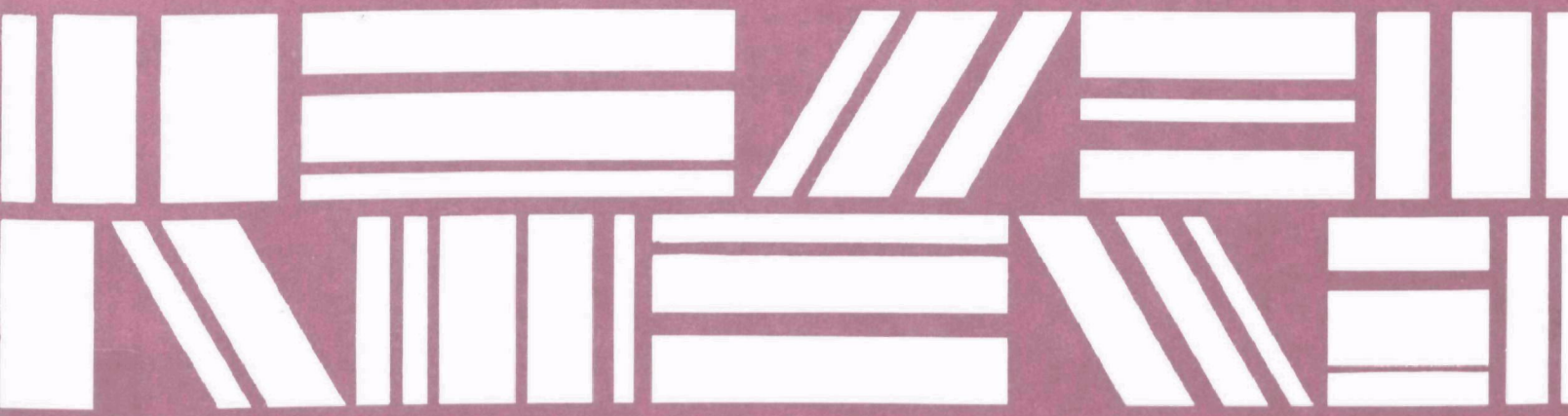
United States
Environmental Protection
Agency

PB93-904204
October-December 1993

EPA

# EPA Publications Bibliography

## Quarterly Abstract Bulletin



PB93-904204
October-December 1993

# EPA PUBLICATIONS BIBLIOGRAPHY

## QUARTERLY ABSTRACT BULLETIN

SPONSORED BY
U.S. Environmental Protection Agency
Center for Environmental Research Information
Cincinnati, Ohio 45268
AND
U.S. Environmental Protection Agency
Information Management and Services Division
Washington, DC 20460

# About this Bibliography

The entire EPA collection at the National Technical Information Service can be accessed through the *EPA Publications Bibliography, Quarterly Abstract Bulletin* and earlier publications in this series. The *EPA Cumulative Bibliography, 1970 - 1976,* (order number PB-265920) contains bibliographic citations of reports generated by EPA and its predecessor agencies and entered into the NTIS collection through 1976. It contains bibliographic citations with abstracts, plus six indexes: Title, Subject (Keyword), Corporate Author, Personal Author, Contract Number, and Accession/Report Number.

The next publication in this series, the *EPA Publications Bibliography, 1977 - 1983,* (order number PB84-158500) contains EPA reports entered into the NTIS collection and published in the *EPA Publications Bibliography, Quarterly Abstract Bulletin* from its inception in 1977 through December, 1983. This volume contains all the indexes of the original 7-year cumulation, plus a Sponsoring EPA Office index. Original hardbound copies of this publication are no longer available; stock has been reproduced by NTIS in order to continue making it available.

A new *EPA Publications Bibliography, 1984 - 1990,* (order number PB91-205500) again cumulates 7 years of EPA reports in a 2-part, hardbound publication which contains the same 7 indexes as the prior edition.

Quarterly supplements to this series continue to be published in the form of the *EPA Publications Bibliography, Quarterly Abstract Bulletin.* Each issue contains an indexed listing of all EPA technical reports and journal articles added to the NTIS collection during the preceding quarter. The fourth issue of each calendar year contains its appropriate abstracts plus complete cumulated indexes for that year.

Bibliographic records of all EPA reports in the NTIS collection are contained in the NTIS Bibliographic Database and are searchable online through various commercial vendors. Copies of individual reports are available in paper or microfiche form. To order documents, computer products, or subscriptions, complete and return the order form at the back of this publication to the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. Current telephone numbers are listed on the order form. Prices for products are indicated in each catalog entry by price codes. To determine a current price, consult the price code table printed on the outside back cover of this publication.

Orders for stocked reports are mailed first class, or its equivalent, normally the day after the order is received. If a document you order must be reproduced by NTIS, it will usually be mailed within two weeks. Orders for documents in the process of being printed outside NTIS may take longer to fill, and you will be notified if NTIS anticipates an unusual delay. Orders for computer products may take slightly longer to fill than those for papercopy documents because of the differences in duplication processes.

The *EPA Publications Bibliography* is available on annual subscription from NTIS at a cost of $145 for U.S., Canada, and Mexico. Single copies are $38. Customers in other countries should contact NTIS for prices.

# CONTENTS


About this Bibliography ..... ii
New EPA Document Numbering System ..... iv
About NTIS ..... v
NTIS Ordering Options ..... v
EPA Library Network ..... vi
Reports Summaries ..... 1
Title Index ..... TI-1
Keyword Index ..... KW-1
Sponsoring EPA Office Index ..... SO-1
Corporate Author Index ..... CA-1
Personal Author Index ..... PA-1
Contract/Grant Number Index ..... CG-1
NTIS Order/Report Number Index ..... OR-1
Order Form ..... At end
Price Codes ..... Outside Back Cover


## National Technical Information Service (NTIS) Key Telephone Numbers

Business hours: Monday through Friday
8:30 a.m. to 5:00 p.m.

### TO PLACE AN ORDER

| | |
|---|---|
| Regular Service | (703) 487-4650 |
| Rush Service | 1-800-553-NTIS |
| Subscription Service | (703) 487-4630 |
| FAX | (703) 321-8547 |
| Telex-International | 64617 |

Online ordering: Dialog (Command: Dialorder)
ORBIT (Command: OrderNTIS)
STN (Command: OrderNTI)
OCLC (Interlibrary Loan Command: NTI, NTI)

### OTHER ASSISTANCE

| | |
|---|---|
| For help identifying a title for sale | (703) 487-4780 |
| For help in tracing an order | (703) 487-4660 |
| For help with NTIS Deposit Accounts | (703) 487-4064 |
| For help with invoices | (703) 487-4770 |
| Licensing Government-owned inventions | (703) 487-4738 |
| Joint Ventures | (703) 487-4805 |

*For a FREE copy of the NTIS Products & Services Catalog, please write or call (703) 487-4650 and ask for PR-827; for a free copy of the NTIS Published Search® Master Catalog, ask for PR-186.*

## New EPA Document Numbering System (January, 1992)

The following document numbering system has been adopted by EPA to indicate the Assistant Administrator/Program Office or Regional Office originating each report. Each 2-digit series listed below is preceded by "EPA" and is followed immediately by a single numeric digit representing the appropriate office within the primary organization. Other alpha/numeric elements follow that indicate the type of publication, calendar year of publication, and sequential publication number. This information is provided as a guide to allow the users of this bibliography to use the report number to know program sponsorship of documents listed.

| | |
|---|---|
| 10 | Administrator; Deputy Administrator |
| 11 | Administrative Law Judges |
| 12 | Science Advisory Board |
| 13 | Cooperative Environmental Management |
| 14 | Associate Administrator for Congressional & Legislative Affairs |
| 15 | Civil Rights |
| 16 | Assistant Administrator for International Activities |
| 17 | Associate Administrator for Commuinications & Public Affairs |
| 18 | Small and Disadvantaged Business Utilization |
| 20 - 22 | Assistant Administrator for Administration & Resources Management |
| 23 | Assistant Administrator for Policy, Planning and Evaluation |
| 27 | Associate Administrator for Regional Operations & State/Local Relations |
| 30 - 34 | Assistant Administrator for Enforcement |
| 35 | Inspector General |
| 36 | General Counsel |
| 40 - 45 | Assistant Administrator for Air & Radiation |
| 50 - 55 | Assistant Administrator for Solid Waste & Emergency Response |
| 60 - 65 | Assistant Administrator for Research & Development |
| 70 - 75 | Assistant Administrator for Pesticides & Toxic Substances |
| 80 - 85 | Assistant Administrator for Water |
| 901 | Region 1 |
| 902 | Region 2 |
| 903 | Region 3 |
| 904 | Region 4 |
| 905 | Region 5 |
| 906 | Region 6 |
| 907 | Region 7 |
| 908 | Region 8 |
| 909 | Region 9 |
| 910 | Region 10 |
| 930 | Central Regional Laboratory, Annapolis, MD |

## ABOUT NTIS

As a cornerstone of the technological publishing structure in the United States, the National Technical Information Service (NTIS) is a key participant in the development of advanced information products and services for the achievement of U.S. productivity and industrial innovation goals in the 90's.

NTIS, an agency of the U.S. Department of Commerce, is the central source for the public sale of U.S. Government-sponsored research, development, and engineering reports and for sales of foreign technical reports and other analyses prepared by national and local government agencies and their contractors or grantees.

NTIS is the central source for:

- Federally-generated computerized datafiles, databases, and software.
- Licensing U.S. Government-owned patents.

NTIS alsc manages:

- the Federal Computer Products Center which provides access to software, datafiles, and databases produced by Federal agencies.
- the Center for the Utilization of Federal Technology (CUFT), which prepares a variety of directories, catalogs, and other information products linking U.S. firms to key and selected U.S. Government technologies, inventions available for licensing, and laboratory contacts.

Consequently, NTIS is one of the world's leading processors of speciality information.

Full summaries of current U.S. and foreign research reports and other specialized information, in hundreds of subject categories, are published regularly by NTIS in a wide variety of newsletters, journals, and indexes and in a variety of subscription formats for other Federal agencies. The complete texts of the technical reports cited are sold in paper and microform.

Approximately 70,000 information items from U.S. and foreign government sources are added to the NTIS collection annually. These consist of some 55,000 technical reports plus computerized datafiles, databases, and software and proceedings, guides, manuals, and other items. Anyone seeking the latest technical reports or wanting to compile unique subject groups of abstracts may either subscribe to a current awareness bulletin or search the NTIS Bibliographic Database online using the services of vendors or organizations that maintain the NTIS database for public use. The entire database in machine processable form may be leased directly from NTIS.

Bibliographies containing summaries of current research from worldwide information sources are available as NTIS Published Searches® and cover over 3,000 topical subject areas.

Customers with well defined continuing interests may subscribe to a standing order microfiche service (SRIM) which enables them to automatically receive the full texts of only those documents relating to their individual requirements.

Foreign reports from worldwide sources including Canada, England, Japan, Germany and Eastern Europe now make up over 20 percent of the NTIS collection.

NTIS sells its technical information products and services under the provisions of Title 15 of the U.S. Code. The law established a clearinghouse for scientific, technical, and engineering information within the Department of Commerce and directed that it be self-supporting.

NTIS, therefore, is a unique Government agency sustained only by sales revenue. The costs of NTIS salaries, marketing, postage, and all other operating costs are paid for from the sales of its products. Costs are not covered by tax-supported Congressional appropriations.

## HOW TO ORDER

**Telephone Orders (703) 487-4650**: The NTIS sales desk is available between 8:30 a.m. and 5:30 p.m., Eastern time, Monday thru Friday. TDD for the hearing impaired (703)487-4639.

**Mail Orders**: Send orders to: NTIS, 5285 Port Royal Road, Springfield, VA 22161.

**FAX or Telex Orders**: FAX (703)321-8547. For assistance, call (703)487-4679. Telex 89-9405 or 64617(international).

**Rush Service**: For an additional $15 per item, orders will be ready for shipment within 24 hours and delivered by overnight courier to most U.S. cities or by Air Mail to Canada, Mexico and other countries. For customers outside the U.S., Canada, and Mexico, add $25 per item. To order Rush, call 1-800-553-NTIS. Outside the U.S., call (703)487-4650. Do not mail your Rush requests.

**QuikSERVICE Online Ordering**: QuikService allows customers to place orders directly into the NTIS system, thus eliminating the time it takes to mail orders. QuikSERVICE displays the cost, availability restrictions, and the approximate time of shipment. The $3 handling fee is waived for all orders placed with QuikService. For information, call (703) 487-4650.

**Methods of Payment**: Customers may pay for NTIS products by: (1) American Express, MasterCard, or VISA; (2) check or money order payable to NTIS in U.S. dollars; (3) an NTIS deposit account; or (4) purchase order - add $7.50 to the total order (available to U.S., Canada, and Mexico only).

**Handling Fee**: A $3 handling fee per order applies to orders from the U.S., Canada, and Mexico. For other countries, the handling fee is $4 per order. The handling fee does NOT apply to Rush orders.

**Postage and Shipping**: Orders are sent First Class or equivalent in the U.S. Orders to other countries are shipped surface mail unless Air Mail or courier service is requested. Air Mail for printed reports is $4 per report to Canada and Mexico ($8 per report to other countries). Air Mail for microfiche is $1 per report to Canada and Mexico ($1.25 per report to other countries).

**Courier and Pickup Service**: Call (703)487-4650 for information about our courier or pickup service.

**Tracing an Order**: If you have questions about your order, write or call NTIS Customer Services at (703)487-4660 between 8:30 a.m. and 5:30 p.m., Eastern time.

**Discounts for Technical Reports:** A 25 percent discount is available for most documents if five or more copies of a single title are ordered at the same time and shipped to the same address. For discounts on more than 100 copies, call (703) 487-4650.

**Library Discount:** Academic libraries can receive a 10 percent education credit on orders. Call the Deposit Account Department at (703) 487-4064 for information.

# EPA Library Network

Most of the following EPA libraries maintain reference sets of EPA reports on microfiche.

**U.S. EPA Region 1 Library**
JFK Federal Building
Boston, MA 02203
(617) 565-3298
FTS: 835-3298

**U.S. EPA Region 2 Library**
26 Federal Plaza
New York, NY 10278
(212) 264-2881
FTS: 264-2881

**U.S. EPA Region 3 Library**
841 Chestnut Street
Philadelphia, PA 19107
(215) 597-7904
FTS: 597-7904

**U.S. EPA Region 4 Library**
345 Courtland Street, NE
Atlanta, GA 30365-2401
(404) 347-4216
FTS: 257-4216

**U.S. EPA Region 5 Library**
230 South Dearborn Street, Rm. 1670
Chicago, IL 60604
(312) 353-9506
FTS: 353-9506

**U.S. EPA Region 6 Library**
1445 Ross Avenue
Dallas, TX 75202-2733
(214) 655-6444
FTS: 255-6444

**U.S. EPA Region 7 Library**
726 Minnesota Avenue
Kansas City, KS 66101
(913) 236-2828
FTS: 757-2828

**U.S. EPA Region 8 Library**
Denver Place, Suite 500
999 18th Street
Denver, CO 80202-2405
(303) 293-1444
FTS: 330-1444

**U.S. EPA Region 9 Library**
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-1517
FTS: 484-1517

**U.S. EPA Region 10 Library**
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-1289
FTS: 399-1289

**U.S. EPA, National Enforcement Investigations Center Library**
Building 53, Box 25227
Denver Federal Center
Denver, CO 80225
(303) 236-5122
FTS: 776-5122

**U.S. EPA, Environmental Monitoring Systems Laboratory Library**
P.O. Box 93478
Las Vegas, NV 89193-3478
(702) 798-2648
FTS: 545-2648

**U.S. EPA, Environmental Research Laboratory Library**
200 SW 35th Street
Corvallis, OR 97333
(503) 757-4328
FTS: 420-4328

**U.S.EPA, Andrew W. Breidenbach Environmental Research Center**
26 W. Martin Luther King Drive
Cincinnati, OH 45268
(513) 569-7707
FTS: 684-7707

**U.S. EPA, Motor Vehicle Emissions Laboratory Library**
2565 Plymouth Road
Ann Arbor, MI 48105
(313) 668-4311
FTS: 374-8311

**U.S. EPA, Environmental Research Laboratory Library**
6201 Congdon Boulevard
Duluth, MN 55804
(218) 720-5538
FTS: 780-5538

**U.S. EPA, Robert S. Kerr Environmental Research Laboratory Library**
P.O. Box 1198
Ada, OK 74820
(405) 743-2256
FTS: 743-2256

**U.S. EPA, Environmental Research Laboratory Library**
South Ferry Road
Narragansett, RI 02882
(401) 782-3025
FTS: 838-6025

**U.S. EPA Region 2 Field Office Library**
2890 Woodbridge Avenue
Building 209, MS 245
Edison, NJ 08837-3679
(908) 321-6762
FTS: 340-6762

**U.S. EPA, Central Regional Laboratory Library**
839 Bestgate Road (3ES20)
Annapolis, MD 21401
(301) 266-9180
FTS: 652-2103

**U.S. EPA, Library Services, MD-35**
Research Triangle Park, NC 27711
(919) 541-0094
FTS: 629-0094

**U.S. EPA, Environmental Research Laboratory Library**
Sabine Island
Gulf Breeze, FL 32561
(904) 932-5311
FTS: 686-9011

**U.S. EPA, Environmental Research Laboratory Library**
College Station Road
Athens, GA 30613-7799
(404) 546-3324
FTS: 250-3324

**U.S. EPA, AREAL, MD-80 Atmospheric Sciences Modeling Division Library**
Research Triangle Park, NC 27711
(919) 541-4536
FTS: 629-4536

**U.S. EPA, Headquarters Library**
PM-211A
401 M Street
Washington, DC 20460
(202) 260-5922
FTS: 260-5922

**U.S. EPA, Office of Toxic Substances Chemical Library**
TS-793
401 M Street
Washington, DC 20460
(202) 260-2321
FTS: 260-2321

# EPA PUBLICATIONS BIBLIOGRAPHY

The full bibliographic report entries in this section are arranged alphanumerically by NTIS order number. Alphabetic data precedes numeric.

## SAMPLE ENTRY

| | |
|---|---|
| **NTIS Order Number/Media Code Price Codes** | **PB90-120072/HSU PC A09/MF A01** |
| Report Title | Sensitivity of Ecological Landscapes and Regions to Global Climatic Change |
| Corporate Author | Oregon State Univ., Corvallis |
| Personal Authors | F. P. Neilson, G. A. King, R. L. DeVelice, J. Lenihan, and D. Marks. |
| Date | Sep 89 |
| Pages | 193p |
| Report Number | EPA/600/3-89/073 |
| Contract Number | EPA-68-C8-0006<br>Prepared in cooperation with NSI Technology Services Corp., Corvallis, OR. Sponsored by Corvallis Environmental Research Lab., OR. |
| Abstract | Increasing awareness of the potential impacts from global climatic change has elicited a storm of research planning among all the major federal agencies. One of the primary difficulties confronted in the planning effort is the need to objectively define clear priorities for research dollars. The report is an attempt to contribute to the process of defining those priorities by scientifically defining specific regions, ecological systems and attributes of those systems that might be particularly sensitive to climatic change. Two approaches to addressing sensitivity have been defined, intrinsic sensitivity and sensitivity relative to a particular stressor. Intrinsic sensitivity is gauged by past variations in different ecosystems. Extrinsic or stressor relative sensitivity addressed the same question, but from the perspective of a particular stress. |
| Keywords (Descriptors & Identifiers) | *Climatic changes, *Environmental Surveys, *Research projects, Hydrology, Forecasting, Weather, Biological Surveys, Precipitation (Meteorology), Runoff, Natural Resources, Seasonal variations, Biomass, vegetation, Forestry, *Regional Analysis, * Ecosystems, *Global aspects, Federal agencies, Comprehensive planning. |

# EPA PUBLICATIONS BIBLIOGRAPHY
## Quarterly Abstract Bulletin

**PB92-220532/REB** PC **A08**/MF **A02**
Environmental Monitoring Systems Lab., Las Vegas, NV. Exposure Assessment Research Div.
**Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies.**
Nevada Univ., Las Vegas. Environmental Research Center.
B. J. Mason. Jul 92, 166p EPA/600/R-92/128
See also PB83-206979. Sponsored by Environmental Monitoring Systems Lab., Las Vegas, NV. Exposure Assessment Research Div.

The document serves as a companion document to the Soil Sampling Quality Assurance User's Guide, Second Edition. The two documents together provide methods, techniques, and procedures for designing a variety of soil measurement programs and associated Quality Assurance Program Plans, implementing those programs and then analyzing, interpreting, and presenting resultant data. Properly designed sampling plans based upon the laws of probability provide a means of making decisions that have a sound and defensible basis. The document summarizes various statistical and geostatistical concepts and procedures pertaining to the design, implementation, and data interpretation of appropriate sampling designs. Soil sampling takes place either in the surface layer (0-6 in.) or at greater depths. The methods of sampling each may be different but make use of two basic techniques. Samples can either be collected with some form of core sampling or auger device, or they may be collected by use of excavations or trenches.

Keywords: *Soil analysis, *Sampling, Methodology, Land pollution, Solid waste disposal, Kriging, Chemical analysis, Quality assurance, Soil contamination, Volatile organic compounds, Procedures.

**PB92-228600/REB** PC **A16**/MF **A03**
**Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Air Quality Data. Volume 2.**
Amoco Corp./Environmental Protection Agency, Yorktown, VA. Pollution Prevention Project.
D. N. Blewitt, J. W. Keating, and J. F. John. 30 Jul 92, 351p
See also PB92-228592.

As part of the Amoco/USEPA Pollution Prevention Project, on air quality evaluation of Amoco Oil Company's Yorktown Virginia Refinery was conducted. The document defines baseline air quality in terms of air emissions and ambient air quality. The baseline was used to evaluate potential impact of different pollution prevention options. Three objects of the study were to: (1) Quantify current air emissions from the facility; (2) Quantify ambient air quality impacts of these emissions; and (3) identify benefits of implementing pollution prevention alternatives or additional control measures. Extensive computer modeling of the airshed immediately around the Refinery was conducted using the ISC Short Term model with approximately 80 on-site emission sources and 8700 hourly meteorological data points.

Keywords: *Petroleum refineries, *Air pollution monitoring, *Pollutant sources, Ambient air quality, Air pollution dispersion, Exhaust gases, Industrial wastes, Waste water, Air flow, Tracers, *Emission inventories, Yorktown(Virginia), Fugitive emissions, Volatile organic compounds, BTEX(Benzene Toluene Ethylbenze Xylene).

**PB93-100071/REB** PC **A12**/MF **A03**
Environmental Monitoring Systems Lab., Las Vegas, NV.
**Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.**
North Carolina State Univ. at Raleigh.
W. W. Heck, C. L. Campbell, R. P. Breckenridge, G. E. Byers, and A. L. Finkner. May 91, 262p EPA/600/4-91/013
Also available from Supt. of Docs. Prepared in cooperation with Department of Agriculture, Raleigh, NC., and ManTech Environmental Technology, Inc., Corvallis, OR. Sponsored by Environmental Monitoring Systems Lab., Las Vegas, NV.

The monitoring program described in the document is one component of the Environmental Monitoring and Assessment Program (EMAP). For EMAP, agroecosystems are defined as land used for crops, pasture and livestock; the adjacent uncultivated land that supports other vegetation (hedgerows, woodlots, etc) and wildlife; and the associated atmosphere, underlying soils, groundwater, and drainage networks (first and second order streams, ponds, and irrigation drainage networks). A program to monitor and evaluate the long-term status and trends of the nation's agricultural resources from an ecological perspective through an integrated, interagency program will be developed and implemented. When fully implemented, the program will: (1) estimate the current status, extent, changes and trends in indicators of agroecosystem condition on a regional basis with ones known confidence; (2) monitor indicators of pollutant exposure and habitat quality and seek associations between anthropogenic stresses and agroecosystem condition; and (3) provide periodic statistical summaries and interpretive reports on agroecosystem condition to the public, the scientific community, and to policy-makers.

Keywords: *Environmental monitoring, *Pollution control, *Agriculture, *Ecosystems, Habitats, Land use, Farm crops, Livestock, Wildlife, Soils, Streams, Irrigation, Trends, Regional analysis, Statistical analysis, Assessment, Government policies.

**PB93-100105/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Guides to Pollution Prevention: The Metal Finishing Industry.**
Battelle, Columbus, OH.
Oct 92, 74p EPA/625/R-92/011
Contract EPA-68-C0-0003
See also PB93-164200. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The guide provides an overview of the major metal finishing processes and operations that generate waste and presents options for minimizing waste generation through source reduction and recycling. A wide variety of processes are used in the metal finishing industry, including physical, chemical, and electrochemical processes. Metal finishing processes generate various waste streams, including contaminated plating baths, spent process baths, cleaners, rinse water, miscellaneous solid waste, solvents, and air emissions. Reducing the generation of this waste at the source or recycling the wastes on or off site will benefit the metal finishing industry by reducing raw material use, reducing disposal costs, and lowering the liabilities associated with waste disposal.

Keywords: *Metal finishing, *Industrial wastes, *Waste management, Waste streams, Waste water, Solvents, Exhaust emissions, Waste recycling, Materials recovery, Waste treatment, Chemical finishing, Electroplating, Electrochemical coating, Source reduction, Waste minimization.

**PB93-111540/REB** PC **A14**/MF **A03**
Environmental Protection Agency, Washington, DC. Health and Ecological Criteria Div.
**Human Health Risk Assessment for the Use and Disposal of Sewage Sludge: Benefits of Regulation.**
Abt Associates, Inc., Cambridge, MA.
Nov 92, 311p
Contract EPA-68-C0-0093
Sponsored by Environmental Protection Agency, Washington, DC. Health and Ecological Criteria Div.

In support of EPA's Office of Water Abt Associates Inc. has analyzed the baseline risks to human health for the general population and for a highly exposed individual (HEI) from the use and disposal of municipal sludge. Human health risks are estimated for both the general population and a HEI associated with current use and disposal practices for sewage sludge. Three methods of sewage sludge use or disposal are considered: (1) incineration, (2) land application, and (3) surface disposal. For each management practice considered, the authors use mathematical models and available data to estimate human exposure and risk. Key data include estimated concentrations of pollutants in sewage sludge; local geology, hydrology, and weather; the locations and behavior of human populations; and dose-response data for each pollutant of concern.

Keywords: *Sewage sludge, *Risk assessment, *Public health, *Health effects, Pollution regulations, Sludge disposal, Incineration, Land disposal, Environmental exposure pathway, Water pollution, Land pollution, Food chains, Lead(Metal), Carcinogenicity, Clean Water Act, Land application.

**PB93-164507/REB** PC **A09**/MF **A03**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Life Cycle Design Guidance Manual. Environmental Requirements and the Product System.** Final rept.
Michigan Univ., Ann Arbor. National Pollution Prevention Center.
G. A. Keoleian, and D. Menerey. Jan 93, 194p EPA/600/R-92/226
See also PB93-139681 and PB93-164101. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The document seeks to promote the reduction of environmental impacts and health risks through a systems approach to design. The approach is based on the product life cycle, which includes raw materials acquisition and processing, manufacturing, use/service, resource recovery, and disposal. A life cycle design framework was developed to provide guidance for more effectively conserving resources and energy, preventing pollution, and reducing the aggregate environmental impacts and health risks associated with a product system. The framework addresses the product, process, distribution, and management/information components of each product system.

Keywords: *Service life, *Environmental impacts, *Waste management, Environment protection, Manufacturing, Raw materials, Cost analysis, Manual, *Life-cycle design, Environmental requirements.

**PB93-183283/REB** PC **A08**/MF **A02**
**Guidelines for MACT Determinations under Section 112(j) (Proposal).**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
Jun 93, 160p EPA/450/3-92/007A

The guidance document is designed to clarify the statutory and regulatory requirements for MACT determinations as required by Section 112(j) of the Clean Air Act (the Act) as amended in 1990. It sets forth procedures for determining emission limitations based on

maximum achievable control technology for major sources who are required to apply for a new Title V permit, revise an existing permit, or apply for a Notice of MACT approval because the promulgation deadline for a MACT standard was missed by greater than 18 months for an applicable source category.

Keywords: *Air pollution standards, *Air pollution control, *Air pollution sources, Hazardous materials, Emissions, Permits, Pollution regulations, Environmental impacts, Law enforcement, Permit applications, *MACT(Maximum Achievable Control Technology), Clean Air Act.

**PB93-183408/REB** PC **A12/MF A03**
**Economic Growth Analysis System: Reference Manual.**
Environmental Protection Agency, Washington, DC. Office of Research and Development.
Apr 93, 260p EPA/600/R-93/067A
For system on diskette, see PB93-505469 through PB93-505543.

The objective of the report was to describe the development of a prototype Economic Growth Analysis Systems (E-GAS) modeling system. The E-GAS model will be used to project emissions inventories of volatile organic compounds, oxides of nitrogen, and carbon monoxide for ozone nonattainment areas and Regional Oxidation Model (ROM) modeling regions. The report details the design and development of the E-GAS system, and includes detailed descriptions of the workings of the E-GAS computer modeling software, and its relationships with internal modeling software components, like Regional Economic Models, Inc. (REMI) models, and external software, like ROM, the Aerometric Information Retrieval System (AIRS), and the Urban Airshed Model (UAM).

Keywords: *Air pollution economics, *Economic development, *Economic models, Manuals, Documentation, Computerized simulation, Regional analysis, State government, Air pollution standards, *Economic Growth Analysis System, *EPA regions 1-10, Urban Airshed Model, Regional Oxidant Model, Emission inventories, Aerometric Information Retrieval System.

**PB93-183416/REB** PC **A04/MF A01**
**Economic Growth Analysis System: User's Guide.**
Environmental Protection Agency, Washington, DC. Office of Research and Development.
Apr 93, 60p EPA/600/R-93/067B
For system on diskette, see PB93-505469 through PB93-505543.

The guide is intended to function as a manual for the Economic Growth Analysis System (E-GAS). The objective of the report was to describe the development of a prototype E-GAS modeling system. The E-GAS model will be used to project emissions inventories of volatile organic compounds, oxides of nitrogen, and carbon monoxide for ozone nonattainment areas and Regional Oxidation Model (ROM) modeling regions. The guide describes in detail the workings of the E-GAS computer modeling software, and its relationships with internal modeling software components, like Regional Economic Models, Inc. (REMI) models, and external software, like ROM, the Aerometric Information Retrieval System (AIRS), and the Urban Airshed Model (UAM). The guide describes all inputs and outputs from the software, and includes a description of all variables used by the E-GAS system.

Keywords: *User manuals(Computer programs), *Air pollution economics, *Economic development, *Economic models, Documentation, Computerized simulation, Regional analysis, State government, Air pollution standards, *Economic Growth Analysis System, *EPA regions 1-10, Urban Airshed Model, Regional Oxidant Model, Emission inventories, Regional Economic Models, Aerometric Information Retrieval System.

**PB93-183440/REB** PC **A05/MF A01**
Environmental Protection Agency, Washington, DC. Office of Pollution Prevention.
**Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.**
Computer Based Systems, Inc., Arlington, VA.
18 May 93, 95p EPA/DF/MT-93/061A
Contract EPA-68-W2-0011
For system on magnetic tape, see PB93-505873.
Sponsored by Environmental Protection Agency, Washington, DC. Office of Pollution Prevention.

The following pages describe the Toxic Chemical Release Inventory System (TRIS) as it is transmitted on magnetic tape. This tape is a 'flat file' representation of the TRIS ADABAS database residing on the EPA IBM ES/9000 located at the National Computer Center in Research Triangle Park, North Carolina. There are 12 record types. The PPA data is officially collected for RY 1991+ although there may be PPA data present for reporting years 1987-1990.

Keywords: *Superfund, *Hazardous materials, *Toxic substances, *Waste management, Documentation, Chemical compounds, Specifications, Emergency planning, Public information, Pollution regulations, Inventories, Facilities, Toxicity, Environmental surveys, Emergency Planning and Community Right to Know Act.

**PB93-183499/REB** PC **A03/MF A01**
**Instruction Manual for the Resource Conservation and Recovery Information System (RCRIS) Extract Data Tapes.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
30 Jun 93, 45p
For system on magnetic tape, see PB93-592570.

The manual explains the technical characteristics of the accompanying three IBM Standard Label tapes which contain 'core' Environmental Protection Agency (EPA) Resource Conservation and Recovery Information System (RCRIS) data. The Resource Conservation and Recovery Information System (RCRIS) is a national program management and inventory system of RCRA hazardous waste handlers. Handlers can be characterized as fitting one or more of the following categories: treatment, storage, and disposal facilities (TSDFs); large quantity generators (LQGs); small quantity generators (SQGs); and transporters. RCRIS captures identification and location data for all handlers and a wide range of information on TSDFs regarding permit/closure status, compliance with Federal and State regulations, and cleanup activities.

Keywords: *Hazardous materials, *Solid waste management, *Waste disposal, User manuals(Computer programs), Data bases, Waste treatment, Waste processing plants, Permits, Hazardous materials transportation, Waste storage, Pollution regulations, Notification procedures, *RCRIS(Resource Conservation and Recovery Information System).

**PB93-183713/REB** PC **A03/MF A01**
Department of Energy, Washington, DC.
**Maya Forest: Key Issues and Recommendations for Action: A Workshop Report. Held in Flores, Guatemala on February 8-9, 1993.**
United States Man and the Biosphere Program, Washington, DC.
Jul 93, 18p*
Department of State, Washington, DC. Sponsored by Department of Energy, Washington, DC., National Park Service, Washington, DC., and Agency for International Development, Washington, DC.

The report is based on information drawn from the Third Tri-national Meeting on the Maya Forest held in Flores, Guatemala on February 8th and 9th, 1993. It is not intended to be the minutes of the meeting, but rather seeks to provide a synopsis of the meeting's main conclusions and recommendations. The meeting was co-sponsored by the U.S. Man and the Biosphere Program's (U.S.MAB) Tropical Ecosystems Directorate (TED) and the Central American Commission on Environment and Development (CCAD).

Keywords: *Forestry, *Guatemala, *Meetings, International cooperation, US DOS, Central America, Tropical regions, MAB(Man and Biosphere), US AID, Maya forest.

**PB93-186096/REB** PC **A11/MF A03**
**Supplement to the OCPSF Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category.**
Environmental Protection Agency, Washington, DC. Engineering and Analysis Div.
Nov 91, 226p EPA/440/1-91/009A
See also PB93-186104.

The document describes the supporting information for the Agency's proposed responses to the U.S. Fifth Circuit Court of Appeals' remand decision related to the Organic Chemicals Plastics and Synthetic Fibers (OCPSF) regulation (40 CFR Part 414), Chemical Manufacturers Association v. Environmental Protection Agency, 870 F.2d 177 (5th Cir.), modified, 885 F.2d 253 (5th Cir. 1989). The Court remanded three aspects of the OCPSF guidelines: (1) the subcategorization of the industry into two subparts imposing differing Best Available Technology Economically Achievable (BAT) limitations because the Agency did not provide sufficient notice for establishing 'less stringent' BAT Subpart J limitations for approximately 23 direct-discharge plants without biological treatment, (2) limitations for 19 of the 20 BAT Subpart J pollutants (and 13 corresponding Pretreatment Standards for Existing Sources (PSES)) that were based upon in-plant biological treatment technology because the design of the model treatment system used to estimate the cost of compliance was inconsistent with the technical basis for the numerical limitations, and (3) the New Source Performance Standards (NSPS) and the Pretreatment Standards for New Sources (PSNS) for consideration of whether zero discharge limits would be appropriate for new plants in the OCPSF industry because of the existence of recycling of wastewater.

Keywords: *Organic chemicals industry, *Plastics industry, *Synthetic fibers, *Industrial waste treatment, *Chemical effluents, *Pollution regulations, Water pollution control, Water pollution abatement, Waste water, Point sources, Industrial plants, Water pollution sampling, Water pollution economics, Economic impact, Pretreatment, Treatment technology, BAT(Best available technology).

**PB93-192631/REB** PC **A03/MF A01**
**Aquatic Toxicity Information Retrieval Data Base: A Technical Support Document. (Revised July 1992).**
Environmental Research Lab.-Duluth, MN.
Apr 93, 25p EPA/DF/MT-93/050A, , EPA/600/C-93/001
For system on magnetic tape, see PB93-505725 and PB93-505733.

The AQUIRE (AQUatic toxicity Information REtrieval) database was established in 1981 by the United States Environmental Protection Agency (US EPA), Environmental Research Laboratory-Duluth (ERL-D). The purpose of AQUIRE is to provide quick access to a comprehensive, systematic, computerized compilation of aquatic toxic effects data. As of July 1992, AQUIRE consists of over 98,300 individual test results on computer file. These tests contain information for 5,500 chemicals and 2,300 organisms, extracted from over 6,300 publications. In addition, the ERL-D data file, prepared by the University of Wisconsin-Superior is now included in AQUIRE. The data file consists of acute toxicity test results for the effects of 525 organic chemicals to fathead minnow. All AQUIRE data entries have been subjected to established quality assurance procedures.

Keywords: *Toxicity, *Data bases, *Water pollution effects(Plants), *Water pollution effects(Animals), Aquatic plants, Aquatic animals, Hazardous materials, Fresh water biology, Marine biology, User manuals(Computer programs), *AQUIRE data base.

**PB93-192656/REB** PC **A24/MF A04**
**Resource Conservation and Recovery Information System (RCRIS) Data Element Dictionary.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Nov 92, 562p
For system on magnetic tape, see PB93-592570.

No abstract available.

Keywords: *Hazardous materials, *Solid waste management, *Waste disposal, *Dictionaries, Data bases, Terminology, Waste treatment, Waste processing plants, Permits, Pollution regulations, Hazardous materials transportation, Waste storage, Notification procedures, Data elements, RCRIS(Resource Conservation and Recovery Information Systems).

**PB93-192698/REB** PC **A05**/MF **A01**
**PREscore Software: Users Manual and Tutorial Version 2.0.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
May 93, 91p EPA/SW/DK-93/066A
For system on diskette, see PB93-505915.

The PREscore software package has been developed to assist site assessment investigations and Hazard Ranking System (HRS) scoring by generating a Preliminary Ranking Evaluation score and associated documentation. The users manual consists of three parts. Chapter 1, 'Getting Started', introduces you to the software package and takes you through the procedures necessary to install PREscore software on your computer. Chapter 2, 'Tutorial', provides an initial step-by-step 'hands-on' lesson in using PREscore by 'walking' you through a series of screens, entering and editing data. Chapter 3, 'Printing', provides instruction for using PREprint, which performs printing functions on PREscore site files. The manual assumes some familiarity with the IBM PC-type platform. Actual scoring of a site with PREscore requires little, if any, knowledge of the Disk Operating System (DOS).

Keywords: *Superfund, *Waste disposal, *Hazardous materials, User manuals(Computer programs), Remedial action, Site surveys, Environmental impact assessments, Land pollution, Water pollution, Air pollution, *PREscore computer model, HRS(Hazard Ranking System), NPL(National Priorities List), SCDM(Superfund Chemical Data Matrix).

**PB93-192748/REB** PC **A05**/MF **A01**
**PRELIM Version 4.0 Users Guide. Documentation for the EPA Computer Program for Development of Local Discharge Limitations under the Pretreatment Program. Data Tape Documentation.**
Environmental Protection Agency, Washington, DC. Office of Water.
May 91, 86p EPA/SW/DK-93/072A
For system on diskette, see PB93-505980.

A critical part of a municipality's task in developing or implementing a local pretreatment program is the development of technically based numerical effluent limitations (local limits) on the discharge of incompatible pollutants to a POTW. These limitations are often incorporated directly into a municipal ordinance or are applied through individual control mechanisms, such as permits, orders, etc., issued to nondomestic users of the POTW. Such limits are needed to enforce the prohibited discharge standards of the General Pretreatment Regulations and to implement three fundamental objectives of the National Pretreatment Program: to prevent the introduction of pollutants into the POTW which could interfere with its operation; to prevent pass-through of untreated pollutants which could violate applicable water quality standards or National Pollutant Discharge Elimination System (NPDES) effluent limitations; to prevent the contamination of POTW sludge which would limit the selected sludge uses or disposal practices. Local limits supplement National categorical standards, which are Federal technology-based limitations, imposed on all facilities in selected industrial categories. Local limits are necessary in cases where an industry is not covered by categorical standards, or where categorical standards are not adequate to protect the POTW or receiving stream or to prevent undue contamination of the sludge.

Keywords: *Industrial waste treatment, *Water pollution standards, *User manuals(Computer programs), Pollution regulations, Water pollution control, Waste water, Permits, State government, Local government, Standards compliance, Documentation, *PRELIM computer program, POTW(Publicly owned treatment works), Pretreatment.

**PB93-192755/REB** PC **A05**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of Pollution, Prevention, and Toxics.
**Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.**
Computer Based Systems, Inc., Arlington, VA.
23 Jul 93, 93p
Contract EPA-68-W2-0011
For system on magnetic tape, see PB93-506020.
Sponsored by Environmental Protection Agency, Washington, DC. Office of Pollution, Prevention, and Toxics.

The report describes the Toxic Chemical Release Inventory System (TRIS) as it is transmitted on magnetic tape. There are the following 12 record types: Facility Data; Chemical Data; Activity and Uses Data; DUNS, EPA ID, NPDES Permit Data; SIC Code Data; Release and Transfer Data; Summation of Release and Transfer Data; Waste Treatment Data; PPA Data - Reporting Year (RY) 1991+; PPA Data - Reporting Year (RY) 1991+; PPA Data - Reporting Year (RY) 1991+; PPA Data - Reporting Year (RY) 1991+; Multiple records can exist for types 4, 5, 6 and 8 per submission. All records are 550 characters in length. Each field includes a definition, format, length, starting position, and ending position.

Keywords: *Hazardous materials, *Toxicity, *Documentation, User manuals(Computer programs), Industrial plants, Emergency planning, Pollution regulations, Waste treatment, Waste disposal, Waste management, *Chemical effluents, *Emissions inventory, Emergency Planning and Community Right-to-Know Act, Reporting requirements, Chemical emissions.

**PB93-193225/REB** PC **A04**/MF **A01**
**Hazardous Waste Management Planning Needs and Practices: A Review of Several State Agency Approaches.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste.
Aug 93, 55p EPA/530/R-93/010

The purpose of the project has been to (1) identify existing and emerging state hazardous waste management planning needs, (2) describe planning practices designed to address these needs, and (3) relate state observations on the relationship of their planning needs and activities to the Federal Capacity Assurance Planning (CAP) process. To identify and describe planning needs and practices, the project targeted two groups of states (nine publishing formal hazardous waste management plans and nine engaged in other forms of planning). States that prepare a formal hazardous waste management plan are: Connecticut; Michigan; Minnesota; New Jersey; New York; North Carolina; Pennsylvania; Vermont; and Washington. Other states that do not publish a formal hazardous waste management planning document and engage in planning activities: Alabama; Delaware; Illinois; Massachusetts, Missouri, Oregon; Texas; Utah; and Virginia. The primary goal was to obtain a range of perspectives associated with different environmental, economic, institutional, and public policy considerations.

Keywords: *Waste disposal, *Hazardous materials, *Waste management, *States(United States), National government, Quality assurance, Waste minimization, Government policies, Legislation, Comparison, Technical assistance, Geography, Economic impact, Regulations, Compliance, US EPA, CERCLA(Comprehensive Environmental Response Compensation and Liability Act of 1980).

**PB93-199222/REB** PC **A05**/MF **A02**
Environmental Protection Agency, Dallas, TX. Region VI.
**Air/Superfund National Technical Guidance Study Series: Compilation of Information on Real-Time Air Monitoring for Use at Superfund Sites.** Final rept.
Radian Corp., Austin, TX.
May 93, 99p EPA/451/R-93/008
Contract EPA-68-DO-0125
Sponsored by Environmental Protection Agency, Dallas, TX. Region VI.

The report summarizes the results of a U.S. Environmental Protection Agency (EPA)-sponsored study to compile and evaluate information on commercially-available real-time air monitoring equipment for use at Superfund sites. In the document, real-time (RT) and near real-time (NRT) monitors are broadly defined as those instruments or methods that provide information either instantaneously or within a relatively short time period (i.e., <30 minutes). The objectives of the study were to review the available literature on real-time (RT) air monitoring; compile a comprehensive list of real-time and near real-time (NRT) air sampling techniques, equipment, and vendors; contact vendors and users to collect information on the technical specifications of their applicable instruments; and prepare a guidance document that summarizes the results of the study. The available literature was reviewed to identify the most current methods for real-time or near real-time measurement of ambient air concentrations of toxic pollutants commonly found at Superfund sites.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Air pollution monitors, Air pollution sampling, Particulates, Opacity, Gas chromatography, Mass spectrometers, Ionization gages, Photoionization, Colorimetric dosimeters, *Real-time air monitors, Flame ionization, Volatile organic compounds.

**PB93-202851/REB** PC **A06**/MF **A02**
Corvallis Environmental Research Lab., OR.
**Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.**
ManTech Environmental Technology, Inc., Corvallis, OR.
N.C. Leibowitz, T. L. Ernst, N. S. Urquhart, S. Stehman, and D. Roose. Jun 93, 104p EPA/620/R-93/008
Contracts EPA-68-C8-0006, EPA-68-03-3532
See also PB91-149526 and PB92-103449. Prepared in cooperation with Bionetics Corp., Warrenton, VA., State Univ. of New York Coll. of Environmental Science and Forestry, Syracuse, and Oregon State Univ., Corvallis. Dept. of Statistics. Sponsored by Corvallis Environmental Research Lab., OR.

The study evaluates the EMAP classification system and sampling design using NEI digital wetland data for portions of Illinois, Washington, North Dakota and South Dakota. A comparison of the EMAP classification to the NWI classification and evaluation of the EMAP sampling design were conducted relative to numbers of wetlands, total areas, average areas, and common versus rare classes. As expected, the EMAP aggregation of NWI data resulted in fewer wetland polygons, each with larger areas, but did not alter the number of wetlands or the total wetland area in each region. Summary statistics based on comparisons of the sampling estimates to true population parameters demonstrated the effectiveness of the EMAP sampling design with the exception of rare wetland classes. Rare EMAP classes, estuarine emergents, and large wetlands (>50 ha) were usually poorly estimated, but the EMAP design is readily adapted to provide better estimates for these categories.

Keywords: *Wetlands, *Environmental monitoring, *Ecosystems, Illinois, Washington(State), North Dakota, South Dakota, Biological indicators, Natural resources management, Swamps, Marshes, Estuaries, Flood plains, EMAP(Environmental Monitoring and Assessment Program), NWI(National Wetland Inventory).

**PB93-203156/REB** PC **A03**/MF **A01**
Environmental Monitoring Systems Lab., Las Vegas, NV.
**X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.**
Lockheed Environmental Systems and Technologies Co., Las Vegas, NV.
C. A. Kuharic, W. H. Cole, A. K. Singh, and D. Gonzales. Mar 93, 31p EPA/600/R-93/073
Contract EPA-68-C0-0049
Prepared in cooperation with Nevada Univ., Las Vegas. Harry Reid Center for Environmental Studies. Sponsored by Environmental Monitoring Systems Lab., Las Vegas, NV.

The California Gulch Superfund Site in Leadville, Colorado was added to the National Priority List (NPL) in 1983. It is an historic mining and smelting site that is currently the focus of extensive studies on soil lead contamination and bioavailability. Studies of ground and surface water impacts are also in progress. Personnel from the Environmental Protection Agencies (EPA) Environmental Monitoring Systems Laboratory at Las Vegas (EMSL-LV), the Denver office of Roy F. Weston, Inc., and Geostat Systems, Inc. (GSI) used field-portable X-ray fluorescence (FPXRF) to determine the spatial distribution of lead concentrations in residential soils. The report details the FPXRF program sample collection, preparation, and analysis procedures, database management, and program quality assurance efforts at Leadville. The program clearly demonstrates that small, field portable XRF instrumentation can produce large quantities of acceptable quality data in a timely and cost-efficient manner when used properly.

Keywords: *Lead(Metal), *X-ray fluorescence analysis, *Soil contamination, Soil tests, Field tests, Quantitative chemical analysis, Land pollution sampling, Port-

able equipment, Spatial distribution, Risk assessment, Public health, Leadville(Colorado).

**PB93-203693/REB** PC **A07/MF A02**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.**
Science Applications International Corp., San Diego, CA.
J. B. Clayton, S. F. Tsang, V. Frank, P. Marsden, and N. Chau. Jul 93, 147p EPA/600/R-93/113A
Contract EPA-68-C8-0062
Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The report presents data from studies designed to evaluate characteristics of selected bench-scale test methods for estimating cleaning performance of chemical agents for removal of oil from substrate surfaces. Such agents have the potential to be used to remove oil that might strand on shorelines and cause adverse effects to impacted ecosystems. In order to mitigate the effect of stranded oil with chemical cleaning agents, however, an on-scene coordinator must have information and an understanding of performance characteristics for available cleaning agents. Performance of candidate cleaning agents can be estimated on the basis of laboratory testing procedures that are designed to evaluate performance of different agents. Data presented in the report are intended to assist the U.S. EPA in evaluation of candidate test methods for estimating performance of cleaning agents. Two test methods were selected for evaluating performance: Environment Canada's Inclined Trough test and a Swirling Coupon test developed in the program.

Keywords: *Oil spills, *Dispersants, *Cleaning agents, Oil pollution removal, Chemical compounds, Chemical analysis, Tests, Performance evaluation, *Shore pollution control, Polluted beaches, Stranded oil.

**PB93-203701/REB** PC **A04/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Chemical Shoreline Cleaning Agents for Oil Spills: Update State-of-the-Art on Mechanisms of Action and Factors Influencing Performance.**
Science Applications International Corp., San Diego, CA.
J. R. Clayton. Jul 93, 57p EPA/600/R-93/113B
Contract EPA-68-C8-0062
Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The purpose of the report is to provide an updated review of information from the available literature for (1) the mechanism of action of cleaning by chemical agents for oil that strands on shorelines, (2) variables affecting performance of these chemical agents, (3) evaluations of laboratory tests designed to assess performance of such agents, and (4) a brief consideration of actual applications of chemical cleaning agents in field situations. Considerations also are given to strengths and limitations of specific laboratory tests, including brief discussions of the applicability of test results for estimating performance of chemical cleaning agents in field trials or conditions encountered in real-world spill events. Finally, a modest attempt is made at providing recommendations for needed research in the laboratory and field for chemical cleaning agents.

Keywords: *Oil spills, *Dispersants, *Cleaning agents, Oil pollution removal, Chemical compounds, Chemical analysis, Tests, Performance analysis, *Shore pollution control, Polluted beaches, Stranded oil.

**PB93-203909/REB** PC **A03/MF A01**
Office of Radiation Programs, Washington, DC.
**Radon/Radon Progeny Measurement Proficiency Program: Cumulative Proficiency Report (Revised September 1987).**
Research Triangle Inst., Research Triangle Park, NC.
Sep 87, 49p EPA/520/1-87/015
Contract EPA-68-01-7350
See also PB93-107092. Errata sheet inserted. Sponsored by Office of Radiation Programs, Washington, DC.

The program's immediate objective is to assist States and the public in selecting companies that have demonstrated competence in measuring indoor radon and radon progeny. This is achieved by evaluating, on a semiannual basis, the proficiency of companies' detector operations and the quality of their data management. The companies that demonstrate their proficiency are listed in the RMP proficiency reports. The program's long-term objectives are to promote standard measurement procedures among measurement companies and to establish quality assurance procedures for all measurement companies. The inclusion of a company in the report should not be interpreted as a certification or accreditation of that company. The report is only a source of measurement companies that have demonstrated capabilities for measuring radon and radon progeny levels.

Keywords: *Radon, *Indoor air pollution, *Radiation monitoring, Residential buildings, Risk assessment, Public health, Listings, Tables(Data), Aerosol monitoring, RMP(Radon/Radon Progeny Measurement Proficiency), Companies.

**PB93-203917/REB** PC **A03/MF A01**
Office of Radiation Programs, Washington, DC.
**Identification of Cost Factors for the Ocean Disposal Alternative for Low-Level Radioactive Waste.**
Brookhaven National Lab., Upton, NY. Nuclear Waste Research Group.
D. Hill, and V. L. Sailor. Dec 94, 32p EPA/520/1-84/026
See also PB83-245498. Sponsored by Office of Radiation Programs, Washington, DC.

A set of economic ground rules is proposed for making cost comparisons between various alternative options for disposing of low-level radioactive wastes. Included are procedures for converting all costs to a common basis and a description of the types of costs which should be included. The major cost factors are identified for several alternatives for the disposal of contaminated soils and neutron activated metallic structures. A program for the actual cost analysis is outlined, and manpower estimates for the studies are presented.

Keywords: *Marine disposal, *Radioactive waste disposal, *Low-level radioactive wastes, Radionuclide migration, Cost benefit analysis, Cost comparison, Comparative evaluations, Ground disposal, *Cost factors.

**PB93-203974/REB** PC **A03/MF A01**
Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.
**Fate of Priority Pollutants in Publicly Owned Treatment Works. Pilot Study.**
Burns and Roe Industrial Services Corp., Paramus, NJ.
H. Feiler. Oct 79, 41p EPA/440/1-79/300
See also PB81-238024, PB83-122788 and PB83-122796. Sponsored by Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.

The purpose of the report is to present the results of a two-plant pilot study designed to determine future operating parameters to be used during a study of the fate of priority pollutants in publicly owned treatment works (POTW's). The scope of the overall project is anticipated to encompass 7-day, 24-hour sampling at 40 strategically located POTW's, representing a variety of municipal treatment technologies, size ranges, and percentages of industrial flow. A major goal of the project is to characterize the impact of toxic pollutants, from all sources, on POTW operations. In addition the effect of secondary treatment on priority pollutants will be studied.

Keywords: *Water pollution sampling, *Sewage treatment plants, *Path of pollutants, Sludge treatment, Waste water, Toxic materials, Sewage treatment effluents, Industrial wastes, *POTW(Publicly owned treatment works), Priority pollutants.

**PB93-203990/REB** PC **A07/MF A02**
Environmental Protection Agency, Washington, DC. Office of Analysis and Evaluation.
**Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Gold Placer Mining Industry.**
Development Planning and Research Associates, Inc., Manhattan, KS.
Aug 85, 135p EPA/440/2-85/026
Contract EPA-68-01-6744
See also PB89-114292. Sponsored by Environmental Protection Agency, Washington, DC. Office of Analysis and Evaluation.

The purpose of the study is to analyze the economic impacts that are likely to result from promulgation of the proposed best practicable control technology (BPT), best available technology economically achievable (BAT) and Best Conventional Technology (BCT) effluent limitations and standards on placer mining in the United States. The results of the economic impact analysis will help establish pollution control regulations that are economically achievable. The analysis examines how each of four alternative pollution control technologies affects the financial viability of placer mines in the United States. The impacts examined include reduced profitability, production cutbacks, mine closures, and employment and earning losses, as well as impacts to the local economies.

Keywords: *Water pollution economics, *Economic impact, *Placer mining, *Gold, *Water pollution control, Regulations, Standards, New source performance standards, Alternatives, Best technology, Clean Water Act, Profits, Closures, Employment, Production management.

**PB93-204048/REB** PC **A02/MF A01**
**Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
A. Lansari, J. J. Streicher, A. H. Huber, G. H. Crescenti, and R. B. Zweidinger. 1993, 8p EPA/600/A-93/123
See also PB91-136911. Prepared in cooperation with ManTech Environmental Technology, Inc., Research Triangle Park, NC., and National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div.

Evaporative emissions from vehicles in an attached garage may represent a significant source of indoor pollution and human exposure. A pilot field study was undertaken to investigate potential in-house dispersion of evaporative emissions of uncombusted fuels from a vehicle parked inside an attached garage. In a set of experiments using sulfur hexafluoride tracer gas, the multizonal mass balance model, CONTAM88, was used to predict interzonal air flow rates and SF6 concentration distributions within the garage and house. Several experiments were included to evaluate the effect of meteorology and mechanical mixing mechanisms on the dispersion of automobile fuel vapor. Measurements indicated that approximately three percent of the garage maximum concentration was measured in a room adjacent to the garage. The model successfully predicted garage concentrations under well mixed conditions, but underpredicted the measured concentrations within various rooms of the house, in which mixing was incomplete. Multizonal mass balance models such as CONTAM88 may be useful in approximating contaminant concentrations at various locations within the house.

Keywords: *Indoor air pollution, *Garages, *Gasoline vapors, *Unburned fuels, Air pollution detection, Fuel tank evaporation, Motor vehicles, Sulfur hexafluoride, Isotopic markers, Mass balance, Field tests, Air flow.

**PB93-204089/REB** PC **A03/MF A01**
**Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.** Symposium paper.
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
C. W. Lewis, T. L. Conner, R. K. Stevens, J. F. Collins, and R. C. Henry. 1993, 18p EPA/600/A-93/127
Pub. in Proceedings of the Annual Meeting of AWMA (86th), Denver, CO., June 13-18, 1993. See also PB93-124618. Prepared in cooperation with University of Southern California, Los Angeles.

A very large data base of ambient non-methane hydrocarbons (NMHC), measured in Atlanta during summer 1990, is now available. The data base includes hourly measured ambient concentrations of C2 - C10 species at six surface sites during July and August. Chemical Mass Balance (CMB) receptor modeling is used to determine the individual contributions of several source

categories to measured total NMHC at one of the central city sites (Georgia Institute of Technology). A novel feature of the modeling is the use of source profiles derived from the ambient data itself through the use of GRACE (Graphical Ratio Analysis for Composition Estimates) and SAFER (Source Apportionment by Factors with Explicit Restriction) methodologies. For the purpose of emissions inventory validation the CMB results are compared to the 1990 summertime Atlanta emissions inventory prepared by the Georgia Department of Natural Resources.

Keywords: *Georgia, *Air pollution monitoring, *Air quality data, Exhaust gases, Fuel spills, Gasoline vapors, Pollution sources, Isoprene, Carbon monoxide, Computerized simulation, Data bases, Reprints, *Non-methane hydrocarbons, Atlanta(Georgia), Volatile organic compounds, Emissions inventory.

**PB93-204097/REB** PC **A03**/MF **A01**
**Setting an Agenda for Research in the Federal Statistical System: Needs for Statistical Disclosure Limitation Procedures.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
L. H. Cox, and L. V. Zayatz. 23 Apr 93, 18p EPA/600/A-93/128
Prepared in cooperation with Bureau of the Census, Washington, DC.

Many federal agencies conduct surveys and censuses of the nation's population and institutions under a pledge of confidentiality. They must then publicly release the gathered information in such a way that responses are not disclosed. The information may be published in the form of microdata or of tabular data, and, for each form, there are strategies for protecting the data. More research into disclosure limitation for microdata and tabular data is needed to ensure that agencies release as much valuable information as possible without violating the confidentiality pledge. The paper contains an agenda for the research.

Keywords: *Confidentiality, *Statistical data, *Privacy Act, Reports, Computer privacy, *Federal agencies, Data processing security.

**PB93-204105/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.** Symposium paper.
Battelle, Columbus, OH.
J. C. Chuang, P. J. Callahan, S. M. Gordon, N. K. Wilson, and R. G. Lewis. 1993, 8p EPA/600/A-93/129
Contract EPA-68-D0-0007
See also PB92-166701. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

A small field study was conducted to evaluate the role of smokers in the house on the levels of PAH, cotinine, and nicotine present in house dust. Samples were collected from eight houses, using the High Volume Small Surface Sampler (HVS3) to collect carpet-embedded dust from designated areas in the carpet in either the living room or family room of each house. After collection, the dust samples were separated into fine (150 micrometers) and coarse fractions. Most of the dust loading (69-85 percent) was found to be distributed in the fine fraction. The fine dust samples were analyzed for PAH, nicotine, and cotinine.

Keywords: *Indoor air pollution, *Dust, *Aromatic polycyclic hydrocarbons, *Air pollution sampling, Isotopic markers, Nicotine, Smoke, Particulates, Environmental exposure pathway, Field tests, *Semivolatile organic compounds, Continine, Solanesol, Smokers, Environmental tobacco smoke.

**PB93-204949/REB** PC **A02**/MF **A01**
Environmental Research Lab., Narragansett, RI.
**Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.** Journal article.
Science Applications International Corp., Narragansett, RI.
G. Zaroogian, P. Yevich, and S. Anderson. c1992, 7p EPA/600/J-93/211 , , ERLN-1277
Contract EPA-68-C1-0005
Pub. in Marine Environmental Research 35, p41-45, 1993. Sponsored by Environmental Research Lab., Narragansett, RI.

Uptake and inhibition studies were used to evaluate mechanisms of uptake of Ni(2+), Cd(2+), and B(a)P in the brown cells of M. mercenaria. Brown cells contain one or more vesicles that have been shown to be lysosomes. Cd(2+), Ni(2+), and B(a)P accumulation by brown cells was concentration-dependent and independent of time and temperature at 5 C. Metabolic inhibitors such as carbonyl cyanide-m-chlorophenyl hydrazone and NaF did not inhibit their uptake. N-ethylmaleimide facilitated Ni(2+) and Cd(2+) uptake, but inhibited B(a)P uptake. Buthionine-(S,R)-sulfoximine inhibited Ni(2+), Cd(2+), and B(a)P uptake in a dose-dependent manner, and diethylmaleate had no effect on Cd(2+) and B(a)P uptake, but increased Ni(2+) uptake. Chloroquine and copper, which accumulate in lysosomes, inhibited Ni(2+), Cd(2+), and B(a)P uptake. Verapamil inhibited Ni(2+) and B(a)P uptake, whereas it increased Cd uptake. The authors' results suggest that the brown cells of M. mercenaria are capable of accumulation of soluble foreign material and that membrane sulfhydrl groups, glutathione, and Cd(2+) channels are active in these processes. (Copyright (c) 1992 Elsevier Science Publishers Ltd, England.)

Keywords: *Benzo(a)pyrene, *Cadmium, *Nickel, *Water pollution effects(Animals), *Marine biology, Metabolism, Cells(Biology), Calcium channels, Copper, Chloroquine, N-ethylmaleimide, Verapamil, Lysosomes, Temperature, Reprints, *Mercenaria mercenaria, Buthionine sulfoximine, Maleic acid/diethyl.

**PB93-204964/REB** PC **A02**/MF **A01**
Environmental Research Lab., Narragansett, RI.
**Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.** Journal article.
Science Applications International Corp., Narragansett, RI.
B. J. Bergen, W. G. Nelson, and R. J. Pruell. c1993, 7p EPA/600/J-93/213, , ERLN-1413
Contract EPA-68-C1-0005
Pub. in Environmental Science and Technology, v27, 1993. Sponsored by Environmental Research Lab., Narragansett, RI.

The partitioning of polychlorinated biphenyls (PCBs) between particulate and dissolved phases of seawater was examined along a concentration gradient in New Bedford Harbor, MA. Regression analysis was used to examine the relationship between the log of the partition coefficients (K(sub p)) and the log of the octanol/water partition coefficients (K(sub ow)) for six PCB congeners at four stations. A seasonal trend (i.e., summer-winter) in partitioning was observed. Log (K(sub p)) was inversely correlated with temperature and to a lesser extent with total suspended solids (TSS) at each station. Multiple regression analysis indicated that approximately 70 percent of the variability in log K(sub p) along the PCB concentration gradient was accounted for by temperature, log K(sub ow), and TSS. Temperature and log K(sub ow) were equally important in defining changes in log K(sub p), with TSS contributing the least predictive ability. (Copyright (c) 1993 American Chemical Society.)

Keywords: *Polychlorinated biphenyls, *Water pollution effects, *Particulates, *Sea water, *Dissolving, Environmental transport, Massachusetts, Environmental effects, Regression analysis, Concentration(Composition), Temperature, Sediments, Biological effects, Separation, Reprints, *New Bedford Harbor, *Partitioning coefficients.

**PB93-204972/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.** Journal article.
Illinois Univ. at the Medical Center, Chicago. Dept. of Microbiology and Immunology.
R. A. Haugland, U. M. X. Sangodkar, P. R. Sferra, and A. M. Chakrabarty. c1991, 11p EPA/600/J-93/214
Contract NIEHS-ES04050-06
Pub. in Gene, v11 p66-73, 1991. See also PB90-100520. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab., and National Inst. of Environmental Health Sciences, Research Triangle Park, NC.

A series of spontaneous 2,4,5-trichlorophenoxyacetic acid (2,4,5-T) nonmetabolizing mutants of Pseudomonas cepacia AC1100 were characterized to be defective in either 2,4,5-T uptake or conversion of the compound to 2,4,5-trichlorophenol (2,4,5-TCP). Two of these mutants, RHC22 and RHC23, were complemented for growth on 2,4,5-T using an AC1100 genomic library constructed in the cosmid vector pCP13. Recombinant cosmids isolated from the complemented mutants contained a 27.5-kb insert which frequently underwent various-sized deletions in Escherichia coli. Hybridization studies showed the DNA to be of chromosomal origin and totally deleted in RHC22, RHC23 and other similar mutants. Complementation analyses of RHC22 with a series of subcloned fragments and spontaneously deleted derivatives of the recombinant cosmid pRHC21 showed the 2,4,5-T(tft) genes to occur within an 8.9-kb region. Pseudomonas aeruginosa cells transformed with the DNA acquired the ability to convert 2,4,5-T to 2,4,5-TCP. The genetic determinant for this function was further localized within a 3.7-kb region. The DNA, in the absence of other sequences from the 8.9-kb tft gene region allowed RHC22 cells to metabolize 2,4,5-T, but at low rates which were insufficient to support growth. (Copyright (c) 1991 Elsevier Science Publishers B.V.)

Keywords: *Pseudomonas cepacia, *Bacteria DNA, *Molecular cloning, *2-4-5-trichlorophenoxyacetic acid, Growth, Mutations, Nucleic acid hybridization, Cosmid, Genetic complementation test, Bacterial genes, Gene expression, Reprints.

**PB93-204998/REB** PC **A03**/MF **A01**
**Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows ('Cyprinodon variegatus').** Journal article.
Environmental Research Lab., Gulf Breeze, FL.
D. J. Hansen, and G. M. Cripe. c1993, 24p EPA/600/J-93/216
Pub. in Aquatic Toxicology and Risk Assessment, v14 p354-375, 1992. See also PB83-151993.

The interlaboratory precision of the American Society for Testing Materials (ASTM) early life-stage toxicity test with the sheepshead minnow (Cyprinodon variegatus) was investigated at five contract and two EPA laboratories using endosulfan and pentachlorobenzene. Each laboratory conducted two tests with each chemical. Tests began with 24-hour-old embryos continued through embryonic development, hatching and growth of fish to the juvenile stage and were terminated after 28 days. Effects on survival of embryos, survival of hatched fish and weight of surviving fish were quantified. Rules were developed for judging acceptability of test results and for selecting the upper and lower chronic values. Using these rules, 19 of the 28 tests (68 percent) were judged acceptable.

Keywords: *Chlorine organic compounds, *Minnows, *Toxicity, *Water pollution effects(Animals), Tests, Laboratories, Bioassay, Chlorobenzene, Endosulfan, Chlorine aliphatic compounds, Growth, Weight(Mass), Comparison, Atlantic Gulf, Life cycles, Embryos, Survival, Test methods, Acceptability, Reprints, Benzene/pentachloro, *Cyprinodon variegatus, Sheepshead minnows.

**PB93-205011/REB** PC **A02**/MF **A01**
Environmental Research Lab., Gulf Breeze, FL.
**Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.** Journal article.
Center of Marine Biotechnology, Baltimore, MD.
T. M. Warren, V. Williams, and M. Fletcher. c1992, 8p CONTRIB-30, EPA/600/J-93/218
Pub. in Applied and Environmental Microbiology, v58 n9 p2954-2959 Sep 92. Sponsored by Environmental Research Lab., Gulf Breeze, FL.

Microcosm studies were performed to evaluate the effect of solid surfaces, bacterial adhesive ability, and inoculum size on colonization success and persistence of P. fluorescens or X. maltophilia, each with a Tn5 insertion that conferred resistance to kanamycin and streptomycin. In lake water enrichment microcosms, the presence of beads appeared to influence the abilities of P. fluorescens or X. maltophilia to colonize, as numbers of both organisms were greater in microcosms with beads (significant at same sampling dates

at P < 0.01). However, solid surfaces did not appear to facilitate persistence of either organisms, as their numbers decreased with time in microcosms both with and without beads. The adhesiveness of the bacteria, as measured in an in vitro assay, did not relate to colonization success, as P. fluorescens and X. maltophilia colonized the microcosms to approximately the same level, but P. fluorescens was the more adhesive strain. In complex systems, colonization of surfaces appeared to result in higher numbers of organisms, but did not noticeably promote persistence. Adhesiveness of a particular organism is probably a relatively minor factor influencing its ability to colonize solid surfaces in complex natural environments.

Keywords: *Bacterial adhesion, *Microbial colony count, *Pseudomonas fluorescens, Microbial drug resistance, Aquatic microbiology, In vitro analysis, Reprints, *Xanthomonas maltophilia.

**PB93-205029/REB** PC **A03/MF A01**
Environmental Research Lab., Gulf Breeze, FL.
**Genetic Analysis of the aggA Locus Involved in Agglutination and Adherence of 'Pseudomonas putida', a Beneficial Fluorescent Pseudomonad.** Journal article.
Utah Agricultural Experiment Station, Logan.
C. R. Buell, and A. J. Anderson. c1992, 11p PAPER-4152, EPA/600/J-93/219
Pub. in Molecular Plant-Microbe Interactions, v5 n2 p154-162 1992. Sponsored by Environmental Research Lab., Gulf Breeze, FL.

An isolate of Pseudomonas putida, which rapidly adheres to plant roots, is agglutinated by a glycoprotein from root surfaces. Agglutination is prevented and adherence to the root surface is diminished by Tn5 insertion in mutant 5123. Two cosmid clones from wild type P. putida and a 2.7-kbp EcoRI-HindIII subclone present in both cosmid clones restored agglutinability to wild type levels in transconjugants of the nonagglutinable (Agg-) Tn5 mutant 5123. These three clones increased agglutinability in transconjugants of the parental Agg+ isolate. The 2.7-kbp EcoRI-HindIII subclone restored adherence to bean root surfaces of 5123 to wild type levels in a short-term binding assay. Deletion analysis of the 2.7-kbp fragment indicated only 1.45 kbp was necessary for complementation of agglutinability in 5123. The sequence, termed the aggA locus, contains an open reading frame of 1,356 nucleotides encoding a predicted 50,509-Da protein. The distribution of the aggA locus in plant-associated bacteria, as detected through Southern hybridization, is limited to bacteria that express the agglutination phenotype.

Keywords: *Pseudomonas putida, *Bacterial genes, *Agglutination, Open reading frames, Bacterial adhesion, Deoxyribonucleic acids, Molecular sequence data, Sequence deletion, Genetic complementation test, Glycoproteins, Phenotype, Reprints.

**PB93-205037/REB** PC **A02/MF A01**
Environmental Research Lab., Gulf Breeze, FL.
**Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.** Journal article.
Utah Agricultural Experiment Station, Logan.
J. Katsuwon, and A. J. Anderson. c1990, 9p PAPER-3994, EPA/600/J-93/220
Pub. in Applied and Environmental Microbiology, v56 n11 p3576-3582 Nov 90. See also PB90-264847. Sponsored by Environmental Research Lab., Gulf Breeze, FL.

Increased specific activities of catalase but not superoxide dismutase were observed during growth of these bacteria on components washed from root surfaces. The specific activities of both enzymes were also regulated during contact of these bacteria with intact bean roots. Increased superoxide dismutase and decreased catalase activities were observed rapidly, by 10 min upon inoculation of cells onto intact bean roots. Catalase specific activity increased with time to peak at 12 h before declining. By 48 h, the cells displayed this low catalase but maintained high superoxide dismutase specific activities. Catalase with a low specific activity and a high superoxide dismutase activity also were present in extracts of cells obtained from 7-day-old roots colonized from inoculum applied to seed. The specific activity of superoxide dismutase of root-contacted cells was about fourfold-higher in comparison to cells grown on rich medium, whereas the specific activity for catalase was reduced about fivefold. A single catalase isozyme, isozyme A, and one isozyme of superoxide dismutase, isozyme 1, were detected during growth of the bacteria on root surface components and during exposure of cells to intact bean roots for 1 h. An additional catalase, isozyme B, was detected from bacteria after exposure to the intact bean roots for 12 h. Catalase isozyme A and superoxide dismutase isozyme 1 were located in the cytoplasm and catalase band B was located in the membrane of P. putida. (Copyright (c) 1990, American Society for Microbiology.)

Keywords: *Catalase, *Superoxide dismutase, *Pseudomonas putida, *Pseudomonas fluorescens, *Bean plants, Isoenzymes, Microbial colony count, Carbon, Polyacrylamide gel electrophoresis, Reprints.

**PB93-205045/REB** PC **A03/MF A01**
Environmental Research Lab., Gulf Breeze, FL.
**Influence of Root Colonizing Bacteria on the Defense Responses of Bean.**
Utah Agricultural Experiment Station, Logan.
R. E. Zdor, and A. J. Anderson. c1992, 11p PAPER-4148, EPA/600/J-93/221
Pub. in Plant and Soil 140, p99-107 1992. Sponsored by Environmental Research Lab., Gulf Breeze, FL.

Systemic effects of root inoculation by Pseudomonas putida isolate Corvallis, P. tolaasii (P9A) and P. aureofaciens REW1-I-1 were observed in bean leaves from 14-day-old plants. SDS- polyacrylamide gel electrophoresis demonstrated that levels of certain acid-soluble proteins increased in the leaf extracts of inoculated plants. Plants inoculated with REW1-I-1 produced more of a 57 M(r) protein, and plants inoculated with isolates P9A and REW1-I-1 produced more of a 38 M(r) protein. Northern hybridization revealed enhanced accumulation of mRNAs, that encode the pathogenesis-related protein PR1a, in leaves of plants inoculated with P. putida and REW1-I-1. Only REW1-I-1, but not P9A or P. putida induced symptoms of an hypersensitive response on tobacco leaves, bean cotyledons, and in bean suspension cultures. Phenolics and phytoalexins accumulated in bean cotyledons exposed to REW1-I-1 for 24h but little change in levels of these compounds occurred in cotyledons inoculated with P9A and P. putida. Both suspension culture cells and roots treated with REW1-I-1 rapidly evolved more hydrogen peroxide than those exposed to P9A and P. putida. However, roots from 14-day-old plants colonized by P9A, P. putida or REW1-I-1 did not have higher levels of phenolics, phytoalexins or mRNAs for two enzymes involved in phenolic biosynthesis, phenylalanine-ammonia lyase and chalcone synthase. A selective induction of plant defense strategies upon root colonization by certain pseudomonads is apparent. (Copyright (c) 1992 Kluwer Academic Publishers.)

Keywords: *Pseudomonas, *Bean plants, *Microbial colony count, Ribonucleic acids, Nucleic acid hybridization, Chemiluminescence, Phenols, Peroxidases, Pseudomonas putida, Reprints, *Plant immunology, Phaseolus vulgaris, Pseudomonas tolaasii, Pseudomonas aureofaciens.

**PB93-205052/REB** PC **A02/MF A01**
Environmental Research Lab., Gulf Breeze, FL.
**Characterization of Catalase Activities in a Root-Colonizing Isolate of 'Pseudomonas putida' (Revised).** Journal article.
Utah Agricultural Experiment Station, Logan.
J. Katsuwon, and A. J. Anderson. c1991, 9p PAPER-4175, EPA/600/J-93/222
Pub. in Canadian Jnl. of Microbiology 38, p1026-1032 1992. Sponsored by Environmental Research Lab., Gulf Breeze, FL.

Pseudomonas putida, a saprophytic root-colonizing bacterium, produces multiple forms of catalase. Catalase A, which increases in specific activity during growth phase and after treatment with H2O2, is located in the cytoplasm and is inhibited by 3-amino-1,2,4-triazole, EDTA, and cyanide, but not by chloroform-methanol treatment. Catalase B, which is induced by external H2O2 or during stationary phase of growth, is membrane associated and is inhibited by chloroform-methanol, EDTA, and cyanide, but not by aminotriazole. Catalase A has a broad pH optimum, from pH 6.0 to 11.0, with two peaks, at pH 8.0 and 11.0. Catalase B is most active at pH 5.0-11.0 Mutant J-1, generated by ethyl methanesulfonate mutagenesis, lacked catalase A activty in extracts of cells harvested throughout lag to early stationary growth phase in liquid medium. Catalase B was produced by J-1 in stationary phase. Exposure of J-1 to H2O2 caused the production of both catalase A and catalase B. Mutant J-1 was more susceptible to cell death than the wild type upon direct exposure to 2.5 mM H2O2 but survived the treatment after exposure to lower (0.3 mM), nonlethal doses of H2O2. The ability to adapt to H2O2 may be related to the behavior of J-1 on roots where active oxygen species are produced by root surface enzymes. J-1 colonized root surfaces at wild-type levels and produced catalases A and B after exposure to root surfaces for 12 h.

Keywords: *Catalase, *Pseudomonas putida, *Plants(Botany), Microbial colony count, Isoenzymes, pH, Hydrogen peroxide, Peroxidases, Mutations, Reprints.

**PB93-205078/REB** PC **A02/MF A01**
Environmental Research Lab., Gulf Breeze, FL.
**Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.** Journal article.
Maryland Biotechnology Inst., Baltimore.
M. Shahamat, U. Mai, C. Paszko-Kolva, M. Kessel, and R. R. Colwell. c1993, 7p EPA/600/J-93/224
Grant NSF-BSR-9020268
Pub. in Applied and Environmental Microbiology, v59 n4 p1231-1235 Apr 93. Prepared in cooperation with Maryland Univ., College Park. Dept. of Microbiology. Sponsored by Environmental Research Lab., Gulf Breeze, FL., and National Science Foundation, Washington, DC.

Autoradiographic methods have been developed to detect metabolic activity of viable but nonculturable cells of Helicobacter pylori in water. Four strains of H. pylori were studied by using microcosms containing suspensions of 72-h cultures in water. The suspensions of aged, nonculturable cells of H. pylori were incubated with ((-3)H)thymidine for 24 to 72 h, after which the cell suspensions were exposed to Kodak NTB2 emulsion for 3 to 28 days. Each sample was processed with three separate controls to rule out false-positive reactions. The organism remains viable and culturable under these conditions for up to 48 h and, in some cases, 20 to 30 days, depending on physical conditions of the environment. The authors found that temperature was a significant (P < or = 0.01) environmental factor associated with the viability of H. pylori cells in water. Autoradiographs of tritium-labeled cells of H. pylori revealed aggregations of silver grains associated with uptake by H. pylori of radiolabelled substrate. Findings based on the autoradiographic approach give strong evidence supporting the hypothesis that there is a waterborne route of infection for H. pylori. The possibility that H. pylori may persist in water in a metabolically active stage but not actively growing and dividing is intriguing and relevant to public health concerns. (Copyright (c) 1993, American Society for Microbiology.)

Keywords: *Helicobacter pylori, *Autoradiography, *Aquatic microbiology, Cell survival, Temperature, Potable water, Helicobacter infections, Metabolism, Public health, Reprints.

**PB93-205086/REB** PC **A01/MF A01**
Environmental Research Lab., Gulf Breeze, FL.
**Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.** Journal article.
Center of Marine Biotechnology, Baltimore, MD.
R. T. Hill, I. T. Knight, M. S. Anikis, and R. R. Colwell. c1993, 5p EPA/600/J-93/225
Contract NA16RU0217-01
Pub. in Applied and Environmental Microbiology, v59 n1 p47-51 Jan 93. Prepared in cooperation with James Madison Univ., Harrisonburg, VA. Dept. of Biology. Sponsored by Environmental Research Lab., Gulf Breeze, FL., and National Oceanic and Atmospheric Administration, Rockville, MD.

Clostridium perfringens in sediment samples collected at the Deep Water Municipal Sewage Sludge Disposal Site (also called the 106-Mile Site), off the coast of New Jersey, was enumerated. The counts of C. perfringens found in sediment samples collected within and to the southwest of the 106-Mile Site were significantly elevated (P. < 0.01) compared with counts of samples from reference stations of similar depth (2,400 to 2,700 m), topography, and distance from the continental shelf, indicating that the benthic environment was contaminated by sewage dumping at the site. Low counts of C. perfringens in sediment samples collected at stations between the base of the conti-

nental shelf and the 106-Mile Site indicated that coastal runoff was not a significant source of contamination. Elevated counts were observed for samples up to 92 km to the southwest, whereas low counts were obtained for samples from stations to the east of the 106-Mile Site. The distribution is consistent with previous model predictions of sludge deposition. In areas heavily impacted by sludge dumping, C. perfringens counts were generally highest in the top 1 cm of sediment and exceeded 9,000 CFU g (dry weight) of sediment. The patterns of C. perfringens dispersal observed in the study have proved useful for selection of heavily impacted areas and control stations for further ecological evaluation by a multidisciplinary research team. (Copyright (c) 1993, American Society for Microbiology.)

Keywords: *Ocean waste disposal, *Sludge disposal, *Sewage sludge, *Water pollution effects, *Benthos, Aquatic ecosystems, Biological indicators, Sediments, Environmental effects, Water quality, Reprints, *Clostridium perfringens.

**PB93-205102/REB** PC **A02/MF A01**
**Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.** Journal article.
Environmental Research Lab., Athens, GA.
R. L. Valentine, and R. G. Zepp. c1993, 6p EPA/600/J-93/227
Pub. in Environmental Science and Technology, v27 n2 p409-412 Feb 93. See also AD-A221 119. Prepared in cooperation with Iowa Univ., Iowa City. Dept. of Civil and Environmental Engineering.

The photochemical formation of carbon monoxide (CO) in water samples obtained from wetlands, lakes, and near-coastal/shelf areas and in aqueous solutions of soil organic matter was investigated. All of these samples contained dissolved organic matter that was largely derived from terrestrial sources. The studies show that, although the water samples had widely varying optical properties and CO photoproduction rates, the efficiencies for photochemical CO formation were remarkably similar in all waters examined. Model calculations further indicated that photodegradation of terrestrial dissolved organic matter (e.g., in wetland and near-coastal environments) may be an important global source of carbon monoxide and a key process in cycling of dissolved organic matter in these environments.

Keywords: *Carbon monoxide, *Photochemical reactions, *Air pollution, *Organic matter, *Natural emissions, Greenhouse gases, Air water interactions, Wetlands, Lakes, Photodegradation, Global aspects, Carbon cycle, Reprints.

**PB93-205110/REB** PC **A02/MF A01**
**FATE, the Environmental Fate Constants Information Database.** Journal article.
Environmental Research Lab., Athens, GA.
H. P. Kollig, B. E. Kitchens, and K. J. Hamrick. c1993, 6p EPA/600/J-93/228
Pub. in Jnl. of Chemical Information and Computer Sciences, v33 n1 p131-134 Jan 93. See also PB89-138796 and PB91-216192. Prepared in cooperation with Computer Sciences Corp., Athens, GA.

An online database, FATE, has been developed for the interactive retrieval of kinetic and equilibrium constants that are needed for assessing the fate of chemicals in the environment. The database contains values for up to 12 parameters for each chemical. As of December 1991, FATE contained values for about 200 chemicals. FATE is unique in that experimental data are extracted only from primary references. Pertinent experimental conditions are included in the database to support the credibility and applicability of a value. Transformation products are included when they are available. A new computer program is used to extrapolate measured hydrolysis rate constant data to a standard format. Acidic, basic, and neutral contributions are combined to calculate the overall hydrolysis rate constant, and the half-life of the chemical at 25 deg C and pH 7. The data are reported as second-order acidic and basic rates and a first-order neutral rate at 25 deg C. A new computerized expert system will be applied to compute fate constant values that are more reliable than many measured values. The expert system has the capability of crossing chemical boundaries to cover all organic compounds. (Copyright (c) 1993 American Chemical Society.)

Keywords: *Environmental transport, *Chemical compounds, *Path of pollutants, *Information systems, Pollution sources, Reaction kinetics, Hydrolysis, pH, Expert systems, Chemical equilibrium, Reprints, *FATE data base.

**PB93-205128/REB** PC **A03/MF A01**
**Possible Influence of Hydrogen Concentration on Microbial Methane Stable Hydrogen Isotopic Composition.** Journal article.
Environmental Research Lab., Athens, GA.
R. A. Burke. c1993, 15p EPA/600/J-93/229
Pub. in Chemosphere, v29 n1-4 p55-67 Apr 93. See also PB92-217181.

Factors affecting the stable hydrogen isotopic composition (delta D) of important sources of microbial methane to the atmosphere include oxidation, methanogenic precursor (e.g., acetate vs. CO2/H2), and the delta D of the environmental water. Variations in hydrogen gas concentrations or rates of interspecies hydrogen transfer resulting from variations in organic matter degradation rates may also affect delta D-CH4. Methane produced via CO2 reduction by laboratory cultures was more D-depleted than methane produced in shallow marine sediments from CO2/H2. The dissolved hydrogen gas concentration in that laboratory culture was about 1mM; whereas, hydrogen concentrations in methane-zone sediments typically range between 10 and 100 nM. The relatively greater hydrogen isotope fractionation in the culture appears to result from the incorporation into methane of protons that are produced intracellularly from the hydrogenase-catalyzed oxidation of hydrogen gas.

Keywords: *Air pollution, *Methane, *Hydrogen isotopes, *Microbial degradation, Organic matter, Natural emissions, Combustion products, Pollution sources, Atmospheric chemistry, Sediments, Carbon dioxide, Carbon isotopes, Oxidation, Wetlands, Chemical reactions, Reprints.

**PB93-205136/REB** PC **A03/MF A01**
**Modeling Contaminant Propagation in Drinking-Water Distribution Systems.** Journal article.
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
R. M. Clark, W. M. Grayman, R. M. Males, and A. F. Hess. c1993, 18p EPA/600/J-93/230
Pub. in Jnl. of Environmental Engineering, v119 n2 p349-364 Mar/Apr 93. See also PB91-196410. Prepared in cooperation with Grayman (W.M.) Consulting Engineers, Cincinnati, OH., RMM Technical Services, Inc., Cincinnati, OH., and South Central Connecticut Regional Water Authority, New Haven.

The Safe Drinking Water Act and its Amendments (SDWAA) will pose a massive challenge for the drinking-water industry in the United States. As the SDWAA regulations reach implementation, increasing effort will be devoted to understanding the factors causing deterioration of water quality between treatment and consumption. A cooperative study involving the U.S. EPA, the University of Michigan, and the South Central Connecticut Regional Water Authority (RWA) demonstrated and validated the use of modeling techniques in the RWA distribution system. Models are used to predict the propagation of chlorine residual in one portion of the RWA system. It is found that residuals varied widely both spatially and temporally. Long residence times in storage tanks caused residual disinfection concentrations to be low or nonexistent during discharge cycles. It was found that system operation has a significant effect on the distribution and concentration of chlorine residuals in the system. (Copyright (c) 1993 ASCE.)

Keywords: *Water treatment, *Distribution systems, *Water quality management, Path of pollutants, Water supply, Water utilities, Potable water, Water pollution, Mathematical models, Reprints, Safe Drinking Water Act.

**PB93-205144/REB** PC **A02/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Alternating Current Electrocoagulation for Superfund Site Remediation.** Journal article.
Electro-Pure Systems, Inc., Amherst, NY.
N. P. Barkley, C. W. Farrell, and T. W. Gardner-Clayson. c1993, 8p EPA/600/J-93/231
Grant EPA-R-816205
Pub. in Jnl. of Air and Waste Management Association, 1993. See also PB-143 652. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The technical and economical feasibility of alternating current electrocoagulation (ACE) was evaluated for a 2-year period. ACE is an electrochemical technology where highly-charged aluminum polyhydroxide species are introduced into aqueous media for the removal of suspended solids, oil droplets, and soluble ionic pollutants. ACE can break stable aqueous colloidal suspensions of up to 10% total solids and stable emulsions containing up to 5% oil. Major operating parameters have been defined for different classes of effluents based on experimental results using complex synthetic soil slurries and metals. Test results indicate that ACE produces aqueous and solid separations comparable to those produced by chemical flocculent additions, but with reduced filtration times and sludge volumes. The technology has application where removal of soluble and suspended pollutants from effluents is required, and in the recovery of fine-grained products from process streams. The technology however, has not yet been demonstrated at full-scale for Superfund site remediation. Summarized are the principal results of the SITE research program and results of ACE treatment on some different classes of industrial effluents, not part of the SITE Program.

Keywords: *Electrocoagulation, *Hazardous materials, *Waste treatment, Remediation, Flocculation, Waste processing, Slurries, Metals, Aqueous solutions, Alternating current, Electrochemistry, Reprints, Treatment technology.

**PB93-205169/REB** PC **A03/MF A01**
Environmental Research Lab., Gulf Breeze, FL. Microbial Ecology and Biotechnology.
**Molecular Basis of Biodegradation of Chloroaromatic Compounds.** Journal article.
Illinois Univ. at Chicago. Dept. of Microbiology and Immunology.
U. M. X. Sangodkar, T. L. Aldrich, T. L. Haugland, R. A. Johnson, and R. K. Rothmel. c1989, 18p EPA/600/J-93/234
Grants EPA-R812660, NIEHS-ES-04050-3
Pub. in Acta Biotechnology, v9 n4 p301-316 1989. Sponsored by Environmental Research Lab., Gulf Breeze, FL. Microbial Ecology and Biotechnology, and National Inst. of Environmental Health Sciences, Research Triangle Park, NC.

Chlorinated aromatic hydrocarbons are widely used in industry and agriculture and comprise the bulk of environmental pollutants. Although simple aromatic compounds are biodegradable by a variety of degradative pathways, their halogenated counterparts are more resistant to bacterial attack and often necessitate evolution of novel pathways. An understanding of such evolutionary processes is essential for developing genetically improved strains capable of mineralizing highly chlorinated compounds. The article provides an overview of the genetic aspects of dissimilation of chloroaromatic compounds and discusses the potential of gene manipulation to promote enhanced evolution of the degradative pathways.

Keywords: *Biodegradation, *Chlorinated aromatic hydrocarbons, *Biochemistry, Microorganisms, Enzymatic hydrolysis, Biochemical reaction kinetics, Enzyme activity, Chemical analysis, Reprints.

**PB93-205177/REB** PC **A02/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Repeated Sequences Including RS1100 'Pseudomonas cepacia' AC1100 Function as IS Elements.** Journal article.
Illinois Univ. at the Medical Center, Chicago. Dept. of Microbiology and Immunology.
R. A. Haugland, U. M. X. Sangodkar, and A. M. Chakrabarty. c1990, 9p EPA/600/J-93/235
Grant PHS-ES-04050-04
Pub. in Molecular and General Genetics, v220 p222-228, 1990. See also PB90-100520. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab., and National Inst. of Environmental Health Sciences, Research Triangle Park, NC.

Several lines of evidence were obtained that the previously identified, repeated sequence RS1100 of Pseu-

domonas cepacia strain AC1100 undergoes transposition events. DNA sequences flanking the chlorohydroxy hydroquinone (CHQ) degradative genes of the organism were examined from sources, including several independently isolated cosmid clones from an AC1100 genomic library and genomic DNAs of two independently maintained wild-type AC1100 isolates. Hybridization and restriction endonuclease mapping studies revealed these sequences to be similar except for their numbers and distributions of RS1100 copies. A recombinant plasmid containing the immediate chq gene region and excluding any copies of RS1100 was conjugated into AC1100 mutant RHA5 which was shown to have undergone a deletion of its corresponding DNA. Hybridization and restriction mapping analyses of several reisolated plasmids revealed the presence of RS1100 sequences at different positions within either the vector or insert portions. One such plasmid contained tandem copies of RS1100 with an intervening DNA sequence also of AC1100 origin. (Copyright (c) Springer-Verlag 1990.)

Keywords: *Pseudomonas cepacia, *Nucleic acid repetitive sequences, *Bacterial DNA, Restriction mapping, Nucleic acid hybridization, Gene expression, DNA insertion elements, Plasmids, Molecular cloning, Reprints, Chlorohydroxyhydroquinone.

**PB93-205185/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.** Journal article.
Illinois Univ. at the Medical Center, Chicago. Dept. of Microbiology and Immunology.
R. A. Haugland, D. J. Schlemm, R. P. Lyons, P. R. Sferra, and A. M. Chakrabarty. c1990, 8p EPA/600/J-93/236
Grant PHS-ES-04050-04
Pub. in Applied and Environmental Microbiology, v56 n5 p1357-1362 May 90. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab., and National Inst. of Environmental Health Sciences, Research Triangle Park, NC.

Combined cell suspensions of the 2,4,5-trichlorophenoxyacetic acid (2,4,5-T) metabolizing organism Pseudomonas cepacia AC1100, and the 2,4-dichlorophenoxyacetic acid (2,4-D)-metabolizing organism Alcaligenes eutrophus JMP134 were shown to effectively degrade either of these compounds provided as single substrates. These combined cell suspensions, however, poorly degraded mixtures of the two compounds provided at the same concentrations. Growth and viability studies revealed that such mixtures of 2,4-D and 2,4,5-T were toxic to AC1100 alone and to combinations of AC1100 and JMP134. High-pressure liquid chromatography analyses of culture supernatants of AC1100 incubated with 2,4-D and 2,4,5-T revealed the accumulation of chlorohydroquinone as an apparent dead-end catabolite of 2,4-D and the subsequent accumulation of both 2,4-dichlorophenol and 2,4,5-trichlorophenol. JMP134 cells incubated in the same medium did not catabolize 2,4,5-T and were also inhibited in initiating 2,4-D catabolism. A new derivative of strain AC1100 was constructed by the transfer into the organism of the 2,4-D-degradative plasmid pJP4 from strain JMP134. The new strain, designated RHJ1, was shown to efficiently degrade mixtures of 2,4-D and 2,4,5-T through the simultaneous metabolism of these compounds. (Copyright (c) 1990, American Society for Microbiology.)

Keywords: *Biodeterioration, *Herbicides, *2-4-dichlorophenoxyacetic acid, *2-4-5-trichlorophenoxyacetic acid, *Alcaligenes, *Pseudomonas cepacia, Growth, Liquid chromatography, Transfection, Reprints.

**PB93-205383/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.**
Purus, Inc., San Jose, CA.
M. D. Johnson, W. Haag, P. G. Bylstone, and P. F. Daley. Jun 93, 41p EPA/540/R-93/516
Grant EPA-R-818209-01-0
Prepared in cooperation with Lawrence Livermore National Lab., CA. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The paper describes a new process for photo-oxidation of volatile organic compounds (VOCs) in air using an advanced ultraviolet source, a Purus xenon flashlamp. Two full scale air emissions control systems for trichloroethane (TCE) were constructed at Purus and tested at Lawrence Livermore National Laboratory (LLNL) Superfund Site. The systems were operated at flash frequencies of 1-30 Hz, temperatures of 33-60 C, flows up to 300 scfm (260 ppmv TCE) and concentrations up to 10,600 ppmv (100 scfm). Residence times ranged from 5 to 75 seconds. In all cases except the lowest flash frequency, greater than 99% removal of TCE was observed.

Keywords: *Air pollution control equipment, *Flash lamps, *Ultraviolet radiation, Photooxidation, Photolysis, Photochemistry, Luminous intensity, Quantum efficiency, Volatile organic compounds, Ethane/trichloro.

**PB93-205508/REB** PC **A99**/MF **A06**
Environmental Protection Agency, Washington, DC. Office of Water.
**Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.**
Science Applications International Corp., Falls Church, VA.
P. Parikh, K. Fenner, M. Podar, and B. Snyder. 16 Apr 93, 618p
Contract EPA-68-C8-0066
See also PB93-154730 and PB93-505402. Sponsored by Environmental Protection Agency, Washington, DC. Office of Water.

The document presents the detailed results of the evaluations performed to estimate the compliance costs related to the proposed Great Lakes Water Quality Guidance. Specifically, the document provides the results of the individual evaluations performed on the 59 sample facilities selected to represent the direct discharges to the Great Lakes System.

Keywords: *Cost estimates, *Water pollution standards, *Water quality management, *Great Lakes, Waste disposal, Facilities, Monitoring, Mining, Corporations, Food industry, Paper industry, Chemical industry, Organic chemicals, Petroleum refining, Industrial wastes, Performance evaluation, Compliance, Public utilities, Licenses, Discharge(Water).

**PB93-205532/REB** PC **A09**/MF **A02**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Technology Evaluation Report: Pilot-Scale Demonstration of a Slurry-Phase Biological Reactor for Creosote-Contaminated Soil. Volume 1.**
IT Corp., Cincinnati, OH.
M. Donsani. Mar 93, 181p EPA/540/5-91/009
Contract EPA-68-C9-0036
See also PB92-129683. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The report documents a pilot-scale test of a slurry-phase biological reactor for treatment of creosote-contaminated soil. The technology used was a reactor system in which an aqueous slurry of soil was mixed with appropriate nutrients and seeded with micro-organisms to enhance the biodegradation process. In the 12-wk study, a creosote-contaminated soil from the Burlington Northern Superfund Site in Brainerd, MN, was used to test the slurry-phase reactors. The results of a previously-performed bench-scale study were used to optimize a pilot-scale reactor system. Each reactor contained 64 l of 30% slurry (soil: water, w/v). The pilot-scale phase utilized an inoculum of indigenous polynuclear aromatic hydrocarbon (PAH) degraders (9.3 x 10 to the 7th power CFU/g of soil), an inorganic nitrogen supplement in the form of NH4(-N), and a media broth containing potassium, phosphate, magnesium, calcium, and iron. The reduction of total PAHs exceeded 87%. The report presents detailed information concerning the operation, sampling and analysis, and results achieved with the pilot-scale slurry-phase bioremediation system.

Keywords: *Biological treatment, *Creosote, *Soils, *Superfund, *Waste treatment, Slurries, Waste disposal, Biodeterioration, Chlorine organic compounds, Aromatic polycyclic hydrocarbons, Bench-scale experiments, Nitrogen inorganic compounds, Reduction, Cost effectiveness, Remedial action, Phenol/pentachloro.

**PB93-205540/REB** PC **A13**/MF **A03**
Corvallis Environmental Research Lab., OR.
**Proceedings of the International Workshop on Carbon Cycling in Boreal Forest and Sub-Arctic Ecosystems: Biospheric Responses and Feedbacks to Global Climate Change.**
Oregon State Univ., Corvallis. Dept. of Civil Engineering.
T. S. Vison, and T. P. Kolchugina. May 93, 292p EPA/600/R-93/084
See also PB93-191484. Sponsored by Corvallis Environmental Research Lab., OR.

In recognition of the need to assess the effect of tundra, peat lands and boreal forests on terrestrial carbon dynamics, an international workshop (with participants from the USA, Canada, the former Soviet Union and other boreal forest and sub-arctic countries) was convened with the following objectives: identify available tools and methods that may be used to provide extensive, early evaluation of responses and feedbacks in boreal forest and sub-arctic ecosystems; identify available carbon dynamics data and models that may be used to conduct preliminary analyses of carbon cycling and sequestering patterns in boreal forest and sub-arctic ecosystems and establish carbon budgets for boreal and sub-arctic countries; identify the necessary elements of a framework to establish the carbon budget for a boreal forest and/or sub-arctic country.

Keywords: *Meetings, *Carbon cycle, *Terrestrial ecosystems, Boreal regions, Subarctic, Tundra, Forests, Biomass, Carbon sinks, Ecological succession, Climatic changes, Greenhouse effect, Forest soils.

**PB93-205557/REB** PC **A10**/MF **A03**
Environmental Protection Agency, Research Triangle Park, NC.
**Characterization of the Organic Emissions from the Thermal Destruction of CFCs.** Final rept. Jan 92-Apr 93.
Acurex Environmental Corp., Research Triangle Park, NC.
J. V. Ryan. Jun 93, 221p REPT-8421.356
Contract EPA-68-DO-0141
See also PB84-170042, PB90-116955, PB92-126952 and PB92-150432. Sponsored by Environmental Protection Agency, Research Triangle Park, NC.

A 293 kW (1 million Btu/h) incinerator was made available to the EPA for the characterization, which focused on determining the destruction efficiencies (DEs) and major products of incomplete combustion (PICs) for each CFC evaluated. Sampling was performed to screen for volatile and semivolatile organic emission products including chlorinated aliphatics, chlorobenzenes, chlorophenols, polychlorinated dibenzodioxins and furans (PCDDs and PCDFs), and polyaromatic hydrocarbons (PAHs). Results indicate that 99.999% DE can be achieved at a CFC-11 feed rate as high as 69% by mass. The formation of volatile and semivolatile organic PICs was minimal. 'Less than' concentrations are presented for target analytes not detected.

Keywords: *Combustion efficiency, *Incinerators, *Freons, *Air pollution sampling, Waste disposal, Fluorohydrocarbons, Chlorohydrocarbons, Combustion products, Aromatic polycyclic hydrocarbons, Destruction, Thermal afterburners.

**PB93-205581/REB** PC **A06**/MF **A02**
Environmental Protection Agency, Washington, DC. Office of Policy, Planning and Evaluation.
**Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.**
Apogee Research, Inc., Bethesda, MD.
M. Luttner, R. Kashmanian, and M. Podar. Apr 92, 124p
Contract EPA-68-CO-0083
See also PB92-231620. Sponsored by Environmental Protection Agency, Washington, DC. Office of Policy, Planning and Evaluation.

The report examines effluent trading as one option to achieve water quality objectives at least cost. Although it can take many different forms, effluent trading in principle allocates reductions in pollutant loadings across point and nonpoint sources using least cost as the criterion. While several options are discussed, the paper focuses principally on trading schemes in which regulated point sources are allowed to avoid upgrading

their pollution control technology to meet water quality-based effluent limits if they pay for equivalent (or greater) reductions in nonpoint source pollution within their watersheds. The report focuses on nutrient trading because trading programs to date have dealt with pollutants of this type and because of the large number of difficult issues specific to trades involving toxic pollutants.

Keywords: *Water quality management, *Incentives, *Point sources, *Nonpoint sources, *Water pollution control, Nutrients, Clean Water Act, Alternatives, Implementation, Cost analysis, Watersheds, Discharge measurement, Requirements, Pollution regulations, *Effluent trading.

**PB93-205672/REB** PC **A11**/MF **A03**
Environmental Protection Agency, Washington, DC.
**Proceedings: Galveston Bay Characterization Workshop. Held on February 21-23, 1991.**
Galveston Bay National Estuary Program,, Austin, TX. F. S. Shipley, and R. W. Kiesling. Mar 92, 235p* GBNEP-6
Sponsored by Environmental Protection Agency, Washington, DC.

The fifty-six short papers composing the proceedings represent the concerted work of numerous scientists with a knowledge of, and concern for, Galveston Bay. These papers are the result of an invitation to the scientific community for contributions centered on estuarine problems already identified and agreed upon by consensus as a Galveston Bay Priority Problems List. Reports on work in progress were encouraged, as well as completed projects. These contributions have helped successfully accomplish four broad goals: first, to identify scientific work on Galveston Bay being conducted by institutions other than the GBNEP; second, to promote peer interaction amount the principle investigators involved in the research; third, to improve the understanding of estuarine problems in need of management solutions; and finally, to encourage project coordination in an ecosystem context.

Keywords: *Coastal zone management, *Gulf coast, *Texas, *Galveston Bay, Estuaries, Ecosystems, Research management, Oil pollution, Aquatic ecosystems, Pollution control, Meetings, Proceedings.

**PB93-205680/REB** PC **A08**/MF **A02**
Environmental Protection Agency, Washington, DC.
**Regulatory Effectiveness Study for the Armand Bayou Coastal Preserve.**
Galveston Bay National Estuary Program,, Austin, TX. G. Mitchell, and D. Windsor. Dec 91, 171p* GBNEP-13
See also PB91-230300 and PB91-230979. Prepared in cooperation with Jesse H. Jones Graduate School of Administration, Houston, TX. Sponsored by Environmental Protection Agency, Washington, DC.

The report contains a description and evaluation of essential regulatory activities governing Christmas Bay and its watershed. The report will be used in management planning for the preserve, and will also contribute to the baseline regulatory data for developing the Galveston Bay Comprehensive Conservation and Management Plan. A companion report was prepared for the Armand Bayou Coastal Preserve.

Keywords: *Coastal zone management, *Gulf coast, *Texas, *Galveston Bay, Estuaries, Pollution regulations, Natural resources management, Law enforcement, Interagency cooperation, Public administration, Environmental protection, Point sources, Wetlands, Storm water runoff.

**PB93-205698/REB** PC **A09**/MF **A03**
Environmental Protection Agency, Washington, DC.
**Regulatory Effectiveness Study for the Christmas Bay Coastal Preserve.**
Galveston Bay National Estuary Program,, Austin, TX. G. Mitchell, and D. Windsor. Dec 91, 196p* GBNEP-14
See also PB91-230151 and PB91-230185. Prepared in cooperation with Jesse H. Jones Graduate School of Administration, Houston, TX. Sponsored by Environmental Protection Agency, Washington, DC.

The report contains a description and evaluation of essential regulatory activities governing Armand Bayou and its watershed. The report will be used in management planning for the preserve, and will also contribute to the baseline regulatory data for developing the Galveston Bay Comprehensive Conservation and Management Plan. A companion report was prepared for the Christmas Bay Coastal Preserve.

Keywords: *Coastal zone management, *Texas, *Gulf Coast, *Galveston Bay, Estuaries, Environmental management, Pollution regulations, Interagency cooperation, Public administration, Law enforcement, Environmental protection, Natural resources, Point sources, Wetlands, Runoff, Landfills, Christmas Bay.

**PB93-205706/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Dallas, TX. Region VI.
**Shoreline Survey for Unpermitted Discharges to Galveston Bay.**
Galveston Bay National Estuary Program,, Austin, TX. R. R. Fay, S. Sweet, and R. J. Wilson. Aug 91, 50p* GBNEP-12
Prepared in cooperation with Texas A and M Univ., College Station. Geochemical and Environmental Research Group. Sponsored by Environmental Protection Agency, Dallas, TX. Region VI.

The objectives of the study are to identify and map unpermitted point source discharges within selected shoreline segments of Galveston Bay and to develop a standard methodology and framework for future comprehensive shoreline surveys of the Galveston Bay system. The pilot study utilized low altitude aerial surveys and shallow draft small boat surveys to determine the extent of and to document locations of unpermitted discharges along 159 miles of bayou and bay shoreline. Nine different shoreline types were surveyed. Positions of discharges, both permitted and unpermitted were logged on to a personal computer data base management system and photographic documentation of both aerial and surface observations were catalogued.

Keywords: *Galveston Bay, *Pollution monitoring, *Aerial photography, Coastal zone management, Gulf coast, Texas, Maps, Shores, Surveys, Enforcement, Legal aspects, Data bases, Estuaries.

**PB93-205722/REB** PC **A11**/MF **A03**
Environmental Protection Agency, Dallas, TX. Region VI.
**Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1. Technical Report.** Final rept.
Galveston Bay National Estuary Program,, Austin, TX. C. J. Newell, H. S. Rifai, and P. B. Bedient. Mar 92, 230p* GBNEP-15
Prepared in cooperation with Groundwater Services, Inc., Houston, TX., and Rice Univ., Houston, TX. Dept. of Environmental Science and Engineering. Sponsored by Environmental Protection Agency, Dallas, TX. Region VI.

The objective of the work was to conduct a geographic analysis and priority ranking of possible non-point sources and loads to Galveston Bay. The study area was defined by GBNEP to include the entire Galveston Bay drainage area with the exception of the Lake Houston and Lake Livingson watersheds; loadings from these upper watersheds were not mapped but were subjected to a separate pollutant loading analysis. The primary elements for the non-point analysis included watershed hydrology, load estimates, ranking of subwatersheds, upper watershed influences, and mapping.

Keywords: *Coastal zone management, *Gulf coast, *Texas, *Galveston Bay, Watersheds, Runoff, Suspended sediments, Nitrogen, Phosphorous, Biochemical oxygen demand, Estuaries, Copper, Coliform bacteria, Feces, Oil pollution, Maps, Nonpoint sources.

**PB93-205730/REB** PC **A07**/MF **A02**
Environmental Protection Agency, Dallas, TX. Region VI.
**Wetland Plant Communities, Galveston Bay System.** Final rept.
Galveston Bay National Estuary Program,, Austin, TX. W. A. White, and J. G. Paine. Mar 92, 134p* GBNEP-16
Prepared in cooperation with Texas Univ. at Austin. Bureau of Economic Geology. Sponsored by Environmental Protection Agency, Dallas, TX. Region VI.

The report is the culmination of a field investigation of wetland plant communities, and is one phase of the project, 'Trends and Status of Wetland and Aquatic Habitats of the Galveston Bay System, Texas,' sponsored by the Galveston Bay National Estuary Program. For purpose of the topical report, wetlands are defined and classified in terms of more classical definitions, for example, salt, brackish, and fresh marshes, in accordance with project requirements. More than 150 sites were examined in the Galveston Bay system.

Keywords: *Galveston Bay, *Wetlands, *Plants(Botany), Coastal zone management, Gulf Coast, Texas, Estuaries, Salt marshes, Surveys.

**PB93-205748/REB** PC **A07**/MF **A02**
Environmental Protection Agency, Dallas, TX. Region VI.
**Segmentation Development for Galveston Bay.** Final rept.
Galveston Bay National Estuary Program,, Austin, TX. May 92, 137p* GBNEP-18
Prepared in cooperation with Jones and Neuse, Inc., Austin, TX. Sponsored by Environmental Protection Agency, Dallas, TX. Region VI.

The purpose of the study is to develop a segmentation scheme for the Galveston Bay System that will facilitate the other efforts planned by the Galveston Bay National Estuary Program (GBNEP). The study is organized around four tasks: (1) the evaluation of existing segmentation schemes, (2) evaluation of natural features and anthropogenic inputs, (3) determination of segmentation criteria, (4) and the drafting of the boundaries. To facilitate the management and presentation of the large amounts of geobased data accumulated, a geographic information system (GIS) was developed for the study area.

Keywords: *Gulf Coast, *Texas, *Coastal zone management, Regional planning, Land use zoning, Beaches, Galveston Bay, Estuaries, Grids(Coordinates), Maps, Urban planning, Shores, Geographic information systems.

**PB93-205755/REB** PC **A20**/MF **A04**
Environmental Protection Agency, Dallas, TX. Region VI.
**Status and Trends of Selected Living Resources in the Galveston Bay System.**
Galveston Bay National Estuary Program,, Austin, TX. M. Osborn, P. Chai, A. Green, J. Lin, and C. Loeffler. Jun 92, 472p* GBNEP-19
Grant EPA-CE-06550-01
Prepared in cooperation with Texas Parks and Wildlife Dept., Austin. Sponsored by Environmental Protection Agency, Dallas, TX. Region VI.

The report is part of the effort to characterize the ecosystem of the Galveston Estuary. Its purpose is to assess the relative health of the Galveston Estuary by evaluating the status and trends of several selected endemic species in order to identify potential problems, as indicated by significant declines in abundance, and to initiate the investigation of the probable cause of these declines. The species studied were selected by members of the Galveston Bay National Estuary Program Scientific and Technical Advisory Committee. The list was assembled to include those groups fundamental to maintaining the Galveston Estuary ecosystem, and economically important taxa: commercially and ecologically important finfish and shellfish, locally breeding birds, alligators, plankton, and open bay and marsh benthos.

Keywords: *Galveston Bay, *Ecosystems, *Estuaries, Texas, Gulf Coast, Coastal zone management, Shellfish, Fishes, Birds, Plankton, Aquatic biology.

**PB93-205763/REB** PC **A16**/MF **A03**
Environmental Protection Agency, Washington, DC.
**Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.** Final rept.
Galveston Bay National Estuary Program,, Austin, TX. J. M. Brooks, T. L. Wade, M. C. Dennicutt, D. A. Wiesenburg, and D. Wilkinson. Jun 92, 352p GBNEP-20
Grant EPA-CE-06550-01
Sponsored by Environmental Protection Agency, Washington, DC., and Texas Water Commission, Austin.

The study characterizes contamination in edible fish and shellfish from Galveston Bay. The sampling

design called for the analysis of trace contaminants in five species from four sites in Galveston Bay. The goal of the sampling program was to collect ten specimens of each target organism that were of legal market size from each collection site. Standard fisheries data were recorded for all collections. The analytical program called for the analyses of 10 individual specimens of the target organisms from each site (200 edible tissue (muscle) samples). Fifty (50) liver samples were composed for analysis from the 120 fishes. The trace contaminants that were measured included heavy metals, polynuclear aromatic hydrocarbons (PAH's), pesticides and PCBs and a GC-MS scan for other EPA organic priority pollutants. In general, trace contaminants were higher in oyster and crab tissues than fish tissue.

Keywords: *Marine fishes, *Shellfish, *Water pollution sampling, *Galveston Bay, Bioassay, Collecting methods, Liver, Tissues(Biology), Oysters, Crabs, Toxicity, Pesticides, Zinc, Lead(Metal), Copper, Organic compounds, Aromatic polycyclic hydrocarbons, Graphs(Charts), Heavy metals.

**PB93-205771/REB** PC **A08**/MF **A02**
Environmental Protection Agency, Dallas, TX. Region VI.
**Characterization of Selected Public Health Issues in Galveston Bay.** Final rept.
Galveston Bay National Estuary Program,, Austin, TX.
P. Jensen, and Y. C. Su. Aug 92, 160p* GBNEP-21
Prepared in cooperation with Espey, Huston and Associates, Inc., Austin, TX. Sponsored by Environmental Protection Agency, Dallas, TX. Region VI.

The purpose of the project is to characterize public health issues associated with bay use activities such as shellfish consumption and contact and non-contact recreation. The major objectives of the characterization study are: (1) Review and summarize activities associated with shellfish bed closures, (2) Identify and characterize sources of bacterial contamination, (3) Review and characterize areas of Galveston Bay which have exceeded water quality standards for contact and non-contact recreation, and (4) Assess the incidence of known pathogenic organisms such as Vibrio Vulnificus. The characterization includes consideration of indicator organisms and known pathogenic organisms and covers all identified water quality segments of Galveston Bay.

Keywords: *Galveston Bay, *Public health, *Environmental health, Coastal zone management, Gulf coast, Texas, Estuaries, Shellfish, Bacteria, Coliforms, Pathogenic bacteria, Water quality, Contamination.

**PB93-205789/REB** PC **A09**/MF **A03**
Environmental Protection Agency, Dallas, TX. Region VI.
**Ambient Water and Sediment Quality of Galveston Bay: Present Status and Historical Trends. Volume 1.** Final rept.
Galveston Bay National Estuary Program,, Austin, TX.
G. H. Ward, and N. E. Armstrong. Aug 92, 193p*
GBNEP-22
Prepared in cooperation with Texas Univ. at Austin. Center for Research in Water Resources. Sponsored by Environmental Protection Agency, Dallas, TX. Region VI.

For many years, data relating to the quality of water and sediment have been collected in the Galveston Bay system by a variety of organizations and individuals. The purpose of the project was to compile these data, and to perform a quantitative assessment of water and sediment quality of Galveston Bay and its evolution over time. The study focused on the following categories of parameters: temperature, salinity and related parameters, suspended sediments and turbidity, pH, dissolved oxygen, nutrients as measured by nitrogen, phosphorous and organic carbon, organics as measured by oil and grease, volatile solids and biochemical oxygen demand, chlorophyll-a, coliforms, metals (total and dissolved), and trace organics, including pesticides, herbicides, PAH's, PCB's, and priority pollutants.

Keywords: *Galveston Bay, *Water quality, *Sediments, Coastal zone management, Gulf Coast, Texas, Estuaries, Salinity, Biochemical oxygen demand, Pollution control, Dissolved oxygen, Coliforms, Maps, Tables(Data), Pesticides, Heavy metals.

**PB93-205797/REB** PC **A06**/MF **A02**
Environmental Protection Agency, Dallas, TX. Region VI.
**Environmental Management Inventory of Galveston Bay.** Final rept.
Galveston Bay National Estuary Program,, Austin, TX.
S. G. Hadden. Oct 92, 108p* GBNEP-24
Prepared in cooperation with Lyndon B. Johnson School of Public Affairs, Austin, TX. Sponsored by Environmental Protection Agency, Dallas, TX. Region VI.

The purpose of the report is to provide an inventory of those agencies and laws along with their associated regulations, that constitute the regulatory framework for environmental protection of Galveston Bay, one of the estuaries of national significance covered under the 1987 law. The inventory is largely descriptive, serving as the first phase in a larger project which will ultimately evaluate the effectiveness of the existing regulatory framework. That assessment in turn will form the basis for the Comprehensive Conservation and Management Plan as well as for policy recommendations to improve the coordination of environmental management of the Bay.

Keywords: *Galveston Bay, *Regulations, *Coastal zone management, Gulf Coast, Texas, Estuaries, Legislation, Law(Jurisprudence), Environmental protection, Local government, Public administration, Interagency cooperation.

**PB93-205805/REB** PC **A06**/MF **A02**
Environmental Protection Agency, Dallas, TX. Region VI.
**Recreational Fishery By-Catch in the Galveston Bay System.** Final rept.
Galveston Bay National Estuary Program,, Austin, TX.
G. E. Saul. Nov 92, 124p* GBNEP-25
Prepared in cooperation with FTN Associates Ltd., Austin, TX., and Texas Parks and Wildlife Dept., Austin. Sponsored by Environmental Protection Agency, Dallas, TX. Region VI.

The purpose of the project was to examine the literature and existing data to determine the magnitude and composition of the recreational finfish and shellfish bycatch in the Galveston Bay system. A preliminary estimate of the recreational by-catch of sport-boat fishermen was made using a combination of data obtained from the National Marine Fisheries Service's (NMFS) Marine Recreational Fishery Statistics Survey (MRFSS) and routine sport-boat harvest monitoring data provided by the Texas Parks and Wildlife Department (TPWD). Data from the MRFSSs included landings of finfishes, determined to species by NMFS contractors, and by-catch data (numbers and disposition by species) based on fishermen recall during intercept surveys.

Keywords: *Sport fishing, *Galveston Bay, Coastal zone management, Gulf Coast, Texas, Sampling, Shellfish, Fins, Estuaries, Surveys.

**PB93-205847/REB** PC **A03**/MF **A01**
**Emergency Planning and Community Right-to-Know Act: Section 313 Release Reporting Requirements (August 1991).**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Aug 91, 30p EPA/560/4-92/002
See also PB92-226216.

The brochure contains information about the Emergency Planning and Community Right-to-Know Act. This law establishes a structure at the state and local levels to assist communities in planning for chemical emergencies and requires facilities to provide information on various chemicals present in the community. The Act requires that this information be made available to the public. One of the requirements concerns the reporting of annual releases of toxic chemicals to the air, water, and land. These provisions are outlined in Section 313 which mandates annual release reporting for over 300 chemicals.

Keywords: *Hazardous materials, *Chemical compounds, *Reporting, Requirements, Air pollution, Water pollution, Land pollution, Emergency planning, Emergency Planning and Community Right-to-Know Act, Chemical releases.

**PB93-205854/REB** PC **A03**/MF **A01**
**Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (1991).**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
1991, 30p EPA/560/4-91/006
See also PB89-192892.

When Congress passed the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), it created a number of new reporting requirements for companies that handle toxic chemicals and products containing toxic chemicals. Section 313 of EPCRA requires that certain manufacturers report annual releases to the environment of listed toxic chemicals and chemical categories. Because these manufacturers must know the toxic chemical composition of the products they use to be able to calculate releases accurately, EPA requires some suppliers of mixtures or trade name products containing one or more of the listed section 313 toxic chemicals to notify their customers. The pamphlet explains which suppliers must notify their customers, who must be notified, what form the notice must take, and when it must be sent.

Keywords: *Chemical composition, *Chemical compounds, *Toxic substances, Hazardous materials, Reporting, Requirements, Safety, Labels, *Chemical releases, Emergency Planning and Community Right-to-Know Act.

**PB93-205862/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
**Abstract Proceedings: Superfund Technical Support Project General Meeting. Held in Athens, Georgia on December 3-6, 1990.**
Environmental Management Support, Silver Spring, MD.
May 91, 40p EPA/540/M-91/003
See also PB92-205657. Sponsored by Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.

Contents: RCRA's New Ground-Water Monitoring Regulations; Remedial Response Construction Cost Estimating System (RACES); The Data Base Analyzer and Parameter Estimator (DBAPE); Superfund Technical Liaison Program; Causes and Effects of Well Turbidity; Characterizing Heterogeneous Hazardous Wastes; Superfund Innovative Technology Evaluation (SITE) Program; Computer-Aided Assessment of Contaminated Sites; Remedy Screening; New Engineering Forum Issue Papers; Fourier Transform Infrared Spectroscopy (FT-IR); Metal Partitioning From Incineration of Soils and Debris; Treatability Assistance Program Update; Data Gaps in Remedial Design; The Pre-Design Technical Summary; Remedial Design Schedule Management; Fate Constants and Pathway Analysis; Identification of non-Target Analytes; Dense Non-Aqueous Phase Liquids; MINTEQA2 Geochemical Equilibrium Model; Corps of Engineers Laboratory Support to EPA Regions; Subsurface Characterization and Mobilization Processes (SCAMP); Overview of Athens' Modeling Capabilities; Predicting Chemical Reactivity by Computer; Radiation Technical Support to Regional Superfund Programs; Design of Groundwater Monitoring Networks.

Keywords: *Meetings, *Superfund, *Waste management, *Water pollution, *Hazardous materials, Ground water, Water pollution sampling, Remedial action, Soil contamination, Turbidity, Radiation monitoring, Geochemistry, Chemical reactions, Fourier transform spectrometers, Incineration, Metals, Path of pollutants, Subsurface investigations.

**PB93-205870/REB** PC **A03**/MF **A01**
**Understanding Bioremediation: A Guidebook for Citizens.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
Feb 91, 23p EPA/540/2-91/002
See also PB90-216466, PB92-235589 and PB93-116143.

Bioremediation - a process that uses microorganisms to transform harmful substances to nontoxic compounds - is one of the most promising new technologies for treating chemical spills and hazardous waste problems. In order to improve the technology and better understand its capabilities, the U.S. Environ-

mental Protection Agency (EPA) is encouraging field tests and evaluation of waste site cleanups using bioremediation. As bioremediation is considered more frequently as a cleanup alternative, citizens need information about this process to help them contribute to informed decision-making regarding the cleanup of waste sites in their communities. The brochure answers some questions about what bioremediation is, where it can be used effectively, and its advantages and disadvantages.

Keywords: *Hazardous materials, *Waste treatment, *Biological treatment, Biodegradation, Microorganisms, Organic compounds, Land pollution control, Oil spills, Bioremediation.

**PB93-205888/REB** PC **A07**/MF **A02**
**Guide to Using Chesapeake Bay Program Water Quality Monitoring Data.**
Environmental Protection Agency, Annapolis, MD. Chesapeake Bay Program.
Mar 93, 129p CBP/TRS-78/92
See also PB90-147935 and PB90-226739.

The document describes the Chesapeake Bay Mainstem Water Quality Monitoring Program in general and provides detailed information about the existing Program data base. The two main purposes of the document are to assist those who wish to obtain monitoring data, and to provide information to data analysts about the data base. The Chesapeake Bay Program, a cooperative effort between the federal government and the state and local governments in the Chesapeake Bay watershed, provides funds to the states of Maryland and Virginia for the routine monitoring of 19 directly measured water quality parameters at 49 stations in the mainstem Bay.

Keywords: *Monitoring, *Water quality, *Chesapeake Bay, *Environmental impacts, Maps, Data bases, Sampling, Stations, Interagency cooperation, Data acquisition.

**PB93-205896/REB** PC **A03**/MF **A01**
**Pesticide Reregistration, March 1991.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Mar 91, 17p EPA-21T-1004
See also PB90-161530 and PB92-231182.

In 1988, the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) was amended to strengthen EPA's pesticide regulatory authority and responsibilities regarding the reregistration of pesticides. These amendments mandated an accelerated reregistration scheme, to be carried out in five phases concluding in the late 1990s. The thrust of the phased approach is to generate a substantially complete scientific data base for each pesticide product before it is evaluated by the Agency and reregistered. The document provides a general overview of the provisions, process and status of the reregistration program.

Keywords: *Pesticides, *Regulations, *Toxicity, Labels, Chemical analysis, Standards, Fees, Criteria, *Reregistration, FIFRA(Federal Insecticide Fungicide and Rodenticide Act).

**PB93-205904/REB** PC **A03**/MF **A01**
**Quality of Our Nation's Water: 1990.**
Environmental Protection Agency, Washington, DC. Office of Water.
Jun 92, 31p EPA/841/K-92/001
See also PB91-145912 and PB92-227800.

The booklet is designed to help the general reader understand the problem of water pollution in the U.S. today. Its focus is on the sources, types, impacts, and extent of water pollution, and the actions government and citizens are taking to control them. The information in the booklet is condensed from the U.S. Environmental Protection Agency's (EPA's) National Water Quality Inventory: 1990 Report to Congress.

Keywords: *States(United States), *Inventories, *Water quality, Water pollution, Rivers, Lakes, Estuaries, Surface waters, Streams, Reservoirs, Runoff, Wetlands, Great lakes, Coasts, Ground water, Environmental protection, Community goals.

**PB93-205961/REB** PC **A02**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Monofilament Fiber Manufacturing.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Jan 88, 10p EPA/560/4-88/004A
See also PB93-205979 and PB88-210380.

Manufacturers of monofilament fibers may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist monofilament fiber manufacturers in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Fibers, *Chemical compounds, *Toxic substances, *Environmental impacts, Guidelines, Study estimates, Manufacturing, Polymers, Emission factors, Water pollution, Pollution sources, Air pollution, Solid wastes, Waste water, Liquid wastes, Concentration(Composition), Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-205979/REB** PC **A02**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Printing Operations.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Jan 88, 10p EPA/560/4-88/004B
See also PB93-205987.

Printers may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist printers in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Printing, *Chemical compounds, *Toxic substances, Study estimates, Guidelines, Solvents, Air pollution, Waste treatment, Water pollution, Emission factors, Solid wastes, Pollution sources, Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-205987/REB** PC **A02**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electrodeposition of Organic Coatings.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Jan 88, 10p EPA/560/4-88/004C
See also PB93-205995.

Appliers of organic coatings via electrodeposition (EDP) may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist appliers of organic coatings in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Chemical compounds, *Toxic substances, *Electrodeposited coatings, Study estimates, Guidelines, Organic compounds, Water pollution, Waste treatment, Waste water, Solid wastes, Air pollution, Pollution sources, Concentration(Composition), Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-205995/REB** PC **A02**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Spray Application of Organic Coatings.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Jan 88, 10p EPA/560/4-88/004D
See also PB93-206001.

Spray applicators of organic coatings may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist appliers of organic coatings in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Chemical compounds, *Toxic substances, *Spray coating, Organic compounds, Guidelines, Study estimates, Waste disposal, Water pollution, Air pollution, Waste water, Solid wastes, Concentration(Composition), Pollution sources, Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-206001/REB** PC **A02**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Semiconductor Manufacturing.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Jan 88, 10p EPA/560/4-88/004E
See also PB93-206019.

Manufacturers of semiconductors may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist semiconductor manufacturers in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Chemical compounds, *Toxic substances, *Semiconductors, Study estimates, Guidelines, Manufacturing, Concentration(Composition), Liquid wastes, Water pollution, Air pollution, Waste water, Emission factors, Pollution sources, Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-206019/REB** PC **A02**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Formulation of Aqueous Solutions.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Mar 88, 10p EPA/560/4-88/004F
See also PB93-206027.

Formulators of aqueous solutions may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist formulators of aqueous solutions, emulsions, and slurries in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Chemical compounds, *Toxic substances, *Aqueous solutions, Guidelines, Study estimates, Concentration(Composition), Pollution sources, Liquid wastes, Air pollution, Water pollution, Waste water, Emission factors, Solid wastes, Superfund Amend-

ments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-206027/REB** PC **A02**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electroplating Operations.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Jan 88, 10p EPA/560/4-88/004G
See also PB93-206035.

Facilities engaged in electroplating operations may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist those who perform electroplating operations in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Chemical compounds, *Toxic substances, *Electroplating, Guidelines, Study estimates, Concentration(Composition), Pollution sources, Air pollution, Solid wastes, Water pollution, Waste water, Emission factors, Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-206035/REB** PC **A02**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Textile Dyeing.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Feb 88, 10p EPA/560/4-88/004H
See also PB93-206043.

Facilities engaged in textile dyeing may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist textile dyers in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Chemical compounds, *Toxic substances, *Textile industry, *Dyeing, Guidelines, Study estimates, Concentration(Composition), Water pollution, Pollution sources, Emission factors, Waste disposal, Waste water, Air pollution, Solid wastes, Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-206043/REB** PC **A02**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Presswood and Laminated Wood Products Manufacturing.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Mar 88, 10p EPA/560/4-88/004I
See also PB93-206050.

Facilities engaged in the manufacture of presswood and laminated wood products may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist those who manufacture presswood and laminated wood products in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Wood products, *Chemical compounds, *Toxic substances, Guidelines, Study estimates, Laminated wood, Manufacturing, Pollution sources, Liquid wastes, Air pollution, Water pollution, Solid wastes, Concentration(Composition), Emission factors, Pressboards, Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-206050/REB** PC **A03**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Roller, Knife, and Gravure Coating Operations.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Feb 88, 14p EPA/560/4-88/004J
See also PB93-206068.

Facilities performing coating operations may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist those using roller, knife, and gravure coating equipment in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Chemical compounds, *Toxic substances, *Coating processes, Guidelines, Study estimates, Concentration(Composition), Solid wastes, Roller coating, Air pollution, Liquid wastes, Emission factors, Water pollution, Pollution sources, Waste water, Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986, Gravure coatings, Knife coatings.

**PB93-206068/REB** PC **A03**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Paper and Paperboard Production.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Feb 88, 13p EPA/560/4-88/004K
See also PB93-206076.

Facilities engaged in paper and paperboard production may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist those engaged in paper and paperboard production in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Chemical compounds, *Toxic substances, *Paper products, Paperboards, Guidelines, Study estimates, Pollution sources, Emission factors, Additives, Solid wastes, Water pollution, Fugitive emissions, Air pollution, Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-206076/REB** PC **A03**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Leather Tanning and Finishing.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Feb 88, 14p EPA/560/4-88/004L
See also PB93-206084.

Facilities engaged in leather tanning and finishing may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist those in the leather tanning and finishing industry in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Chemical compounds, *Toxic substances, *Leather, Guidelines, Study estimates, Tanning materials, Emission factors, Concentration(Composition), Waste disposal, Pollution sources, Finishing, Solid wastes, Water pollution, Waste water, Air pollution, Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-206084/REB** PC **A03**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Wood Preserving Operations.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Feb 88, 13p EPA/560/4-88/004P
See also PB93-206092.

Facilities engaged in wood preserving operations may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist facilities engaged in wood preserving operations in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Chemical compounds, *Toxic substances, *Wood preservatives, *Wood industry, Guidelines, Study estimates, Emission factors, Concentration(Composition), Solid wastes, Fugitive emissions, Water pollution, Pollution sources, Waste water, Air pollution, Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-206092/REB** PC **A03**/MF **A01**
**Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Rubber Production and Compounding.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Mar 88, 13p EPA/560/4-88/004Q
See also PB93-205961.

Facilities engaged in rubber production and compounding may be required to report annually any releases to the environment of certain chemicals regulated under Section 313, Title III, of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The document has been developed to assist those who produce rubber in the completion of Part III (Chemical Specific Information) of the Toxic Chemical Release Inventory Reporting Form. Included herein is general information on toxic chemicals used and process wastes generated, along with several examples to demonstrate the types of data needed and various methodologies available for estimating releases.

Keywords: *Environmental impacts, *Chemical compounds, *Toxic substances, *Rubber industry, *Synthetic elastomers, Guidelines, Study estimates, Pollution sources, Emission factors, Concentration(Composition), Air pollution, Water pollution, Waste water, Fugitive emissions, Solid wastes, Superfund Amendments and Reauthorization Act of 1986, Emergency Planning and Community Right-to-Know Act of 1986.

**PB93-206209/REB** PC **A03**/MF **A01**
**Superfund: Environmental Progress.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
Nov 90, 14p EPA/540/8-90/101
See also PB91-921203.

While Superfund has made many gains in terms of protection of human health and the environment, to date little attention has been paid to any measures other than the number of sites deleted from the National Priorities List. The report explains some of Superfund's environmental progress in terms of new measures called environmental indicators. These indicators relate to: (1) Controlling Acute Threats to People and

the Environment; (2) Achieving Long-Term Cleanup Goals for Sites; and (3) Removing Contamination from the Environment.

Keywords: *Superfund, *Project management, *Progress, Environmental research, Priorities, Research management, Surface waters, Ground water, Soils.

**PB93-206340/REB** PC **A03**/MF **A01**
**Bioremediation in the Field: Number 1, November 1990.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Nov 90, 18p EPA/540/2-90/004
See also PB92-224708 and PB92-224807.

The Bioremediation Field Initiative is designed to provide EPA and State project managers, consulting engineers, and industry with timely information regarding new developments in the application of bioremediation. These applications include the cleanup of abandoned waste sites, industrial facilities, leaking underground storage tanks and ground water impacted from these sources. The Technology Innovation Office (TIO), an office within the Office of Solid Waste and Emergency Response (OSWER), in conjunction with the Office of Research and Development's (ORD) Office of Technology Transfer and Regulatory Support, will produce the bulliten on a regular basis to serve as the principal information transfer mechanism for the Bioremediation Field Initiative.

Keywords: *Biological treatment, *Remedial action, *Hazardous materials, *Waste management, Superfund, Military facilities, Soil contamination, Petroleum products, Field tests, Underground storage, Resource recovery acts, Projects, Storage tanks, Information, Soils.

**PB93-206399/REB** PC **A02**/MF **A01**
**America's Wetlands: Our Vital Link between Land and Water.**
Environmental Protection Agency, Washington, DC. Office of Water.
Feb 88, 10p OPA-87-016
See also PB90-198201.Color illustrations reproduced in black and white.

The Environmental Protection Agency (EPA), in partnership with state and local governments, is responsible for restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. Because of the value of wetlands as an integral part of those waters, EPA is also charged with protecting wetland resources. To provide leadership in building such a broad-based national effort, EPA established an Office of Wetlands Protection in 1986. Reading the booklet will give you a better understanding of the importance of wetlands, how they are threatened, and what can be done to conserve them for future generations.

Keywords: *Wetlands, *Natural resources management, Natural resources conservation, US EPA, Clean Water Act, Corps of Engineers, Swamps, Marshes, States(United States), Public relations, Handbooks, Environmental protection.

**PB93-206449/REB** PC **A06**/MF **A02**
Environmental Protection Agency, Washington, DC. Office of Pollution, Prevention, and Toxics.
**Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances.**
National Research Council, Washington, DC. Committee on Toxicology.
c1993, 125p
Contract EPA-CR-815682-01-0
See also PB90-238890. Sponsored by Environmental Protection Agency, Washington, DC. Office of Pollution, Prevention, and Toxics, and Agency for Toxic Substances and Disease Registry, Atlanta, GA.

Massive amounts of extremely hazardous substances (EHSs) can be released accidentally as a result of chemical spills, industrial explosions, fires, or accidents involving railroad cars and trucks transporting EHSs. The people in communities surrounding industrial facilities where EHSs are manufactured, used, or stored, and in communities along the nation's railways and highways are potentially at risk of being exposed to airborne EHSs during accidental releases. The U.S. Environmental Protection Agency (EPA) has identified 366 EHSs based on acute lethality data in rodents. The report addresses risk assessment of short-term exposures to high levels of chemical toxicants. It describes the criteria and methods for developing community emergency exposure levels for EHSs for use by many organizations, including EPA, the ATSDR, state and local governments, and chemical industries.

Keywords: *Hazardous materials, *Toxicity, *Exposure, *Risk assessment, Public health, Inhalation, Risk management, Tolerances(Physiology), Air pollution effects(Humans), Chemical spills, *CEEL(Community emergency exposure levels), Carcinogenicity, Dose-response relationships, Reference values.

**PB93-206472/REB** PC **A21**/MF **A04**
**Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards, and Pretreatment Standards for the Paint Formulating Point Source Category.**
Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.
Dec 79, 483p EPA/440/1-79/049B
See also PB90-126475.

The document presents the findings of an extensive study of the paint manufacturing industry for the purpose of developing effluent limitations for existing point sources and standards of performance for new sources and pretreatment standards for existing and new sources to implement Sections 301, 304, 306 and 307 of the Clean Water Act. Effluent limitation guidelines are set forth for the degree of effluent pollutant reduction attainable through application of best available technology economically achieveable which must be attained by existing point sources by July 1, 1984. The standards of performance for new sources (NSPS) set forth the degree of effluent pollutant reduction that is achievable through the application of the best available demonstrated control technology, processes, operating methods, or other alternatives. Pretreatment standards for existing and new sources (PSES and PSNS) set forth the degree of effluent pollutant reduction that must be achieved in order to prevent the discharge of pollutants that pass through, interfere with, or are otherwise incompatible with the operation of POTW.

Keywords: *Paint industry, *Industrial waste treatment, *Chemical effluents, *Pollution regulations, Water pollution control, Water pollution abatement, Waste water, Point sources, Industrial plants, Water pollution sampling, Water pollution economics, Economic impact, Pretreatment, Treatment technology, BAT(Best Available technology).

**PB93-206480/REB** PC **A11**/MF **A03**
Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.
**Treatability Studies for the Inorganic Chemicals Manufacturing Point Source Category.**
Jacobs Engineering Group, Inc., Pasadena, CA. Environmental Div.
Jul 80, 250p EPA/440/1-80/103
Contract EPA-68-01-5767
See also PB91-122632. Sponsored by Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.

The major purpose underlying the Treatability Study is to evaluate the achievable performance of proposed Best Available Technologies (BAT) for the treatment and control of pollutant discharges, and to provide empirical treatment system performance information applicable to selected inorganic chemical subcategories. The study specifically concentrated on those subcategories in the Inorganic Chemicals Industry for which analytical data on raw waste waters and treated effluents either do not exist or are deficient, and for which data are needed for purposes of comparison with proposed effluent limitations currently being proposed by the Effluent Guidelines Division of the Environmental Protection Agency.

Keywords: *Chemical industry, *Inorganic compounds, *Industrial waste treatment, *Chemical effluents, *Pollution regulations, Water pollution control, Water pollution abatement, Waste water, Point sources, Industrial plants, Water pollution sampling, Water pollution economics, Economic impact, Pretreatment, Treatment technology, BAT(Best Available Technology).

**PB93-206498/REB** PC **A24**/MF **A04**
**Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 1.**
Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.
Nov 82, 560p EPA/440/1-82/070B-VOL-1
See also PB86-154135, PB86-161452, and Volume 2, PB93-206506.

The document and the administrative record provide the technical basis for proposing effluent limitations guidelines for existing direct dischargers, pretreatment standards for new and existing indirect dischargers, and standards of performance for new source direct dischargers. This category is made up of 3600 plants employing people. Nine hundred sixty five of these plants use wet processing methods which can generate wastewaters. Of the 965 plants, 287 discharge directly to rivers, lakes, or streams; 327 discharge to publicly owned treatment works (POTW); and 351 achieve zero discharge of process wastewaters.

Keywords: *Foundries, *Metal industry, *Industrial waste treatment, *Chemical effluents, *Pollution regulations, Water pollution control, Water pollution abatement, Waste water, Point sources, Industrial plants, Water pollution sampling, Water pollution economics, Economic impact, Pretreatment, Treatment technology, BAT(Best Available Technology).

**PB93-206506/REB** PC **A22**/MF **A04**
**Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 2.**
Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.
Nov 82, 504p EPA/440/1-82/070B-VOL-2
See also Volume 1, PB93-206498.

The volume addresses the cost, energy, and non-water quality impacts of applying the different levels of wastewater pollution control to foundry operations. It includes a discussion of actual treatment costs incurred at sampled plants, alternative treatment technologies, and the cost, energy, and other non-water quality impacts associated with the application of the BPT, BAT, NSPS, PSES, and PSNS alternative treatment systems. In addition, the consumptive use of water is addressed.

Keywords: *Foundries, *Metal industry, *Industrial waste treatment, *Chemical effluents, *Pollution regulations, Water pollution control, Water pollution abatement, Waste water, Point sources, Industrial plants, Water pollution sampling, Water pollution economics, Economic impact, Pretreatment, Treatment technology, BAT(Best Available Technology).

**PB93-206514/REB** PC **A21**/MF **A04**
**Development Document for Effluent Limitations Guidelines and Standards for the Porcelain Enameling. Point Source Category.** Final rept.
Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.
Nov 82, 499p EPA/440/1-82/072
See also PB83-208405 and PB81-201527.

EPA has subcategorized the porcelain enameling industry based on the basis material coated. The subcategories are defined as porcelain enameling on: steel, cast iron, aluminum and copper. No limitations are established for porcelain enameling on precious metals (gold, silver and platinum group metals) because they are believed to be very small sources and virtually all would be excluded from regulation by the small indirect discharger exemption. The study included the identification of raw waste and treated effluent characteristics, including: (1) the sources and volume of water used, the processes employed, and the sources of pollutants and wastewaters in the plant, and (2) the constituents of wastewaters. Such analysis enabled EPA to determine the presence and concentration of toxic pollutants in wastewater discharges.

Keywords: *Porcelain enamels, *Industrial waste treatment, *Chemical effluents, *Pollution regulations, Water pollution control, Water pollution abatement, Waste water, Point sources, Industrial plants, Water

pollution sampling, Water pollution economics, Economic impact, Pretreatment, Treatment technology, BAT(Best Available Technology).

**PB93-206522/REB** PC **A23**/MF **A04**
**Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category (Proposed).**
Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.
Oct 82, 529p EPA/440/1-82/074B
See also PB83-263780, PB84-192459 and PB93-156719.

Pursuant to Sections 301, 304, 306, 307, and 501 of the Clean Water Act and the provisions of the Settlement Agreement in Natural Resources Defense Council v. Train, 8 ERC 2120 (D.D.C. 1976) modified, 12 ERC 1833 (D.D.C. 1979), EPA has collected and analyzed data for plants in the Copper Forming Point Source Category. EPA has never proposed or promulgated effluent limitations or standards for the industry. The document and the administrative record provide the technical basis for proposing effluent limitations based on best practicable technology (BPT) and best available technology (BAT) for existing direct dischargers, pretreatment standards for existing indirect dischargers (PSES), pretreatment standards for new indirect dischargers (PSNS), and standards of performance for new source direct dischargers (NSPS). The copper forming category is comprised of 176 plants. Of the 176 plants, 37 discharge directly to rivers, lakes, or streams; 45 discharge to publicly owned treatment works (POTW); and 94 achieve zero discharge of process wastewater.

Keywords: *Copper industry, *Metal working, *Industrial waste treatment, *Chemical effluents, *Pollution regulations, Water pollution control, Water pollution abatement, Waste water, Point sources, Industrial plants, Water pollution sampling, Water pollution economics, Economic impact, Pretreatment, Treatment technology, BAT(Best Available Technology).

**PB93-206530/REB** PC **A24**/MF **A04**
**Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Inorganic Chemicals Manufacturing Point Source Category, Phase 2 (Proposed).**
Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.
Sep 83, 563p EPA/440/1-83/007B
See also PB85-102374, PB85-156446 and PB93-153963.

Thirty-Four inorganic chemical products were screened for the purpose of establishing wastewater effluent limitations guidelines for existing sources, standards of performance for new sources, and pretreatment standards for new and existing sources in the study. The screening studies showed that only the plant process wastewaters from the first 17 subcategories contain significant quantities of toxic metals at treatable levels. (The Calcium Hypochlorite (Bleaching Powder) subcategory also generates treatable levels of toxic and nonconventional pollutants but that industry is intimately associated with the chlor-alkali industry and will be covered as part of the chlor-alkali subcategory. A considerable amount of toxic pollutant removal is presently achieved in the industry by the existing control and treatment practices. Additional removal can be accomplished by the application of available and demonstrated technologies which would add to or modify existing treatment systems.

Keywords: *Chemical industry, *Inorganic compounds, *Industrial waste treatment, *Chemical effluents, *Pollution regulations, Water pollution control, Water pollution abatement, Waste water, Point sources, Industrial plants, Water pollution sampling, Water pollution economics, Economic impact, Pretreatment, Treatment technology, BAT(Best available technology).

**PB93-206548/REB** PC **A99**/MF **A06**
**Proposed Revisions to Ocean Dumping Criteria: Final Environmental Impact Statement. Volume 2.**
Environmental Protection Agency, Washington, DC. Oil and Special Materials Control Div.
1977, 605p
See also PB-233 018 and PB-233 019.

The document provides the text of letters sent to respond to or comment on the proposed revisions to ocean dumping criteria. The letters come from a variety of environmental organizations, scientists, and private citizens.

Keywords: *Marine disposal, *Environmental impact statements-Final, Criteria, Dredge spoil, Regulations, Permits, *Responses, *Comments.

**PB93-206555/REB** PC **A08**/MF **A02**
**Global Oceans Directory. A Compendium of Organizations Dedicated to Marine Conservation.**
Environmental Protection Agency, Washington, DC. Office of Wetlands, Oceans and Watersheds.
Aug 92, 175p EPA/842/B-92/001

The Directory contains organizations involved in ocean conservation and resource management. The directory was prepared for the U.S. EPA Office of Wetlands, Oceans and Watersheds (OWOW) to serve as a quick reference to answer questions such as: Organizations involved with marine law; Marine related activities of the U.S. Department of State. The directory has the following parts: Profiles; Tables of contents; Keyword matrix. The directory is composed of profiles of organizations involved with marine issues. The profiles are grouped into three categories: United States Government Agencies; United Nations Agencies; and Non-Governmental Organizations.

Keywords: *Global, *Oceans, *Resource conservation, *Resources management, *Directories, Organizations, Government agencies, United States, United Nations, Wildlife, Government policies, Listings, Non-governmental agencies, Ocean law.

**PB93-206563/REB** PC **A14**/MF **A03**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**National Air Toxics Information Clearinghouse: Ongoing Research and Regulatory Development Projects, July 1992.** Final rept.
Radian Corp., Research Triangle Park, NC.
Jul 92, 317p EPA/453/R-92/005
Contract EPA-68-D1-0125
Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The purpose of the document is to inform State and local agencies and other Clearinghouse users of current research and regulatory development projects underway at the US EPA, the National Institute for Occupational Safety and Health, the Agency for Toxic Substances and Disease Registry, and State and local agencies, and to help them identify sources of specific air toxics information. Every effort has been made to ensure accuracy as of April 1992, the date that compilation of information was completed. However, further changes in agency priorities and funding levels may change the scope and estimated project completion dates.

Keywords: *Air pollution, *Toxic substances, *Research projects, Chemical compounds, Air quality, Indoor air pollution, Pollution regulations, Toxicity, Exposure, Risk assessment, Public health, Air pollution control, Listings, *National Air Toxics Information Clearinghouse, Research and development.

**PB93-206571/REB** PC **A99**/MF **A06**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Index, 1992.** Final rept.
Radian Corp., Austin, TX.
Jul 92, 621p* EPA/453/B-92/007
Contract EPA-68-D1-0125
See also PB92-111830. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The purpose of the bibliography is to provide State and local agencies with citations to report and Federal Register notices useful to them in developing and operating air toxics control programs. The reports selected for this bibliography were published by the following agencies: U.S. EPA, NAS, NCI, NIEHS, NTP, NIOSH, ATSDR, CPSC, and WHO, including the International Agency for Research on Cancer. Relevant reports published by various State and local agencies are also included in this edition. The edition of the bibliography updates the cumulative bibliography previously published by the National Air Toxics Information Clearinghouse, Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics, July 1991. The citations selected for this year were compiled from sources available through January 31, 1992.

Keywords: *Air pollution, *Toxic substances, *Bibliographies, Chemical compounds, Risk assessment, Toxicity, Exposure, Air pollution standards, Sectoral analysis, Air pollution control, Air pollution monitoring, *National Air Toxics Information Clearinghouse.

**PB93-206589/REB** PC **A99**/MF **E08**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**National Air Toxics Information Clearinghouse: NATICH Data Base Report of Federal, State, Local and EPA Air Toxics Activities.** Final rept.
Radian Corp., Research Triangle Park, NC.
1 Sep 92, 829p DCN-92-203-164-04-09, EPA/453/R-92/008
Contract EPA-68-D1-0125
Supersedes PB92-143700. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

Contents: State and Local Agencies; Air Toxics Contacts; Regulatory Program Information; Acceptable Ambient Concentration Guidelines or Standards; Pollutant Research; Methods Development Activities; Non-Health Related Impacts; Ambient Monitoring Information; General Permitting and Source Testing Information; Permitting Information; Source Testing Information; Emissions Inventory Information; Risk Assessment Information; Permit Descriptions; Source Test Descriptions; Clearinghouse Identifiers for Chemical Groups.

Keywords: *Air pollution, *Toxic substances, *Research projects, National government, Local government, State government, Chemical compounds, Pollution regulations, Risk assessment, Public health, Exposure, Toxicity, Air pollution standards, Permits, Air pollution sources, Listings, Data bases, *National Air Toxics Information Clearinghouse.

**PB93-206597/REB** PC **A03**/MF **A01**
**Cold Starting an Alcohol-Fueled Engine with Ultrasonic Fuel Atomization.** Technical rept.
Environmental Protection Agency, Ann Arbor, MI. Technology Development Group.
R. I. Bruetsch, and F. J. Hamady. Mar 93, 24p EPA/AA/TDG-93/02A
Supersedes PB93-197945. See also PB89-230692.

A test program was devised at EPA's National Vehicle and Fuel Emissions Laboratory to evaluate a Tonen ultrasonic fuel atomizer system on a Honda B20 engine using both M85 (85% methanol, 15% hydrocarbons) and M100 (neat methanol) fuels to determine whether cold starting a premixed-charge port injected engine on alcohol fuels at low ambient temperatures can be improved. Modification to the engine's intake manifold was performed at the Japanese Automotive Research Institute (JARI) in cooperation with the New Energy Development Organization (NEDO) to install heated injectors in close proximity to the ultrasonic atomizers. The engine is also equipped with the stock port injector system intact and functional. Successful M100 cold starts were obtained down to 20 deg F (-7 deg C).

Keywords: *Automotive fuels, *Automobile engines, *Exhaust gases, *Starting, Atomizers, Ultrasonic frequencies, Methanol, Tests, United States, Japan.

**PB93-206605/REB** PC **A03**/MF **A01**
**Pesticide Reregistration Progress Report, October 1991.**
Environmental Protection Agency, Arlington, VA. Special Review and Reregistration Div.
Oct 91, 16p EPA-22T-1001
See also PB92-224328 and PB93-178994.

The report is the third in a series of periodic reports produced by the Special Review and Reregistration Division (SRRD), Office of Pesticide Programs (OPP), U.S. Environmental Protection Agency (EPA), on the progress towards pesticide reregistration as mandated under the 1988 amendments to the Federal Insecti-

cide, Fungicide, and Rodenticide Act (FIFRA). The report will show the status of reregistration through the fourth quarter of the 1991 fiscal year.

Keywords: *Pesticides, *Toxicity, *Regulations, Chemical analysis, Risk assessment, Utilization, Environmental exposure, Agricultural chemistry, Reviews, *Reregistration, FIFRA(Federal Insecticide Fungicide and Rodenticide Act).

**PB93-206746/REB** PC **A02**/MF **A01**
**Pesticide Fact Sheet: 'Pseudomonas cepacia' Type Wisconsin.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
28 Dec 92, 6p EPA/737/F-93/002

Products are for formulating use in the manufacture of seed treatments and for use as a seed treatment to control damping-off fungi and nematodes. The end-use product is intended for use on corn (field, sweet, and pop), melons, tomatoes, lettuce, squash, cole crops, sunflowers, sugar beets, carrots, canola, alfalfa, clovers, grain sorghum, cotton, soybeans, beans (snap and dry) and potatoes. The results of the toxicity/pathogenicity studies submitted indicated that the active ingredient was not pathogenic or infective to rats when administered orally or intratracheally, was not pathogenic, infective or toxic when administered intravenously and was not toxic when applied dermally. Due to lack of toxicity in the rat studies which were conducted, the product should not pose a risk to wild mammalian species.

Keywords: *Fungicides, *Chemical analysis, Pesticides, Toxicity, Environmental effects, Biocides, Pseudomonas cepacia, Seed treatment, Biological control, Use patterns.

**PB93-206753/REB** PC **A02**/MF **A01**
**Pesticide Fact Sheet Number 239: Cimectacarb.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
11 Feb 93, 9p EPA/737/F-92/003

The document contains up-to-date chemical information, including a summary of the Agency's regulatory position and rationale, on a specific pesticide or group of pesticides. A Fact Sheet is issued after one of the following actions has occurred. These are: Issuance or reissuance of a registration standard; Issuance of each special review document; Registration of a significantly changed use pattern; Registration of a new chemical; or An immediate need for information to resolve controversial issues relating to a specific chemical or use pattern.

Keywords: *Pesticides, *Regulations, *Toxic substances, *Pollution control, Plant growth, Growth regulators, Turf grasses, Recreation facilities, Chemical properties, Tests, Laboratory animals, US EPA, Registration, Toxicity, Rats, Metabolism, Volatile organic compounds, *Chemical information fact sheet, *Cimectacarb, Carboxylic acid ester.

**PB93-206761/REB** PC **A02**/MF **A01**
**Pesticide Fact Sheet: Streptomyces sp. Strain K61.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
13 Apr 93, 7p EPA/737/F-93/004

Products are for repackaging use and for use as fungicides for the control of plant diseases caused by Fusarium, Alternaria and Botrytis. The products are intended for use on field crops, such as cotton, corn, soybeans, wheat, sorghum, beans and peas, and on vegetable and ornamental crops in the field or in greenhouses. The results of the toxicity/pathogenicity studies submitted indicated that the active ingredient was not pathogenic or infective to treated animals in any of the studies. Effects of the product on fish was not adequately determined and a test on rainbow trout must be repeated.

Keywords: *Fungicides, *Chemical analysis, Pesticides, Toxicity, Environmental effects, Biocides, Streptomyces species strain K61, Seed treatment, Biological control, Use patterns.

**PB93-206969/REB** PC **A04**/MF **A01**
**Development Document for Effluent Limitations Guidelines and Standards for the Pharmaceuticals Manufacturing. Point Source Category.**
Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.
Sep 82, 65p EPA/440/1-83/084B
See also PB87-172268.

Pharmaceutical plants manufacture biological products, medicinal chemicals, botanical products, and other pharmaceutical products. EPA identified 466 operating facilities involved in the manufacture of pharmaceutical products. Most of the pharmaceutical industry is located in the eastern half of the United States. The most prevalent manufacturing operation in the industry is the formulating, mixing, and compounding operation; batch-type production is the most common type of manufacturing technique for this industry. The wastewaters produced and discharged by the pharmaceutical industry are very diverse. Plant size, products, processes, and materials to which wastewater is exposed vary greatly. Additionally, the ratio of finished product to the quantity of raw materials, solvents, and other processing materials is generally very low.

Keywords: *Drug industry, *Industrial waste treatment, *Chemical effluents, *Pollutions regulations, Water pollution control, Water pollution abatement, Waste water, Point sources, Industrial plants, Water pollution sampling, Water pollution economics, Economic impact, Pretreatment, Treatment technology, BAT(Best Available Technology).

**PB93-206977/REB** PC **A07**/MF **A02**
Environmental Protection Agency, Washington, DC. Office of Marine and Estuarine Protection.
**INSEA User's Manual Environmental Performance Model of Incineration at Sea Operations.** Final rept.
Battelle Pacific Northwest Labs., Richland, WA.
Aug 87, 141p EPA/556/1-87/001
Contract EPA-68-03-3319
Sponsored by Environmental Protection Agency, Washington, DC. Office of Marine and Estuarine Protection.

INSEA (Incineration at SEA) is a screening tool to estimate the maximum allowable concentration of wastes that can be incinerated at sea without exceeding standards for marine aquatic life. The relationship between the water quality standards and the maximum allowable concentrations in the incinerator feed are defined by the processes considered by the model. A consistent bias toward conservatism in the model is required to compensate for the present inability to reliably predict many of the processes that may occur in the atmosphere and ocean, or to measure the parameters that could be used to define these processes. The model considers the primary atmospheric and oceanic processes that are responsible for dispersing the incinerator emissions into the environment. These processes are dispersion and transport of the contaminant plume in the atmosphere and dispersion and advection of the contaminant in the ocean.

Keywords: *Hazardous materials, *Incineration, *Waste disposal, *Ocean disposal, Water pollution effects, Particulates, Stack disposal, Dispersing, Plumes, Toxicity, Wind, Environmental transport, User manuals(Computer programs), *INSEA(Incineration at Sea).

**PB93-206993/REB** PC **A06**/MF **A02**
Battelle Pacific Northwest Labs., Richland, WA.
**Proceeding of the Workshop on the Sea-Surface Microlayer in Relation to Ocean Disposal. Held in Airlie, Virginia on December 18-19, 1985.**
Environmental Protection Agency, Washington, DC. Office of Marine and Estuarine Protection.
Aug 87, 113p EPA/556/1-87/005
Prepared in cooperation with Battelle/Marine Research Lab., Sequim, WA. Sponsored by Battelle Pacific Northwest Labs., Richland, WA.

A workshop was convened to identify information needs concerning the sea-surface microlayer (SSM) that would assist the U.S. Environmental Protection Agency in the ocean disposal regulatory process. Twenty-two participants from a wide diversity of disciplines, including technical experts on the sea-surface microlayer, identified and ranked over 30 relevant information needs. Top priority was given to determining: (1) residence times for components in the SSM and their alteration by inputs from disposal, (2) the importance of the SSM as a biological habitat, and (3) the toxicity of disposal wastes applied in a realistic way to the SSM. A research and monitoring plan based on a decision-tree and containing short- and long-term tasks was outlined. The first step involves sampling and analysis of the SSM during research ocean disposal activities. Measured SSM contaminant concentrations would then be compared with data on toxicity to surface organisms such as neustonic (floating) fish eggs.

Keywords: *Marine disposal, *Air water interactions, *Water pollution monitoring, Toxicity, Water pollution effects, Environmental transport, Incineration, Microenvironment, Meetings, Pollution regulations, *Sea-surface microlayer.

**PB93-207108/REB** PC **A09**/MF **A02**
Environmental Protection Agency, Washington, DC. Office of Water.
**Proceedings of the National Citizens' Volunteer Water Monitoring Conference (3rd). Held in Annapolis, Maryland on March 29-April 2, 1992. Building Partnerships in the Year of Clean Water.**
Izaak Walton League of America, Decorah, IA.
J. Doherty. Sep 92, 190p EPA/841/R-92/004
See also PB91-168377. Sponsored by Environmental Protection Agency, Washington, DC. Office of Water, and National Oceanic and Atmospheric Administration, Rockville, MD.

The objectives of the conference were to: promote successful partnerships between governments, schools, environmental organizations and businesses; teach implementation and maintenance of successful volunteer monitoring programs; provide hands-on training in developing scientific monitoring methods; help participants translate collected data into useful environmental education and action; create an opportunity to network and exchange information with other successful programs; and set the future direction for volunteer monitoring nationwide.

Keywords: *Water quality, *Citizen participation, *Water pollution monitoring, Rivers, Lakes, Wetlands, Estuaries, Coasts, National government, State government, Local government, Government/industry relations, Volunteers, Private organizations, Meetings.

**PB93-207348/REB** PC **A03**/MF **A01**
**Criteria for Review of Hazardous Materials Emergency Plans.**
National Response Team, Washington, DC.
May 88, 35p NRT-1A
See also PB93-158012.

The document contains a set of criteria which may be used by the Regional Response Teams (RRTs) in the review of local plans under the provisions of Section 303(g) of the Superfund Amendments and Reauthorization Act of 1986 (SARA). These criteria also may be used by local emergency planning committees (LEPCs) for preparing plans as required under Section 303 (a) and by state emergency response commissions (SERCs) for reviewing plans as required under Section 303 (e) of the Act. The review guide is intended as a companion document to the Hazardous Materials Emergency Planning Guide (NRT-1), and can be viewed as a supplement to the planning process as implemented by local emergency planning committees.

Keywords: *Hazardous materials, *Emergency planning, *Criteria, Administrative procedures, Chemical spills, Risk assessment, Accident prevention, Compliance, Regulations, Interagency cooperation, *RRT(Regional Response Teams), *LEPC(Local emergency response committees).

**PB93-207363/REB** PC **A03**/MF **A01**
**Case Studies in Wellhead Protection: Ten Examples of Innovative Wellhead Protection Programs.**
Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.
Dec 92, 12p EPA/813/R-92/002

Contents: Carroll County, Maryland-Water Resource Management Program; Descanso, California-Community Water District Wellhead Protection Program; Eastern Shore of Virginia-Wellhead Protection Program; El Paso, Texas-Wellhead Protection Program; Enid, Oklahoma-Aquifer Management and Wellhead Protec-

tion Program; Manchester-By-The-Sea, Massachusetts-Wellhead Protection Program; Nantucket, Massachusetts-Water Resources Protection Program; Palm Beach County, Florida-Wellhead Protection Program; Santo Domingo Pueblo, New Mexico-Wellhead Protection Program; Spokane, Washington Program.

Keywords: *Wellheads, *Water quality management, *Water pollution abatement, *Ground water, Aquifers, Hydrologic budget, Aquifer management, Environmental protection, State government, Local government, Regional planning, Case studies.

**PB93-207397/REB** PC **A06**/MF **A02**
**Guide for Cost-Effectiveness and Cost-Benefit Analysis of State and Local Ground Water Protection Programs.**
Environmental Protection Agency, Washington, DC. Office of Water.
Apr 93, 113p EPA/813/R-93/001

The guide familiarizes state and local ground water program managers with the tools of economic analysis. It shows how these tools can be used to evaluate ground water programs through cost-effectiveness or cost-benefit analysis. Case studies show the practical application of cost analysis, cost-effectiveness analysis, and cost-benefit analysis. A bibliography is included if a program manager needs further information on any of these subjects.

Keywords: *Ground water, *Water pollution economics, *Environmental protection, Water pollution abatement, Water pollution control, Benefit cost analysis, Cost effectiveness, Economic analysis, Baseline studies, State government, Local government, Guidelines, CSGWPP(Comprehensive State Ground Water Protection Program).

**PB93-207405/REB** PC **A03**/MF **A01**
**Role and Function of Forest Buffers in the Chesapeake Bay Basin for Nonpoint Source Management.**
Environmental Protection Agency, Annapolis, MD. Chesapeake Bay Program.
Feb 93, 16p CBP/TRS-91/93

The problems of the Chesapeake Bay are largely the result of non-point source (NPS) pollutants. It is unquestionable that the conversion of forests to other land uses throughout the watershed and particularly adjacent to streams and rivers, has adversely affected the vitality of our water resources. Now, there is an increasing recognition of the role that forests can play to help reduce pollution when combined with other management practices. Research results from a variety of sources have documented the effectiveness of the riparian forest in reducing NPS loading from runoff and groundwater. Most of the research has been done in agricultural watersheds or in connection with silvicultural activities. Most attention is now, however, on the use of riparian forest buffer strips as a management practice. However, forest buffers are difficult to address in the same context as other common best management practices. Forest buffers are also recognized for their high value in wildlife and fish habitat and maintaining ecosystem integrity. The paper primarily discusses elements of the relationship between forests and water quality in the context of the forest buffer.

Keywords: *Buffers, *Water management(Applied), *Chesapeake Bay Basin, *Forest land, *Water pollution control, Runoff, Nonpoint sources, Aquatic ecosystems, Marine fishes, Habitats, Forest trees, Shrubs, Vegetation, Riparian streams.

**PB93-207413/REB** PC **A02**/MF **A01**
**Contaminated Sediments News: Number 5, April, 1992.**
Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.
Apr 92, 9p EPA/823/N-92/001

The newsletter was developed to help with the exchange of relevant information on contaminated sediments and to increase communication among interested parties. The newsletter includes listings of conferences and forums, agency activities, and short articles.

Keywords: *Sediments, *Water pollution effects, Toxicity, Hazardous materials, Water quality, New England, San Francisco Bay, Great Lakes, Regional planning, *Contaminated sediments, Newsletters.

**PB93-207447/REB** PC **A11**/MF **A03**
Coordinating Research Council, Inc., Atlanta, GA.
**Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.** Annual rept.
California Univ., Riverside. Statewide Air Pollution Research Center.
W. P. L. Carter, J. A. Pierce, I. L. Malkina, D. Luo, and W. D. Long. 1 Apr 93, 229p CRC-APRAC-ME-9
Contracts ARB-A032-0692, C91323
Prepared in cooperation with California State Air Resources Board, Sacramento, South Coast Air Quality Management District, El Monte, CA., and Environmental Protection Agency, Washington, DC. Sponsored by Coordinating Research Council, Inc., Atlanta, GA.

The effects of 36 representative volatile organic compounds (VOCs) and CO on ozone formation, NO oxidation, and OH radical levels were measured in a series of environmental chamber experiments representing conditions where VOCs have the greatest effect on photochemical ozone formation. The experiments consisted of repeated 6-hour indoor chamber irradiations of a simplified mixture of ozone precursors with NOx in excess, alternating with runs with varying amounts of a test VOC added. The VOCs studied included representative alkanes, alkenes, aromatic hydrocarbons, aldehydes, alcohols, ethers, alcohol ethers, and siloxanes. CO, Acetone and 2-chloromethyl-3-chloropropene were also studied. Reactions of formaldehyde, acetone, the methylbenzenes and the alkenes had the largest positive effects on OH radical levels, and because of this they caused the most NO oxidation and ozone formation per molecule reacted. Reactions of the siloxanes and the C(6+) n-alkanes had the most inhibiting effects on radicals, causing them to inhibit NO oxidation and ozone formation under the conditions of these experiments. The other compounds had smaller and usually negative effects on OH radicals, and had moderate but positive effects on ozone formed and NO oxidized. Information was also obtained on amounts of NO oxidation caused directly by the reactions of the added VOCs or their products.

Keywords: *Photolysis, *Air pollution, *Chemical analysis, *Ozone, Photochemical oxidants, Oxidation, Combustion chambers, Carbon monoxide, Nitrogen oxides, Hydroxides, Smog, Photochemistry, *Volatile organic compounds, MIR(Maximum incremental reactivity).

**PB93-207488/REB** PC **A07**/MF **A02**
**Report to Congress on Implementation of Section 403(c) of the Federal Water Pollution Control Act.**
Environmental Protection Agency, Washington, DC. Office of Marine and Estuarine Protection.
Jun 90, 137p EPA/503/6-90/001

The U.S. Environmental Protection Agency (EPA) presents the report to Congress on implementation of section 403(c) of the Clean Water Act (the Act), as required in section 1007 of the Ocean Dumping Ban Act of 1988. Congress specifically requested the following information regarding the 403(c) program: An accounting of discharges into the waters of the territorial sea, the contiguous zone, and the ocean; A schedule for implementing section 403(c) of such Act and achieving compliance with guidelines promulgated under such section as expeditiously as practicable, and an estimate of the resources required to meet such schedule; and Recommendations for any additional legislative authorities needed to achieve compliance with such guidelines.

Keywords: *Ocean waste disposal, *Water pollution control, *Legislation, US EPA, Clean Water Act, Recommendations, Licenses, Regulations, Compliance, Discharge(Water), Degradation, Boundaries, Territorial seas, Coasts, States(United States), Ecosystems, Biological productivity, *Ocean Dumping Ban Act of 1988, Report to Congress.

**PB93-207496/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.
**National Directory of Citizen Volunteer Environmental Monitoring Programs (Third Edition).**
Rhode Island Univ., Narragansett. Sea Grant Program.
Apr 90, 48p EPA/503/9-90/004
See also PB89-154462. Sponsored by Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.

Like the volunteer environmental monitoring movement itself, the directory has grown rapidly. The first edition, published in September 1988, listed 43 programs. Just seven months later, the second edition, containing 70 entries, was produced. The expanded, updated, and revised third edition of the directory includes 133 programs. Thirty of these are brand-new programs that started within the year. During that same year many of the older programs have expanded, increasing the number of volunteers involved and the number of sites monitored, and taking on new projects. Most of the entries in this edition contain much more detailed information than in previous editions--information about specific techniques and tests used for monitoring, about funding sources, and about ways that governmental agencies are using citizen volunteer monitoring results.

Keywords: *Environmental monitoring, *Citizen participation, *Directories, Water quality, Acid rain, Acid mine drainage, Land pollution, Pollution control, State government, Local government, Communities, Regional planning, Voluntary organizations.

**PB93-207504/REB** PC **A08**/MF **A02**
**Ground-Water Modeling Compendium. Model Fact Sheets, Descriptions, Applications and Assessment Framework.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Oct 92, 157p EPA/500/B-92/006
Prepared in cooperation with Wisconsin Univ.-Madison, and International Ground Water Modeling Center, Indianapolis, IN.

Models can be used to guide and complement field investigations, thereby improving the understanding of the consequences of site-specific hydrogeclogic conditions. However, models should not be used in lieu of field investigations and care must be taken to ensure that models are not misused. The intention of the Compendium is to: promote the appropriate use of models by increasing users' awareness about the strengths, weaknesses and inherent uncertainties associated with ground-water models and modeling in general; and support model users and decision-makers by providing a convenient source of information on how to oversee modeling projects, how certain models have been applied in the context of hazardous waste/Superfund programs, and the characteristics of four specific ground-water models.

Keywords: *Ground water movement, *Path of pollutants, *Model studies, Water pollution, Environmental transport, Flow characteristics, Parametric analysis, Hydrogeology, Ground water, Computerized simulation, MODFLOW model, PLASM model, MOC model, RANDOM WALK model.

**PB93-207520/REB** PC **A08**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Locating and Estimating Air Emissions from Sources of Styrene.** Final rept.
Radian Corp., Research Triangle Park, NC.
D. Campbell. Apr 93, 169p EPA/454/R-93/011
See also PB92-126788. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The document deals specifically with styrene. Its intended audience includes Federal, State and local air pollution personnel and others who are interested in locating potential emitters of styrene, and making gross estimates of air emissions therefrom. Because of the limited amounts of data available on some potential sources of styrene emissions, and since the configurations of many sources will not be the same as those described here, the document is best used as a primer to inform air pollution personnel about (1) the types of sources that may emit styrene, (2) process variations and release points that may be expected within these sources, and (3) available emissions information indicating the potential for styrene to be released into the air from each operation.

Keywords: *Styrene, *Air pollution detection, *Pollution sources, Point sources, Industrial plants, Pesticides, Transportation sector, Emission factors, Production, Exhaust emissions, Pollution regulations, *Emission inventories, CAS 100-42-5.

**PB93-207538/REB** PC **A03**/MF **A01**
**Community Right-to-Know and Small Business: Understanding Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act of 1986.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Sep 88, 27p OSWER-88-005
See also PB89-120018 and PB91-139634.

The brochure has been developed to provide small businesses with important information on whether to report, and how and what to report under Sections 311 and 312 of the Emergency Planning and Community Right-To-Know Act of 1986. The document is not intended to replace any regulations written in support of the law. It is intended to assist the small business owner with compliance. Also, the brochure does not detail all of the sections of the Emergency Planning and Community Right-To-Know Act of 1986.

Keywords: *Hazardous materials, *Emergency planning, *Small businesses, Administrative procedures, Risk assessment, Compliance, Regulations, Reporting, Local government, State government, Emergency Planning and Community Right-to-Know Act, Chemical releases.

**PB93-207546/REB** PC **A03**/MF **A01**
**Portraits of Our Coastal Waters. Supplement to the National Water Quality Inventory. Report from the EPA Regions.**
Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.
Jun 91, 35p EPA/503/2-91/004

Contents: Pathogen Contamination in Great Bay, New Hampshire; Water Quality Problems in the Middle Atlantic Bight; Red Tide in the Eastern Gulf of Mexico; Oxygen Depleted Coastal and Estuarine Waters in Louisiana and Texas; Sediment Deficit and Saltwater Intrusion in Barataria Basin, Louisiana; Toxic Contamination in San Diego Bay, California; Salmon Mortality Problems in Port Townsend Bay, Washington; Multimedia Pollutants Effect Green Bay/Fox River, Wisconsin.

Keywords: *Coastal regions, *Water quality, *Water pollution, *Case studies, Water pollution effects, Atlantic Ocean, Pacific Ocean, Mexico Gulf, Lake Michigan, Man environment interactions, Land use, Runoff.

**PB93-207553/REB** PC **A03**/MF **A01**
**International Evaluation of In-situ Biorestoration of Contaminated Soil and Groundwater (September 1990).**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
S. J. J. M. Staps. Sep 90, 30p EPA/540/2-90/012
Pub. in Proceedings of NATO/CCMS International Conference, Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater (3rd), Montreal, Canada, November 6-9, 1989. See also PB91-143198.

The philosophy of in-situ biorestoration is to stimulate the indigenous soil microorganisms to degrade contaminants by improving the environmental conditions in the soil using a water recirculation system. The objective of the project is to show the possibilities for application of the technique in relation with contaminants, soil conditions and other site-specific circumstances by means of integration and evaluation of results of in-situ biorestoration projects. The project is limited to the Netherlands, West Germany and the USA. Experience has especially been gained with in-situ biorestoration at hydrocarbon-contaminated petrol stations and industrial sites. The system generally consists of a water recirculation system, aboveground water treatment and conditioning of the infiltrating water with nutrients and an oxygen source. However, there is no one-and-only application method for in-situ biorestoration. The remediation, which can last from approximately six months to several years, can reach residual concentrations below the B-value of the Netherlands examination framework.

Keywords: *Remedial action, *Soil contamination, *Water pollution control, *Ground water, Biodeterioration, Hydrocarbons, Land pollution, Water circulation, Microorganisms, Water treatment, Fluid infiltration, Nutrients, Oxygenation, Design criteria, Cost effectiveness, Evaluation, Tables(Data), Permeability, Translations, *Foreign technology.

**PB93-207561/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of Marine and Estuarine Protection.
**Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.**
Oak Ridge National Lab., TN. Environmental Sciences Div.
C. C. Coutant, and D. L. Benson. Aug 87, 47p ORNL/PUB-2972, EPA/503/3-88/001
Contract DE-AC05-84OR21400
See also PB84-119197 and PB84-119205. Sponsored by Environmental Protection Agency, Washington, DC. Office of Marine and Estuarine Protection, Department of Energy, Washington, DC., and Martin Marietta Energy Systems, Inc., Oak Ridge, TN.

The project seeks to develop strategies and priorities for arresting habitat deterioration and restoring lost habitats in estuaries through identification of critical zones for maintaining living resources. It uses as an example one representative and important estuarine species, the striped bass (Morone saxatilis). Data on summer water temperatures, dissolved oxygen concentrations, and striped bass distribution in Chesapeake Bay and Albemarle Sound, North Carolina, were evaluated to determine/establish if critical zones existed for maintenance of populations. Criteria for habitat suitability for adults and subadults were those identified in freshwater reservoirs (<25C and >2 mg/l dissolved oxygen). In Chesapeake Bay, two key areas were identified: (1) a zone of residual cool water (<25C) in the vicinity of the William Preston Lane, Jr. Memorial Bridge (Bay Bridge) near Annapolis, where striped bass subadults and adults congregate in summer, and (2) a shallow sill near the mouth of the Rappahannock River, where warm surface waters (>25C) in summer impinge on the bottom and may block egress of striped bass subadults and adults from the bay. Increasing anoxia in the bay in recent years, especially in the residual cool water, has reduced the amount of suitable habitat available. The Bay Bridge and sill areas are suggested as high-priority zones for pollution monitoring and control.

Keywords: *Marine fishes, *Estuaries, *Habitats, *Water pollution, *Chesapeake Bay, Populations, Bass, Ocean temperature, Albermarle Sound, Salinity, Oxygen, Dissolved gases, Concentration(Composition), Plankton blooms, Eutrophication, Monitoring, Graphs(Charts), Maryland, North Carolina, Virginia, *Morone saxatilis.

**PB93-207579/REB** PC **A10**/MF **A03**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Locating and Estimating Air Emissions from Sources of Methylene Chloride.** Final rept.
Radian Corp., Research Triangle Park, NC.
C. Blackley, G. Brooks, J. Buzun, J. Forrester, and R. Mead. Feb 93, 205p EPA/454/R-93/006
See also PB86-107604. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The document deals specifically with methylene chloride (MC), also known as dichloromethane. The intended audience includes Federal, State and local air pollution personnel and others who are interested in locating potential emitters of MC and in making gross estimates of MC air emissions. Data on some potential sources of MC emissions are limited and the configurations of many sources will differ from those described here. Therefore, the document is best used as a primer to inform air pollution personnel about (1) the types of sources that may emit MC, (2) process variations and release points that may be expected within these sources, and (3) available emissions information indicating the potential for MC to be released into the air from each operation.

Keywords: *Methylene chloride, *Air pollution detection, *Pollution sources, Point sources, Industrial plants, Pesticides, Transportation sector, Emission factors, Production, Exhaust emissions, Pollution regulations, *Emission inventories, CAS 75-09-2.

**PB93-207652/REB** PC **A10**/MF **A03**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Volume 6. Citations, 1992.** Final rept.
Radian Corp., Research Triangle Park, NC.
Jul 92, 217p* EPA/453/B-92/006
Contract EPA-68-D1-0125
See also Volume 5, PB92-111830. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The purpose of the report is to provide State and local agencies with citations of reports and Federal Register notices useful in developing and operating air toxics control programs. The reports selected for the bibliography were published by the following agencies: EPA, NAS, NCI, NIEHS, NTP, NIOSH, ATSDR, CPSC, WHO, and IARC. Relevant reports published by various State and local agencies are also included in the edition. The citations selected this year were compiled from sources available through January 31, 1992.

Keywords: *Air pollution, *Toxic substances, *Bibliographies, Chemical compounds, Risk assessment, Toxicity, Exposure, Air pollution standards, Sectoral analysis, Air pollution control, Air pollution monitoring, *National Air Toxics Information Clearinghouse.

**PB93-207660/REB** PC **A12**/MF **A03**
**Regulatory Impact Analysis: Control of Sulfur and Aromatics Contents of on-Highway Diesel Fuel.**
Environmental Protection Agency, Ann Arbor, MI. Office of Mobile Sources.
Jun 90, 257p

The regulatory analysis focuses on the cost effectiveness of regulating diesel fuel sulfur content. The report discusses the implications of fuel controls on the refinery industry, the control options considered, the cost effectiveness of fuel control, leadtime, enforcement issues and certification fuel.

Keywords: *Diesel fuels, *Air pollution control, *Sulfur, *Economic analysis, *Aromatic hydrocarbons, Highways, Exhaust emissions, Cost engineering, Diesel engine exhaust, Desulfurization.

**PB93-207710/REB** PC **A04**/MF **A01**
**Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.**
Environmental Protection Agency/National Oceanic and Atmospheric Administration Team on Near Coastal Waters, Rockville, MD.
C. Warsh, J. P. Tolson, C. J. Klein, S. P. Orlando, and C. Alexander. Jul 88, 56p EPA/503/6-88/000
See also PB93-136521. Prepared in cooperation with Delaware Univ., Newark. Coll. of Marine Science.

The study is an assessment of the susceptibility and concentration status of 17 Northeast estuaries to nutrient-related pollution problems. It is the final version of one of seven chapters in the Case Study and one of two chapters that will be completed. It first presents background information on the problems of nutrient overenrichment in estuaries followed by a screening analysis of the susceptibility and status of estuaries to nutrient discharges and sections on nutrient sources and discharge estimation methods. The final section is an overview of the region based on simple comparisons of discharge estimates across estuaries in the region. Appendix A contains one-page summaries for each estuary that include information on significant physical and hydrologic features, susceptibility and pollutant status, nutrient discharge estimates, and a narrative to assist the reader interpret the data. Summary estimates of particular interest are the changes in nitrogen and phosphorus inputs that would significantly alter the pollutant status of each estuary. Four additional appendices contain more detailed breakdowns of nutrient discharges by season and by source, an evaluation of the quality of the discharge estimates, and the method for determining an estuary's nutrient concentration status and susceptibility to nutrient-related pollution problems.

Keywords: *New England, *Water pollution monitoring, *Nutrients, *Estuaries, Nitrogen, Phosphorus, Pollution sources, Waste water, Runoff, Agricultural wastes, Discharge measurement, *Northeastern Region(United States), National Estuarine Inventory.

**PB93-207728/REB** PC **A09**/MF **A02**
**Cost of Providing Government Services to Alternative Residential Patterns.**
Environmental Protection Agency, Annapolis, MD. Chesapeake Bay Program.
May 93, 190p

The Subcommittee established a two step process to begin to analyze the environmental and economic impacts of residential development. Its objective is to determine if there are significantly different economic and environmental costs that can be attributed to different types, forms, and locations of residential development. In particular, the Subcommittee has decided to investigate how the capital cost per dwelling unit of providing services and infrastructure, specifically public services and infrastructure, varies according to type, form, and location of new residential development. As a next step, the Subcommittee will be investigating the specific water-quality impacts of various forms and patterns of development.

Keywords: *Regional planning, *Local government, *Government agencies, Land use, Land development, Human services, Environmental impacts, Costs, Water quality, Communities, Coastal regions, Estuaries.

**PB93-207744/REB** PC **A07**/MF **A02**
**Monitoring, Research, and Surveillance Plan for the 106-Mile Deepwater Municipal Sludge Dump Site and Environs.** Final rept.
Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.
Dec 90, 128p EPA/503/4-91/001
Prepared in cooperation with National Oceanic and Atmospheric Administration, Rockville, MD., and Coast Guard, Washington, DC.

In 1988, Congress passed the Ocean Dumping Ban Act of 1988 (ODBA) to end the practice of ocean dumping of sewage sludge and industrial waste by December 31, 1991. OBDA also required that the Environmental Protection Agency (EPA), in cooperation with the National Oceanic and Atmospheric Administration (NOAA) and the United States Coast Guard (USCG), design a monitoring program for the 106-Mile Site and the environs that may be impacted by the dumping of sewage sludge. In addition to requiring increased monitoring of the area, the joint Monitoring Plan required by ODBA was to include (1) sampling of an appropriate number of fish and shellfish species and other organisms to assess the effects of environmental conditions on living marine organisms in the areas of interest and (2) use of satellite and other advanced technologies in conducting the program.

Keywords: *Marine disposal, *Water pollution monitoring, *New York Bight, Path of pollutants, Water pollution effects(Animals), Sludge disposal, Sewage sludge, Long-range transport, Contaminated sediments, Nearfield fate, Farfield fate, Short-term effects, Long-term effects.

**PB93-207769/REB** PC **A05**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.
**Great Lakes Water Quality Guidance Docket Index.**
Labat-Anderson, Inc., Arlington, VA.
14 May 93, 81p*
Errata sheet inserted. Sponsored by Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.

The index supports the docket for the proposed Water Quality Guidance for the Great Lakes System published in the April 16, 1993 Federal Register.

Keywords: *Great Lakes, *Water pollution, *Pollution regulations, Indexes, Water quality, Hazardous materials, *Great Lakes Region(United States), Water quality criteria, Dockets.

**PB93-207926/REB** PC **A15**/MF **A03**
Environmental Protection Agency, Washington, DC. Nonpoint Sources Branch.
**Lake and Reservoir Restoration Guidance Manual: Second Edition.**
North American Lake Management Society, Merrifield, VA.
H. Olem, and G. Flock. Aug 90, 339p EPA/440/4-90/006
See also PB88-230719. Sponsored by Environmental Protection Agency, Washington, DC. Nonpoint Sources Branch.

Contents: (1) Overview of manual; (2) Ecological concepts; (3) Problem identification; (4) Predicting lake water quality; (5) Managing the watershed; (6) Lake and reservoir restoration and management techniques; (7) Hypothetical case study; (8) Implementing the management plan; (9) Lake protection and maintenance; References; Appendices.

Keywords: *Water quality management, *Water pollution control, *Lakes, *Reservoirs, Manuals, Surface waters, Evaluation, Aquatic ecosystems, Watersheds, Stratification, Algae, Monitoring, Chemical analysis, pH, Alkalinity, Nutrients, Fresh water fishes, Eutrophication, Financing, Tables(Data), Hydrologic cycle, Restoration.

**PB93-207934/REB** PC **A06**/MF **A02**
**Supplementary Development Document for Effluent Limitations Guidelines for the Leather Tanning and Finishing Point Source Category.**
Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.
Dec 86, 104p EPA/440/1-86/016S
See also PB88-213541.

The Environmental Protection Agency (EPA or the Agency) is proposing to amend 40 CFR Part 425 which limits effluent discharges to waters of the United States and the introduction of pollutants into publicly owned treatment works (POTW) by existing and new sources engaged in leather tanning and finishing.

Keywords: *Leather industry, *Industrial waste treatment, *Chemical effluents, *Pollution regulations, Water pollution control, Water pollution abatement, Waste water, Point sources, Industrial plants, Water pollution economics, Economic impact, Pretreatment, Treatment technology, BAT(Best available technology).

**PB93-207967/REB** PC **A03**/MF **A01**
**Introduction to Water Quality-Based Toxics Control for the NPDES Program.**
Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.
Mar 92, 47p EPA/831/S-92/002
See also PB91-127415.

Contents: The Scientific Necessity to Protect Water Quality; The Legal Authority to Protect Water Quality; (National Pollutant Discharge Elimination System (NPDES) Permit Program, The Integrated Approach to Water Quality-Based Toxics Control); Capabilities and Limitations of Whole Effluent Toxicity Testing; Scientific Concepts in Toxicity Testing; Practical Aspects of Whole Effluent Toxicity Testing; Compliance with Whole Effluent Toxicity Limits; Violations of Permits Having Whole Effluent Toxicity Limits; Appendix A: EPA's Authority to Regulate Toxicity; Appendix B: Excerpts Taken From Sample NPDES Permits and Relevant to Whole Effluent Toxicity Testing; Appendix C: Documents Relevant to Toxicity Testing; Appendix D: Glossary.

Keywords: *Toxicity, *Water pollution control, *Surface waters, Instructions, Standards, Monitoring, Quality assurance, Standards, Compliance, Reduction, Outfall sewers, Exposure, Licenses, Tests, Inspection, Dosage, Humans, Microorganisms, Growth, Mortality.

**PB93-207975/REB** PC **A11**/MF **A03**
**Federal Test Procedure Review Project: Preliminary Technical Report.** Technical rept.
Environmental Protection Agency, Ann Arbor, MI. Certification Div.
May 93, 230p EPA/420/R-93/007
See also PB93-197903.

The principal subject of the report is driving behavior, including acceleration and trip start patterns. After reviewing existing research on driving behavior, EPA determined that new surveys were needed to assess current driving in U.S. urban nonattainment regions. A parallel study of current technology vehicle emissions under the full range of driving conditions is also in progress. Results from these efforts will be combined in determining the need for test procedure revisions. The preliminary technical report discusses how the driving surveys were conducted, presents analyses of the results, and compares the data to the existing FTP. Quantitative assessments of the emission impacts are still in progress and are not discussed in the report.

Keywords: *Motor vehicles, *Exhaust emissions, *Driver behavior research, Vehicle air pollution, Pollution regulations, Parametric analysis, Speed, Urban areas, Air pollution standards, Federal Test Procedure, Clean Air Act, Driving style effect on exhaust emissions.

**PB93-208007/REB** PC **A18**/MF **A04**
Environmental Protection Agency, Ann Arbor, MI. Emission Control Technology Div.
**Analysis of Original Equipment and Aftermarket Manufacturer Oxygen Sensor Constructional, Functional, and Price Differences.**
Radian Corp., Sacramento, CA.
C. R. Beyer, D. A. Wright, and R. F. Klausmeier. Sep 89, 409p DCN-89-245-076-02-02, EPA/460/3-89/002
Contract EPA-68-03-3474
Sponsored by Environmental Protection Agency, Ann Arbor, MI. Emission Control Technology Div.

The oxygen sensor is a critical component of modern vehicle emission control systems. Studies conducted by the United States Environmental Protection Agency (EPA) show that failed oxygen sensors result in high emissions during the Federal Test Procedure (FTP). Many states have inspection and maintenance (I/M) programs to detect and correct high emitting vehicles but most programs have a repair cost limit. The high retail price of some oxygen sensors often exceeds the I/M repair cost limit, resulting in high emitting vehicles not being repaired. A study of oxygen sensor prices, designs, and applications was conducted to identify reasons for high oxygen sensor prices. The study showed that many oxygen sensors are constructionally and functionally the same but their retail prices vary greatly.

Keywords: *Oxygen detectors, *Motor vehicles, Air pollution control equipment, Inspection, Maintenance, Prices, Emission control, Exhaust emissions, Surveys.

**PB93-208015/REB** PC **A10**/MF **A03**
**Report on the EPA/Manufacturer Cooperative I/M Testing Program.** Technical rept.
Environmental Protection Agency, Ann Arbor, MI. Emission Planning and Strategies Div.
J. A. McCargar, and L. M. Snapp. Sep 92, 212p EPA/AA/EPSD-I/M-92-01
See also PB86-213394.

The Cooperative EPA/Manufacturer I/M Test Program (CTP) was a joint effort by the Environmental Protection Agency and seven of the major domestic and imported vehicle manufacturers to recruit failed vehicles from an official state Inspection/Maintenance (I/M) program for study in a laboratory environment. The intent of the program was to gather data that could be combined with the results from a number of other studies, contributing to accomplishing several objectives. Among these were the following: Develop advice to I/M programs on improvements to preconditioning methods and formal I/M test procedures. Seek, and assess the potential of, a limited diagnosis and repair sequence as a remedy for a significant portion of the in-use emissions excess. Improve methods and models for estimating I/M effectiveness in reducing emissions. Provide feedback to the manufacturers on particular malfunction or malmaintenance types.

Keywords: *Motor vehicles, *Air pollution standards, *Exhaust emission measurement, Exhaust system inspection, Exhaust emission tests, Maintenance, Carbon monoxide, Hydrocarbons, Vehicle air pollution, Exhaust emissions, *Automobile exhaust.

**PB93-208072/REB** PC **A07**/MF **A02**
**Proceedings of the Ocean Dumping Workshop 106-Mile Site. Held in Ocean City, NJ., on March 28-30, 1989.**
Environmental Protection Agency, Washington, DC. Office of Marine and Estuarine Protection.
Jun 89, 128p EPA/503/9-89/009
See also PB81-241572. Prepared in cooperation with National Oceanic and Atmospheric Administration, Washington, DC., and Coast Guard, Washington, DC.

EPA, NOAA, and USCG convened a workshop in Ocean City, New Jersey on March 28-30, 1989 to ad-

dress concerns about potential effects on fisheries and human health risks resulting from disposal of sewage sludge at the 106-Mile Site, and to assist in the process of identifying critical monitoring, research, and surveillance needs relative to the 106-Mile Site. The goals of the workshop were (1) to assess what is known about the transport and fate of the sludge; (2) to assess potential impacts on living marine resources and on human health from disposal of sewage sludge at the 106-Mile Site; and (3) to develop recommendations for future research, monitoring, and surveillance activities at the 106-Mile Site and in surrounding areas potentially impacted by sludge disposal at the site. Workshop participants included representatives of Federal agencies and state governments, the scientific and technical community, citizen groups, congressional staffs, and sewerage authorities.

Keywords: *New York Bight, *Marine disposal, *Water pollution monitoring, Atlantic Ocean, Sludge disposal, Sewage sludge, Aquatic ecosystems, Risk assessment, Public health, Marine biology, Water pollution effects, Pollution regulations, Water quality management, Meetings.

**PB93-208148/REB** PC **A08**/MF **A02**
**Clark-Fork-Pend Oreille Basin Water Quality Study: A Summary of Findings and a Management Plan.**
Environmental Protection Agency, Seattle, WA. Region X.
Feb 93, 171p EPA/910/R-93/006

The report is the product of a three-state water quality study in the Clark Fork-Pend Oreille Basin. In response to concerns about the growing presence of algae and weeds, Congress appropriated funds to conduct a water quality study in the basin. The Congressional request appears as water quality study in the basin. The Congressional request appears as Section 525 of the 1987 Clean Water Act. The study's main objectives were: (1) characterize water quality problems, (2) identify pollution sources, (3) recommend actions for protecting and restoring water quality throughout the basin. The following water quality objectives were identified: (1) control nuisance algae in the Clark Fork River by reducing nutrient concentrations; (2) protect Lake Pend Oreille water quality by maintaining or reducing current rates of nutrient loading from the Clark Fork River; (3) reduce nearshore eutrophication in Lake Pend Oreille by reducing nutrient loading from local sources; (4) improve Pend Oreille River water quality through macropyhte management and tributary nonpoint source controls. To meet these objectives, the plan outlines specific management actions.

Keywords: *Pend Oreille Basin, *Clark Fork River, *Water quality management, Clean Water Act, Objectives, Idaho, Washington(State), Watersheds, Pend Oreille River, Nutrients, Algae, Phosphorus, Sewage disposal, Nonpoint sources, Inorganic nitrates, Nitrites, Eutrophication, Lakes, Montana.

**PB93-208213/REB** PC **A99**/MF **A06**
**Development Document for Effluent Limitations Guidelines and Standards for the Aluminum Forming Point Source Category.** Draft rept.
Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.
Sep 80, 617p EPA/440/1-80/073A
See also PB84-244415.

The purpose of the report is to provide the supporting technical data regarding water use, pollutants and treatment technologies for any (BPT) Best Practical Technology; (BAT) Best Available Technology; (BCT) Best Conventional Technology, (NSPS) New Source Performance Standards or pretreatment standards for existing sources (PSES), and pretreatment standards for new sources (PSNS) which EPA may choose to issue for the Aluminum Forming Category, under Sections 301, 304, 306, 307 and 501 of the Clean Water Act.

Keywords: *Aluminum industry, *Metal working, *Industrial waste treatment, *Chemical effluents, *Pollution regulations, Water pollution control, Water pollution abatement, Waste water, Point sources, Industrial plants, Water pollution sampling, Water pollution economics, Economic impact, Pretreatment, Treatment technology, BAT(Best Available Technology).

**PB93-208221/REB** PC **A22**/MF **A04**
**Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Pharmaceutical Manufacturing Point Source Category.**
Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.
Nov 82, 513p EPA/440/1-82/084B
See also PB93-206969.

The document presents the technical data to support effluent limitations for the pharmaceutical manufacturing point source category as required by the Clean Water Act (The Act) and related settlement agreements. It also presents the technologies to achieve limitations as defined by an amended best practicable control technology currently available (BPT), best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT), and standards as defined by new source performance standards (NSPS), and pretreatment standards for new and existing sources (PSNS and PSES). The pharmaceutical manufacturing point source category manufactureres biological products, medicinal chemicals, botanical products and pharmaceutical products covered by Standard Industrial Classification Code (SIC) Numbers 2831, 2833, and 2834, and other commodities described within the report.

Keywords: *Drug industry, *Industrial waste treatment, *Chemical effluents, *Pollution regulations, Water pollution control, Water pollution abatement, Waste water, Point sources, Industrial plants, Water pollution sampling, Water pollution economics, Economic impact, Pretreatment, Treatment technology, BAT(Best available technology).

**PB93-208262/REB** PC **A03**/MF **A01**
**Incorporating Uncertainty Associated with Censored Water Quality Data in Parametric Trend Analysis.**
Environmental Protection Agency, Annapolis, MD. Chesapeake Bay Program.
Jun 93, 32p CBP/TRS-75/93

Water quality data are often collected in monitoring programs to serve as a basis for the estimation of trends. A problem arises in trend estimation when data series contain observations reported as below detection limit (BDL). The several published methods that deal with BDL observations are generally oriented towards obtaining the 'best value' to substitute for the censored values. When the definition of a detection limit associated with a datum is unknown, a conservative lower bound (with a theoretical justification) for the precision of the observation is given. The results show that weighted regression estimates of linear trends are much less sensitive to the method of substitution for BDL values than unweighted regression trend estimates. The results also indicate that use of weighted regression in multiply censored data series eliminates the need to apply the highest detection limit to all data in the series (when data below this highest limit exist in the data series) in order to avoid trends due to changing detection limits.

Keywords: *Water pollution detection, *Water quality management, *Parametric analysis, Data covariances, Water chemistry, Water pollution monitoring, Nutrients, Trends, Chesapeake Bay Program, BDL(Below detection limit).

**PB93-208270/REB** PC **A06**/MF **A02**
**Chesapeake Bay Coordinated Split Sample Program Annual Report, 1990-1991: Analytical Methods and Quality Assurance Workgroup of the Chesapeake Bay Program Monitoring Subcommittee.**
Environmental Protection Agency, Annapolis, MD. Chesapeake Bay Program.
1991, 102p CBP/TRS-76/93

The Chesapeake Bay Program is a federal-state partnership with a goal of restoring the Chesapeake Bay. Its ambient water quality monitoring programs, started in 1984, sample over 150 monitoring stations once or twice a month a month. Due to the size of the Bay watershed (64,000 square miles) and the cooperative nature of the CBP, these monitoring programs involve 10 different analytical laboratories. The Chesapeake Bay Coordinated Split Sample Program (CSSP), initialed in 1988, assesses the comparability of the water quality results from these laboratories. The report summarizes CSSP results for 1990 and 1991, its second and third full years of operation. The CSSP has two main objectives: identifying parameters with low inter-organization agreement, and estimating measurement system variability. The identification of parmeters with low agreement is used as part of the overall Quality Assurance program. Laboratory and program personnel use the information to investigate possible causes of the differences, and take action to increase agreement if possible. Later CSSP results will document any improvements in inter-organization agreement. The variability estimates are most useful to data analysts and modelers who need confidence estimates for monitoring data.

Keywords: *Program management, *Water pollution sampling, *Chemical analysis, *Chesapeake Bay, Laboratories, Tests, Organizations, Agreements, Monitoring, Quality assurance, Accuracy, Virginia, Potomac River, Standards, Organic phosphates, Particulates, Assessments, State government, National government, Total organic carbon.

**PB93-208288/REB** PC **A05**/MF **A01**
**Comparison of Mid-Bay and Lateral Station Water Quality Data in the Chesapeake Bay Mainstem: Chesapeake Bay Program.**
Environmental Protection Agency, Annapolis, MD. Chesapeake Bay Program.
Jun 93, 96p CBP/TRS-74/93

Seasonal median water quality values were compared between stations in mid-Bay and lateral regions in seven east-west transects in the mainstem Chesapeake Bay. Comparisons were made over seven years, 1985-1991, for April-October surface layer medians of total phosphorus, total nitrogen, dissolved orthophosphate, dissolved inorganic nitrogen, total suspended solids, chlorophyll a, Secchi depth, and salinity. Comparisons were also made using spring (March-May) and summer (June-September) medians of surface and bottom salinity and dissolved oxygen. Comparisons were made using difference plots of raw data, scatter plots of annual seasonal medians, and the Wilcoxon matched-pairs test on annual seasonal medians. The graphical and statistical analyses confirmed each other. Correlation coefficients were also calculated between mid-Bay and lateral data series to estimate their degree of similarity over time, but could not be tested for statistical significance.

Keywords: *Statistical tests, *Water quality data, *Chesapeake Bay, Water pollution sampling, Comparison, Median(Statistics), Seasonal variations, Periodic variations, Nitrogen, Phosphorus, Inorganic nitrogen compounds, Salinity, Chlorophylls, Depth, Dissolved oxygen, Correlation, Differences, Aquatic plants, Graphs(Charts), Maps, Total suspended solids.

**PB93-208320/REB** PC **A06**/MF **A02**
**Proceedings and Summary of the Workshop on Finfish as Indicators of Toxic Contamination. Held in Airlie, Virginia on July 27-28, 1986.**
Environmental Protection Agency, Washington, DC. Office of Marine and Estuarine Protection.
1986, 110p

Contents: Overview of the National Estuary Program and Objectives of the Workshop on Finfish as Indicators of Toxic Contamination; Summary of the Opening Plenary Session; Summary of Plenary Session on Subgroup Reports; Summary Report from the Subgroup on Anatomic Pathology; Report from the Subgroup on Bioaccumulation and Enzymes; Report from the Subgroup on Reproduction/Development, Physiology, Behavior, and Population; Summary Report from Subgroup on Immunology; Appendices.

Keywords: *Water pollution effects, *Bioindicators, *Toxicity, *Estuaries, *Marine fishes, *Meetings, Populations, Indicator species, Reproduction(Biology), Biological accumulation, Animal diseases, Enzymes, Behavior, Stress(Physiology), Immunology, *Finfish.

**PB93-208668/REB** PC **A06**/MF **A02**
**Toxics Release Inventory. Public Data Release. State Fact Sheets, 1991.**
Environmental Protection Agency, Washington, DC. Office of Pollution, Prevention, and Toxics.
May 93, 118p EPA/745/F-93/002
See also PB92-155381.

The Toxics Release Inventory (TRI) is mandated by section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986. The law is based on the premise that citizens have a right-to-know about chemicals in their communities. It has two main purposes: to provide planning for response to chemical accidents; and to provide the public and the government with information about possible chemical hazards. The purpose of this State Fact Sheet book is to provide a status of TRI data at the state level. Under section 313 of EPCRA, certain manufacturers must report on an annual basis the amounts of over 300 toxic chemicals, including those in 20 chemical categories, that they release directly to the air, water, or land, or that they inject underground. The reports also include information on amounts transferred to off-site locations for treatment or disposal. In 1991, for the first time, facilities also provided additional information mandated by the Pollution Prevention Act (PPA) of 1990, such as amounts recycled on- and off-site, amounts used for energy recovery on- and off-site, amounts treated on-site, and amounts released due to non-production related events (e.g., accidental spills). The reports are sent to the U.S. Environmental Protection Agency (EPA) and to the states or tribes. The law specifies that the EPA must compile these reports into an annual inventory that is publicly available by computer telecommunication and other means on a cost-reimbursable basis.

Keywords: *Superfund, *Hazardous materials, *Toxic substances, *Waste management, Environmental surveys, Magnetic tapes, Chemical compounds, Inventories, Emergency planning, Pollution regulations, Facilities, Public information, *Emergency Planning and Community Right to Know Act.

**PB93-208759/REB** PC **A05**/MF **A01**
**Illinois Annual Air Quality Report, 1992.**
Illinois State Environmental Protection Agency, Springfield. Div. of Air Pollution Control.
May 93, 92p IEPA/APC/93-004
See also report for 1990, PB93-208775.

The document summarizes ambient air quality measurements obtained in Illinois during the calendar year of 1992. The report discusses air quality data obtained for each site, provides statistical summaries, details air quality violations and provides trend data where available. Background information is included concerning sources of air pollutants, health effects, air quality standards and ambient monitoring methodologies.

Keywords: *Illinois, *Air quality data, *Air pollution monitoring, Pollution sources, Air pollution standards, Air quality control regions, Particulates, Ozone, Sulfur dioxide, Carbon monoxide, Nitrogen dioxide, Lead(Metal).

**PB93-208775/REB** PC **A05**/MF **A01**
**Illinois Annual Air Quality Report, 1991.**
Illinois State Environmental Protection Agency, Springfield. Div. of Air Pollution Control.
May 92, 96p IEAPA/APC/92-058
See also report for 1987, PB88-241609 and report for 1992, PB93-208759.

The document summarizes ambient air quality measurements obtained in Illinois during the calendar year of 1991. The report discusses air quality data obtained for each site, provides statistical summaries, details air quality violations and provides trend data where available. Background information is included concerning sources of air pollutants, health effects, air quality standards and ambient monitoring methodologies.

Keywords: *Illinois, *Air quality data, *Air pollution monitoring, Pollution sources, Air pollution standards, Air quality control regions, Particulates, Ozone, Sulfur dioxide, Carbon monoxide, Nitrogen dioxide, Lead(Metal).

**PB93-209013/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of Policy, Planning and Evaluation.
**Enhancement of the Pesticide Residues Information System (PRIS). Volume 1.** Final rept.
Dynamac Corp., Rockville, MD.
J. D. Nies. 14 Jul 93, 25p
Contract EPA-68-D2-0053
See also PB91-154591 and Volume 2, PB93-209021. Sponsored by Environmental Protection Agency, Washington, DC. Office of Policy, Planning and Evaluation.

The Pesticide Residues Information System (PRIS) contains the results of more than 500,000 analyses for 329 distinct pesticides (and metabolites) on an estimated 110,864 samples. Fresh agricultural commodities comprise approximately 76 percent of the samples; processed foods comprise approximately 24 percent of the samples. One or more detectable pesticide residues were found on approximately 29 percent of all samples. Samples have been collected by each State food regulatory agency for a variety of reasons such as random surveillance, product or chemical specific concerns, and consumer complaints. Sampling sites include farm fields, packing sheds, distribution/marketing warehouses, and retail grocery stores. The National Food Processors Association (NFPA) data represent the monitoring activities of member companies on processed foods or on commodities that have been purchased for processing. Scientific Certification Systems data were developed by Scientific Certification Systems (SCS) laboratories under contract to private food retailers located in the U.S. and Canada. Samples of fresh agricultural commodities were obtained exclusively from distribution/marketing warehouses.

Keywords: *Pesticide residues, *Food contamination, Pesticides, Metabolites, United States, Canada, Food processing, Data bases, *PRIS(Pesticide residues information system), Processed food, Raw food.

**PB93-209021/REB** PC **A15**/MF **A03**
Environmental Protection Agency, Washington, DC. Office of Policy, Planning and Evaluation.
**Enhancement of the Pesticide Residues Information System (PRIS). Volume 2.** Final rept.
Dynamac Corp., Rockville, MD.
J. D. Nies. 14 Jul 93, 346p
Contract EPA-68-D2-0053
See also PB91-154609 and Volume 1, PB93-209013. Sponsored by Environmental Protection Agency, Washington, DC. Office of Policy, Planning and Evaluation.

Pesticide residue data on raw and processed food were obtained on a voluntary basis from agencies and organizations not required to submit these data to the Office of Pesticide Programs. The project was part of a scoping exercise to compile and summarize in an electronic format available monitoring data from outside EPA and to begin to evaluate the usefulness of these data for scientific and regulatory purposes. Data for 329 pesticides on over 61,000 samples were obtained from three primary sources: Agriculture Canada, state monitoring data compiled by FDA, and the National Food Processors Association.

Keywords: *Pesticide residues, *Food contamination, Pesticides, Metabolites, United States, Canada, Food processing, Data bases, Tables(Data), *PRIS(Pesticide residues information system), Processed food, Raw food.

**PB93-209146/REB** PC **A05**/MF **A01**
Air Force Center for Environmental Excellence, Brooks AFB, TX.
**Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.**
Battelle, Columbus, OH.
R. E. Hinchee, S. K. Ong, R. N. Miller, D. C. Downey, and R. Frandt. May 92, 95p
See also PB93-194231 and AD-A222 348. Prepared in cooperation with Engineering-Science, Inc., Denver, CO. Sponsored by Air Force Center for Environmental Excellence, Brooks AFB, TX.

Bioventing is an extremely cost-effective method for treating soils contaminated with fuels (JP-4, diesel, gasoline, and heating oil) and non-chlorinated solvents. In April of this year, the Air Force Center for Environmental Excellence (AFCEE) launched a nationwide 'bioventing initiative' to test the effectiveness of this innovative process at 55 contaminated sites in nineteen states. Twenty systems have already been installed and tested. To ensure that systems were installed and tested consistently, AFCEE developed the comprehensive protocol document. With minimal site specific modifications, the protocol is also used as a regulatory test plan. The concept significantly reduces test plan preparation costs. The AFCEE document introduces the bioventing technology and describes the technical procedures used to set up a bioventing system for field evaluation. It also provides testing, equipment, measurements, and other relevant quantitative data.

Keywords: *Biological treatment, *Soil treatment, *Land pollution control, Air force, Soil contamination, Remedial action, Jet engine fuels, Oil spills, Underground storage, Storage tanks, Performance evaluation, Field tests, Cost analysis, Biodeterioration, *Innovative treatment technology, *Cleanup operations, *Soil venting, Protocols.

**PB93-209401/REB** PC **A13**/MF **A03**
Robert S. Kerr Environmental Research Lab., Ada, OK.
**Compilation of Ground-Water Models.** Research rept. Sep 88-Sep 91.
Butler Univ., Indianapolis, IN. Holcomb Research Inst.
P. K. M. van der Heijde, and O. A. Elnawawy. May 93, 289p EPA/600/R-93/118
Contract EPA-CR-815363
See also PB93-178226. Prepared in cooperation with Colorado School of Mines, Golden. International Ground Water Modeling Center, and Indiana Univ.-Purdue Univ. at Indianapolis. Sponsored by Robert S. Kerr Environmental Research Lab., Ada, OK.

The report presents the methodology used by the International Ground Water Modeling Center to classify, evaluate and manage descriptive information regarding ground-water modeling codes for the purpose of model selection. Furthermore, the report provides an overview of available ground-water modeling codes and their major characteristics. The report includes a section that defines ground-water modeling, presents the classification approach taken by the International Ground Water Modeling Center (IGWMC), and discusses different types of models and the mathematical approaches invoked for developing the models. Separate sections discuss and review the different categories of ground-water models: flow models, transport models, chemical reaction models, stochastic models, models for fractured rock, and ground-water management models. The appendices include a listing and description from the IGWMC MARS database of selected models from each category.

Keywords: *Ground water, *Mathematical models, *Flow models, Subsurface flow, Hydrology, Aquifers, Two dimensional flow, Three dimensional flow, Computerized simulation, Water pollution, Environmental transport, Saturated zone.

**PB93-209419/REB** PC **A08**/MF **A02**
**Geotechnical Systems for Structures on Contaminated Sites: A Technical Guidance Document.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste.
H. I. Inyang, and V. B. Myers. Aug 93, 159p EPA/530/R-93/002

The technical guidance document has been developed to address some of the technical aspects of contaminated site remediation and redevelopment. The guidance does not represent an advocacy by the U.S. EPA for the use of commercial or residential structures to cover contaminated media. However, at some sites where contamination is marginal or where the primary source of contamination has been removed, it may be technically feasible to build functional structures that can mitigate some of the environmental hazards present at such sites. The document is not a regulation but is intended to help State and Regional personnel in the evaluation of design measures for structural foundations and non-conventional covers at marginally contaminated sites. It provides a body of information on design techniques that could be adopted by facility and operators if EPA or State personnel allow the reuse of marginally contaminated or cleaned-up land for structural purposes.

Keywords: *Structural design, *Sites, *Remedial action, *Waste disposal, Guidelines, Manuals, Risk assessment, Soil stabilization, Regional planning, State government, Migration, Ground water, Earth fills, Containment, Caps, Coverings, Fluid infiltration, RCRA(Resource Conservation and Recovery Act), Cleanup.

**PB93-209427/REB** PC **A08**/MF **A02**
**Report to the United States Congress on Radionuclides in Drinking Water: Multimedia Risk and Cost Assessment of Radon in Drinking Water.** Draft rept.
Environmental Protection Agency, Washington, DC. Office of Water.
15 Jul 93, 158p

EPA prepared the report in response to the Congressional mandate in Public Law 102-389 (the Chafee-Lautenberg Amendment to EPA's Appropriation Bill, enacted October 6, 1992) which directs the Administrator of the U.S. Environmental Protection Agency (EPA) to report to Congress on EPA's findings regarding the risks of human exposure to radon, the costs for controlling or mitigating that exposure, and the risks posed by treating water to remove radon. The Chafee-Lautenberg Amendment called for an explicit multimedia comparison of the risks from radon in indoor air and drinking water. Congress placed the requirement on the Agency because of the concern voiced in the United States over the costs to be incurred by public water systems in the control of radon in drinking water while a larger threat from indoor air was not being addressed except through voluntary measures. Amendments to the Safe Drinking Water Act in 1986 called for the regulation of radon in drinking water.

Keywords: *Radon, *Risk assessment, *Cost analysis, Radionuclide migration, Path of pollutants, Public health, Natural radioactivity, Ingestion(Biology), Inhalation, Law(Jurisprudence), Pollution regulations, *Drinking water, Dose-response relationships.

**PB93-209872/REB** PC **A06**/MF **A02**
Environmental Protection Agency, Washington, DC. Office of Water.
**Supplemental Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation.**
Science Applications International Corp., McLean, VA.
May 91, 118p EPA/21W-4002
See also PB93-209880. Sponsored by Environmental Protection Agency, Washington, DC. Office of Water.

The National Pretreatment Program as implemented under the Clean Water Act (CWA) and General Pretreatment Regulations (40 Code of Federal Regulations (CFR) Part 403) is designed to control the introduction of nondomestic wastes to Publicly Owned Treatment Works (POTWs). The specific objectives of the Program are to protect POTWs from pass through and interference, to protect the receiving waters and to improve opportunities to recycle sludges. To accomplish these objectives, the program relies on National categorical standards, prohibited discharge standards and local limits. Part 1 of the document provides background information on pollutant levels in residential wastewater and in wastewaters from commercial sources, and characterizes toxic pollutant discharges from these sources. Residential and commercial source monitoring data summarized in Part 1 are intended to supplement similar data found in the 1987 local limits guidance.

Keywords: *Water pollution abatement, *Water pollution standards, *Waste water, *Hazardous materials, Industrial wastes, Industrial waste treatment, Residential sector, Water pollution sources, Metals, Sewage, Landfills, Pollution regulations, Effluents, *POTW(Publicly-Owned Treatment Works), *Pretreatment.

**PB93-209898/REB** PC **A09**/MF **A02**
**Guidance for Capacity Assurance Planning. Capacity Planning Pursuant to CERCLA Section 104(c)(9).** Final rept.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
May 93, 188p EPA/530/R-93/014, OSWER-DIRECTIVE-9010.02

The Guidance document advises states on how to assure adequate hazardous waste treatment and disposal capacity for meeting the requirements of Section 104(c)(9) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or 'Superfund'), as amended, by preparing 1993 Hazardous Waste Capacity Assurance Plans (CAPs). It supersedes similar guidance documents issued in December 1988 and April 1991, and should be used by states for the 1993 Capacity Assurance Planning Process. The document includes an overview of the Capacity Assurance Planning Process, baseyear data, projections, and addressing shortfalls.

Keywords: *Superfund, *Waste management, *Hazardous materials, Waste disposal, Waste processing plants, Waste recycling, Waste utilization, Pollution regulations, Remediation, Guidelines, Forecasting, Requirements, *Capacity assurance plans.

**PB93-209989/REB** PC **A16**/MF **A03**
Office of Radiation Programs, Washington, DC.
**National Radon Measurement Proficiency Program: Individual Proficiency Report.**
ICF, Inc., Fairfax, VA.
Jul 93, 375p EPA/402/R-93/079
Contract EPA-68-D2-0131
See also PB93-209997 and PB93-139673. Sponsored by Office of Radiation Programs, Washington, DC.

The report will assist State, EPA Regions, and local government officials in providing advice to the public on the selection of proficient radon measurement contractors. The Report is a listing of 1,000 individual contractors who have met the requirements of EPA's National Radon Measurement Proficiency (RMP) Program as of July 15, 1993. Each contractor is listed by name, RMP individual and organization identification numbers, company name, address, phone number, and geographic service area.

Keywords: *Radon, *Indoor air pollution, *Air pollution monitoring, Contractors, Listings, Pollution regulations, Requirements, Performance standards, Buildings, Public information, National Radon Proficiency Program.

**PB93-209997/REB** PC **A11**/MF **A03**
Office of Radiation Programs, Washington, DC.
**National Radon Contractor Proficiency (RCP) Program. Proficiency Report, July 1993.**
ICF, Inc., Fairfax, VA.
Jul 93, 249p EPA/402/R-93/080
Contract EPA-68-D2-0131
See also PB93-209989 and PB93-139665. Sponsored by Office of Radiation Programs, Washington, DC.

The report will assist State, EPA Regions, and local government officials in providing advice to the public on the selection of proficient radon mitigation contractors. The Report is a listing of 853 contractors who have met the requirements of EPA's National Radon Contractor Proficiency (RCP) Program as of July 15, 1993. Each contractor is listed by name, RCP identification number, company name, address, phone number, and geographic service area.

Keywords: *Radon, *Indoor air pollution, *Air pollution control, Contractors, Listings, Pollution regulations, Requirements, Performance standards, Buildings, Public information, National Radon Contractor Proficiency Program.

**PB93-210110/REB** PC **A19**/MF **A04**
California State Air Resources Board, Sacramento. Research Div.
**Survey of Medical Waste Incinerators and Emissions Control.** Final rept.
Energy and Environmental Research Corp., Irvine, CA.
R. G. Barton, D. W. Hansell, D. Furlong, G. R. Hassell, and W. S. Lanier. Jan 92, 440p ARB-R-93/462
Contract ARB-A832-155
See also PB90-259946. Sponsored by California State Air Resources Board, Sacramento. Research Div., and Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The report contains two volumes. Volume I of the report assesses the state-of-the-art of medical waste thermal treatment. The program involved a survey of existing information on medical waste treatment. This information was combined with data from municipal and hazardous waste combustion to identify potential mechanisms responsible for toxic emissions. Manufacturers of combustion and flue gas cleaning equipment were contacted. Information on current design practice was obtained. Volume II was prepared to assist local air pollution management districts implement Section 93104, Title 17, of the California Code of Regulations. Section 93104 places restrictions on polychlorodibenzo-p-dioxins (PCDD) and polychlorodibenzofurans (PCDF) emission levels and medical waste incinerator operating parameters which may affect PCDD/PCDF emissions. Part I of Volume II provides direct guidance for implementing the regulations. Part II provides background information on the operation and capabilities of flue gas cleaning systems used to control particulate, acid gas, metals, and PCDD/PCDF emissions.

Keywords: *Environmental surveys, *Heat treatment, *Air pollution control, *Incinerators, *Waste disposal, *Air pollution control equipment, Hospital solid wastes, State of the art, Polychlorinated dibenzodioxins, Polychlorinated dibenzofurans, Combustion products, Radioactive materials, Toxic substances, Pollution regulations, Implementation, Flue gas, Metals, Acidification, *Medical wastes, *Emissions control.

**PB93-210193/REB** PC **A03**/MF **A01**
**Water Quality in Illinois, 1990-1991.** Biennial rept.
Illinois State Environmental Protection Agency, Springfield. Div. of Water Pollution Control.
C. Northrop. Jan 93, 12p IEAP/WPC-92-224
See also PB92-223023.

The report is a summary of the 305(b) 'Illinois Water Quality Report'. It highlights the 1990 - 1991 water quality conditions of Illinois' rivers, streams, inland lakes, Lake Michigan, and groundwater. The report also outlines current water quality issues and the IEPA's water pollution control programs.

Keywords: *Water quality, *Illinois, *Water pollution control, Water quality data, Nonpoint sources, Water quality management, Surface waters, Ground water, Toxic substances, Organic compounds, Fishes, Sediments, Water quality standards, Lakes, Rivers, Zebra mussels.

**PB93-210219/REB** PC **A03**/MF **A01**
**Xeriscape Landscaping: Preventing Pollution and Using Resources Efficiently.**
Environmental Protection Agency, Washington, DC. Office of Water.
Apr 93, 20p EPA/840/B-93/001

One can have stunning gardens and lawns--and save water, prevent pollution, and protect the environment, too--by employing a form of landscaping called Xeriscape landscaping. Defined as 'quality landscaping that conserves water and protects the environment', Xeriscape produces attractive landscapes that use less water because they're based on designs and plants suited to the locale. The booklet describes Xeriscaping and its many benefits, cites some successful examples, and provides a short bibliography and contact/reference list.

Keywords: *Landscaping, *Water conservation, Environmental protection, Turf grasses, Irrigation, Soil analysis, Mulching, *Xeriscape.

**PB93-210250/REB** PC **A05**/MF **A02**
**User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections.**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
Nov 92, 98p EPA/454/R-92/006
See also PB85-211498 and PB93-105559.

CAL3QHC is a microcomputer based model to predict carbon monoxide (CO) or other inert pollutant concentrations from motor vehicles at roadway intersections. The model includes the CALINE-3 line source dispersion model and a traffic algorithm for estimating vehicular queue lengths at signalized intersections. CAL3QHC enhances CALINE-3 by incorporating methods for estimating queue lengths and the contribution of emissions from idling vehicles. The model permits the estimation of total air pollution concentrations from both moving and idling vehicles. It is a reliable tool for predicting concentrations of inert air pollutants near signalized intersections. Because idle emissions account for a substantial portion of the total emissions at an intersection, the model is relatively insensitive to traffic speed, a parameter difficult to predict with a high degree of accuracy on congested urban roadways without a substantial data collection effort.

Keywords: *Air pollution monitoring, *Intersections, *Motor vehicles, Computerized simulation, User

manuals(Computer programs), Exhaust emissions, Carbon monoxide, Idling, Roads, Air pollution sources, Exhaust gas dispersion, Meteorological data, CAL3QHC model, CALINE-3 model.

**PB93-210300/REB** PC **A04**/MF **A01**
**Commitment to Watershed Protection: A Review of the Clean Lakes Program.**
Environmental Protection Agency, Washington, DC. Office of Wetlands, Oceans and Watersheds.
Feb 93, 60p EPA/841/R-93/001
See also PB93-210375, PB88-230719 and PB93-207926.

Contents: Introduction; Lessons Learned from the Clean Lakes Program; Effects of the Clean Lakes Program; How it Came to Be--History and Structure, Resources; Tables; Figure.

Keywords: *Water pollution control, *Lakes, *Surface waters, *Reservoirs, Watersheds, Citizen participation, Financial assistance, Local government, State government, National government, Technical assistance, American Indians, Grants, History, Protection, Aquatic ecosystems, Assessments, Financing, US EPA, Tables(Data), Restoration, Clean Lakes Program, Volunteers.

**PB93-210359/REB** PC **A20**/MF **A04**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Guidance on the Application of Refined Dispersion Models for Hazardous/Toxic Air Releases.** Final rept.
Radian Corp., Austin, TX.
May 93, 456p EPA/454/R-93/002
Contract EPA-68-D00125
Supersedes PB91-190983. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The document provides general guidance on characterizing hazardous air pollutant releases and shows how to apply appropriate dispersion models. Specifically, it: Helps determine likely or reasonable storage conditions for specific chemicals for which a release might occur; Helps determine release classes (e.g., liquid or gaseous phase) of a hazardous release; Defines the steps to be taken when determining if a release should be considered a dense gas release (and thus require the use of a model capable of such a simulation); Defines the methods used to determine the input variables used by commonly-used refined models in the public domain; Points out the implications and effects of various choices for input information; Shows, by example, the calculation of the input variables used by the models; Describes the outputs available from the models; and Discusses how to determine the input that gives the 'worst-case' impact conditions.

Keywords: *Air pollution control, *Hazardous materials spills, *Accidents, Aerosols, Air quality display model, Dispersions, Chemical spills, Mathematical models, Toxic hazards, Computerized simulation, Scenarios, Releasing, Ammonia, Chlorine, Hydrogen fluoride, Hydrogen chloride, Sulfur dioxide, Ethylene oxide.

**PB93-210367/REB** PC **A14**/MF **A03**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Workbook of Screening Techniques for Assessing Impacts of Toxic Air Pollutants (Revised).** Final rept.
Pacific Environmental Services, Inc., Research Triangle Park, NC.
Dec 92, 307p EPA/454/R-92/024
Contract EPA-68-D0-0124
Supersedes PB89-134340. See also PB86-245248 and PB88-150958. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The workbook provides a logical approach to the selection of appropriate screening techniques for estimating ambient concentrations due to various toxic/hazardous pollutant releases. Methods used in the workbook apply to situations where a release can be fairly well-defined, a condition typically associated with non-accidental toxic releases. The format of the workbook is built around a series of release scenarios which may be considered typical and representative of the means by which toxic chemicals become airborne.

Keywords: *Air pollution effects, *Toxicity, *Environmental impacts, Hazardous materials, Mathematical models, Ambient air quality, Pollutant sources, Atmospheric diffusion, Meteorological data, Screening, Tests.

**PB93-210375/REB** PC **A15**/MF **A03**
Environmental Protection Agency, Washington, DC. Office of Wetlands, Oceans and Watersheds.
**Fish and Fisheries Management in Lakes and Reservoirs. Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.**
Terrene Inst., Inc., Washington, DC.
1993, 326p EPA/841/R-93/002
See also PB93-210300, PB93-203982 and PB93-207926. Sponsored by Environmental Protection Agency, Washington, DC. Office of Wetlands, Oceans and Watersheds.

Fish, however, are an integral component of lake and reservoir ecosystems. In addition to being a desired resource for lake users, they play important roles in energy flows, nutrient cycling, and maintaining community balance. The physical, chemical, and biological characteristics of a lake or reservoir are major determinants of the types, number, and size of fish available for harvest. At the same time, fisheries management affects not only fish and the quality of fishing but also the ecosystem as a whole. The manual is written to provide water quality managers with a better understanding of the concepts and techniques of fisheries management as well as the role of fish in the lake ecosystem and the potential use of fish management as one method for improving and maintaining water quality.

Keywords: *Water pollution control, *Lakes, *Reservoirs, *Fisheries, Manuals, Fresh water fishes, Aquatic ecosystems, Nutrients, Technical assistance, Reproduction(Biology), Hydrology, Phytoplankton, Growth, Invertebrates, Populations, Government agencies, State government, Toxicity, Quality assurance, Chemical analysis, *Restoration, *Water quality management.

**PB93-210383/REB** PC **A07**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.** Final rept.
Research Triangle Inst., Research Triangle Park, NC.
E. E. Rickman, R. K. M. Jayanty, and L. V. Jaffe. Feb 93, 132p RTI/5960/132-01D, EPA/454/R-93/007
Contract EPA-68-D1-0009
Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

Volatile organic compounds are important contributors to the formation of ozone in photochemical smog. To reduce the concentration of ozone in the environment, the Environmental Protection Agency (EPA) currently regulates volatile organic emissions from surface coatings. Current regulations require the measurement of volatile organic content of surface coatings. The current EPA measurement method (EPA Method 24) is not suited for use with coatings that are cured with ultraviolet (uv) radiation. To meet its regulatory needs, the Office of Air Quality Planning and Standards has implemented the development of a new method for measuring the volatile organic content of uv-cured coatings. The report describes the review of the American Society for Testing and Materials (ASTM) method and the development of a new EPA Draft Method for determination of volatile matter content from uv-cured coatings.

Keywords: *Volatility, *Organic compounds, *Coatings, Epoxy coatings, Acrylic resins, Polystyrene, Thiols, Curing, Ultraviolet radiation, Ozone, Photochemical reactions, Smog.

**PB93-210391/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Guideline for Modeling Carbon Monoxide from Roadway Intersections.**
Sigma Research Corp., Concord, MA.
D. C. DiCristofaro. Nov 92, 58p EPA/454/R-92/005
Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The guideline is designed to evaluate air quality impacts at one or more roadway intersections where vehicular traffic will cause or contribute to increased emissions of carbon monoxide (CO). The explicit purpose of the guideline is to provide a consistent, scientifically acceptable method for estimating the air quality impacts of vehicular traffic at intersections to determine if such impacts may exceed the National Ambient Air Quality Standards (NAAQS) for CO.

Keywords: *Carbon monoxide, *Air pollution monitoring, *Urban intersections, Air quality display model, Exhaust emissions, Automobile exhaust, Environmental impacts, Traffic congestion, Atmospheric diffusion, NAAQS(National Ambient Air Quality Standards).

**PB93-211985/REB** PC **A21**/MF **A04**
Environmental Research Lab., Narragansett, RI.
**What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.**
American Society of Limnology and Oceanography, Walla Walla, WA.
S. W. Chisholm, and F. M. M. Morel. c1991, 489p EPA/600/R-93/120
Presented at the American Society of Limnology and Oceanography Symposium, San Marcos, CA., February 22-24, 1991, v36 n8. See also PB86-140886. Sponsored by Environmental Research Lab., Narragansett, RI.

The oceans play a critical role in regulating the global carbon cycle. Deep-ocean waters are roughly 200% supersaturated with CO2 compared to surface waters, which are in contact with the atmosphere. The difference is due to the flux of photosynthetically derived organic material from surface to deep waters and its subsequent remineralization, i.e. the 'biological pump'. The pump is a complex phytoplankton-based ecosystem. It is driven by sunlight, and fueled by the supply of inorganic nutrients derived primarily from the deep ocean. In areas of the oceans where inorganic N and P are effectively exhausted by phytoplankton in surface waters during the growing season, the pump functions at maximal efficiency: The transport of carbon to depth is limited by the flux of N and P into the surface waters. In the Southern Ocean, near the equator, and in the subarctic Pacific, however, relatively high concentrations of nitrate and phosphate are found in the surface waters throughout the year, and phytoplankton biomass and net production are much lower than would be expected based on the availability of major nutrients. (Copyright (c) 1991, by the American Society of Limnology and Oceanography, Inc.)

Keywords: *Phytoplankton, *Limnology, *Biological productivity, *Southern Ocean, *Pacific Ocean, Arctic regions, Nutrients, Carbon dioxide cycle, Global warming, Atmosphere, Biomass, Deep water, Inorganic nitrates, Phosphates, Organic compounds, Surface waters, Tables(Data), Greenhouse gases, Biological pump.

**PB93-212025/REB** PC **A05**/MF **A01**
**Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants (Revised).**
Environmental Monitoring Systems Lab., Cincinnati, OH.
Apr 77, 77p

The publication contains guidelines for sampling and analysis of industrial wastes.

Keywords: *Water pollution sampling, *Industrial wastes, *Chemical analysis, *Hazardous materials, Guidelines, US EPA, Standards, Laboratory equipment, Gas chromatography, Purging, Mass spectrometers, Quality assurance, Waste treatment, Liquids, Quantative analysis, Qualitative analysis, Phenols, Metals, Cyanides, Test methods.

**PB93-212033/REB** PC **A01**/MF **A01**
**Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Water.
May 93, 4p EPA/832/F-93/004

The fact sheet outlines how the federal government has participated in partnerships with the states and local governments to clean and protect our nation's

waters, and now has broadened this partnership to include the private sector.

Keywords: *Sewage treatment, *Water pollution economics, *Water quality management, *Finances, *Interagency cooperation, National government, State government, Cost repayment, Pollution regulations, Water pollution abatement, *Public-private partnerships, *Private sector, Partners Rebuilding America program, State revolving funds, Publicly owned treatment works, Cooperative agreements.

**PB93-212041/REB** PC **A13**/MF **A03**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.** Final rept. Sep 91-Sep 92.
Radian Corp., Research Triangle Park, NC.
A. E. Leininger, K. A. Scott, E. C. Sarsony, L. C. Huff, and C. R. Blackley. Jun 93, 295p EPA/600/R-93/108A
Contract EPA-68-D1-0031
See also PB91-231134. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The catalog presents a discussion of and data on constituents and emissions from products that have the potential to impact the indoor air environment. The Catalog is intended as a tool to be used by researchers to help organize the study of materials as potential sources of indoor air emmisions. Included in the catalog are sections on seven product categories: insulation, wallcoverings, resilient floor coverings, carpet, adhesives, sealants and caulks, and pesticides. Each section presents a classification scheme for the product category, sales and usage volume data, qualitative data on product composition, and quantitative and qualitative data on emission rates to the indoor air. Emissions information is presented only for volatile organic compounds (VOCs) because these are the compounds most likely to be emitted from materials found in homes and office buildings. Data tables summarizing available emissions and constituent data are provided, and are organized according to the classification scheme presented for each product category.

Keywords: *Indoor air pollution, *Air pollution sources, *Construction materials, *Catalogs, Pesticides, Insulation, Floor coverings, Adhesives, Sealing compounds, Sealers, Emissions, Volatile organic compounds.

**PB93-212058/REB** PC **A09**/MF **A02**
Corvallis Environmental Research Lab., OR.
**Research Plan and Methods Manual for the Oregon Wetlands Study.**
Magee (Teresa K), Corvallis, OR.
T. K. Magee, S. E. Gwin, R. G. Gibson, C. C. Holland, and J. Honea. Apr 93, 185p EPA/600/R-93/072
Contract EPA-68-C8-0006
See also PB90-261512. Prepared in cooperation with ManTech Environmental Technology, Inc., Corvallis, OR. Sponsored by Corvallis Environmental Research Lab., OR.

The goals of the Oregon Wetlands Study are to develop a monitoring method for characterizing and comparing natural and project freshwater, emergent wetlands in different land use settings, and to obtain information that will improve wetland management strategies employing restoration and creation in replacement of permitted wetland losses. Four study objectives addressing these needs for freshwater palustrine wetlands dominated by emergent vegetation and open water are: (1) determine the number of wetlands converted to other landtypes and identify causes of direct loss, (2) evaluate the relationships between surrounding land uses and attainable quality of wetlands, (3) evaluate the replacement potential of wetlands to aid in development of performance criteria for projects, and(4) evaluate how project design and implementation affect replacement potential to facilitate development of design guidelines. Sampling will be focused on populations of wetlands. The study area is located in the metropolitan area of Portland, Oregon. Aspects of vegetation, soils, hydrology, wetland morphology, and extent of buffers will be sampled systematically using a grid of transects.

Keywords: *Research projects, *Swamps, *Construction, *Water pollution sampling, Manuals, Licenses, Fresh water, Land use, Aquatic ecosystems, Vegetation, Soils, Buffers, Hydrology, Field tests, Quality assurance, Maps, Tables(Data), Clean Water Act, Populations, Natural wetlands, Artificial wetlands, *Portland(Oregon).

**PB93-212181/REB** PC **A13**/MF **A03**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Field Test of a Generic Method for Halogenated Hydrocarbons.** Rept. for Sep 92-Sep 93.
Radian Corp., Research Triangle Park, NC.
J. T. Bursey, R. G. Merrill, R. A. McAllister, and J. F. McGaughey. 7 Jul 93, 277p EPA/600/R-93/101
Contract EPA-68-D1-0010
See also PB93-180891. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

The objective of the program was to perform a field validation of the VOST and SemiVOST methods as written at a coal fired power plant in a manner that will allow the collection of sufficient valid data to be able to establish the bias and precision of the methods for the halogenated organic compounds listed in Title III of the Clean Air Act Amendments of 1990. Pesticides, polychlorinated biphenyls, 2,3,7,8-tetrachloro-p-dibenzodioxin, and dibenzofurans were excluded from the study because EPA specific methods already exist for these compounds. To achieve this objective, a field test site was selected to allow access for the quadruple sampling trains required for testing. Collection and evaluation of the data followed one of the acceptable approaches detailed in the EPA Method 301.

Keywords: *Organic halogen compounds, *Air pollution detection, *Field tests, Fossil-fuel power plants, Stationary sources, Air pollution sampling, Chemical analysis, Validation, Performance evaluation, Tables(Data), EPA Method 301, VOST(Volatile Organic Sampling Train), Clean Air Act, Spiking procedures.

**PB93-212264/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC.
**Association of Personal and Workplace Characteristics with Reported Health Symptoms of 6771 Government Employees in Washington, DC.** Symposium chapter Jan-Sep 92.
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
L. A. Wallace, C. J. Nelson, and G. Glen. 1992, 8p EPA/600/A-93/137
Contract EPA-68-D0-0106
See also PB92-103175. Sponsored by Environmental Protection Agency, Research Triangle Park, NC.

A study of indoor air quality in four office buildings was carried out in 1989 near Washington, DC. Three buildings were used by the Environmental Protection Agency (EPA) and the fourth by the Library of Congress (LOC). A questionnaire was provided to approximately 5000 employees of the EPA and about 3500 employees of the LOC. An analysis of 3948 completed EPA questionnaires has been carried out. The main objective of the present study was to perform identical analyses on the EPA and LOC data sets separately to determine 'robust' relationships between symptoms and workplace or personal characteristics. An additional objective was to expand the analyses to include not only the 'last year' health symptoms but also the 'last week' and job-related symptoms as well. Finally, several questions concerning absenteeism and productivity have been newly analyzed.

Keywords: *Indoor air pollution, *District of Columbia, *Occupational safety and health, Office buildings, Environmental surveys, Aerosols, Dust, Odors, Fungi, Working conditions, Signs and symptoms.

**PB93-212272/REB** PC **A03**/MF **A01**
**UV Monitoring Program at US EPA.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
W. F. Barnard, and L. T. Cupitt. 10 Jun 93, 12p EPA/600/A-93/138

EPA's UV program will focus on improving the Agency's ability to assess human exposures and effects, including: (1) to enhance the accuracy, reliability and applicability of the UV Ultraviolet Index and the predictive algorithms upon which it is based; (2) to operate EPA's UV monitoring network in order to verify and improve the Index calculations and predictions and to acquire reliable data for convolving with human effects 'action curves'; and (3) to exchange data and QA/QC procedures with other UV researchers, both within EPA, in other U.S. Agencies and institutions, and in the international community. The focus of EPA's efforts will be human exposure and effects, combined with a concerted effort at QA/QC.

Keywords: *Solar ultraviolet radiation, *Monitoring, *Radiant flux density, Radiation measurements, Ultraviolet spectrophotometers, Exposure, Risk assessment, Public health, Air pollution, Cloud cover, UV Exposure Index and Monitoring Network.

**PB93-212298/REB** PC **A02**/MF **A01**
**Low Cost Procedure to Make Gaseous Pollutant Audit Materials.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
W. J. Mitchell, E. W. Streib, H. L. Crist, and R. Bousquet. Apr 93, 9p EPA/600/A-93/140
Presented at the Environmental Protection Agency/Air and Waste Management Association Symposium 'Measurement of Toxic and Related Air Pollutants', Durham, NC., May 5, 1993. See also PB93-191427, PB93-194173 and PB91-120279. Prepared in cooperation with ManTech Environmental Technology, Inc., Research Triangle Park, NC.

EPA has identified over 130 organic and 20 inorganic gases that it is now regulating or plans to regulate as air pollutants. These compounds are covered by a variety of environmental regulations such as RCRA, NSPS, NAAQS, TSCA, NESHAPS, and CERCLA. These compounds can be found in the air from 1 ppb to the 1000 ppm range and in different relative ratios. A gas transfer system is described in this presentation that will allow an organization to prepare a wide variety of QC and QA materials for these gases using a small number of stock gases in compressed gas cylinders. The experiments conducted to characterize the performance of this system to date and the additional experiments planned are described.

Keywords: *Standards, *Air pollution detection, *Gas detectors, *Gas analysis, Quality assurance, Quality control, Calibrating, Volatile organic compounds, Pollution regulations, Stability, Gas cylinders, Auditing, Mixtures, *Reference materials, *Research Gas Materials Program, *Gas transfer systems, Atmospheric Research and Exposure Assessment Laboratory, Protocols.

**PB93-212306/REB** PC **A02**/MF **A01**
**Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
A. E. Bond, G. G. Akland, R. G. Lewis, and C. J. Nelson. 26 Apr 93, 7p EPA/600/A-93/141
Presented at the Measurement of Toxic and Related Air Pollutants, Durham, NC., May 4-7, 1993. See also PB90-152224.

A four-farm pilot study was conducted during May and June 1992 in southeastern Minnesota to test and evaluate a variety of different sampling methods for determining the potential human exposure of farm applicators and their families to 26 different pesticides during routine agricultural pesticide applications. The study design incorporated sampling methods that included the potential routes of exposure through inhalation, ingestion, and dermal adsorption. The paper includes a discussion of the study design, the sampling rationale, and a profile of the different types of environmental samples collected from air, soil, house dust, dermal patches and gloves, diet (drinking water, solid food, and beverages), and biological samples (blood and urine).

Keywords: *Minnesota, *Pesticides, *Environmental exposure pathway, Risk assessment, Public health, Environmental surveys, Food chains, Inhalation, Pollution sampling, Reprints, Biomarkers, Skin contact, Soil contamination.

**PB93-212314/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Recent Advances in Measuring Exhaled Breath and Estimating Exposure and Body Burden for Volatile Organic Compounds (VOCS).**
Research Triangle Inst., Research Triangle Park, NC.
L. Wallace. 10 Feb 93, 24p EPA/600/A-93/142
Contracts EPA-68-02-3679, EPA-68-02-4544
See also PB88-100052. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

An improved portable breath measurement method has been developed that allows one-minute sampling times. The equipment has been successfully tested in field and chamber studies. Results of these studies suggest that breath levels following known exposures are predictable and reproducible across a small number of volunteers. The residence times in the body and the distribution in body compartments of several common air toxics have been determined. A simple four-compartment linear model is capable of fitting the observed data. The main parameters of the model include the fraction f of the parent compound exhaled under steady-state conditions and the residence times tau(sub i) in the ith compartment. The values of these parameters for several volatile organic compounds (VOCs) and for the four body compartments (blood, vessel-rich tissues, vessel-poor tissues, and fat) are provided.

Keywords: *Body burden, *Volatile organic compounds, *Breath tests, Portable equipment, Reproducibility of results, Test methods, Pharmacokinetics, Tissue distribution, Monitors.

**PB93-212322/REB** PC **A02**/MF **A01**
**National Performance Audit Program (NPAP).** Symposium paper.
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
E. T. Hunike, and J. B. Elkins. May 93, 8p EPA/600/A-93/143

The National Performance Audit Program (NPAP) is one of the major components in the quality assurance of the Nation's air monitoring program. Over the last several years and especially in 1993, the NPAP has undergone a metamorphosis. The paper will explore some of the forces behind this change as well as the resulting changes which include expansion of the NPAP to cover all the criteria pollutants, new audit equipment design, more audit equipment, more sites audited, and changes in the audit site selection process. The paper will include a review of the audit equipment used throughout the program's existence, an examination, pollutant by pollutant, of the number of audits performed each year beginning in 1989, and other enhancements of the expanded NPAP.

Keywords: *Air pollution standards, *Air pollution monitoring, *Air pollutants, Carbon monoxide, Lead(Metal), Nitrogen dioxide, Sulfur dioxide, Ozone, Particulates, Air pollution sources, Quality assurance, *NPAP(National Performance Audit Program), Monitoring stations.

**PB93-212330/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.**
Research Triangle Inst., Research Triangle Park, NC.
L. A. Wallace, H. Oezkaynak, J. D. Spendler, E. D. Pellizzari, and P. Jenkins. Jul 93, 8p EPA/600/A-93/144
Contract EPA-68-02-4544
See also PB93-166957. Prepared in cooperation with Harvard School of Public Health, Boston, MA., and California State Air Resources Board, Sacramento. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

Personal, indoor, and outdoor concentrations of inhalable particles and 15 elements were measured for a probability sample of 178 persons representing 139,000 nonsmoking residents of Riverside, California. Newly designed personal monitors were employed. Personal exposures often exceeded concurrent indoor and outdoor concentrations, both for particles and for 14 of 15 associated elements. The increase appears to be due to personal activities such as dusting, vacuuming, cooking, and sharing a home with a smoker. This suggests that reduction of dust levels in the home could decrease exposure to airborne particles.

Keywords: *Indoor air pollution, *Ambient air quality, *Air pollution monitoring, Air pollution sources, Exposure, Dust, Nicotine, Particles, Chemical elements, *Riverside(California), Personal monitors.

**PB93-212348/REB** PC **A02**/MF **A01**
**NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
C. J. Nelson, J. M. Clothier, G. Akland, and A. Bond. 21 Apr 91, 6p EPA/600/A-93/145
Presented at Measurement of Toxic and Related Air Pollutants, Durham, NC., May 4-7, 1993. Prepared in cooperation with Southwest Research Inst., San Antonio, TX.

The National Cancer Institute (NCI), the Environmental Protection Agency (EPA), and the National Institute of Environmental Health Sciences (NIEHS) have planned a long-term prospective epidemiologic study of men, women, and dependent children in agricultural areas to identify and quantify cancer risks that may be associated with pesticide usage. The paper covers the types of questionnaires that are to be used in the study. The main topic is the EPA developed questionnaire that was designed to assess total pesticide exposure to the farm family. The EPA developed a questionnaire to assess previous pesticide use and practices, exposure while pesticides are being applied, and any residue that may find its way into the home. The questionnaire was administered to 3 farm families during the spring of 1992. Activity logs were kept by participants during the one week study period. A food frequency log was kept of all food prepared during the day of application and information was gathered on the types of food used by the families, both locally produced and purchased from retail stores. Problems encountered during the administration of the questionnaire and steps taken to remedy the problems will be discussed.

Keywords: *Biological markers, *Pesticides, *Health hazards, *Agricultural worker's diseases, *Questionnaires, Occupational safety and health, Toxicology, Diet records, Families, Prospective studies, Epidemiology.

**PB93-212355/REB** PC **A03**/MF **A01**
Robert S. Kerr Environmental Research Lab., Ada, OK.
**Rapid Phase Indentification of Mixed Crystalline Solids.** Symposium paper.
Oregon Graduate Inst. of Science and Technology, Beaverton.
J. T. Stanley, C. D. Palmer, D. A. Downham, A. M. Johansen, and J. McCarthy. c1992, 17p EPA/600/A-93/146
Grant EPA-R-819665
Proceedings of Symposia held at the TMS Annual Meeting, Denver, CO., February 21-25, 1993. Pub. in the Minerals, Metals and Materials Society, p433-445. Sponsored by Robert S. Kerr Environmental Research Lab., Ada, OK.

Amorphous precipitates, minerals, and mineral surfaces are important factors in the cleanup of waste sites. It is necessary, therefore, to accurately identify the composition and crystalline form of the minerals in soils, sediments, and waste products before it is possible to quantify the impact of disturbance to environmental systems or to design practical remediation schemes. However, phase identification in metal-contaminated soils is difficult because of the multitude of phases present, their variable degree of crystallinity, and the low percentages of the active/hazardous phases of interest. The objectives of the paper are to outline the need for such rapid phase identification in environmental problems, describe the methodologies currently investigated, and to present some preliminary observations.

Keywords: *Phase studies, *Chromium, *Soil chemistry, Soil analysis, Chemical analysis, Land pollution, Crystal-phase transformations, Electron microscopy, X ray spectroscopy, Computerized simulation, Reprints, Waste characterization, Remediation.

**PB93-212363/REB** PC **A02**/MF **A01**
**Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.**
Robert S. Kerr Environmental Research Lab., Ada, OK.
T. E. Short, and G. T. Yeh. 1993, 10p EPA/600/A-93/147
Pub. in Advances in Hydro-Science and Engineering, v1 ptB p1807-1812. See also PB90-186305 and PB91-182345. Prepared in cooperation with Pennsylvania State Univ., University Park. Dept. of Civil Engineering.

An experimental investigation using an artificial aquifer was conducted on in-situ denitrification. Methanol substrate was injected into the aquifer to enable denitrifying bacterial to convert the nitrates into nitrogen. The experiment in the study provided a data base that was used to evaluate mathematical simulations of the processes involved. Numerical dispersion was found to be a critical characteristic of the numerical solution technique. Density drive and plugging of the aquifer due to biological growths were found to be important processes that need to be considered in future simulations.

Keywords: *Denitrification, *Water pollution control, *Aquifers, *Mathematical models, *Remedial action, In-situ processing, Hydrology, Experimental design, Substrates, Anaerobic processes, Chemical reactions, Biodegradation, Microorganisms, Environmental transport, Reprints.

**PB93-212371/REB** PC **A03**/MF **A01**
**Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.**
Robert S. Kerr Environmental Research Lab., Ada, OK.
J. W. Weaver, J. Johnson, V. Ravi, and B. K. Lien. 1993, 16p EPA/600/A-93/148
Pub. in International Ground Water Modeling Center, p1-115--1-126 Jun 93. Prepared in cooperation with Dynamac Corp., Ada, OK.

The paper discusses vadose zone parameter estimation techniques that may be used in lieu of measured parameter values. In particular, two different data bases that provide generic parameter estimates are reviewed. The effects of parameter variability on vadose zone NAPL flow are illustrated through usage of the Kinematic Oily Pollutant Transport (KOPT) model. The model simulated a laboratory experiment where gasoline was released into a one-meter long chromatography column. The model input parameter were measured, and the position of the leading edge of the gasoline was recorded as a function of time from the experiment. Simulations that use measured or tabulated parameter sets were compared with the experimental data, which represents the correct response of the system to the gasoline input. To assess the impact of using tabulated parameters Monte Carlo simulations were performed using correlated parameter sets generated from the tabulations. These results show that wide distributions of the parameters are required to capture likely variability in input parameter values.

Keywords: *Ground water movement, *Path of pollutants, *Parametric analysis, Computerized simulation, Vadose water, Water pollution detection, Soil water movement, Gasoline, Hydraulic properties, Reprints, *Vadose zone, KOPT(Kinematic Oily Pollutant Transport).

**PB93-212389/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**EPA's Information Management System for Tracking Reasonable Further Progress.** Rept. for Oct 92-May 93.
Pechan (E.H.) and Associates, Inc., Durham, NC.
W. R. Barnard, C. C. Monroe, and T. A. Dean. 1993, 17p EPA/600/A-93/149
Contract EPA-68-D1-0146
Presented at the Annual Conference, Air and Waste Management Association (86th), Denver, CO., June 13-18, 1993. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper describes operating characteristics of a personal-computer (PC)-based Reasonable Further

Progress (RFP) tracking system developed for use by EPA to evaluate the progress that nonattainment areas are making toward meeting a 15% volatile organic compound (VOC) reduction specified in the Clean Air Act Amendments (CAAA) of 1990. Details of the program's capabilities, file handling, reporting, and graphics are reported. In order to track the emission reductions resulting from these strategies, emissions reported in the RFP projection inventories will be compared with actual emissions reported in periodic adjusted-base inventories, that are also required by the CAAA. However, the comparison will take place a number of years in the future.

Keywords: *Air pollution control, *Air pollution monitoring, *Information systems, Implementation air pollution planning, Air quality maintenance, Air pollution sources, Emissions, State government, Local government, User manuals(Computer programs), *RFP(Reasonable Further Progress), Tracking systems, Emission inventories, Volatile organic compounds.

**PB93-212397/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**IAQPC: An Indoor Air Quality Simulator.** Rept. for Jun-Dec 88.
Research Triangle Inst., Research Triangle Park, NC.
M. K. Owen, P. A. Lawless, T. Yamamoto, and D. S. Ensor. 1993, 20p EPA/600/A-93/150
Grant EPA-R-814169-03
Presented at Indoor Air Quality '89, San Diego, CA., April 17-20, 1989. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

An Indoor Air Quality Simulator for Personal Computers (IAQPC) has been developed in response to the growing need for quick, accurate predictions of indoor air contamination levels. Heating, ventilating, and air conditioning (HVAC) system designers need ways to determine if a planned system will ensure the health of building occupants. Scientists will find the program useful as an experimental design aid. Building maintenance personnel will be able to use it to determine approaches that will alleviate contamination problems. Version 2 of the IAQPC extends Version 1 with more extensive input menus and output options. Improved algorithms for contaminant transport and flow have been incorporated. The program models up to six pollutants concurrently for buildings of up to 20 rooms. It allows inclusion of sources, sinks, and air cleaners and can be adapted to a wide range of structures. The algorithms used to determine the concentrations have been tested against experimental data and found to yield accurate predictions. The paper describes the model's inputs, calculations, and outputs and presents a case study performed with the model.

Keywords: *Indoor air pollution, *Air flow, *Computerized simulation, User manuals(Computer programs), Air conditioning equipment, Ventilation, Heating systems, Sinks, Air pollution sources, Air cleaners, Reprints, *IAQPC(Indoor Air Quality Simulator for Personal Computers).

**PB93-212405/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Relating Air Cleaner Efficiency to Indoor Air Quality.** Rept. for Oct 91-Mar 92.
Research Triangle Inst., Research Triangle Park, NC.
M. K. Owen, D. S. Ensor, P. A. Lawless, J. T. Hanley, and L. E. Sparks. 1992, 19p EPA/600/A-93/151
Grant EPA-R-817083
Presented at ASHRAE IAQ 1992, San Francisco, CA., October 18-21, 1992. See also PB91-205153 and PB91-205161. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper gives results of a study of a single-story office building, relating air cleaner efficiency to indoor air quality. Predicting the improvement in indoor air quality due to in-duct air cleaners is an important aspect of ventilation system design. The effects of percentage of outdoor makeup air, filtration, and occupancy on mass concentrations and particle size distributions were recorded. Particle size dependent filtration efficiencies for a variety of air cleaners, including those in use in the test building, were determined. A multizone indoor air quality simulator, IAQPC, was used to simulate the conditions in the building. The building's layout, ventilation system design, and filtration efficiency data were entered. A comparison of simulator to experimental results showed good agreement. To determine the effect of various mitigation procedures, IAQPC and the building's data set were used to model the air concentrations for several types of filters and an electronic air cleaner. In addition, the effect of changing sources was examined.

Keywords: *Indoor air pollution, *Office buildings, *Air pollution control equipment, Air filters, Ventilation, Air conditioning equipment, Air intakes, Aerosols, Air quality, Air circulation, Computerized simulation, Reprints, IAQPC(Indoor Air Quality Simulator for Personal Computers).

**PB93-212413/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**EPA's Photovoltaic Demand-Side Management Cost-Shared Demonstrations.** Rept. for Sep 92-Feb 93.
Ascension Technology, Inc., Lincoln Center, MA.
E. C. Kern, and R. J. Spiegel. 1993, 8p EPA/600/A-93/152
Contract EPA-68-D2-0148
Presented at American Solar Energy Society Conference held in Washington, DC. on April 22-28, 1993. See also DE83017776. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper discusses an investigation of how photovoltaics (PV) may be used as both a pollution-mitigating energy replacement for fossil fuels and a demand-side management (DSM) option to reduce peak electrical demands of commercial and residential buildings. Eleven electric utilities are partners in this first nationwide demonstration of PV DSM. The approach is to install and monitor standardized PV systems in diverse geographic areas with varying solar energy resource and electric power demand, production, and cost conditions. The systems will be monitored for a year to record direct and diffuse irradiance, ambient air temperature, PV power generation, and building loads. Utilities will provide the electric system operations data needed to determine the pollution mitigation and peak demand reduction that can result from the PV electrical power generation.

Keywords: *Pollution abatement, *Photovoltaic power supplies, *Energy demand, *Electric power generation, US EPA, Power demand, Demand(Economics), Solar energy, Performance evaluation, Energy sources, Cost analysis, Electric utilities, Demand side management.

**PB93-212421/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Methane Emissions from the Natural Gas Industry.** Rept. for May-Dec 92.
Radian Corp., Austin, TX.
M. R. Harrison, R. M. Cowgill, L. M. Campbell, and R. A. Lott. 1993, 12p EPA/600/A-93/153
Contract EPA-68-D1-0031
Presented at Air and Waste Management Association, National Conference, Denver, CO., June 13-18, 1993. Prepared in cooperation with Gas Research Inst., Chicago, IL. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper discusses a project to quantify methane (CH4) emissions from the U.S. natural gas industry. The study will measure or calculate all gas industry CH4 emissions--from production at the wellhead, through the system, to the customer's meter. Emissions downstream of the consumer's meter, such as the end-user's burner emissions, are not included. When these data are combined with data from other studies, a definite comparison of the relative environmental impact of using natural gas versus other fuels will be possible. The study will also provide data that can be used by the industry to identify cost-effective mitigation techniques to reduce losses.

Keywords: *Natural gas industry, *Emission factors, Leakage, Pipelines, Gas wells, Natural gas distribution systems, Methane, Global warming, Greenhouse effect, Well heads, Stationary sources, Air pollution control, Environmental impacts.

**PB93-212439/REB** PC **A03**/MF **A01**
**EPA's Research in LCA Methodology.**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
M. A. Curran, and B. W. Vigon. 1993, 12p EPA/600/A-93/154
Pub. in Air and Waste Management Association Conference (86th), Denver, CO., June 13-18, 1993. Prepared in cooperation with Battelle, Columbus, OH.

Life-Cycle Assessment (LCA) is a technical, database and holistic approach to define and subsequently reduce the environmental burdens associated with a product, process, or activity by identifying and quantifying energy and material usage and waste discharges, assessing the impact of those wastes on the environment, and evaluating and implementing opportunities to effect environmental improvements. The assessment includes the entire life-cycle of the product, process or activity encompassing extraction and processing of raw materials, manufacturing, transportation and distribution, use/reuse, recycling and final disposal. LCA is a useful tool for evaluating the environmental consequences of a product, process, or activity, however, current applications of LCA have not been performed in consistent or easily understood ways. The EPA recognized the need to develop an LCA framework which could be used to provide consistent use across the board. Also, additional research is needed to enhance the understanding about the steps in the performance of an LCA and its appropriate usage. The paper will present the research activities of the EPA leading toward the development of an acceptable method for conducting LCA's.

Keywords: *Service life, *Environment pollution, *Environmental protection, Pollution control, Pollution abatement, Waste disposal, Waste recycling, Waste management, Manufacturing, Production, Acquisition, Maintenance, Reprints.

**PB93-212447/REB** PC **A02**/MF **A01**
**Pollution Prevention Research Ongoing: EPA's Risk Reduction Engineering Laboratory.** Journal article.
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
H. M. Freeman, and P. M. Randall. c1993, 7p EPA/600/J-93/237
Pub. in Jnl. for Cleaner Production, v1 n1 p33-37 1993. See also PB92-213206, PB93-107266 and PB93-139681.

The mission of the Risk Reduction Engineering Laboratory is to advance the understanding, development and application of engineering solutions for the prevention or reduction of risks from environmental contamination. The mission is accomplished through basic and applied research studies, engineering technology evaluations, new process developments and demonstration studies. The paper provides an overview of the ongoing pollution prevention research that supports this mission. (Copyright (c) 1993 Butterworth-Heinemann Ltd.).

Keywords: *Environment pollution, *Pollution control, *Pollution abatement, Environmental protection, Waste disposal, Waste recycling, Waste management, Service life, Technology transfer, Risk assessment, Public health, Reprints, *Risk Reduction Engineering Laboratory, Research and development.

**PB93-212454/REB** PC **A03**/MF **A01**
Environmental Research Lab.-Narragansett, Newport, OR.
**Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.** Journal article.
ASci Corp., Newport, OR.
M. Behrendeld, J. Hardy, H. Gucinski, A. Hanneman, and H. Lee. c1993, 16p EPA/600/J-93/238
Contract EPA-68-C0-0051
Pub. in Marine Environmental Research, v35 p349-363 1993. See also PB93-199545. Prepared in cooperation with Huxley Coll. of Environmental Studies, Bellingham, WA., and ManTech Environmental Technology, Inc., Corvallis, OR. Sponsored by Environmental Research Lab.-Narragansett, Newport, OR.

Ambient intensities of solar ultraviolet radiation inhibit photosynthesis in the upper layers of the oceans. The effect of ultraviolet-B radiation (UVBR) (290-320 nm) on marine phytoplankton carbon fixation during two

latitudinal transects through the South Pacific ocean was measured to determine a dose-response model for estimating UVBR effects in natural surface populations and to identify latitudinal variation in UVBR sensitivity. Photoinhibition increased linearly with increasing doses of UVBR as weighted by the DNA action spectrum, with no apparent threshold for effect. The dose-rate response was nearly constant at low latitudes but varied at higher latitudes. Ambient intensities of UVBR cause photoinhibition and it is likely that even small increases in surface UVBR will cause additional photodamage. (Copyright (c) 1993 Elsevier Science Publishers.)

Keywords: *Phytoplankton, *Biological radiation effects, *Solar radiation, *Ultraviolet radiation, Photosynthesis, Primary biological productivity, Dose-response relationships, Aquatic ecosystems, Marine biology, Pacific Ocean, Marine algae.

**PB93-212462/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.** Journal article.
ManTech Environmental Technology, Inc., Corvallis, OR.
J. C. Sifneos, M. E. Kentula, and P. Price. c1993, 13p EPA/600/J-93/239
Pub. in Texas Jnl. of Science, v44 n4 p475-485 1992. See also PB93-212512, PB92-153907 and PB92-217439. Prepared in cooperation with Price (Paul) Associates, Inc., Austin, TX. Sponsored by Corvallis Environmental Research Lab., OR.

The authors analyzed data from Section 404 permits issued in Texas and Arkansas from 1982 through 1986 that required compensatory mitigation for alteration of freshwater wetlands. The location, area, wetland type, and other data describing the impacted and compensatory wetlands were compiled and analyzed. Information contained in the permit record was analyzed. No judgement was made as to whether there was compliance with the terms of the permit or whether the compensated wetland replaced the ecological functions of the wetland destroyed. Losses of wetland functions associated with wildlife and fisheries habitat most commonly were documented. Accurate reporting of the effect of Section 404 permits on the wetland area was difficult for a number of reasons. For example, no area information was listed in the permit record for 14 percent of the impacted wetlands and seven percent of the compensated wetlands.

Keywords: *Environmental impacts, *Licenses, *Water pollution effects, *Construction, Clean Water Act, Replacing, Aquatic ecosystems, Fresh water, Wildlife, Habitats, Fisheries, Texas, Arkansas, Trends, Losses, Compliance, Mitigation, Reprints, *Wetlands.

**PB93-212470/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).** Journal article.
Connecticut Coll., New London. Dept. of Botany.
S. R. Confer, and W. A. Niering. c1992, 17p EPA/600/J-93/240
Pub. in Wetlands Ecology and Management, v2 n3 p143-156 1992. See also PB91-179101 and PB92-136811. Sponsored by Corvallis Environmental Research Lab., OR.

Five three- to four-year old created palustrine/emergent wetland sites were compared with five nearby natural wetlands of comparable size and type. Hydrologic, soil and vegetation data were compiled over a nearly two-year period (1988-90). Created sites, which were located along major highways, exhibited more open water, greater water depth, and greater fluctuation in water depth than natural wetlands. Typical wetland soils exhibiting mottling and organic accumulation were wanting in created sites as compared with natural sites. Typha latifolia (common cattail) was the characteristic emergent vegetation at created sites, whereas a more diverse mosaic of emergent wetland species was often associated with Typha at the natural sites. Species richness was slightly higher in created vs. natural wetlands, but the mean difference was not significant. The study suggest the possibility of creating small palustrine/emergent wetlands having certain functions associated with natural wetlands, such as flood water storage, sediment accretion and wildlife habitat. It is premature to evaluate fully the outcome of these wetland creation efforts. A decade or more is needed, emphasizing the importance of long term monitoring and the need to establish demonstration areas.

Keywords: *Vegetation, *Swamps, *Wetlands, Aquatic ecosystems, Fresh water, Sites, Comparison, Soil properties, Mitigation, Water storage, Species diversity, Flooding, Monitoring, Clean Water Act, Connecticut, Tables(Data), Reprints, *Natural wetlands, Typha latifolia, Cattails, *Artificial wetlands.

**PB93-212488/REB** PC **A03**/MF **A01**
**National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.** Journal article.
Corvallis Environmental Research Lab., OR.
T. C. Strickland, G. R. Holdren, P. L. Ringold, D. Bernard, and K. Smythe. c1993, 12p EPA/600/J-93/241
Pub. in Environmental Management, v17 n3 p329-334 1993. See also PB93-212496 and PB87-110383. Prepared in cooperation with Environmental and Social Systems Analysts Ltd., Vancouver (British Columbia), Science and Policy Associates, Inc., Washington, DC., and Battelle Columbus Div., Washington, DC.

The United States Environmental Protection Agency (EPA), with the assistance of the US Department of Energy (DOE) and the National Oceanographic and Atmospheric Admn (NOAA) is examining the utility of a critical loads approach for evaluating atmospheric pollutant effects on sensitive ecosystems. The framework is based on regional population characteristics of the ecosystem(s) of concern. The six steps of the approach are: (1) selection of ecosystem components, indicators, and characterization of the resource; (2) definition of functional subregions; (3) characterization of deposition within each of the subregions; (4) definition of an assessment end point; (5) selection and application of models; and (6) mapping projected ecosystem responses. Specific recognition of data and model uncertainties is an integral part of the process, and the use of multiple models to obtain ranges of critical loads estimates for each ecosystem component in a region is encouraged. Through this intercomparison process uncertainties in critical loads projections can be estimated.

Keywords: *Air pollution, *Ecosystems, *Deposition, *Atmospheric composition, *Environmental impact assessments, Regional analysis, US EPA, Study estimates, Comparison, Natural resources, Environmental transport, Reprints, *Critical loads.

**PB93-212496/REB** PC **A02**/MF **A01**
**National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.** Journal article.
Corvallis Environmental Research Lab., OR.
C. Hunsaker, R. Graham, R. S. Turner, G. R. Holdren, and T. C. Strickland. c1993, 9p EPA/600/J-93/242
Pub. in Environmental Management, v17 n3 p335-341 1993. See also PB93-212504. Prepared in cooperation with Oak Ridge National Lab., TN. Environmental Sciences Div.

The United States Environmental Protection Agency (EPA), with the assistance of the US Department of Energy (DOE) and the National Oceanographic and Atmospheric Admn (NOAA) has been evaluating the feasibility of an effects-based (critical loads) approach to atmospheric pollutant regulation and abatement. The rationale used to develop three of the six steps in a flexible assessment framework is presented along with a discussion of a variety of implementation approaches and their ramifications. The rationale proposes that it is necessary to provide an explicit statement of the condition of the resource that is considered valuable because: (1) individual ecosystem components may be more or less sensitive to deposition; (2) it is necessary to select indicators of ecosystem condition that can be objectively measured and that reflect changes in the quality of the assessment end point; and (3) acceptable status must be defined. The rationale also stresses the importance of defining the assessment regions and subregions to improve the analysis and understanding of the indicator response to deposition. Subregional definition can be based on a variety of criteria, including informed judgment or quantitative procedures. (Copyright (c) 1993 Springer-Verlag New York Inc.)

Keywords: *Air pollution, *Deposition, *Environmental impact assessments, *Atmospheric composition, Ecosystems, Regional analysis, Biological indicators, Lakes, Air water interactions, Water pollution, Baseline measurements, Environmental transport, Reprints, *Critical loads.

**PB93-212504/REB** PC **A03**/MF **A01**
**National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.** Journal article.
Corvallis Environmental Research Lab., OR.
B. Hicks, R. McMillen, R. S. Turner, G. R. Holdren, and T. C. Strickland. c1993, 12p EPA/600/J-93/243
Pub. in Environmental Management, v17 n3 p343-353 1993. See also PB93-212488. Prepared in cooperation with Oak Ridge National Lab., TN., and National Oceanic and Atmospheric Administration, Rockville, MD.

Methods are discussed for describing patterns of current wet and dry deposition under various scenarios. It is proposed that total deposition data across an area of interest are the most relevant in the context of critical loads of acidic deposition, and that the total deposition will vary greatly with the location, the season, and the characteristics of individual subregions. Wet and dry deposition are proposed to differ in such fundamental ways that they must be considered separately. Both wet and dry deposition rates are controlled by the presence of the chemical species in question in the air. The great differences in the processes involved lead to the conclusion that it is better to measure wet and dry deposition separately and combine these quantifications to produce 'total deposition' estimates than to attempt to derive total deposition directly. A number of options for making estimates of total deposition to be used in critical loads assessment scenarios are discussed for wet deposition (buckets and source receptor models) and for dry deposition (throughfall, micrometeorology, surrogate surfaces and collection vessels, inference from concentrations, dry-wet ratios, and source-receptor models). (Copyright (c) 1993 Springer-Verlag New York Inc.)

Keywords: *Air pollution, *Deposition, *Environmental impact assessments, *Atmospheric composition, Wet methods, Dry methods, Regional analysis, Chemical compounds, Ecosystems, Precipitation(Meteorology), Throughfall, Reprints, *Critical loads.

**PB93-212512/REB** PC **A03**/MF **A01**
**Impacts of Section 404 Permits Requiring Compensatory Mitigation on Wetlands in California (USA).** Journal article.
Corvallis Environmental Research Lab., OR.
C. C. Holland, and M. E. Kentula. c1992, 15p EPA/600/J-93/244
Pub. in Wetlands Ecology and Management, v2 n3 p157-169. See also PB93-212462. Prepared in cooperation with ManTech Environmental Technology, Inc., Corvallis, OR.

The authors analyzed data from Section 404 permits issued in California from January 1971 through November 1987 that involved impacts to wetlands and required compensatory mitigation. The purpose of the study was to determine patterns and trends in permitting activity and to document cumulative effects of associated management decisions on the California wetland resource. The 324 permits examined documented that 387 compensatory wetlands (1255.9 ha) were required as mitigation for impacts to 368 wetlands (1176.3 ha). The utility of the data on wetland area was limited, however, since 38% of the impacted wetlands and 41.6% of the compensatory wetlands lacked acreage data. The number of permits requiring compensatory mitigation and the number of impacted and compensatory wetlands increased from 1971 to 1986. Documentation of the details of Section 404 permit decisions was inadequate for the permits examined.

Keywords: *Environmental impacts, *Licenses, *Water pollution effects, Mitigation, Forest land, Estuaries, Trends, Wildlife, Aquatic ecosystems, Habitats, Clean Water Act, California, Reprints, *Wetlands.

**PB93-212520/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

**Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.** Journal article.
Arizona Univ., Tucson. Dept. of Chemical Engineering.
P. M. Lemieux, W. P. Linak, J. A. McSorley, and J. O. Wendt. c1993, 16p EPA/600/J-93/245
Contract EPA-68-02-4701
Pub. in Combustion Science and Technology, v85 n1-6 p203-216 1992. See also PB90-245317 and PB91-196329. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper discusses experiments, on a 73 kW roray kiln incinerator simulator, to determine the effect of innovative waste packaging designs on transient emissions of products of incomplete combustion (PICs) due to batch-charging of containerized liquid surrogate waste compounds bound on ground corncob sorbent. When containers of waste are batch-charged into rotary kilns, the rupture of the containers as often followed by a very rapid evolution of the volatile compounds contained therein. The flash vaporization/pyrolysis can result in local depletion of available O2, as supplied from the primary burner. This can lead to a transient puff of partially combusted organic material that can pass throught the primary combustion chamber and, possibly, even through the secondary combustion chamber and/or downstream pollution control equipment. This phenomenon frequently leads to feed rate limitations based on the volatility or heat of combustion of organic liquids inside the containers. EPA's AEERL has developed a prototype container system designed to partition the waste/sorbent mixture within the containers that are fed into the rotary kiln.

Keywords: *Combustion efficiency, *Air pollution control, *Liquid wastes, *Incineration, *Containers, Waste disposal, Performance evaluation, Hazardous materials, Oxygen enrichment, Kilns, Sorbents, Mass transfer, Volatile organic compounds, Pyrolysis, Reprints, *Transient puffs.

**PB93-212538/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.** Journal article Apr 88-Dec 91.
Arizona Univ., Tucson. Dept. of Chemical Engineering.
M. A. Scotto, T. W. Peterson, and J. O. L. Wendt.
c1992, 11p EPA/600/J-93/246
Contract EPA-68-02-4247
Pub. in Symposium (International) on Combustion (24th)/The Combustion Institute, p1109-1117 1992. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper discusses experiments on a 17-kW downflow combustor to determine how sorbent injection into the postflame influenced the particle size distribution of a lead (Pb) aerosol formed from a surrogate Pb-containing waste. In the absence of chlorine (Cl), the Pb aerosol size distribution evolved within the combustor to lie predominantly between 0.02 and 0.2 micrometer by the time it was sampled at the combustor exit. When a commercial kaolinite sorbent was added, the Pb sampled in that particle size range was reduced by 99%, and it is clear that the heavy metal was reactively scavenged in the combustor by the larger sorbent particles. Cl kept the Pb in vapor form until it was sampled, at which point it formed a fume in the probe. At large Cl/Pb ratios (> 10), adding sorbent was not effective in scavenging the Pb vapor, although capture was again apparent as Cl/Pb ratios were reduced to 2. Data from experimental runs with a large excess of Cl present, but not those where the Cl/Pb ratio was equal to 2, are in sharp contrast to literature data from bench scale reactor studies. (Copyright (c) 1992 M. A. Scotto.)

Keywords: *Hazardous materials, *Aerosols, *Waste disposal, *Incinerators, *Pollution control, *Meetings, Lead(Metal), Absorbers(Materials), Particle size, Kaolinite, Combustion products, Chlorine, Injection, Scavenging, Oxidation reduction reactions, Experimental data, Test methods, Reprints.

**PB93-212546/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.** Journal article Oct 90-May 91.
Science Applications International Corp., Durham, NC.
D. A. Kirchgessner, S. D. Piccot, and A. Chadha.
c1993, 23p EPA/600/J-93/248
Contract EPA-68-D9-0173
Pub. in Chemosphere, v26 n1-4 p23-44 1993. See also PB86-223161 and PB87-168787. Prepared in cooperation with TRC Environmental Corp., Chapel Hill, NC. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper discusses a new methodology that allows the rapid and efficient measurement of methane (CH4) emissions from surface coal mines. An initial field trial of this methodology has been completed, and results from the field trial revealed that emissions from one surface coal mine in the U.S. are estimated to be 1,735,000 cu m/yr. The results provide some evidence that CH4 concentrations determined by Fourier Transform Infrared (FTIR) spectrometry may be low by 20-75%, but the overall effect of this potential bias on the mine emissions estimate cannot be adequately quantified. The initial trial demonstrated that the methodology is an applicable and feasible approach for measuring CH4 emissions from very large coal mines. It also highlighted several uncertainties and methodology questions which, if resolved, could improve the performance and reliability of the methodology.

Keywords: *Methane, *Coal mining, *Surface mining, *Air pollution sampling, *Mathematical models, *Emission factors, Study estimates, Field tests, Fourier transform spectrometers, Infrared spectroscopy, Feasibility studies, Performance evaluation, Reprints.

**PB93-212553/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Estimate of Global Methane Emissions from Coal Mines.** Journal article Oct 90-May 91.
Science Applications International Corp., Durham, NC.
D. A. Kirchgessner, S. D. Piccot, and J. D. Winkler.
c1993, 22p EPA/600/J-93/249
Contract EPA-68-D9-0173
Pub. in Chemosphere, v26 n1-4 p453-472 Jan/Feb 93. See also PB91-223214. Prepared in cooperation with TRC Environmental Corp., Chapel Hill, NC. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper gives estimates of country-specific emissions of methane (CH4) from underground coal mines, surface coal mines, and coal crushing and transport operations for 1989. Emissions for individual countries are estimated by using two sets of regression equations (R2 values range from 0.56 to 0.71). The first set is used to estimate the CH4 content of coals in selected countries based on country-specific coal depth and other relevant parameters. The second equation relates this CH4 content and the country's coal production rate to the emissions from coal mining operations. The regression equations developed in this study rely on documented relationships that exist between mine emissions, coalbed CH4 content, coal production rate, and other coal properties. Only those independent variables which could be included at 95% confidence or greater were retained in the regression equations. Estimated global emissions from coal mining are estimated to be 45.6 Tg for 1989.

Keywords: *Methane, *Coal mining, *Air pollution sampling, *Global aspects, *Emission factors, Underground mining, Surface mining, Study estimates, Concentration(Composition), Regression analysis, Crushing, Materials handling, Mine haulage, Transportation, Reprints.

**PB93-212561/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Comparison of Methods for Estimating Global Methane Emissions from Landfills.** Journal article Aug 91-Apr 92.
Radian Corp., Research Triangle Park, NC.
R. L. Peer, S. A. Thorneloe, and D. L. Epperson.
c1993, 16p EPA/600/J-93/250
Contracts EPA-68-D0-0125, EPA-68-D1-0117
Pub. in Chemosphere, v26 n1-4 p387-400 Jan/Feb 93. See also PB90-215112, PB91-149534 and PB92-101351. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper discusses research efforts to improve methodologies for estimating landfill emissions. The paper discusses two key variables: the amount of refuse landfilled, and the CH4-generating potential of that refuse. Estimates of annual U.S. municipal solid waste production are compared, and the limitations of each method are reviewed. The implications for global data development are discussed.

Keywords: *Methane, *Earth fills, *Emission factors, *Air pollution sampling, *Waste disposal, Global aspects, Concentration(Composition), Comparison, Anaerobic processes, Materials recovery, Gas production, Reprints.

**PB93-212579/REB** PC **A02**/MF **A01**
**Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.** Journal article.
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
L. L. Beck. c1993, 8p EPA/600/J-93/251
Pub. in Chemosphere, v26 n1-4 p447-452 Jan/Feb 93. See also PB90-182494 and PB92-152875.

The paper gives the scope and methodology of EPA/AEERL's methane emissions studies and discloses data accumulated thus far in the program. Anthropogenic methane emissions are a principal focus in AEERL's global climate research program, including three major sources: municipal solid waste landfills, coal mines, and natural gas systems. A major emphasis in the landfill program is measurement of emissions from operating landfills and calculation of country-specific emissions. Landfill methane emissions are not estimated, but factors affecting emissions are discussed and estimates developed by others are provided. For coal mines, existing data collected by other researchers are combined with EPA data on emissions from surface mines, coal handling systems, and abandoned mines to provide an estimate of global emissions of 46 Tg/yr. Methane from natural gas production, transmission, and distribution systems is estimated to be 4.4 Tg/yr for the U.S.

Keywords: *Methane, *Emission factors, *Air pollution sampling, *Earth fills, *Coal mining, *Natural gas, Waste disposal, Materials handling, Global aspects, Study estimates, Abandoned sites, Concentration(Composition), Gas production, Distribution systems, Reprints.

**PB93-212587/REB** PC **A03**/MF **A01**
Environmental Research Lab., Narragansett, RI.
**Effects of Food Density on Growth and on Patterns of Prey Depletion by Larval Silverside Fish, 'Menidia beryllina' (Cope): A Laboratory Investigation with Image Analysis.** Journal article.
Rhode Island Univ., Kingston. Dept. of Zoology.
B. H. Letcher, and D. A. Bengtson. c1993, 17p EPA/600/J-93/252
Grant EPA-R-814721
Pub. in Jnl. of Marine Biology and Ecology, v167 n2 p197-213 1993. See also PB85-210102 and PB86-184462. Sponsored by Environmental Research Lab., Narragansett, RI.

The growth and daily prey depletion rates of inland silverside (Menidia beryllina (Cope)) larvae fed different rations (0, 25, 50, 100, or 150 percent of the fishes' initial wet weight) of Artemia nauplii during the period 7 days to 14 days post-hatch were investigated. Instantaneous growth rates ranged from -0.174 day for unfed fish, to 0.181 day for fish fed the 150% ration. Relative consumption rates increased from 0.179 (mg food (mg fish) day) at the lowest ration (25%) to 0.440 (mg food (mg fish) day) at the highest ration (150%) and were linearly related to relative growth rates (mg (mg fish) day) across the range of consumption rates studied. On one day of the 7-day study, the within-day patterns of food depletion by the fish also were examined with image analysis. Fish ingested food at a constant rate, as long as it was available, up to 11 h of feeding. On average, depletion rates in the first 4 h of feeding were not significantly different among fish fed the four rations; however, the depletion rates of the fish fed the 150% ration were significantly higher during the second 4 h of feeding than during the first 4 h. The results provide information for the calculation of a prelim-

inary energy budget for M. beryllina, and also provide aquatic toxicologists with information for the conduct of standard effluent toxicity tests. The daily ration prescribed in the current standard method is approximately three times the amount that can actually be ingested by the larvae. (Copyright (c) 1993 Elsevier Science Publishers BV.)

Keywords: *Fresh water fishes, *Feeding habits, *Growth, Food consumption, Graphs(Charts), Larvae, Survival, Tests, Images, Reprints, *Menidia beryllina.

**PB93-212595/REB** PC **A03**/MF **A01**
Environmental Research Lab., Narragansett, RI.
**Characterization of Reference Artemia III for Marine Toxicological Studies.** Journal article.
Rhode Island Univ., Kingston. Dept. of Zoology.
G. A. Collins, D. A. Bengtson, and J. C. Moore. c1993, 12p EPA/600/J-93/253
Grant EPA-R-814721
Pub. in Aquatic Toxicology and Risk Assessment, v14 p315-323. See also PB89-220503. Sponsored by Environmental Research Lab., Narragansett, RI.

ASTM Practice for Using Brine Shrimp Nauplii as Food for Test Animals in Aquatic Toxicology Tests (E 1203) suggests use of Reference Artemia as a reference standard for evaluating other batches of brine shrimp as food for organisms used in toxicology. In 1988, the U.S. EPA was able to procure a 200-kg quantity of presumed high-quality, small-sized Artemia cysts that had been homogeneously mixed and packaged for long-term storage. The cysts and hatched nauplii have now been characterized in terms of fatty acid profile, toxicant residues, biometrics, and ability to support good survival and growth of saltwater fish and survival and reproduction of saltwater mysids. The cysts have been approved for use as reference cysts and have been designated RAC III.

Keywords: *Marine biology, *Bioindicators, *Bioassay, *Reference standards, Toxicity, Heavy metals, Chemical analysis, Brine shrimp, Pesticide residues, Qualitative analysis, Fatty acids, Laboratories, Minnows, Marine fishes, *Artemia, Cyprinodon variegatus, Menida beryllina, Mysidopsis bahia.

**PB93-212603/REB** PC **A02**/MF **A01**
New Hampshire Univ., Durham. Complex Systems Research Center.
**Experimental Inducement of Nitrogen Saturation at the Watershed Scale.** Journal article.
Maine Univ. at Orono.
J. S. Kahl, S. A. Norton, I. J. Fernandez, K. J. Nadelhoffer, and C. T. Driscoll. c1993, 6p EPA/600/J-93/254
Pub. in Environmental Science and Technology, v27 n3 p565-568 1993. See also DE90791335. Prepared in cooperation with Marine Biological Lab., Woods Hole, MA. Ecosystems Center, and State Univ. of New York Coll. of Environmental Science and Forestry, Syracuse. Dept. of Civil Engineering. Sponsored by New Hampshire Univ., Durham. Complex Systems Research Center, and Corvallis Environmental Research

Atmospheric nitrogen deposition to forested ecosystems in excess of vegetative demand may lead to a condition of terrestrial 'nitrogen saturation'. The subsequent increases in N export to surface waters are symptomatic of fundamental changes in terrestrial nutrient processing. The authors have experimentally induced incipient N saturation in a paired-catchment experiment at the Bear Brook Watershed in Maine (BBWM). Using modest loading rates of N compared to typical forest fertilization rates or the N pool in forest soils, the experiment has resulted in large increases in NO3(-) concentrations in streams. Nitrate flux from the treated catchment has increased from 200 to more than 500 equiv/ha/yr. Seasonal patterns in stream NO3(-) concentrations have been fundamentally altered by the treatment, with NO3(-) loss now occurring nearly all year from the experimental watershed. These results suggest that N saturation, soil acidification, and altered N cycling in forested watersheds may be induced at lower rates of N deposition than previously believed.

Keywords: *Watersheds, *Land pollution, *Water pollution, *Acidification, Forest land, Nitrogen cycle, Air pollution, Ecosystems, Water quality, Nitrogen oxides, Air land interactions, Deposition, Trees(Botany), Experimental design, Nutrients, Reprints, *Nitrogen saturation.

**PB93-212611/REB** PC **A02**/MF **A01**
**Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.** Journal article.
Corvallis Environmental Research Lab., OR.
E. Israeli, B. T. Shaffer, J. A. Hoyt, B. Lighthart, and L. M. Ganio. c1993, 7p EPA/600/J-93/255
Pub. in Applied and Environmental Microbiology, v59 n2 p594-598 1993. See also PB91-117598.

Because the death mechanisms of freeze-dried and air-dried bacteria are thought to be similar, freeze-drying was used to investigate the survival differences between potentially airborne genetically engineered microorganisms and their wild types. To this end, engineered strains of Escherichia coli and Pseudomonas syringae were freeze-dried and exposed to air, visible light, or both. The death rates of all engineered strains were significantly higher than those of their parental strains. Light and air exposure were found to increase the death rates of all strains. Application of death rate models to freeze-dried engineered bacteria to be released into the environment is discussed. (Copyright (c) 1993, American Society for Microbiology.)

Keywords: *Genetic engineering, *Escherichia coli, *Survival, *Freeze drying, Species diversity, Reprints, *Pseudomonas syringae, Airborne bacteria.

**PB93-212629/REB** PC **A02**/MF **A01**
ManTech Environmental Technology, Inc., Corvallis, OR.
**Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. aeschynomene' Transformants with Benomyl Resistance.** Journal article.
Corvallis Environmental Research Lab., OR.
J. L. Armstrong, and D. L. Harris. c1993, 6p EPA/600/J-93/256
Pub. in Phytopathology, v38 n3 p328-331. Sponsored by ManTech Environmental Technology, Inc., Corvallis, OR.

A procedure is presented for transforming Colletotrichum gloeosporioides f. sp. aeschynomene to benomyl resistance by using a mutant beta-tubulin gene from Neurospora crassa. Hybridization between the N. crassa beta-tubulin gene and transformant DNAs digested with StyI indicated that the integration site in all transformants was in a specific region of the genome. Transformants tolerated up to 300 micrograms of benomyl per milliliter but differed in pigmentation, growth rate, and pathogenicity. All transformed strains remained benomyl resistant after repeated subculture on medium lacking benomyl. The authors speculate that the bias in the site of integration was due to selection against transformants with other configurations between the N. crassa beta-tubulin gene and C. g. aeschynomene genome, which were unstable, lethal, or unsuitable for expression of the benomyl phenotype. (Copyright (c) 1993 The American Phytopathological Society.)

Keywords: *Microbial drug resistance, *Deoxyribonucleic acids, *Genetic transformation, *Benomyl, Neurospora crassa, Tubulin, Nucleic acid hybridization, Growth, Phenotype, Plasmids, Virulence, Reprints, *Colletotrichum gloeosporioides.

**PB93-212637/REB** PC **A03**/MF **A01**
**Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.** Journal article.
Corvallis Environmental Research Lab., OR.
P. E. Schriwder, R. K. Dixon, and J. K. Winjum. c1993, 11p EPA/600/J-93/257
Pub. in Unasylva, v44 p52-60 1993. See also PB92-109131 and PB92-122787. Prepared in cooperation with National Council of the Paper Industry for Air and Stream Improvement, Inc., Medford, MA., and ManTech Environmental Technology, Inc., Corvallis, OR.

As part of the Global Change Research Program of the United States Environmental Protection Agency (USEPA), an assessment was initiated in 1990 to evaluate forest establishment and management options to sequester carbon and reduce the accumulation of greenhouse gases in the atmosphere. Three specific objectives are to: identify site-suitable technologies and practices that could be utilized to manage forests and agroforestry systems to sequester and conserve carbon; assess available data on site-level costs of promising forest and agroforestry management practices; evaluate estimates of technically suitable land in forested nations and biomes of the world to help meet the Noordwijk forestation targets.

Keywords: *Conservation, *Forest management, *Carbon dioxide, *Air pollution effects(Plants), Reforestation, Affosestation, Land restoration, Global, Regional analysis, Cost analysis, Climatic changes, Chelation, Technology assessment, Agroforestry.

**PB93-212645/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Washington, DC.
**Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.** Journal article.
California Univ., Berkeley. Dept. of Plant Pathology.
M. Wilson, and S. E. Lindow. c1993, 9p EPA/600/J-93/258
Pub. in Applied and Environmental Microbiology, v59 n2 p410-416 Feb 93. Sponsored by Environmental Protection Agency, Washington, DC.

The bacterial epiphyte Pseudomonas syringae MF714R was cultured on agar or in broth or collected form colonized leaves; it was then inoculated onto greenhouse-grown bean plants incubated in a growth chamber at low relative humidity or in the field or onto field-grown bean plants. Cells cultured in liquid medium survived the least well after inoculation of leaf surfaces under all conditions. Cells cultured in solid medium exhibited the highest percent survival an desiccation tolerance in the growth chamber but generally survived less well in the field than did cells harvested from plants. Cells harvested from plants and inoculated onto plants in the field usually exhibited the highest percent survival, started to increase in population earlier, and reached a higher number than did cells cultured in vitro. Differences in field survival were apparently not attributable to differential UV tolerance. The observed effects of phenotypic plasticity on epiphytic survival and colonization should be considered in risk assessment studies. (Copyright (c) 1993, American Society for Microbiology.)

Keywords: *Bacteria, *Survival, *Inoculation, *Tolerances(Physiology), Bean plants, Culture media, Greenhouses, Cells(Biology), Humidity, Controlled atmospheres, Populations, Field tests, Liquids, Solids, Risk assessment, *Pseudomonas syringae, Epiphyte, Biological pest control.

**PB93-212652/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.** Journal article.
ManTech Environmental Technology, Inc., Corvallis, OR.
D. P. Turner, P. Sollins, M. Leuking, and N. Rudd. c1993, 13p EPA/600/J-93/259
Pub. in Plant and Soil, v148 p163-174 1993. Prepared in cooperation with Oregon State Univ., Corvallis. Dept. of Forest Science. Sponsored by Corvallis Environmental Research Lab., OR.

Old-growth forest stands of mixed species composition provide the opportunity to study species-specific influences on soil properties. The authors monitored rates of nitrogen mineralization, nitrification and an index of ammonium and nitrate uptake in a mixed old-growth stand of Douglas-fir (Pseudotsuga menziesii), western hemlock (Tsuga heterophylla) and western redcedar (Thuja plicata) over a two-year period. Litter and mineral soil (0-10-cm depth) were sampled adjacent to ten large trees of each species. After initial characterization of litter and soil, buried bags were incubated in both layers for ca. 2-month intervals. Soil and litter pH was lowest near western hemlocks. Nitrification, nitrate concentrations, and percent uptake as nitrate differed among the tree species; rates were highest near western redcedars. For all species, percent nitrification and nitrate uptake rate were higher in soil than in litter. The results indicate species-specific effects on ammonium and nitrate production and uptake within this forest type. (Copyright (c) 1993 Kluwer Academic Publishers.)

Keywords: *Growth, *Nitrification, *Forest trees, Ammonium compounds, Nitrogen inorganic compounds, Concentration(Composition), Soil properties, Wood wastes, pH, Fir trees, Containers, Field tests, Seasonal variations, Absorption, Conifers, Monitoring, Oregon, Reprints, *Pseudotsuga mengiesii, Douglas fir trees, Tsuga heterophylla, Western hemlock trees.

**PB93-212660/REB** PC **A02**/MF **A01**
Corvallis Environmental Research Lab., OR.
**National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.** Journal article.
ManTech Environmental Technology, Inc., Corvallis, OR.
G. R. Holdren, T. C. Strickland, B. J. Cosby, D. Marmorek, and D. Bernard. c1993, 10p EPA/600/J-93/260
Contracts EPA-68-C8-0006, DE-AC05-84OR21400
Pub. in Environmental Management, v17 n3 p355-363 1993. Prepared in cooperation with Virginia Univ., Charlottesville. Dept. of Environmental Sciences, and Environmental and Social Systems Analysts Ltd., Vancouver (British Columbia). Sponsored by Corvallis Environmental Research Lab., OR., and Department of Energy, Washington, DC.

The critical loads approach is emerging as an attractive means for evaluating the effects of atmospheric deposition on sensitive terrestrial and aquatic ecosystems. Various approaches are available for modeling ecosystem responses to deposition and for estimating critical load values. These approaches include empirical and statistical relationships, steady-state and simple process models, and integrated-effects models. For any given ecosystem, the most technically sophisticated approach will not necessarily be the most appropriate for all applications; identification of the most useful approach depends upon the degree of accuracy needed and upon data and computational requirements, biogeochemical processes being modeled, approaches used for representing model results on regional bases, and desired degree of spatial and temporal resolution. Different approaches are characterized by different levels of uncertainty. If the limitations of individual approaches are known, the user can determine whether an approach provides a reasonable basis for decision making. Several options, including point maps, grid maps, and ecoregional maps, are available for presenting model results in a regional context. These are discussed using hypothetical examples for choosing populations and damage limits.

Keywords: *Deposition, *Atmospheric circulation, *Air pollution, *Aquatic ecosystems, *Terrestrial ecosystems, Sulfates, Inorganic nitrates, Mathematical models, Steady state, Statistical analysis, Populations, Damage assessment, Maps, Response, Reprints, Critical loads, Biogeochemical processes.

**PB93-212678/REB** PC **A02**/MF **A01**
Charles K. Blandin Foundation, Grand Rapids, MN.
**Synthesis of Ectomycorrhizae on Northern Red Oak Seedlings in a Michigan Nursery.** Journal article.
Corvallis Environmental Research Lab., OR.
R. K. Dixon, and P. S. Johnson. c1993, 8p EPA/600/J-93/261
Pub. in Jnl. of Arboriculture, v18 n5 p266-272 Sep 92. Sponsored by Charles K. Blandin Foundation, Grand Rapids, MN., North Central Forest Experiment Station, St. Paul, MN., and Minnesota Agricultural Experiment Station, St. Paul.

Vegetative inoculum of the ectomycorrhizal fungus Suillus luteus was thoroughly mixed into fumigated nursery soil, and northern red oak seedlings of four families were evaluated one and two years after sowing for ectomycorrhizal development, growth, and nutrition. At the end of year one, treated seedlings were successfully inoculated with S. luteus, but the percentage varied significantly with family. Suillus luteus persisted on lateral roots two years following sowing. Two of four seedling families inoculated with S. luteus were significantly larger in size than control plants. These results suggest that the fungal symbiont S. luteus can be successfully introduced into nurseries and that early ectomycorrhizal development improves the growth of northern red oak seedlings.

Keywords: *Oak trees, *Growth, Inoculation, Fungi, Nutrition, Size determination, Improvement, Hardwoods, Containers, Reprints, *Nurseries, Seedlings, *Suillus luteus, Ectomicorrhizal fungus, Roots, Quercus.

**PB93-212686/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.** Journal article 31 Mar 88-30 Sep 90.
National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div.
J. E. Pleim, and J. S. Chang. c1993, 19p EPA/600/J-93/262
Contract EPA-68-D1-80016
Pub. in Atmospheric Environment, v26A n6 p965-981 1992. See also PB93-212702 and PB91-233551. Prepared in cooperation with State Univ. of New York at Albany. Atmospheric Sciences Research Center. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

A simple non-local closure model for vertical mixing in Convective Boundary Layers (CBL) has been developed specifically for application in regional or mesoscale atmospheric chemistry models. The model, named the Asymmetrical Convective Model (ACM), is based on the concept that vertical transport within the CBL is inherently asymmetrical. Upward transport by buoyant plumes originating in the surface layer is simulated by mixing from the lowest model layer directly to all other layers in the CBL. Downward transport, however, proceeds only to the next lower layer in order to emulate gradual compensatory subsidence. The realism of the ACM is tested through comparisons to large-eddy simulations of several idealized test cases. The ACM is also tested in the context of the Regional Acid Deposition Model (RADM) both to determine sensitivity to different CBL mixing schemes and to compare to vertically resolved aircraft measurements. These tests demonstrate quicker upward transport of ground level emissions by the ACM as compared to the eddy diffusion scheme currently used in RADM. The ACM also affects ozone photochemistry in the boundary layer resulting in lower ozone concentrations in areas of high NOx emissions.

Keywords: *Atmospheric boundary layer, *Air pollution, *Environmental transport, *Convection currents, Atmospheric diffusion, Vertical air currents, Ozone, Nitrogen oxides, Plumes, Mixing, Mesoscale phenomena, Reprints, *Asymmetrical Convection Model, Regional Acid Deposition Model.

**PB93-212694/REB** PC **A01**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC.
**Accuracy Assessment of EPA Protocol Gases Purchased in 1991.** Journal article.
Research Triangle Inst., Research Triangle Park, NC.
E. A. Coppedge, T. J. Logan, M. R. Midgett, R. C. Shores, and M. J. Messner. Dec 92, 5p EPA/600/J-93/263
Contract EPA-68-D1-0009
Pub. in Jnl. of Air Waste Management Association, v42 n12 Dec 92. See also PB90-197732. Sponsored by Environmental Protection Agency, Research Triangle Park, NC.

The U.S. Environmental Protection Agency (EPA) has established quality assurance procedures for air pollution measurement systems that are intended to reduce the uncertainty in environmental measurements. The compressed gas standards of the program are used for calibration and audits of continuous emission monitoring systems. EPA's regulations require that the certified values for these standards be traceable to National Institute of Standards and Technology (NIST) Standard Reference Materials or to NIST/EPA-approved Certified Reference Materials via either of two traceability protocols. The manufacturer assessment was conducted to: (1) document the accuracy of the compressed gas standards' certified concentrations; and (2) ensure that the compressed gas standards' written certification reports met the documentation requirements of the protocol. All available sources were contacted and the following gas mixtures were acquired: (1) 300-ppm SO2 and 400-ppm NO in N2; and (2) 1500-ppm SO2 and 900-ppm NO in N2.

Keywords: *Standards, *Air pollution detection, *Gas analysis, *Gas detectors, US EPA, Performance evaluation, Auditing, Air pollution standards, Calibrating, Quality assurance, Quality control, Gas cylinders, Mixtures, Pollution regulations, Reprints, *Reference materials, *Protocols.

**PB93-212702/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Interpretive Analysis of Observed and Modeled Mesoscale Ozone Photochemistry in Areas with Numerous Point Sources.** Journal article Aug-Dec 91.
National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div.
J. E. Pleim, and J. K. S. Ching. c1993, 19p EPA/600/J-93/264
Pub. in Atmospheric Environment, v27A n6 p999-1017, 1993. See also PB93-212686. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

The Regional Acid Deposition Model (RADM) has been applied to several of the field experiments that were part of the Acid Models Operational and Diagnostic Evaluation Study (Acid MODES) to assess the model's ability to simulate photochemical production of ozone in regions dominated by point source emissions. The comparison of model simulations at different grid resolutions suggests that increased resolution improves the simulation of ozone photochemistry in such regions. Further analysis of NOx, and HOx concentrations and photochemical production rates of ozone, however, show that the model's response to large point source emissions is very unsystematic both spatially and temporally. This is due to the models inability to realistically simulate the small scale (subgrid) gradients in precursor concentrations in and around large point source plumes. Because of the inherently nonlinear nature of ozone photochemistry with respect to concentrations of NOx and VOC, ozone formation rates in model grid cells depend enormously on grid resolution, dispersion rates (primarily wind speed and mixed layer height), chemical background (VOCs and radicals) and NOx emission rates.

Keywords: *Ozone, *Point sources, *Photochemical reactions, Nitrogen oxides, Hydrogen compounds, Computerized simulation, Air pollution, Atmospheric chemistry, Photochemistry, Flow models, Reprints, RADM(Regional Acid Deposition Model), Volatile organic compounds.

**PB93-212710/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.** Journal article.
National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div.
R. L. Dennis, J. N. McHenry, W. R. Barchet, F. S. Binkowski, and D. W. Byun. c1993, 25p EPA/600/J-93/265
Pub. in Atmospheric Environment, v27A n6 p975-997 1993. See also PB92-152966. Prepared in cooperation with Computer Sciences Corp., Research Triangle Park, NC. Applied Technology Div., and Battelle Pacific Northwest Labs., Richland, WA. Atmospheric Sciences Dept. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

A serious underprediction of ambient sulfate (SO4(2-) by two comprehensive, Eulerian models of acid deposition, the Regional Acid Deposition Model (RADM) and the Acid Deposition and Oxidant Model (ADOM), was found in the National Acid Precipitation Assessment Program phase of the Eulerian Model Evaluation Field Study (EMEFS) model evaluation. Two hypotheses were proposed to explain the cause of the underprediction in RADM: insufficient SO4(2-) production by nonprecipitating convective clouds and insufficient primary SO4(2-) emissions. Modifications of the RADM cloud and scavenging module to better simulate nonprecipitating cumulus clouds are described in detail. Three contrasting pairs of tests using data from the EMEFS were applied to these hypotheses: source vs. downwind regions; mid summer vs. late summer seasons, sunny-dry vs. cloudy-wet synoptic types. The SO4(2-) emissions hypothesis, tested by artificially boosting SO4(2-) emissions, fared better than expected but was rejected because of its poor performance on the regional and seasonal contrast tests. The

RADM nonprecipitating cumulus modification successfully captured the seasonal and the late summer synoptic contrasts but improvement is still needed for the regional and mid summer synoptic contrasts.

Keywords: *Sulfates, *Air pollution, *Pollution sources, *Clouds(Meteorology), Acidification, Performance evaluation, Seasonal variations, Wind direction, Regional analysis, Revisions, Reprints, *Regional Acid Deposition Model, Eulerian Model Evaluation Field Study.

**PB93-212728/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Final Results of the Condors Convective Diffusion Experiment.** Journal article.
National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div.
G. A. Briggs. c1993, 16p EPA/600/J-93/266
Pub. in Boundary-Layer Meteorology, OHOLO Conference, Eilat, Israel, October 1991. See also PB86-222221 and PB89-206684. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

The Convective Diffusion Observed by Remote Sensors (CONDORS) field experiment conducted at the Boulder Atmospheric Observatory used innovative techniques to obtain three dimensional mappings of plume concentration fields of oil fog detected by lidar and 'chaff' detected by Doppler radar. It included extensive meteorological measurements and, in 1983, tracer gases measured at a single sampling arc. Final results from ten hours of elevated and surface release data are summarized here. Spatial standard deviations (diffusion coefficients) of chaff and oil agree overall and are consistent at short range with velocity standard deviations and statistical theory predictions. Surface release lateral diffusion is enhanced up to 60% at small distances, consistent with the 1956 Prairie Grass measurements and with larger turbulence velocities and reduced wind speed measured near the surface. Decreased lateral diffusion at small dimensionless averaging times is also noted. Finally, convectively scaled concentrations were plotted versus dimensionless distance and height for oil and for chaff, for each 30-60 min period. Aggregated CONDORS fields compare well with laboratory tank and numerical model simulations.

Keywords: *Atmospheric diffusion, *Convection, *Pollution transport, *Plumes, Air pollution, Boundary layer, Remote sensing, Chaff, *CONDORS Project, Fog oil smoke.

**PB93-212736/REB** PC **A03**/MF **A01**
National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div.
**Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.** Journal article.
North Carolina State Univ. at Raleigh. Dept. of Marine, Earth and Atmospheric Sciences.
M. J. Brown, S. P. Arya, and W. H. Snyder. c1993, 18p EPA/600/J-93/267
Pub. in Jnl. of Applied Meteorology, v32 n3 Mar 93. See also PB85-193266. Sponsored by National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div., and Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

The vertical diffusion of a passive tracer released from surface and elevated sources in a neutrally-stratified boundary layer has been studied by comparing field and laboratory experiments with a non-Gaussian K-theory model that assumes power-law profiles for the mean velocity and vertical eddy diffusivity. Several important differences between model predictions and experimental data were discovered: (1) the model overestimated ground-level concentrations from surface and elevated releases at distances beyond the peak concentrations; (2) the model overpredicted vertical mixing near elevated sources, especially in the upward direction; (3) the model-predicted exponent in the exponential vertical concentration profile for a surface release was smaller than the experimentally measured exponent. Model closure assumptions and experimental shortcomings were examined in order to account for the differences.

Keywords: *Boundary layer flow, *Pollution transport, *Vertical motion, *Dispersing, *Plumes, *Mathematical models, Atmospheric circulation, Air pollution, Turbulent diffusion, Wind tunnels, Rural areas, *Non-Gaussian plume model.

**PB93-212744/REB** PC **A03**/MF **A01**
**Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.** Technical paper series (Final).
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
P. Gabele, K. T. Knapp, W. D. Ray, R. Snow, and W. Crews. c1993, 11p EPA/600/J-93/268
Presented at the International Fuels and Lubricants Meeting and Exposition, Tulsa, Oklahoma, October 22-25, 1990. See also PB88-241872 and PB91-146563. Prepared in cooperation with NSI, Inc., Research Triangle Park, NC., and SAE International, Warrendale, PA.

The paper describes an emissions study of two vans powered by compressed natural gas (CNG). One van was relatively new, while the other had been driven more than 120,000 mi. The purpose of the study was to obtain emissions information which could be used to predict the impact of CNG use on ambient air quality and air toxic concentrations, and to develop a better understanding of the effect of ambient temperature variations on CNG emissions. Using four different driving cycles, emission tests were carried out at 20 deg F, 75 deg F, and 105 deg F.

Keywords: *Automotive fuels, *Natural gas, *Exhaust emissions, Mobile pollutant sources, Air quality, Temperature, Coldstarts, Formaldehyde, *CNG(Compressed Natural Gas), NGV(Natural Gas Vehicles).

**PB93-212751/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Evaluation of Ventilation Performance for Indoor Space.** Rept. for Jun 91-Dec 92.
Research Triangle Inst., Research Triangle Park, NC. Center for Aerosol Technology.
T. Yamamoto, D. S. Ensor, and L. E. Sparks. 1993, 8p EPA/600/A-93/155
Grant EPA-R-817083
Presented at Indoor Air 1993 Conference, Helsinki, Finland, July 4-8, 1993. See also PB93-173086. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

Ventilation performance depends on room geometry, ventilation method and operating conditions, as well as on the location, source strength, and types of contaminants. A menu-driven ventilation model was developed that can determine the turbulent flow field and time-dependent/steady-state contaminant concentration distributions within an isothermal indoor space. This two-dimensional turbulence model was developed specifically for personal computers. The flow field calculated from the model showed good agreement with results from the commercially available FLUENT code. Ventilation performance was evaluated using the scale, 'Ventilation Performance Index.' Effects of room configurations, operating conditions, and effective diffusion coefficient on ventilation performance were investigated by varying a Peclet number.

Keywords: *Indoor air pollution, *Ventilation, *Air circulation, Computerized simulation, Two dimensional flow, Turbulent flow, Effectiveness, Performance evaluation, Flow distribution, Reprints, *Rooms, Indoor space.

**PB93-212769/REB** PC **A03**/MF **A01**
**Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.** Book chapter.
Environmental Research Lab.-Narragansett, Newport, OR. Pacific Ecosystems Branch.
H. Lee. c1992, 31p EPA/600/A-93/156, ISBN-0-87371-450-4
Pub. in Sediment Toxicity Assessment, Boca Raton, FL, 1992. Also pub. as Environmental Research Lab.-Narragansett, Newport, OR. rept. no. ERLN-N161. See also PB92-114164.

As is increasingly well documented and frequently stated in introductions, sediments are the ultimate sink for hydrophobic organic pollutants and heavy metals. These pollutants are potentially bioavailable to sediment-dwelling organisms, and acute or chronic health effects can occur if sufficient levels are bioaccumulated. Predation by fishes and epibenthic invertebrates on contaminated benthos introduces sediment contaminants into pelagic food webs that may then biomagnify through the food web. Thus, bioaccumulation by infaunal organisms is the first step in the biological transport of hydrophobic pollutants from the sediment reservoir to higher trophic levels, including shore birds, marine mammals, and human consumers. Accumulation of these pollutants in higher trophic levels can result in impaired reproduction and increased cancer risk for human consumers. In addition to playing a key role in ecological and human health-risk assessments, bioaccumulation by infaunal organisms generates insights into the bioavailability of sediment contaminants and can be used to test the assumptions of the techniques used to derive sediment quality criteria. (Copyright (c) 1992 by Lewis Publishers, Inc.)

Keywords: *Sediments, *Water pollutants, *Toxicity, *Biological accumulation, Biological availability, Metals, Marine biology, Humans, Marine fishes, Food chains, Risk assessment, Health hazards, Malignant neoplasms, Chemical models, Pharmacokinetics, Energy metabolism, Reprints, Hydrophobic organic pollutants.

**PB93-212777/REB** PC **A03**/MF **A01**
Environmental Research Lab., Narragansett, RI.
**Statistical Analyses of COADS Wind Data in Coastal Regions of the United States.**
National Oceanic and Atmospheric Administration, Boulder, CO. Environmental Research Labs.
F. A. Godshall, and H. A. Walker. Aug 92, 16p EPA/600/A-93/157
Contract EPA-68-C1-0005
Presented at Proceedings of the International COADS Workshop, Boulder, CO., January 13-15, 1992. See also PB86-105723. Sponsored by Environmental Research Lab., Narragansett, RI.

In the study, wind data from the Comprehensive Ocean-Atmosphere Data Set (COADS) are used to determine atmospheric circulation changes which are empirically associated with the air temperature changes. Some understanding of the natural processes which produce climate change is anticipated from the study of these associations. Systematic changes of wind in U.S. coastal regions with periods of climate warming and cooling suggest circulation changes, in addition to carbon dioxide-controlled radiation effects, could produce the climate changes indicated by air temperature. A statistical procedure for analyses of COADS was used to determine decade-period vector wind-field differences from the COADS record period. The statistical procedure for these analyses is explained and the wind differences are compared to summaries of mid-Atlantic coast island-station observations.

Keywords: *Atmospheric temperature, *Climatic changes, *Wind(Meteorology), *Atmospheric circulation, Greenhouse effect, Climatology, Meteorological data, Wind velocity, Wind data, Statistical analysis, Coasts, United States, Reprints, Comprehensive Ocean Atmospheric Data Set.

**PB93-212785/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.** Book chapter.
ManTech Environmental Technology International, Inc., Corvallis, OR.
E. H. Lee, W. E. Hogsett, and D. T. Tingey. 1993, 31p EPA/600/A-93/158
Pub. in Oxidants in the Environment, Volume of Wiley Series, Advances in Environmental Science and Technology, 1993. Sponsored by Corvallis Environmental Research Lab., OR.

The present secondary National Ambient Air Quality Standard (NAAQS) for ozone, established in 1979, was based on limited information from a few field studies on vegetation and may not be protective of crop damage due to ozone, alone or in combination with

other pollutants. Considerable information from field studies conducted in the past decade indicate that there is poor functional correspondence between agricultural production and the index of the current secondary NAAQS for ozone. Because the current ozone NAAQS is based on data for extreme values of air quality, the index of the NAAQS ignores key features of hourly exposure data that are desirable and important to minimizing the risk of crop damage. Improved federal ozone standards, sufficient to protect vegetation, require modifications to the form and averaging period of the current NAAQS with minimum increase to the number of nonattainment and crossover areas. Air quality indicators based on exposure indices developed in work involving ozone effects on crops show considerable improvement over modifications to the current NAAQS that lower the standard level to achieve a comparable level of protection, with respect to changes in nonattainment status.

Keywords: *Ozone, *Air pollution standards, *Air pollution effects(Plants), Farm crops, Crop response, Plant growth, Air quality data, Ambient air quality, Exposure, Toxicology, Reprints, *National Ambient Air Quality Standard, Air quality indicators.

**PB93-212793/REB** PC **A02**/MF **A01**
**Ecotoxicological Principles for Avian Field Studies Using Radiotelemetry or Remote Sensing.** Symposium paper.
Corvallis Environmental Research Lab., OR.
A. Fairbrother. 1993, 10p EPA/600/A-93/159
Presented at Pellston Workshop: Radiotelemetry for Avian Field Studies, Asilomar, CA., 1993.

Ecotoxicological studies for pesticide risk assessments strive to develop cause-and-effect relationships between pesticide application and adverse effects on birds (both as individuals and as populations) and to determine the mechanisms by which the observed effects occur. In order to accomplish this, data are collected to determine if the location of the birds put them into potential contact with the pesticide, how the pesticide changes behaviors and the physiology of the animals, and how these changes result in increased mortality and reduced reproduction. Radiotelemetry and other remote sensing technologies can be powerful tools to aid in gathering the data.

Keywords: *Birds, *Remote sensing, *Pollution effects(Animals), Pesticides, Toxicology, Radio telemetry, Tracking(Position), Animal behavior, Reproduction(Biology), Reprints, *Ecotoxicology, Biomarkers.

**PB93-212801/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.**
IT Corp., Cincinnati, OH.
R. J. Turner, and M. B. Foerst. 1993, 14p EPA/600/A-93/160
Contract EPA-68-C9-0036
Pub. in Air and Waste Management Association Annual Meeting (86th), Denver, CO., Jun 13-18, 1993, p1-12. See also PB92-216944. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Chromated copper arsenate (CCA) is the predominant wood preservative used in the U.S. (67% by volume of wood treated). The residuals from pressure treatment of lumber consist of washdown waters, drippage, treating cylinder sediment, spent formulations and filter screenings. Analyses of these materials indicate arsenic, copper, and chromium concentrations of 1-3 percent each. The solid residues are currently land disposed in RCRA permitted facilities after stabilization and meeting a leachate standard of 5.0 mg/L for arsenic and chromium characteristic wastes. Bench-scale research studies were conducted by the EPA and the private sector to investigate the extractability of the arsenic and metals for reuse by the wood preserving facilities and to determine whether the solid residues are rendered nonhazardous by extraction. Stabilization techniques were also evaluated for immobilization of the arsenic and other metals. The feasibility for recovery of CCA from treatment residues has been demonstrated. Conventional stabilization did not effectively immobilize the arsenic or chromium.

Keywords: *Waste management, *Wood preservatives, *Materials recovery, *Waste treatment, Waste utilization, Metals, Extraction, Solidification, Feasibility studies, Arsenic, Chromium, Performance evaluation, Stabilization, *Chromated copper arsenate.

**PB93-212819/REB** PC **A03**/MF **A01**
**Downwash of Plumes in the Vicinity of Buildings: A Wind-Tunnel Study.**
National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div.
W. H. Snyder. 1993, 17p EPA/600/A-93/161
Proceedings NATO Advanced Research Workshop, held in Portugal on June 28-July 2, 1993. Prepared in cooperation with National Oceanic and Atmospheric Administration, Rockville, MD., and Department of Commerce, Washington, DC.

A wind-tunnel study has been conducted to examine the effects of several parameters on the downwash of effluents released from stacks in the vicinity of rectangular-shaped buildings. The situations modeled included idealized or generic steam-boiler and combustion-turbine electric-generating plants. Systematically varied were parameters such as the stack height, location of stack, wind direction, effluent-speed to wind-speed ratio, and effluent buoyancy. Measurements included over 300 concentration profiles. Vertical profiles were measured at a fixed distance downwind, both in the presence and in the absence of the buildings, to ascertain the building effects. In several of the more interesting cases, more extensive measurements were made to more fully describe the entire concentration field.

Keywords: *Air pollution, *Plumes, *Effluents, *Downwash, *Electric power plants, Flue gases, Wind tunnel models, Buildings.

**PB93-212827/REB** PC **A03**/MF **A01**
**Aerosol Measurement: Principles, Techniques, and Applications.** Book chapter.
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
K. Willeke, and P. A. Baron. 1993, 33p EPA/600/A-93/162
See also PB90-200288. Prepared in cooperation with North Carolina Univ. at Chapel Hill. Dept. of Environmental Sciences and Engineering.

The study of aerosols in indoor air and the assessment of human exposure to aerosols are relatively recent activities. The terms indoor air and exposure assessment refer primarily to nonindustrial settings, such as homes, offices, and public-access buildings (e.g., museums, airport terminals, retail stores). Although many occupational settings are 'indoors', the aerosol concentrations and constituents, airflow regimes, and turbulence levels pose related, but different, aerosol measurement constraints. Until recently, it was commonly believed that the quality of indoor air was superior to that of the outdoor (ambient) air nearby. Several factors have influenced the apparent deterioration of indoor air quality: life-styles have changed; building construction techniques have changed; and people have become more concerned about environmental tobacco smoke (ETS).

Keywords: *Indoor air pollution, *Air pollution sampling, *Aerosol monitoring, Impactors, Photometers, Air samplers, Chemical analysis, Aerosols, Air quality, Exposure, Risk assessment, Public health, Reprints, Personal sampling, Microenvironmental sampling.

**PB93-212835/REB** PC **E99**/MF **E99**
Electric Power Research Inst., Palo Alto, CA.
**Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991.**
Nesbit (William) and Associates, Santa Rosa, CA.
c1991, 1236p-in 3v*
Set includes PB93-212843 through PB93-212868. See also PB89-220529, PB89-220537 and PB92-121375. Sponsored by Electric Power Research Inst., Palo Alto, CA., and Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

No abstract available.

Keywords: *Air pollution control, *Nitrogen oxides, *Stationary sources, *Meetings, Combustion products, Flue gases, Particulates, Electric utilities, Power plants, Gas turbines, Power generation, Pollution regulations.

**PB93-212843/REB** PC **A15**/MF **A03**
Electric Power Research Inst., Palo Alto, CA.
**Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 1. Sessions 1-3.** Rept. for Mar 89-Mar 91.
Nesbit (William) and Associates, Santa Rosa, CA.
C. DeWitt. c1991, 328p EPA/600/R-92/093A
See also Volume 2, PB93-212850. Sponsored by Electric Power Research Inst., Palo Alto, CA., and Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
Also available in set of 3 reports PC E99/MF E99, PB93-212835.

The symposium was the sixth in a biennial series devoted to the international exchange of information on recent technological and regulatory developments for stationary combustion NOx control. Topics covered included the significant increase in active full-scale retrofit demonstrations of low-NOx combustion systems in the United States and abroad over the past two years; full-scale operating experience in Europe with selective catalytic reduction (SCR); pilot- and bench-scale SCR investigations in the United States; increased attention on selective noncatalytic reduction in the United States; and NOx controls for oil- and gas-fired boilers. Volume 1 contains papers from the following sessions: Background; Large Scale Coal Combustion I; and Large Scale Coal Combustion II.

Keywords: *Air pollution control, *Nitrogen oxides, *Stationary sources, Fossil-fuel power plants, Electric utilities, Boilers, Power generation, Combustion products, Flue gas, Particulates, Meetings.

**PB93-212850/REB** PC **A20**/MF **A04**
Electric Power Research Inst., Palo Alto, CA.
**Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 2. Sessions 4 and 5.** Rept. for Mar 89-Mar 91.
Nesbit (William) and Associates, Santa Rosa, CA.
C. DeWitt. c1991, 475p EPA/600/R-92/093B
See also Volume 1, PB93-212843 and Volume 3, PB93-212868. Sponsored by Electric Power Research Inst., Palo Alto, CA., and Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
Also available in set of 3 reports PC E99/MF E99, PB93-212835.

The symposium was the sixth in a biennial series devoted to the international exchange of information on recent technological and regulatory developments for stationary combustion NOx control. Topics covered included the significant increase in active full-scale retrofit demonstrations of low-NOx combustion systems in the United States and abroad over the past two years; full-scale operating experience in Europe with selective catalytic reduction (SCR); pilot- and bench-scale SCR investigations in the United States; increased attention on selective noncatalytic reduction in the United States; and NOx controls for oil- and gas-fired boilers. Papers from the following sessions are contained in Volume 2: Combustion NOx Developments 1; Large Scale SCR Applications; Post Combustion Developments 1; Industrial/Combustion Turbines on NOx Control.

Keywords: *Air pollution control, *Nitrogen oxides, *Stationary gases, Combustion products, Flue gases, Particulates, Boilers, Electric utilities, Power generation, Gas turbines, Power plants, Meetings.

**PB93-212868/REB** PC **A19**/MF **A04**
Electric Power Research Inst., Palo Alto, CA.
**Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 3. Sessions 6-8.** Rept. for Mar 89-Mar 91.
Nesbit (William) and Associates, Santa Rosa, CA.
C. DeWitt. c1991, 433p EPA/600/R-92/093C
See also Volume 2, PB93-212850. Sponsored by Electric Power Research Inst., Palo Alto, CA., and Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
Also available in set of 3 reports PC E99/MF E99, PB93-212835.

The symposium was the sixth in a biennial series devoted to the international exchange of information on recent technological and regulatory developments for stationary combustion NOx control. Topics covered included the significant increase in active full-scale retrofit demonstrations of low-NOx combustion systems in the United States and abroad over the past two years; full-scale operating experience in Europe with selective catalytic reduction (SCR); pilot- and bench-scale SCR investigations in the United States; increased attention on selective noncatalytic reduction in the United States; and NOx controls for oil- and gas-fired boilers. Papers from the following sessions are contained in Volume 3: Post Combustion Developments II; Combustion NOx Developments II; New Developments I; New Developments II; Oil/Gas Combustion Applications.

Keywords: *Air pollution control, *Nitrogen oxides, *Stationary sources, Combustion products, Flue gases, Particulates, Boilers, Electric utilities, Gas turbines, Power plants, Power generation, Meetings.

**PB93-213213/REB** PC **A03**/MF **A01**
**Guideline on Air Quality Models (Revised): Appendix W of 40 CFR Part 51 (Supplement B).**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
Feb 93, 34p
See also PB86-245248 and PB88-150958.

Recommendations are made in the guide concerning air quality models, data bases, requirements for concentration estimates, the use of measured data in lieu of model estimates, and model evaluation procedures. The guidance provided here should be followed in all air quality analyses relative to State Implementation Plans and in analyses required by EPA, State and local agency air programs. In all cases, the model applied to a given situation should be the one that provides the most accurate representation of atmospheric transport, dispersion, and chemical transformations in the area of interest.

Keywords: *Air pollution monitoring, *Atmospheric diffusion, *Mathematical models, Air pollution dispersion, Atmospheric models, Air flow, Chemical reactions, Pollution regulations, Guidelines, Clean Air Act.

**PB93-213494/REB** PC **A06**/MF **A02**
**Revision of Methodology for Deriving National Ambient Water Quality Criteria for the Protection of Human Health: Report of Workshop and EPA's Preliminary Recommendations for Revision.** Draft rept.
Environmental Protection Agency, Washington, DC. Office of Water.
8 Jan 93, 107p

The Clean Water Act of 1977 requires the development of protective criteria for ambient water contaminants that may adversely affect human health. Consequently, EPA developed guidelines and a methodology to derive these criteria for individual chemicals and prepared ambient Water Quality Criteria documents for a group of 65 chemicals listed in the Act as priority chemicals. The methodology and summaries of the criteria data were published in 1980. The document proposes a revision to the 1980 methodology. The need for this is a result of the recognition that the underlying science has advanced significantly in the past 12 years.

Keywords: *Water quality management, *Public health, *Water pollution effects, *Meetings, Clean Water Act of 1977, Revisions, Chemicals, US EPA, Recommendations, Carcinogens, Humans, Bacteria, Microorganisms, Biological accumulation, Exposure, Concentration(Composition), Risk assessment, National Priority List.

**PB93-213916/REB** PC **A03**/MF **A01**
Coordinating Research Council, Inc., Atlanta, GA.
**EVAP3.0 CRC Evaporative Emission Model: User's Manual.**
Radian Corp., Austin, TX.
Feb 93, 40p
*For system on diskette, see* PB93-506301. Also pub. as Environmental Protection Agency, Atlanta, GA. rept. no. EPA/SW/DK-93/086A. Prepared in cooperation with Environmental Protection Agency, Atlanta, GA. Region IV. Sponsored by Coordinating Research Council, Inc., Atlanta, GA.

The EVAP3.0 model computes hot-soak and diurnal emissions for an average vehicle in a specified calendar year as a function of dispensed RVP, driving patterns, fuel weathering, fuel tank level effects, diurnal temperature profile, and tank temperature. The calendar year fleet is described by factors derived from EPA's MOBILE4.1 model. Section 2.0 of the manual describes the system requirements for the proper functioning of the model. Section 3.0 describes the installation and use of the model. Section 4.0 describes in detail the inputs required to run the model and Section 5.0 gives a few examples for running the model. Section 6.0 provides a summary of the development of the CRC-Evaporative emissions model. The section also contains a basic description of the model and qualifications.

Keywords: *Evaporative emissions, *Air pollution emission factors, *Automobiles, Air pollution sources, Mobile pollutant sources, Smog, Photochemical reactions, Refueling losses, Vapor pressure, User manuals(Computer programs), Driving style effect on exhaust emissions, Ambient temperature effect on exhaust, Fuel level, Fuel weathering.

**PB93-214328/REB** PC **A03**/MF **A01**
***Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry.***
Environmental Protection Agency, Washington, DC. *Office of Water.*
May 93, 28p EPA/821/R-93/008
See also PB93-214336 and PB93-186104.

The report summarizes the effects that revised compliance cost estimates have on the economic impact analysis of effluent limitations guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry.

Keywords: *Effluents, *Economic impact, *Industrial plants, Costs, Regulations, Water pollution standards, Waste water treatment, Compliance, Chemical plants, Plastics industry.

**PB93-214336/REB** PC **A08**/MF **A02**
**Supplement to the Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics and Synthetic Fibers Point Source Category.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Water.
28 May 93, 175p EPA/821/R-93/007
See also PB93-214328 and PB93-186096.

The document describes the supporting information for the Agency's amendments to 40 CFR Part 414, which limits effluent discharges to waters of the United States and the introduction of pollutants into publicly owned treatment works (POTWs) by existing and new sources in the organic chemicals, plastics, and synthetic fibers (OCPSF) point source category.

Keywords: *Effluents, *Industrial plants, Regulations, Laws, Water pollution standards, Waste water treatment, Legislation, Chemical plants, Plastics industry.

**PB93-214344/REB** PC **A05**/MF **A02**
**Preliminary Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease.**
Environmental Protection Agency, Washington, DC. Office of Water.
Jun 93, 100p EPA/821/R-93/009

The Clean Air Act Amendments of 1990 require that use of Class I chlorofluorocarbons (CFCs) which deplete the ozone layer be phased out by 1996. Freon 113 (trichlororfluorethane) is a Class I CFC that is required by present U.S. EPA wastewater and solid waste methods for measurement of the conventional pollutant, oil and grease. The report provides the results of Phase I of EPA's study to replace Freon 113 in the determination of oil and grease.

Keywords: *Replacing, *Freon 113, *Air pollution control, *Industrial wastes, Ozone, Fuel oils, Greases, Solvents, Test methods, Trichloroethanes, Flurohydrocarbons, Chloromethanes, Methyl ether, Mixtures, Chemical analysis, Evaluation, Infrared detection, Columns(Process engineering), Tables(Data), Clean Air Act Amendments of 1990, Ethane/Trifluoro, Sonication extraction.

**PB93-214419/REB** PC **A05**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.** Final rept. Mar 92-Mar 93.
Radian Corp., Research Triangle Park, NC.
J. F. McGaughey, and S. C. Foster. 15 Apr 93, 92p
*EPA/600/R-93/115*
Contract EPA-68-D1-0010
See also PB87-168696 and PB93-121085. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

The accurate measurement of the total nonmethane volatile organic carbon emissions from stationary sources is critical to characterizing many industrial processes and for regulating according to the Clean Air Act. Current methods are difficult to use and the ability to do performance audits has been marginal, especially at low concentrations (< 50 parts per million of carbon, ppmc). One of the key elements for an ideal measurement technique would be a detector that responds to all classes of organic compounds equally, based on the number of carbon atoms present. A commercially available catalytic flame ionization detector (CFID) has shown promise in the area. Laboratory studies with a CFID were performed to determine the response of compounds with various functional groups. These classes included brominated, chlorinated, nitrogenated, oxygenated, aromatic, and non-aromatic compounds. The response of each compound is compared to the response of an alkane with the same number of carbon atoms. The report discusses the experimental work with the detector and an approach for sampling, sample recovery, and field tests for comparison to the EPA Method 25.

Keywords: *Air pollution detection, *Volatile organic compounds, *Carbon, Nitrogen organic compounds, Oxygen organic compounds, Bromine organic compounds, Chlorine organic compounds, Stationary sources, Performance evaluation, Gas chromatography, *Catalytic flame ionization detectors.

**PB93-215564/REB** PC **A12**/MF **A03**
Robert S. Kerr Environmental Research Lab., Ada, OK.
**In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.** Research rept.
Dynamac Corp., Ada, OK.
R. D. Norris, R. E. Hichee, R. Brown, P. L. McCarty, and L. Semprini. Jul 93, 252p EPA/600/R-93/124
See also PB93-146850. Sponsored by Robert S. Kerr Environmental Research Lab., Ada, OK.

The report provides the reader with a detailed background of the technologies available for the bioremediation of contaminated soil and ground water. The document has been prepared for scientists, consultants, regulatory personnel, and others who are associated in some way with the restoration of soil and ground water at hazardous waste sites. It provides the most recent scientific understanding of the processes involved with soil and ground-water remediation, as well as a definition of the state-of-the-art of these technologies with respect to circumstances of their applicability and their limitations. In addition to discussions and examples of developed technologies, the report also provides insights to emerging technologies which are at the research level of formation, ranging from theoretical concepts, through bench scale inquiries, to limited field-scale investigations. The report centers around a number of bioremediation technologies applicable to the various subsurface compartments into which contaminants are distributed. The processes which drive these remediation technologies are discussed in depth along with the attributes which direct their applicability and limitations according to the phases into which the contaminants have partitioned. These discussions include in-situ remediation systems, air sparging and bioventing, use of electron acceptors alternate to oxygen, natural bioremediation, and the introduction of organisms into the subsurface. The contaminants of major focus in the report are petroleum hydrocarbons and chlorinated solvents.

Keywords: *Ground water, *Water pollution control, *Remediation, *Land pollution control, Hazardous materials, Waste disposal, Hydrocarbons, Microorganisms, Biological treatment, Biodegradation, Activated

sludge process, Biological industrial waste treatment, Oxidation, *Bioremediation, Contaminated soils, Chlorinated solvents.

**PB93-215572/REB** PC **A05**/MF **A01**
**RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.**
Environmental Protection Agency, Cincinnati, OH. Center for Environmental Research Information.
D. Bartenfelder, R. Sims, H. Compton, W. Grube, and L. Murdock. Oct 92, 89p EPA/625/R-92/014
See also PB92-102102, PB92-102110 and PB92-114495.

The seminar publication provides an overview of many technologies that can be used in applying the stabilization concept to RCRA cleanup activities. Technologies discussed include covers, grouting, slurry walls, hydrofracture, horizontal well drilling, vacuum extraction, and bioventing. Information included in each discussion includes applications and limitations, screening criteria, implementation issues, and monitoring strategies.

Keywords: *Pollution control, *Remediation, *Waste treatment, Meetings, Case studies, Ground water, Surface waters, Landfills, Compaction, Grouting, Coverings, Well drilling, Biological treatment, *RCRA(Resource Conservation and Recovery Act), Cleanup, Treatment technology, Slurry walls, Vacuum extraction, Bioventing.

**PB93-215580/REB** PC **A08**/MF **A02**
**Wellhead Protection: A Guide for Small Communities.** Seminar pub.
Environmental Protection Agency, Washington, DC. Office of Water.
Feb 93, 155p EPA/625/R-93/002
See also PB88-111893 and PB93-101111. Prepared in cooperation with Eastern Research Group, Inc., Lexington, MA.

Guidance for setting up wellhead protection programs is available at the state and federal levels, but local initiative is the key to developing an effective program. Each community can best determine how to develop its own wellhead protection program by taking into account local hydrogeological characteristics, land uses, and political and economic conditions. The publication is designed to help small community decision makers, utility personnel, and other interested community members take intiative at the local level. It provides the basic information needed to begin a wellhead protection program.

Keywords: *Ground water, *Water pollution control, *Wellheads, Water quality management, Local government, Water wells, Aquifers, Water supply, Pollution regulations, Pollution sources, Case studies, Meetings, Wellhead Protection Program.

**PB93-215598/REB** PC **A07**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Organic Air Emissions from Waste Management Facilities.** Seminar pub.
Environmental Protection Agency, Cincinnati, OH. Center for Environmental Research Information.
Aug 92, 126p EPA/625/R-92/003
See also DE83005997. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

Because air emissions from waste management operations pose a threat to human health and the environment, regulations have been developed to control organic air emissions from these operations. RCRA standards limit organic air emissions as a class from process vents and equipment leaks at hazardous waste treatment, storage, and disposal facilities requiring a permit under Subtitle C of RCRA. Standards promulgated under the Clean Air Act (CAA) limit emissions of benzene from benzene waste operations. The seminar publication will help improve understanding of the air rules that apply to waste management operations, focusing on control technologies and the RCRA and CAA regulations.

Keywords: *Waste processing plants, *Air pollution control, *Organic compounds, Meetings, Air pollution standards, Pollution regulations, Air pollution monitoring, Chemical analysis, Waste treatment, Waste disposal, Waste storage, Waste management, Clean Air Act, Resource Conservation and Recovery Act, Fugitive emissions.

**PB93-215606/REB** PC **A05**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Center for Environmental Research Information.
**Small Community Water and Wastewater Treatment.** Summary rept.
Science Applications International Corp., Fort Washington, PA.
Sep 92, 89p EPA/625/R-92/010
Sponsored by Environmental Protection Agency, Cincinnati, OH. Center for Environmental Research Information.

The summary report presents information on the unique needs of small communities facing new water and wastewater treatment requirements. It contains three main sections: technology overviews (each presents a process description, O&M requirements, technology limitations, and financial considerations), small community case studies, and a resource directory presenting listings of organizations that can provide a wide variety of technical and financial services to small communities.

Keywords: *Water treatment, *Sewage treatment, *Requirements, Communities, Financing, Case studies, Waste water, Packaged treatment plants, Trickling filters, Potable water, Lagoons(Ponds), Sedimentation tanks, Sludge digestion, Coagulation, Disinfection, Activated carbon treatment, Activated sludge process, Case studies, *Small systems, Drinking water.

**PB93-215614/REB** PC **A08**/MF **A02**
Environmental Protection Agency, Cincinnati, OH. Center for Environmental Research Information.
**Control of Air Emissions from Superfund Sites.**
Radian Corp., Austin, TX.
B. Eklund, P. Thompson, C. Albert, B. Walker, and W. Delaney. Nov 92, 163p EPA/625/R-92/012
See also PB86-151677. Sponsored by Environmental Protection Agency, Cincinnati, OH. Center for Environmental Research Information.

The intended audience for the handbook are engineers and scientists involved in preparing Remedial Design (RD) plans for Superfund sites. The handbook contains a summary of existing information and an overview of the topic of air emission controls is presented. The handbook contains background information to familiarize the user with the technical basis for each control technology. Specific guidance is provided to assist the user in limiting the choices of potential control technologies and in selecting a specific set of control technologies for a given application. References are included for users seeking more detailed guidance. The handbook is a screening tool and is not intended to provide detailed technical specifications for preparing bid packages.

Keywords: *Superfund, *Air pollution control equipment, *Hazardous materials, *Remediation, Environmental exposure pathway, Air pollution standards, Waste disposal, Point sources, Metals, Particulates, Cost effectiveness, Manuals, Volatile organic compounds.

**PB93-215622/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
**Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.**
Radian Corp., Austin, TX.
B. Eklund, C. Thompson, and S. Mischler. Apr 93, 54p EPA/451/R-93/006
Contract EPA-68-DO-0125
See also PB93-215630, PB87-116745 and PB93-186807. Sponsored by Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.

The report provides procedures for estimating the ambient air concentrations associated with solidification/stabilization of contaminated soil or sludge. Solidification/stabilization processes are used to immobilize toxic and hazardous constituents in the contaminated soil or sludge. Procedures are given to evaluate the effect of the treatment rate and contaminant concentration on the emission rates and on the ambient air concentrations at selected distances from the treatment area. Health-based ambient air action levels are also provided for comparison to the estimated ambient concentrations.

Keywords: *Superfund, *Remediation, *Ambient air quality, *Stabilization, *Solidification, Hazardous materials, Waste disposal, Sludge, Exposure, Chemical analysis, Air pollution effects(Humans), Risk assessment, Public health, Contaminated soil, Volatile organic compounds.

**PB93-215630/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
**Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.**
Radian Corp., Austin, TX.
W. Dulaney, B. Eklund, C. Thompson, and S. Mischler. Apr 93, 54p EPA/451/R-93/005
Contract EPA-68-DO-0125
See also PB93-215648. Sponsored by Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.

The report provides procedures for estimating the ambient air concentrations associated with thermal desorption. Thermal desorption is a treatment process where heat is used to physically remove organic compounds from soils and sludges. Procedures are given to evaluate the effect of the treatment rate and contaminant concentration on the emission rates and on the ambient air concentrations at selected distances from the treatment area. Health-based ambient air action levels are also provided for comparison to the estimated ambient concentrations.

Keywords: *Superfund, *Remediation, *Ambient air quality, Hazardous materials, Waste disposal, Sludge, Exposure, Chemical analysis, Air pollution effects(Humans), Risk assessment, Public health, *Thermal desorption, Contaminated soil.

**PB93-215648/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.**
Radian Corp., Austin, TX.
B. Eklund, C. Thompson, and S. Mischler. Apr 93, 44p EPA/451/R-93/004
Contract EPA-68-DO-0125
See also PB93-215655. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The report provides procedures for estimating the ambient air concentrations associated with emissions of particulate matter from soils handling operations at Superfund sites. Materials handling operations are necessary at any site where ex-situ treatment is performed. In addition, soils handling operations, such as excavation or grading, are frequently performed as part of site preparation. Procedures are given to evaluate the effect of the handling rate and contaminant concentration on the emission rates and on the ambient air concentrations at selected distances from the treatment area. Health-based ambient air action levels are also provided for comparison to the estimated ambient concentrations.

Keywords: *Superfund, *Remediation, *Ambient air quality, *Particulates, Hazardous materials, Waste disposal, Materials handling, Exposure, Inhalation, Chemical analysis, Air pollution effects(Humans), Risk assessment, Public health, Contaminated soil, Volatile organic compounds.

**PB93-215655/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
**Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.**
Radian Corp., Austin, TX.
W. Dulaney, B. Eklund, C. Thompson, and S. Mischler. Apr 93, 54p EPA/451/R-93/003
Contract EPA-68-DO-0125

See also PB93-215622. Sponsored by Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.

The report provides procedures for estimating the ambient air concentrations associated with bioventing. Bioventing is an insitu remediation process where oxygen is introduced to the contaminated subsurfaces to enhance biodegradation rates of the organic contaminants. Procedures are given to evaluate the effect of exhaust gas flow rate and contaminant concentration on the emission rates and on the ambient air concentrations at selected distances from the area. Health-based ambient air action levels are also provided for comparison to the estimated ambient concentrations.

Keywords: *Superfund, *Remediation, *Ambient air quality, Biodegradation, Hazardous materials, Waste disposal, Exhaust gases, Exposure, Chemical analysis, Air pollution effects(Humans), Risk assessment, Public health, *Bioventing, Volatile organic compounds.

**PB93-215663/REB** PC **A08/MF A02**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Development and Testing of Dry Deposition Algorithms.**
Sigma Research Corp., Concord, MA.
J. A. Scire, G. E. Moore, and D. Strimaitis. May 93, 157p EPA/454/R-92/017
Contract EPA-68-D90067
See also PB92-232446. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The primary objective of the study is to implement a generalized dry deposition algorithm for particulate matter, suitable for regulatory use, into the Industrial Source Complex (ISC2) model. Reviews were conducted of methods for computing dry deposition velocities, plume depletion, and certain micrometeorological parameters from routinely available observations. Several observational data bases were identified from the literature and used in the testing and evaluation of ten particle deposition models. Recommendations for computing particle deposition velocities, plume depletion, and meteorological variables were made. These techniques have been incorporated into a revised version of the ISC2 model and related processor programs.

Keywords: *Dry methods, *Deposition, *Air pollution, *Atmospheric diffusion, *Algorithms, Diffusion modeling, Mathematical models, Particulates, Regulations, Plumes, Meteorology, Environmental transport, Comparison, Computerized simulation, Revisions, *Industrial Source Complex Models.

**PB93-215861/REB** PC **A10/MF A03**
**Guidelines for Delineation of Wellhead Protection Areas, 1993.**
Environmental Protection Agency, Washington, DC. Office of Ground-Water Protection.
May 93, 207p EPA/440/5-93/001
See also PB88-111430.

The Amendments to the Safe Drinking Water Act (SDWA), which were passed in June 1986, established the first nationwide program to protect ground-water resources used for public water supplies from a wide range of potential threats. The SDWA seeks to accomplish the goal by the establishment of State Wellhead Protection (WHP) Programs which 'protect wellhead areas within their jurisdiction from contaminants which may have any adverse effect on the health of persons.' One of the major elements of WHP is the determination of zones within which contaminant source assessment and management will be addressed. These zones, denoted as Wellhead Protection Areas (WHPA's), are defined in the SDWA as 'the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield.' Hence, the law establishes the concept of protecting some of the recharge areas to these points of public drinking water withdrawal. The States are given flexibility in determining appropriate operational approaches to WHPA delineation. The Environmental Protection Agency (EPA), in addition, is required by the SDWA to release technical guidance on the hydrogeologic aspects of this task. Keywords: *Ground water, *Water pollution control, *Well heads, Water quality management, Water pollution abatement, Water wells, Water supply, Hydrogeology, Pollution regulations, Case studies, Safe Drinking Water Act, Well Protection Program.

**PB93-215929/REB** PC **A03/MF A01**
Environmental Protection Agency, Chicago, IL. Region V.
**Lake Water Quality Assessment Program: Southern Illinois Lakes.**
Illinois State Environmental Protection Agency, Springfield. Div. of Water Pollution Control.
A. J. Burns. Aug 91, 50p IEPA/WPC/91-210
Prepared in cooperation with Greater Egypt Regional Planning and Development Commission, Carbondale, IL. Sponsored by Environmental Protection Agency, Chicago, IL. Region V.

The Illinois Environmental Protection Agency applied for, received, and implemented a Lake Water Quality Assessment grant program from 1989-1991. Grant monies from USEPA Region V, with equal funding provided by the Agency, were utilized to improve the quantity and quality of lake information reported in the 1990 and 1992 cycle Section 305(b) (of the Clean Water Act) reports. The report summarizes the water quality and sediment data collected and assessments for 25 southern Illinois lakes.

Keywords: *Water quality data, *Water pollution sampling, *Surface waters, Lakes, Clean Water Act, Grants, Sediments, Nutrients, Metals, Chemical analysis, Turbidity, Stratification, Inorganic nitrates, Nitrites, Phosphorus, Alkalinity, Biochemical oxygen demand, Tables(Data), *Southern Region(Illinois), Total Suspended Solids.

**PB93-216067/REB** PC **A07/MF A02**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.**
Science Applications International Corp., Buffalo, NY.
L. C. Ehrenreich, A. Matuson, J. Peters, and J. Evans.
Jul 93, 148p EPA/540/R-93/517
Contract EPA-68-C0-0048
Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The report summarizes the results and activities of the demonstration testing of Toronto Harbor Commissioners (THC) Soil Recycle Treatment Train. The Demonstration was conducted at a site within the Port Industrial District (PID) in Toronto, Ontario, Canada under the Superfund Innovative Technology Evaluation (SITE) Program developed by the U.S. Environmental Protection Agency (EPA). The demonstration examined a part of THC's on-going evaluation of the treatment train during the first nine months of 1992. EPA elected to sample the process during the processing of Soil B, which based on field sampling, was expected to exhibit relatively high organic (oil and grease, PAH compounds) and inorganic (heavy metals) contaminants.

Keywords: *Land pollution control, *Chemical treatment, *Biological treatment, Remediation, Chelation, Slurries, Metals, Organic compounds, Inorganic compounds, *Toronto(Canada), Toronto Harbor, Contaminated soil, Treatment train, Soil washing.

**PB93-216075/REB** PC **A12/MF A03**
**Environmental Monitoring Issues: Results of Workshops Held in July 1992 as Part of EPA's Eighth Annual Waste Testing and Quality Assurance Symposium.**
Environmental Protection Agency, Washington, DC. Office of Modeling, Monitoring Systems and Quality Assurance.
D. Friedman. Mar 93, 274p EPA/600/R-93/033

The report summarizes the ideas and information developed in a series of workshops held in July, 1992 to address four environmental monitoring issues. The issues addressed were: Adoption of performance based methods; Predicting the environmental impact of oily materials; Characterizing heterogeneous wastes; Characterizing mixed wastes. The workshops served as a means of soliciting input on how EPA can best address these issues from all sectors of the monitoring community (e.g., state and regional regulatory officials, industry, commercial laboratories, other federal agencies).

Keywords: *Environmental monitoring, *Waste management, *Meetings, Oil wastes, Radioactive wastes, Hazardous materials, Environmental impact assessments, Environmental issues, Pollution regulations, Technology utilization, Mixed wastes, Waste characterization.

**PB93-216109/REB** PC **A03/MF A01**
***Protecting Local Ground-Water Supplies through Wellhead Protection.***
Environmental Protection Agency, Washington, DC. Office of Water.
May 91, 23p EPA/570/09-91/007
See also PB92-224765.

The guide outlines an easy-to-follow, five-step process that a community can take to protect its public water supply wells.

Keywords: *Water pollution control, *Ground water, *Well heads, Water quality management, Water pollution abatement, Water wells, Water supply, Hydrogeology, Local government, Pollution regulations, Planning.

**PB93-216174/REB** PC **A10/MF A03**
Environmental Protection Agency, Ann Arbor, MI. Certification Div.
**Marine Industry Characterization Report.** Final rept.
ICF International, Inc., Fairfax, VA.
25 Mar 93, 204p EPA/420/R-93/008
Contract EPA-68-C1-0059
See also PB92-126960. Sponsored by Environmental Protection Agency, Ann Arbor, MI. Certification Div.

Under the Clean Air Act Amendments of 1990, the U.S. Environmental Protection Agency (EPA) is required to consider the impacts on air quality caused by previously unregulated sources, including nonroad engines and vehicles. In a previous report, EPA determined that engines used for marine applications, including both pleasure craft and commercial vessels, may contribute to emissions of regulated pollutants in some areas that fail to meet ambient air quality standards. Consequently, EPA has initiated efforts to further refine its understanding of the marine industry, including the products and markets of industry participants. The purpose of the report is to summarize data on the technical characteristics of marine engines and vessels and the financial characteristics of firms in the industry. The report contains no discussion of the environmental impacts associated with the marine industry or of the potential economic or financial effects that any future regulatory efforts may have.

Keywords: *Marine engines, *Shipbuilding, *Naval architecture, *Air pollution abatement, US EPA, Clean Air Act, Boating, Trends, Air quality, Exhaust emissions, Regulations, Finances, Manufacturing.

**PB93-216273/REB** PC **A10/MF A03**
**Selecting Remediation Techniques for Contaminated Sediment.**
Environmental Protection Agency, Washington, DC. Office of Water.
Jun 93, 222p EPA/823/B-93/001
See also PB93-116275.

The objective of the planning guide is to assist federal and state remedial managers, local agencies, private cleanup companies, and supporting contractors in the remedial decision-making process at contaminated sediment sites. It attempts to accomplish the following: define the characteristics of contaminated sediments and of surrounding water bodies that affect remedy selection, provide a streamlined process for selecting an appropriate remedy, describe commonly-selected conventional remedies and potentially applicable innovative technologies. Current literature on processing contaminated sediment has provided the generic content in the guide. The sediment-specific data has been consolidated for easy reference. It brings together conventional options and potential alternatives appropriate to these sites; it provides treatability study data and examples drawn from relevant case studies.

Keywords: *Sediments, *Hazardous materials, *Pollution control, Water pollution effects(Materials), Reme-

diation, Surface waters, Biological treatment, Solvent extraction, Dechlorination, Incineration, Desorption, Solidification, Case studies, Handbooks, Treatment technology, Soil washing.

**PB93-216380/REB** PC **A05**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Simultaneous Control of PM-10 and Hazardous Air Pollutants: Rationale for Selection of Hazardous Air Pollutants as Potential Particulate Matter or Associated with Particulate Matter at Source Conditions.** Final rept.
Radian Corp., Research Triangle Park, NC.
Jun 93, 89p EPA/452/R-93/013
Contract EPA-68-D0-0125
Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The Clean Air Act Amendments of 1990 (CAAA) set forth a list of 189 hazardous air pollutants (HAP's) and required the Environmental Protection Agency (EPA) to promulgate control standards for the principal sources of these emissions. The purpose of the report is to identify HAP's that may be particulate matter (PM), associated with PM, or condensible (C) emissions at source conditions and, therefore, could potentially be controlled at the source using particulate control technology.

Keywords: *Hazardous materials, *Particulates, *Air pollution control, Chemical analysis, Criteria, Pollution regulations, Aliphatic organic compounds, Alicyclic organic compounds, Polychlorinated biphenyls, Metals, Inorganic compounds, Radioactive wastes, HAP(Hazardous air pollutants), Clean Air Act Amendments of 1990, Dibenzofurans.

**PB93-216562/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Mobile On-Site Recycling of Metalworking Fluids.**
Battelle, Columbus, OH.
A. R. Gavaskar, R. F. Olfenbuttel, and J. A. Jones. Jul 93, 53p EPA/600/R-93/114
Contract EPA-68-CO-0003
Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Product quality, waste reduction, and economic issues were evaluated for a technology designed to recycle metalworking fluids. Emulsion-type fluids were tested at two sites and a synthetic fluid was tested at a third site. The specific recycling unit evaluated is based on the technology of filtration, pasteurization, and centrifugation. This recycling unit is mounted on a truck which goes from site to site, performing the recycling at each customer location. The customer is charged a fixed fee for the service. Metalworking fluid recycling was found to have good potential as a means of waste reduction and cost savings. The product quality achieved by this unit was evaluated by conducting performance tests and by chemical characterization of the spent, recycled and virgin fluids. Performance tests included tests for corrosion resistance, emulsion stability, foaming resistance lubricity and biological resistance.

Keywords: *Recycling, *Metal working, *Cutting fluids, Field tests, Pasteurizing, Centrifuging, Filtration, Technology assessment, Mobile equipment, Waste recycling.

**PB93-216570/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Outreach to Manufacturers of Lead Test Kits.**
Research Triangle Inst., Research Triangle Park, NC.
K. K. Luk, L. L. Hodson, and W. F. Gutknecht. Jul 93, 30p EPA/600/R-93/119
Contract EPA-68-02-4550
Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

Copies of the investigation were submitted to each test kit manufacturer in October, 1991, both for their review and also to provide information which might be valuable to the manufacturers for the purpose of improving their kits. The manufacturers' identities were coded in the draft report. The manufacturers were then contacted and sent a questionnaire regarding their product and plans for the future. After the outreach was completed (spring 1992), the draft evaluation report was revised, the manufacturers' names included, and the report published as 'Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust', EPA 600/R-93/085. The objective of the report is to present a discussion of the results of the outreach to the test kit manufacturers.

Keywords: *Lead(Metal), *Sampling, *Surveys, Testing, Instructions, Soils, Dust, Paints, Government/industry relations, *Test kit manufacturers, Test kits, Outreach programs.

**PB93-216588/REB** PC **A07**/MF **A02**
**Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.**
Corvallis Environmental Research Lab., OR.
D. Olszyk, D. Bachelet, S. Holman, K. Fischer, and K. L. Heong. Jul 93, 149p EPA/600/R-93/128
See also PB93-135622. Prepared in cooperation with ManTech Environmental Technology, Inc., Corvallis, OR., and International Rice Research Inst., Los Banos, Laguna (Philippines).

The report describes the second year of research by the Rice Research Program conducted cooperatively at the U.S. Environmental Protection Agency's Environmental Research Laboratory in Corvallis (ERL-C), Oregon, USA, and at the International Rice Research Institute (IRRI) at Los Banos, the Philippines. It covers the period October 1, 1991 through September 30, 1992. The report first describes the overall framework and organization of the project. The second year of the program saw continued progress in the characterization of impacts of increasing ultraviolet-B radiation and climate change on the wetland rice ecosystem. The next three years of the project will see a continuation of the intensive modeling and research activities to assess the effects of UV-B and global climate change on rice productivity. Such research is essential if productivity is to be sustained and increased in a changing global climate.

Keywords: *Rice plants, *Biological radiation effects, *Ultraviolet radiation, *Climatic changes, *Terrestrial ecosystems, Global aspects, Plant ecology, Yield, Agricultural products, Agroclimatology, Quality assurance, Environmental effects.

**PB93-216596/REB** PC **A08**/MF **A02**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Technology Evaluation Report: Site Program Demonstration Test. Accutech Pneumatic Fracturing Extraction and Hot Gas Injection, Phase 1. Volume 1.**
Science Applications International Corp., Hackensack, NJ.
Jul 93, 165p EPA/540/R-93/509
Contract EPA-68-CO-0048
Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The Pneumatic Fracturing Extraction (PFE) process developed by Accutech Remedial Systems, Inc. makes it possible to use vapor extraction to remove volatile organics at increased rates from a broader range of vadose zones. The low permeability of silts, clays, shales, etc. would otherwise make such formations unsuitable for cost-effective vapor extraction and require more costly approaches. Pneumatic fracturing provides an innovative means of increasing the permeability of a formation and thus extending the radius of influence so that contaminants can be effectively extracted. In the PFE process, fracture wells are drilled in the contaminated vadose zone and left open bore (uncased) for most of their depth. A packer system is used to isolate small (2 ft) intervals so that short bursts (- 20 sec) of compressed air (less than 500 psig) can be injected into the interval to fracture the formation. The process is repeated for each interval. The fracturing extends and enlarges existing fissures and/or introduces new fractures, primarily in the horizontal direction. When fracturing has been completed, the formations then subjected to vapor extraction.

Keywords: *Land pollution control, *Remedial action, *Soil treatment, *Volatile organic compounds, Fracturing, Performance evaluation, Vadose water, Injection, Technology innovation, Cost analysis, Quality assurance, *Soil vapor extraction, *Pneumatic fracturing extraction.

**PB93-216604/REB** PC **A06**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.**
Research Triangle Inst., Research Triangle Park, NC. Center for Environmental Measurements and Quality Assurance.
E. D. Estes, and W. F. Gutknecht. Jul 93, 117p EPA/600/R-93/129
Contract EPA-68-D10009
See also PB93-216612. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

The U.S. Environmental Protection Agency sponsored a 1 1/2 day workshop to review the status of chemical test kit technology designed for testing lead (Pb) in solids. The goals of the workshop were to identify problems and limitations that could result in measurement error and to develop a set of performance parameters to generate or verify figures of merit that are comparable across the technology. The report summarizes the presentations, discussions and recommended approaches to experimentally determine the parameters of bias, precision, response range, calibration and interferences.

Keywords: *Test equipment, *Lead(Metal), *Paints, *Meetings, *Air pollution, Identifying, Homeowner housing, Sampling, Comparison, Quantative analysis, Qualitative analysis, Concentration(Composition), Performance evaluation, Consumer products, Safety, Calibrating, Professional test kits.

**PB93-216612/REB** PC **A05**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Workshop Report: Identification of Performance Parameters for Portable X-ray Fluorescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.**
Research Triangle Inst., Research Triangle Park, NC. Center for Environmental Measurements and Quality Assurance.
E. D. Estes, and W. F. Gutknecht. Jul 93, 100p EPA/600/R-93/130
Contract EPA-68-D10009
See also PB93-216604. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

The U.S. Environmental Protection Agency sponsored a 1 1/2 day workshop to review the current status of portable x ray fluorescence (XRF) technology. The goal of the workshop was to identify problems and limitations that could result in portable XRF measurement error and to develop a set of performance parameters to generate or verify figures of merit that are comparable across the technology. The report synopsizes the remarks of nine of the thirty-two attendees who addressed topics ranging from HUD's needs and lead policy issues to XRF instrument design, operation and applications. Group consensus definitions and implementation techniques were developed for such performance parameters as precision, bias, detection limits, interpretation of substrate effects and the evaluation of instrument physical characteristics.

Keywords: *Portable equipment, *Lead(Metal), *Paints, *Air pollution, *Meetings, X ray fluorescence, Chemical analysis, Measurement, Errors, Public buildings, Nondestructive tests, Design criteria, Performance evaluation.

**PB93-216638/REB** PC **A15**/MF **A03**
**Companies that Generate, Treat, Dispose or Recover Hazardous Waste. 1991 Annual Report.**
Illinois State Environmental Protection Agency, Springfield. Div. of Land Pollution Control.
H. A. Wright. May 93, 345p IEPA/LPC/93-059
See also PB89-177935.

The publication contains information gathered by the Illinois Environmental Protection Agency (EPA) on Illinois companies that generate and ship off-site, and companies that treat, store, dispose, or recycle (TSDR) hazardous waste. Section I contains informa-

tion on companies that generated hazardous waste in Illinois and shipped it off-site for management during 1991. Section II contains information on TSDR facilities in Illinois that filed an annual report in 1991. This includes facilities that generated and managed their own hazardous waste on-site and facilities that accepted and managed waste generated by others.

Keywords: *Illinois, *Hazardous materials, Industrial waste treatment, Waste disposal, Waste processing plants, Waste recycling, Waste storage, Waste transfer stations, Incineration, Solid wastes, Liquid wastes, Sludges.

**PB93-216869/REB** PC **A03**/MF **A01**
**Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.** Technical rept.
Environmental Protection Agency, Ann Arbor, MI. Technology Development Group.
R. I. Bruetsch, R. M. Schaefer, and G. K. Piotrowski.
Jun 93, 20p EPA/AA/TDG-93/03

The report discusses the results of a test program performed at EPA's National Vehicle and Fuel Emissions Laboratory (NVFEL) to evaluate two different methanol vehicle catalyst systems. The catalysts were tested on a lean burn and a stoichiometric port injected engine equipped vehicle using M100 (neat methanol) fuel. The exhaust emission levels, particularly formaldehyde emissions, were significantly reduced by both catalysts. Air injection strategies were implemented to obtain very low cold start emissions of unburned fuel and formaldehyde.

Keywords: *Methanol fuels, *Catalysts, *Motor vehicle engines, *Air pollution abatement, Catalytic converters, Exhaust gases, Automotive fuels, Burning rate, Fuel injection, Formaldehyde, Combustion products, US EPA.

**PB93-216885/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**SCREEN2 Model User's Guide.**
Pacific Environmental Services, Inc., Research Triangle Park, NC.
Sep 92, 56p EPA/450/4-92/006
Contract EPA-68-D00124
Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The document presents current EPA guidance on the use of the SCREEN2 screening model. The SCREEN2 model is supported by the 'SCREEN2 Model User's Guide', which previously was Appendix A of 'Soreening Procedures for Estimating the Air Quality Impact of Stationary Sources - Draft for Public Comment' (PB89-159396). SCREEN2 is a PC-driven, Gaussian atmospheric dispersion model which calculates maximum 1-hour, downwind concentrations of non-reactive pollutants. Major changes in this version of SCREEN2 are the finite line segment method for area sources, addition of wind speeds in the wind speed-stability matrix for calculating concentrations, and the inclusion of a single volume source option. The structure of the computer code was modified to aid in any future revisions to SCREEN2.

Keywords: *Air pollution dispersion, *Stationary sources, *Environmental impacts, Atmospheric diffusion, Wind velocity, Meteorological data, User manuals(Computer programs), Computerized simulation, Air quality, Point sources, *SCREEN2 computer model, Clean Air Act.

**PB93-216927/REB** PC **A06**/MF **A02**
**Volunteer Lake Monitoring Program, 1992. Volume 1: Statewide Summary.**
Illinois State Environmental Protection Agency, Springfield. Div. of Water Pollution Control.
A. J. Burns. Apr 93, 114p IEPA/WPC/93-061A
See also PB93-217214 and PB92-222512.

A Volunteer Lake Monitoring Program initiated by the Illinois EPA in 1981 was continued in 1992. Citizens were trained to measure Secchi disc transparency, total depth, and record field observations from a boat at designated sites on their chosen lake. The report provides a historical perspective of the Volunteer Lake Monitoring Program and describes program objectives and rationale. Methods for volunteer training and data handling/analysis are described; 1992 program results presented and discussed; and trends analyzed. Two hundred and forty-six volunteers participated in monitoring 136 lakes in 1992; 134 lakes had data for 4 or more sampling periods and are included in the report.

Keywords: *Water pollution sampling, *Citizen participation, *Lakes, *Illinois, Volunteers, History, Training, US EPA, Nutrients, Suspended sediments, Transparence, Turbidity, Objectives, Classifications, Eutrophication, Periodic variations, Tables(Data), Trophic level, Oligotrophic, Mesatrophic.

**PB93-216950/REB** PC **A03**/MF **A01**
**Comparative Health Effects Assessment of Drinking Water Treatment Technologies: Report to Congress.**
Environmental Protection Agency, Washington, DC. Office of Water.
4 Nov 88, 12p
See also PB89-108971 and PB89-173710.

The document is the executive summary for the report of the same name (PB89-173710/HDM). It evaluates the impact of the most widespread drinking water treatment technologies (particularly disinfection) on public health.

Keywords: *Drinking water, *Water treatment, *Public health, Water quality, Risk assessment, Disinfection, Filtration, By-products, Health hazards, Water pollution control, Toxicity, Treatment technology, Raw water.

**PB93-216992/REB** PC **A05**/MF **A01**
**Turning the Tide on Trash: A Learning Guide on Marine Debris.**
Environmental Protection Agency, Washington, DC. Office of Water.
1992, 90p EPA/842/B-92/003
See also PB92-188606.

The learning guide is an interdisciplinary guide designed to provide maximum flexibility in the classroom. The guide can be used as a stand-alone teaching tool, or individual activities may be used to supplement work in other subject areas. The learning guide opens with an exercise, 'Let's Talk Trash: A Litter Survey,' that encourages students to think about their own behaviors and attitudes with respect to litter. Following the litter survey are the learning guide's three teaching units: The Definition, Characteristics, and Sources of Marine Debris. In this unit, students will examine what marine debris is, where it comes from, and how it enters the marine environment. The Effects of Marine Debris. This unit explores the effects of marine debris on wildlife and coastal communities, and the potential hazards it poses to humans. Developing Solutions and Spreading the Word. In this unit, students will learn about steps they can take to prevent marine debris, investigate what individuals and organizations are doing about the problem, and explore ways to educate others about possible solutions.

Keywords: *Marine disposal, *Water pollution control, *Education, Litter, Coastal regions, Water pollution effects, Beaches, Ocean waste disposal, Manuals, Students, Instructors, Marine pollution, Instructional materials.

**PB93-217172/REB** PC **A03**/MF **A01**
**National Estuary Program Guidance. Comprehensive Conservation and Management Plans: Content and Approval Requirements.**
Environmental Protection Agency, Washington, DC. Office of Water.
Oct 92, 40p EPA/842/B-92/002

Estuaries and other coastal and marine waters are national resources increasingly threatened by pollution, habitat loss, coastal development, and resource conflicts. Congress established the National Estuary Program (NEP) under the Water Quality Act of 1987 to pioneer a broad and innovative approach to respond to these threats. The NEP, managed by the U.S. Environmental Protection Agency (EPA), identifies nationally significant estuaries and supports the development of comprehensive management plans to ensure their ecological integrity. Ultimately, these activities result in a comprehensive conservation and management plan (CCMP) for the estuary. The first section describes the requirements for approvable CCMPs. This guidance does not mandate the format in which the CCMP contents are presented.

Keywords: *Water quality management, *Estuaries, *Coasts, Water Quality Act of 1987, Guidelines, Water conservation, Habitats, Objectives, Trends, Assessments, Aquatic ecosystems, US EPA, Regulations, Financing, Natural resources management, National Estuary Program, Institutional framework.

**PB93-217180/REB** PC **A04**/MF **A01**
**Biological and Water Quality Survey of Sugar Creek and Tributaries Crawford County, Illinois, August and September 1992.**
Illinois State Environmental Protection Agency, Springfield. Div. of Water Pollution Control.
M. M. King, and R. L. Hite. Jun 93, 54p IEPA/WPC-93-063

In August 1992, the Illinois Environmental Protection Agency investigated water quality and biological conditions in Sugar Creek and tributaries, Robinson Creek, Quail Creek, Marathon Creek, and Lamotte Creek, in Crawford County, Illinois. The primary purpose was to assess impacts of wastewater from the two major dischargers, the Robinson municipal wastewater treatment plant (MWWTP) and the Marathon Petroleum Company refinery, upon the water quality and aquatic life use of Robinson Creek and Sugar Creek. Water quality degradation downstream from Robinson MWWTP included elevated dissolved solids, chemical oxygen demand, nitrates, phosphorus, and chloride, and downstream from the Marathon refinery included additional elevations of all of the above constituents, along with elevated water temperatures caused by Marathon effluent. Aquatic life, including macroinvertebrates and fish, indicated poor conditions in Robinson Creek downstream from the Robinson MWWTP, and very poor conditions downstream from the Marathon refinery.

Keywords: *Water quality data, *Stream pollution, *Fresh water fishes, Municipalities, Sewage treatment, Waste disposal, Refineries, Industrial wastes, Invertebrates, Sampling, Populations, Aquatic animals, Waste water, Temperature, Inorganic nitrates, Phosphorus, Chlorides, Tables(Data), Tributaries, *Crawford County(Illinois), Chemical oxygen demand.

**PB93-217214/REB** PC **A04**/MF **A01**
**Volunteer Lake Monitoring Program, 1992. Volume 2: Northwestern Illinois Region.**
Illinois State Environmental Protection Agency, Springfield. Div. of Water Pollution Control.
A. J. Burns. May 93, 57p IEPA/WPC/93-061B
See also PB93-216927 and PB93-113538.

The report is Volume II of a series of seven reports summarizing Illinois EPA's 1992 Illinois Volunteer Lake Monitoring Program (VLMP). It provides a summary of 1992 VLMP lakes in Northwestern Illinois including a program overview, volunteer participation, and a ranking of lakes on a regional basis. Thirty-eight volunteers recorded a total depth, Secchi disc transparency, and field observations for 20 lakes in Northwestern Illinois between May and October, 1992. Average transparencies ranged from 6-166 inches. Volunteer water quality samples were collected at three lakes once every month from May thru October and ambient lake data, collected by IEPA staff, is presented for seven lakes.

Keywords: *Water quality sampling, *Citizen participation, *Lakes, Volunteers, Monitoring, Training, Turbidity, Clarity, Ranking, Suspended sediments, Depth, Color, Algae, Weeds, Tables(Data), Maps, Trophic level, *Northwest Region(Illinois), Secchi disc transparency.

**PB93-217412/REB** PC **A23**/MF **A04**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Reactive Plume Model IV (RPM-IV) User's Guide.**
Systems Applications International, San Rafael, CA.
Jun 93, 549p EPA/454/B-93/012
Contract EPA-68-D9-0066
See also PB82-230723. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The Reactive Plume Model (RPM-IV) is a photochemical plume-segment model that simulates the evolution of a photochemical plume by representing the plume as a series of cells across the horizontal extent of the plume. The RPM is a Lagrangian model that represents an air parcel of pollutants as it moves downwind,

simulating the entrainment of ambient (background) air and the resulting chemical transformations within the plume. Each run of the RPM simulates one air parcel trajectory as it travels downwind. The RPM estimates short-term concentrations of primary pollutants (reactive or inert emissions) and secondary pollutants (those formed within point-source plumes). Different chemical mechanisms can be used within and outside the plume in different model runs, such as first-order reaction rate approximations to nonlinear chemical systems, different levels of condensation of a master mechanism, or different representations of chemical reactions (e.g., alternative reaction rate constants).

Keywords: *Air pollution, *Photochemical reactions, *Reaction kinetics, Point sources, Photochemistry, Ozone, Photolysis, Nitrogen oxides, Computerized simulation, User manuals(Computer programs), *Reactive plume models, Volatile organic compounds.

**PB93-217537/REB** PC **A18**/MF **A04**
**Guidance for Writing Permits for the Use or Disposal of Sewage Sludge.** Draft rept.
Environmental Protection Agency, Washington, DC. Office of Wastewater Enforcement and Compliance.
Mar 93, 401p
See also PB91-145508.

Section 405(d) of the Clean Water Act (CWA) directs the U.S. Environmental Protection Agency (EPA) to develop regulations containing guidelines for the use and disposal of sewage sludge. On February 19th, 1993, EPA published final regulations at 40 Code of Federal Regulations (CFR) Part 503 as the culmination of a major effort to develop technical standards in response to Section 405(d). These regulations govern three sewage sludge use and disposal practices: land application, surface disposal, and incineration. A key element in EPA's implementation of the Part 503 regulations is educating Agency and State personnel about these new requirements. Although the regulations are generally directly enforceable against all persons involved in the use and disposal of sewage sludge, they will also be implemented through permits issued to 'treatment works treating domestic sewage' as defined in 40 CFR 122.22. Thus, the primary focus of the manual is to assist permit writers in incorporating the Part 503 requirements into permits; it serves as an update to the Guidance for Writing Case-by-Case Permit Conditions for Municipal Sewage Sludge (PB91-145508/HDM).

Keywords: *Sewage sludge, *Permits, *Pollution regulations, Permit applications, Sludge disposal, Waste recycling, Pollution standards, Pollution monitoring, Land disposal, Incineration, Pathogens, Manuals, Guidelines, Land application, Clean Water Act, POTW(Publicly owned treatment works).

**PB93-217560/REB** PC **A07**/MF **A02**
Environment Canada, Ottawa (Ontario).
**Guiding Principles for Chemical Accident Prevention, Preparedness and Response.** Environment monograph.
Organization for Economic Co-Operation and Development, Paris (France).
Feb 93, 127p OECD-51
Also pub. as Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response rept. no. EPA/550/B-93/001 and ISBN-0-16-041782-1. Prepared in cooperation with Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response. Sponsored by Environment Canada, Ottawa (Ontario).

The Guiding Principles address the various issues which may affect safety at a hazardous installation. These include prevention-related issues such as those concerning the establishment of a corporate Safety Policy, the planning, design, siting, construction and operation of the installation, and the review of safety performance as well as the establishment of safety objectives and a control framework by public authorities. In addition, the Guiding Principles address the issues of emergency planning and response in order to mitigate the adverse consequences of any accident that might occur. Other issues covered are land-use planning, community awareness, research and development, and aid and investments related to installations in non-OECD countries. (Copyright (c) OECD, 1992.)

Keywords: *Hazardous materials, *Emergency planning, *Accident prevention, Industrial accidents, Chemical spills, Safety, Emergency preparedness, Public health, Exposure, Decision making, Community relations, Cooperation, OECD(Organization for Economic Cooperation and Development).

**PB93-217628/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.
**State Clean Water Strategies: Meeting the Challenges of the Future.**
Industrial Economics, Inc., Cambridge, MA.
Dec 87, 26p
Sponsored by Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.

The report includes a market-based incentive approach to water pollution abatement. Trading creating a market to buy and sell allowances to discharge pollutants, allows municipal and industrial point sources to meet water quality goals. The study focuses on the use of trading to achieve compliance with water quality standards for water quality-limited rivers, lakes, and estuaries.

Keywords: *Water pollution standards, *Water pollution abatement, *Municipalities, *Industries, Allotments, Point sources, Compliance, Objectives, Requirements, Markets, Lakes, Rivers, Estuaries, US EPA, States(United States), *Water Quality Act of 1987, *Discharge(Water).

**PB93-217636/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of Policy, Planning and Evaluation.
**Benefits and Feasibility of Effluent Trading between Point Sources: An Analysis in Support of Clean Water Act Reauthorization.** Draft rept.
Industrial Economics, Inc., Cambridge, MA.
M. Luttner, and M. Podar. May 92, 69p
Contract EPA-68-W1-0009
Sponsored by Environmental Protection Agency, Washington, DC. Office of Policy, Planning and Evaluation.

To prepare for reauthorization of the Clean Water Act, the U.S. Environmental Protection Agency (EPA) commissioned a series of studies of market-based incentive approaches to water pollution abatement. The study addresses one such approach: allowing municipal and industrial point sources to meet water quality goals by trading; i.e., by creating a market to buy and sell allowances to discharge pollutants. The study focuses in particular on the use of trading to achieve compliance with water quality standards for water quality-limited rivers, lakes, and estuaries, assuming that all municipalities and industries that discharge to these waters will remain subject to existing technology-based requirements. The study includes three components. First, it reviews the literature on the theoretical benefits of trading (focusing on case studies of specific water bodies) and identifies the major factors influencing the magnitude of the benefits. Second, it assesses data collected by EPA to determine the frequency with which trading might be employed in practice, identifying the number of water quality-limited water bodies receiving discharges from multiple point sources. Finally, staff of regulatory agencies were interviewed to determine the extent to which trading is now applied and the issues that would need to be addressed for trading to become more widely used.

Keywords: *Water pollution economics, *Point sources, *Pollution regulations, Water pollution standards, Water pollution abatement, Standards compliance, Chemical effluents, Municipal wastes, Industrial wastes, Water quality management, Economic analysis, Water Quality Act, Clean Water Act, Pollutant discharge allowances.

**PB93-217644/REB** PC **A09**/MF **A02**
**Training Manual for NPDES Permit Writers.**
Environmental Protection Agency, Washington, DC. Office of the Assistant Administrator for Water.
Mar 93, 187p EPA/833/B-93/003
See also PB93-185619.

The manual provides basic training in the writing of a National Pollutant Discharge Elimination System (NPDES) permit. It is designed for new permit writers, but may also serve as a refresher for experienced permit writers. The manual will also be useful for anyone who has an interest in the NPDES permit program and how it operates.

Keywords: *Permits, *Water pollution abatement, *Manuals, Permit applications, Water pollution standards, Effluents, Water treatment, Pollution regulations, Industrial wastes, Municipal wastes, Reporting requirements, Training, NPDES(National Pollutant Discharge Elimination System), Clean Water Act.

**PB93-217651/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Risk Reduction Engineering Laboratory Site Remediation Technical Support Program: FY92 Annual Report.** Final rept.
Science Applications International Corp., Cincinnati, OH.
Mar 93, 19p EPA/600/R-93/133
Contract EPA-68-C8-0048
Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The Risk Reduction Engineering Laboratory is responsible for planning, implementing, and managing research, development, and demonstration programs to provide an authoritative, defensible engineering basis in support of the policies, programs, and regulations of the EPA with respect to drinking water, wastewater, pesticides, toxic substances, solid and hazardous wastes, and Superfund-related activities. The publication is one of the products of that research and provides a vital communication link between the researcher and the user community. The report summarizes the activities and accomplishments of the Laboratory in providing technical support to EPA Regional Offices and others on contaminated soil site remediation engineering problems.

Keywords: *US EPA, *Hazardous materials, *Test facilities, Soil contamination, Remediation, Superfund, Waste disposal, Waste treatment, Risk assessment, Research projects, *Risk Reduction Engineering Laboratory, Research and development, Treatment technology, START(Superfund Technical Assistance Response Team).

**PB93-217669/REB** PC **A12**/MF **A03**
Environmental Research Lab., Athens, GA.
**3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.**
AQUA TERRA Consultants, Mountain View, CA.
G. T. Yeh, S. Sharp-Hansen, B. Lester, R. Strobl, and J. Scarbrough. Nov 92, 254p EPA/600/R-92/223
Contract EPA-68-CO-0019
Prepared in cooperation with Pennsylvania State Univ., University Park, GeoTrans, Inc., Sterling, VA., and AScI Corp., Athens, GA. Sponsored by Environmental Research Lab., Athens, GA.

Two related numerical codes, 3DFEMWATER and 3DLEWASTE, are presented that can be used to delineate wellhead protection areas in agricultural regions using the assimilative capacity criterion. 3DFEMWATER (Three-dimensional Finite Element Model of Water Flow Through Saturated-Unsaturated Media) simulates subsurface flows, whereas 3DLEWASTE (Hybrid Three-dimensional Lagrangian-Eulerian Finite Element Model of Waste Transport Through Saturated-Unsatured Media) models contaminant transport. Both codes treat heterogeneous and anisotropic media consisting of as many geologic formations as desired, consider both distributed and point sources/sinks that are spatially and temporally dependent, and accept for types of boundary conditions--i.e., Dirichlet (fixed-head or concentration), specified-flux, Neumann (specified-pressure-head gradient or specified-dispersive flux), and variable. The variable boundary condition in 3DFEMWATER simulates evaporation/infiltration/seepage at the soil-air interface and, in 3DLEWASTE, simulates mass infiltration into or advection out of the system. 3DLEWASTE contains options to model adsorption using a linear, Fruendlich, or Langmuir isothern, plus dispersion, and first-order decay.

Keywords: *Wellheads, *Three dimensional flow, *Water pollution control, Water wells, Path of pollutants, Ground water, Agricultural chemicals, Agricultural wastes, Water supply, Computerized simulation, Air water interfaces, Sediment water interfaces, Saturated flow, Unsaturated flow, 3DFEMWATER computer model, 3DLEWASTE computer model.

**PB93-217784/REB** PC **A07**/MF **A02**
Environmental Research Lab., Athens, GA.
**Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.**
AQUA TERRA Consultants, Mountain View, CA.
C. L. Travers, and S. Sharp-Hansen. Aug 93, 140p*
EPA/600/R-93/125
Contracts EPA-68-03-3513, EPA-68-C0-0019
Sponsored by Environmental Research Lab., Athens, GA.

The U.S. Environmental Protection Agency recently promulgated revisions to the Solid Waste Disposal Facility Criteria under Subtitle D of the Resource Conservation and Recovery Act (RCRA). These revisions create a need for tools to predict the performance of facilities regulated under Subtitle D. Mathematical models, based on site-specific data, provide a means to estimate the effects of a variety of designs and hydrogeologic conditions on the generation and migration of leachate at a Subtitle D facility. Leachate generation and migration are influenced by numerous interrelated physical, chemical, and biological processes that can occur during the lifetime of a waste disposal facility. Many of these processes are discussed in the report. Some processes are well understood and easily described by mathematical models. The mathematical representation of other processes is the subject of current research. The report focuses on the general state-of-the-art in modeling leachate generation and migration. Issues related to selection of models for application to specific scenarios are also discussed.

Keywords: *Solid waste disposal, *Leaching, *Mathematical models, *Criteria, *Earth fills, US EPA, Revisions, Environmental transport, Hydrogeology, Soil properties, Biological effects, Municipalities, Industrial wastes, State of the art, Scenarios, Pollution regulations, Performance evaluation, *Resource Conservation and Recovery Act.

**PB93-217792/REB** PC **A04**/MF **A01**
**Anaerobic Dehalogenation and Its Environmental Implications. Abstracts of 1992 American Society for Microbiology Conference. Held in Athens, Georgia on August 30-September 4, 1992.**
Environmental Research Lab., Athens, GA.
J. E. Rogers, and D. A. Abramowicz. Aug 93, 75p EPA/600/R-93/131
Prepared in cooperation with General Electric Corporate Research and Development, Schenectady, NY.

The document provides abstracts of the 33 papers presented at the conference sessions addressing the environmental fate of chlorinated organic chemicals; the anaerobic dechlorination of chlorinated phenols; the dechlorination of polychlorinated biphenyls; the dehalogenation of aliphatic compounds; the dechlorination of pesticides; the abiotic dechlorination of porphyrins, corrins, and non-tetrapyrroles; the kinetics of dehalogenations; the microbial physiology of dechlorinating systems; and the hydrolytic dehalogenation of compounds. Research results were provided for a variety of compounds, including polychlorinated biphenyls, pentachloro-dibenzodioxan, polychlorinated phenols, 2,4-dichlorophenol, aroclors, 1,2-dichloroethane, tetrachloroethene, methyl chloride, perchloroethylene, 2,4,5-tetrachlorophenol, and pentachlorodibenzofuran.

Keywords: *Biodeterioration, *Anaerobic bacteria, *Environmental pollutants, *Meetings, Polychlorobiphenyl compounds, Chlorohydrocarbons, Kinetics, Phenols, Halogens, Pesticides, Herbicides, Hydrolysis, Chlorinated phenols, Chlorinated dioxanes.

**PB93-218170/REB** PC **A14**/MF **A03**
**Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.**
Environmental Protection Agency, Washington, DC. Office of Acid Deposition, Environmental Monitoring, and Quality Assurance.
M. R. Church, K. W. Thornton, P. W. Shaffer, D. L. Stevens, and B. P. Rochelle. Jul 89, 304p EPA/600/3-89/061D
Also available from Supt. of Docs. See also Volume 3, PB93-218188.

Volume IV contents: Appendices (Model calibration/confirmation reports, Watersheds simulated by ETD, ILWAS, and MAGIC, Uncertainty estimates confidence bounds for model projections).

Keywords: *Surface waters, *Sulfur, *Acidification, *Water chemistry, Blue Ridge Mountains, Air water interactions, Acid rain, Deposition, Watersheds, Drainage, Air pollution effects, Runoff, Acid neutralizing capacity, Soil chemistry, Chemical analysis, Hydrology, Maps, *Direct/Delayed Response Program, National Acid Precipitation Assessment Program, Northeastern Region(United States), Southern Blue Ridge Province(United States).

**PB93-218188/REB** PC **A14**/MF **A03**
**Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.**
Environmental Protection Agency, Washington, DC. Office of Acid Deposition, Environmental Monitoring, and Quality Assurance.
M. R. Church, K. W. Thornton, P. W. Shaffer, D. L. Stevens, and B. P. Rochelle. Jul 89, 319p EPA/600/3-89/061C
Also available from Supt. of Docs. See also Volume 2, PB93-218196 and Volume 4, PB93-218170.

Volume III contents: Level 3 Analyses - Dynamic Watershed Modelling; Summary of Results (Retention of Atmospherically Deposited Sulfur; Base Cation Supply; Integrated Effects on Surface Water Acid Neutralizing Capacity).

Keywords: *Surface waters, *Sulfur, *Acidification, *Water chemistry, Blue Ridge Mountains, Air water interactions, Acid rain, Deposition, Watersheds, Drainage, Air pollution effects, Runoff, Acid neutralizing capacity, Soil chemistry, Chemical analysis, Hydrology, Maps, *Direct/Delayed Response Program, National Acid Precipitation Assessment Program, Northeastern Region(United States), Southern Blue Ridge Province(United States).

**PB93-218196/REB** PC **A18**/MF **A04**
**Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.**
Environmental Protection Agency, Washington, DC. Office of Acid Deposition, Environmental Monitoring, and Quality Assurance.
M. R. Church, K. W. Thornton, P. W. Shaffer, D. L. Stevens, and B. P. Rochelle. Jul 89, 411p EPA/600/3-89/061B
Also available from Supt. of Docs. See also Volume 1, PB93-218204 and Volume 3, PB93-218188.

Volume II contents: Watershed Sulfur Retention; Level 1 Statistical Analyses (includes relationships between atmospheric deposition and surface water chemistry and between watershed attributes and surface water chemistry); Level 2 Analyses - Single Factor Response Time Estimates.

Keywords: *Surface waters, *Sulfur, *Acidification, *Water chemistry, Blue Ridge Mountains, Air water interactions, Acid rain, Deposition, Watersheds, Drainage, Air pollution effects, Runoff, Acid neutralizing capacity, Soil chemistry, Chemical analysis, Hydrology, Maps, *Direct/Delayed Response Program, National Acid Precipitation Assessment Program, Northeastern Region(United States), Southern Blue Ridge Province(United States).

**PB93-218204/REB** PC **A14**/MF **A03**
**Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.**
Environmental Protection Agency, Washington, DC. Office of Acid Deposition, Environmental Monitoring, and Quality Assurance.
M. R. Church, K. W. Thornton, P. W. Shaffer, D. L. Stevens, and B. P. Rochelle. Jul 89, 321p EPA/600/3-89/061A
Also available from Supt. of Docs. See also Volume 2, PB93-218196.

Volume I Contents: Introduction to Direct/Delayed Response Program; Processes of Acidification; Project Approach; Data Sources and Descriptions (Mapping, Soil, Deposition and Hydrology); Regional Population estimate.

Keywords: *Surface waters, *Sulfur, *Acidification, *Water chemistry, Blue Ridge Mountains, Air water interactions, Acid rain, Deposition, Watersheds, Drainage, Air pollution effects, Runoff, Acid neutralizing capacity, Soil chemistry, Chemical analysis, Hydrology, Maps, *Direct/Delayed Response Program, National Acid Precipitation Assessment Program, Northeastern Region(United States), Southern Blue Ridge Province(United States).

**PB93-218238/REB** PC **A07**/MF **A02**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.** Final rept. Nov 86-Nov 91.
NATO Committee on the Challenges of Modern Society, Brussels (Belgium).
R. F. Olfenbuttel, T. O. Dahl, M. Hinsenveld, S. C. James, and N. Lewis. Feb 93, 132p* CCMS-190-VOL-1, EPA/600/R-93/012A
Contract EPA-68-C8-0062
See also PB93-218246 and PB93-218253. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Contents: Thermal technologies; Stabilization/solidification technologies; Soil vapor extraction technologies; Physical/chemical extraction technologies; Pump and treat ground water; Chemical treatment of contaminated soils (APEG); Microbial treatment technologies; Selecting remedies at a complex hazardous waste site.

Keywords: *Soil contamination, *Ground water, *Remediation, Hazardous materials, Land pollution control, Water pollution control, Waste treatment, Waste recycling, Waste processing, Solidification, Stabilization, Biodegradation, Extraction, Chemical treatment, Treatment technology, Thermal treatment.

**PB93-218246/REB** PC **A99**/MF **A06**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 1: Pages 1 through 662.** Final rept. Nov 86-Nov 91.
NATO Committee on the Challenges of Modern Society, Brussels (Belgium).
R. F. Olfenbuttel. Feb 93, 662p* CCMS-190-VOL-2-PT-1, EPA/600/R-93/012B
Contract EPA-68-C8-0062
See also PB93-218238 and PB93-218253. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The Pilot Study was designed to identify and evaluate innovative, emerging and alternative remediation technologies and to transfer technical performance and economic information on them to potential users. Volume II, Appendices, Part 1 contains overviews of national environmental regulations and guest speakers' presentations.

Keywords: *Soil contamination, *Ground water, *Remediation, Pollution regulations, Hazardous materials, Land pollution control, Water pollution control, Waste treatment, Waste recycling, Waste processing, Chemical treatment, Solidification, Stabilization, Biodegradation, Extraction, Treatment technology, Thermal treatment.

**PB93-218253/REB** PC **A99**/MF **A06**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 2: Pages 663 through 1389.** Final rept. Nov 86-Nov 91.
NATO Committee on the Challenges of Modern Society, Brussels (Belgium).
R. F. Olfenbuttel. Feb 93, 718p* CCMS-190-VOL-2-PT-2, EPA/600/R-93/012C
Contract EPA-68-C8-0062
See also PB93-218238 and PB93-218246. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The Pilot Study was designed to identify and evaluate innovative, emerging and alternative remediation technologies and to transfer technical performance and economic information on them to potential users. Volume II, Appendices, Part 2 contains final project reports and NATO/CCMS Fellow reports.

Keywords: *Soil contamination, *Ground water, *Remediation, Case studies, Hazardous materials, Land pollution control, Water pollution control, Waste treatment, Waste recycling, Waste processing, Chemical treatment, Solidification, Stabilization, Biodegradation, Extraction, Treatment technology, Thermal treatment.

**PB93-218501/REB** PC **A07**/MF **A02**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.** Final summary rept.
Environmental Quality Management, Inc., Cincinnati, OH.
J. R. Kominsky, R. W. Freyberg, J. A. Brownlee, and K. A. Brackett. 31 Dec 92, 131p EPA/600/R-93/152
Contract EPA-68-D2-0058
Prepared in cooperation with New Jersey State Dept. of Health, Trenton. Environmental Health Service, and International Technology Corp., Cincinnati, OH. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

In 1988, a study was conducted to document Asbestos Hazard Emergency Response Act final clearance concentrations of asbestos at these 17 schools. The findings of the study prompted a followup study in 1990 to determine the airborne asbestos concentrations 2 years after the abatement efforts in these schools. Another followup study was conducted in May 1991 to determine the airborne asbestos concentrations in these 17 schools during actual occupied conditions. Results showed elevated levels of airborne asbestos at seven of the schools. Reentrainment of residual asbestos-containing debris from the 1988 abatement or operations and maintenance activities may have contributed to the elevated airborne asbestos concentrations measured during the May 1991 study.

Keywords: *Asbestos, *Air pollution monitoring, *School buildings, Air pollution abatement, Indoor air pollution, New Jersey, Exposure, Environmental surveys, Concentration(Composition).

**PB93-218519/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Fluid Sorbent Recycling Device for Industrial Fluid Users.**
Battelle, Columbus, OH.
A. S. C. Chen, R. F. Olfenbuttel, and B. T. Cano. Aug 93, 59p EPA/600/R-93/154
Contract EPA-68-C0-0003
Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

A roller compression extractor that extracts fluids from reusable sorbent pads was evaluated as a method of waste reduction. The extraction device, evaluated for industrial fluid users in New Jersey, was found to be effective in recycling unpleated sorbent pads, especially for low-viscosity fluids. The unpleated sorbent pads can be reused for at least eight times for low-viscosity fluids and up to three times for medium-viscosity fluids. However, the Extractor cannot be used for pads soaked with high-viscosity fluids. Annual savings up to 51% and 75%, would be possible for pads reused two and eight times, respectively. The cost per use can be as low as $1.19 for eight reuse cycles, versus $4.80 for single usage. The savings come primarily from cost and volume reductions in sorbent pad disposal. The number of drums needed for pad disposal would be reduced 73% and 93% if pads are reused for two and eight times, respectively.

Keywords: *Waste recycling, *Pollution abatement, *Liquid wastes, *Sorbents, *Industrial wastes, Extraction, Performance evaluation, Economic analysis, Quality assurance, Technology utilization, Waste management, Viscosity, *Roller compression extractors, *Sorbent pads.

**PB93-218568/REB** PC **A05**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Evaluation of Three Cleaning Methods for Removing Asbestos from Carpet: Determination of Airborne Asbestos Concentrations Associated with Each Method.** Final summary rept.
Environmental Quality Management, Inc., Cincinnati, OH.
J. R. Kominsky, D. W. Freyberg, and K. A. Brackett. Aug 93, 85p EPA/600/R-93/155
Contract EPA-68-C0-0016
Prepared in cooperation with International Technology Corp., Cincinnati, OH. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The study was conducted to compare the effectiveness of three cleaning methods to remove asbestos from contaminated carpet and to determine the airborne asbestos concentrations associated with the use of each method. The carpet on which the methods were tested was naturally contaminated over a period of approximately 15 to 20 years from fallout of asbestos-containing material in ceiling tiles and fireproofing. The effectiveness of dry vacuuming using vacuum cleaners with and without a high-efficiency particulate air filter was compared with that of wet cleaning using a hot-water extraction cleaner. Overall, wet cleaning with a hot-water extraction cleaner reduced the level of asbestos contamination in the carpet by approximately 60 percent. No significant evidence was found to indicate either an increase or a decrease in carpet asbestos concentration after dry vacuuming.

Keywords: *Asbestos, *Carpets, *Air pollution control, Vacuum cleaners, Vacuum filters, Indoor air pollution, Air pollution sampling, Air filters, Exposure, Particle size distribution, Wet vacuuming, Dry vacuuming.

**PB93-218576/REB** PC **A05**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Method for the Determination of Asbestos in Bulk Building Materials. (Test Method).**
Research Triangle Inst., Research Triangle Park, NC.
R. L. Perkins, and B. W. Harvey. Jul 93, 100p EPA/600/R-93/116
Contracts EPA-68-02-4550, EPA-68-D1-0009
Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

Laboratories are now called upon to identify asbestos in a variety of bulk building materials, including loose-fill insulations, acoustic and thermal sprays, pipe and boiler wraps, plasters, paints, flooring products, roofing materials and cementitious products. The diversity of bulk materials necessitates the use of several different methods of sample preparation and analysis. The report outlines the applicability of the various preparation and analysis methods to the broad spectrum of bulk building materials now being analyzed. The method demonstrated a capability for improving the precision and accuracy of analytical results. It contains significant revisions to procedures outlined in the Interim Method along with the addition of several new procedures.

Keywords: *Asbestos, *Building materials, *Air pollution sources, Construction materials, Sample preparation, Electron microscopy, X ray diffraction, Gravimetry, Polarized light, Calibration, Identifying, Standards, Compliance, Quality control, Stereomicroscopy.

**PB93-218865/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Recycling Nickel Electroplating Rinse Waters by Low Temperature Evaporation and Reverse Osmosis.**
Illinois Dept. of Energy and Natural Resources, Champaign. Hazardous Waste Research and Information Center.
T. C. Lindsey, and P. M. Randall. Aug 93, 72p EPA/600/R-93/160
Contract EPA-CR-815829
See also PB-240 722. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Low temperature evaporation and reverse osmosis systems were each evaluated (on a pilot scale) on their respective ability to process rinse water collected from a nickel electroplating operation. Each system offered advantages under specific operating conditions. The low temperature evaporation system was best suited to processing solutions with relatively high (greater than 4,000 to 5,000 mg/L) nickel concentrations. The reverse osmosis system was best adapted to conditions where the feed solution had a relatively low (less than4,000 to 5,000 mg/L) nickel concentration. In electroplating operations where relatively dilute rinse water solutions must be concentrated to levels acceptable for replacement in the plating bath, a combination of the two technologies might provide the best process alternative.

Keywords: *Water pollution control, *Vacuum evaporation, *Reverse osmosis, *Waste water, Electroplating, Industrial wastes, Waste recycling, Operating costs, Cost analysis, Technology transfer, Performance evaluation, Treatment technology, Nickel plating.

**PB93-219095/REB** PC **A05**/MF **A01**
**Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised.**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards. Oct 92, 93p EPA/454/R-92/019

The document presents current EPA guidance on the use of the revised screening procedures for estimating the air quality impact of stationary sources. The original version of the document (EPA-450/4-88-010, PB89-159396) was a draft for public comment which has subsequently been included as part of the Guideline on Air Quality Models. SCREEN2 technical support is provided herein. Major changes in this version of SCREEN2 are the finite line segment method for area sources, addition of wind speeds in the wind speed-stability matrix for calculating concentrations, and the inclusion of a single volume source option.

Keywords: *Air pollution dispersion, *Stationary sources, *Environmental impacts, Atmospheric diffusion, Wind velocity, Meteorological data, Computerized simulation, Air quality, Point sources, *SCREEN2 computer model, Clean Air Act.

**PB93-219111/REB** PC **A04**/MF **A01**
**Volunteer Lake Monitoring Program, 1992. Volume 4. West Central Illinois Region.** Annual rept.
Illinois State Environmental Protection Agency, Springfield. Div. of Water Pollution Control.
A. J. Burns. Jun 93, 63p IEPA/WPC/93-061D

The report is Volume IV of a series of seven reports summarizing Illinois EPA's 1992 Illinois Volunteer Lake Monitoring Program (VLMP). It provides a summary of 1992 VLMP lakes in West-Central Illinois including a program overview, volunteer participation, and a ranking of lakes on a regional basis. Fifty-two volunteers recorded total depth, Secchi disc transparency, and field observations of 24 lakes in West-Central Illinois between May and October, 1992. Average transparencies ranged from 12-243 inches. Volunteer water quality samples were collected at seven lakes once every month from May thru October and ambient lake data, collected by IEPA staff, is presented for six lakes.

Keywords: *Water pollution sampling, *Citizen participation, *Lakes, Volunteers, Measurement, Transparence, Turbidity, Color, Depth, Suspended sediments, Algae, Weeds, Ratings, Field tests, Tables(Data), Trophic level, *West Central Region(Illinois).

**PB93-219459/REB** PC **E99**/MF **E99**
**PR Notices 92-1 through 92-6.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
1992, 37p-in 6v*
Set includes PB93-219467 through PB93-219517.

No abstract available.

**PB93-219467/REB** PC **A02**/MF **A01**
**PR Notice 92-1. Notice to Manufacturers, Formulators, Producers, and Registrants of Pesticide Products.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
2 Jan 92, 8p EPA/731/N-92/001
See also Part 2, PB93-219475.
Also available in set of 6 reports PC E99/MF E99, PB93-219459.

The purpose of the notice is to clarify the Office of Pesticide Program's (OPP's) policy with regard to submission and identification of adverse effects information under Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) Section 6(a)(2). The notice advises registrants of their obligation to submit adverse effects data, pursuant to FIFRA Section 6(a)(2), and clearly identify it as 6(a)(2) data, pursuant to 40 Code of Federal Regulations (CFR) 152.125. Registrants are also advised that studies for certain toxicology guidelines with potential adverse effects flagged under 40 CFR 158.34 are considered to be Section 6(a)(2) information, and are subject to the notice. The notice informs registrants of EPA's intention to enforce aggressively the Section 6(a)(2) submission obligation and the 40 CFR 152.125 identification requirement.

Keywords: *Pesticides, *Toxicity, *Regulations, Registration, Procedures, Requirements, Environmental protection, Labels, Law enforcement, Environmental health, FIFRA(Federal Insecticide Fungicide and Rodenticide Act).

**PB93-219475/REB** PC **A01**/MF **A01**
**PR Notice 92-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
10 Feb 92, 5p EPA/731/N-92/002
See also Part 1, PB93-219467 and Part 3, PB93-219483.
Also available in set of 6 reports PC E99/MF E99, PB93-219459.

The Notice describes EPA's revised policy permitting certain chlorofluorocarbon (CFC) related labeling claims on pesticide aerosol products. Under the new policy, true claims that a product does not contain CFCs or other ozone depleting substances are permitted on pesticide labels. If the labeling claim is limited to the exact wording provided in Section II of the notice, labeling may be revised by notification to EPA in accordance with 40 CFR 156.46(a)(1). Alternative labeling statements must be approved by submission of an application for amended registration.

Keywords: *Pesticides, *Labels, *Environmental effects, *Ozone layer, Aerosols, Chlorofluorocarbons, Regulations, Requirements, Procedures, Toxic Substances Control Act.

**PB93-219483/REB** PC **A03**/MF **A01**
**PR Notice 92-3. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticide Products.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
19 Mar 92, 12p EPA/731/N-92/003
See also Part 2, PB93-219475 and Part 4, PB93-219491.
Also available in set of 6 reports PC E99/MF E99, PB93-219459.

The notice is to alert pesticide registrants to new provisions of the Clean Air Act (CAA) which will affect registrations, and inform them of how they must or may comply with new requirements within the framework of FIFRA. Applications for registration must be approved or notifications submitted earlier than CAA compliance dates if registrants wish to minimize disruption of pesticide distribution and sale. The Appendix to the Notice gives a general timeline of activities under the CAA and related activities under FIFRA. The requirements of the CAA concerning stratospheric ozone protection and the notice are directed to registrants of products containing or manufactured with: Chlorofluorocarbons (CFCs); Hydrochlorofluorocarbons (HCFCs); Carbon tetrachloride, and Methyl chloroform.

Keywords: *Pesticides, *Environmental effects, *Ozone layer, Regulations, Requirements, Compliance, Registration, Chlorofluorocarbons, Carbon tetrachloride, Environmental protection, Clean Air Act, Hydrochlorofluorocarbons, Methyl chloroform.

**PB93-219491/REB** PC **A01**/MF **A01**
**PR Notice 92-4. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
9 Oct 92, 4p EPA/731/N-92/004
See also Part 3, PB93-219483 and Part 5, PB93-219509.
Also available in set of 6 reports PC E99/MF E99, PB93-219459.

The Notice describes EPA's interpretation that a Material Safety Data Sheet (MSDS) may accompany a pesticide or device without approval from EPA as long as it does not conflict with approved pesticide labeling.

Keywords: *Pesticides, *Labels, *Regulations, Requirements, Procedures, Instructions, FIFRA(Federal Insecticide Fungicide and Rodenticide Act), Material safety data sheets.

**PB93-219509/REB** PC **A01**/MF **A01**
**PR Notice 92-5. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
9 Oct 92, 5p EPA/731/N-92/005
See also Part 4, PB93-219491 and Part 6, PB93-219517.
Also available in set of 6 reports PC E99/MF E99, PB93-219459.

The notice explains that EPA has waived the submission of certain product chemistry data for end-use products. In the past, color and odor data were required on the premise that each end-use product has a distinct color and odor which would enable EPA and others in identifying products, particularly in enforcement cases or in medical emergencies. However, because EPA has approved alternate formulations containing substitute colorants and odorants for the same product since 1974, it is nearly impossible for EPA or others to use these characteristics to identify a product. Finally, EPA does not generally need color and odor data to make regulatory judgments about the risks and benefits of end-use products unless the color and odor affect product performance. For these reasons, EPA will waive the requirement that color and odor data be generated or submitted for end-use products unless the color or odor are expected to affect product performance (efficacy).

Keywords: *Pesticides, *Registration, *Chemical analysis, Regulations, Procedures, Requirements, Color, Odors, Product Chemistry Data.

**PB93-219517/REB** PC **A01**/MF **A01**
**PR Notice 92-6. Notice to Manufacturers, Producers, Formulators and Registrants of Pesticides.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
23 Dec 92, 3p EPA/737/N-92/006
See also Part 5, PB93-219509.
Also available in set of 6 reports PC E99/MF E99, PB93-219459.

EPA issued PR Notice 91-7 requesting that registrants remove claims of heightened efficacy from the label because they are false or misleading. EPA set a deadline of December 30, 1992 for registrants to make such changes. To allow time to consider comments received on PR Notice 91-7, EPA is extending the compliance dates. EPA intends to issue an amendment to PR Notice 91-7 to provide further guidance on how to comply with that notice.

Keywords: *Pesticides, *Registration, *Labels, Regulations, Procedures, Requirements, Compliance, FIFRA(Federal Insecticide Fungicide and Rodenticide Act), Efficacy.

**PB93-219822/REB** PC **A02**/MF **A01**
**Pesticide Fact Sheet: 1-Indole-3-Butanethioic Acid, S-Phenyl Ester.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
5 Apr 93, 9p EPA/737/F-93/007

Ample toxicological, and ecological effects data have been submitted to support the unconditional registrations of Rootall, which is a low volume, minor use pattern product, and the manufacturing use product, Rootall-B. The Environmental Fate and Ground Water Branch (EFGWB) has sufficient data to assess the environmental fate of Rootall and Rootall-B. The following data requirements have been satisfied: hydrolysis. The aerobic soil metabolism and the data requirements for leaching and adsorption/desorption have been waived. The requirements of photodegradation in water, and soil dissipation were waived. These studies were not required provided the registrant deleted the terrestrial non-food uses from the label. EFGWB agreed to waive all fate data contingent upon a determination by the Biological and Economic Analysis Division that the waiver request, based on economic hardship was valid.

Keywords: *Plant growth regulators, *Toxicology, *Chemical properties, Pesticides, Environmental effects, Toxicity, Environmental transport, Biochemistry, *Phenyl 4(3-Indonlyl)Thiololutanoate, Chemical information fact sheet, Use patterns, CAS 85977-73-7.

**PB93-219830/REB** PC **A03**/MF **A01**
**Pesticide Fact Sheet: Glufosinate Ammonium.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
29 Jun 93, 12p EPA/737/F-93/010

This is a non-selective water soluble herbicide for application as a foliar spray for the control of emerged annual and perennial grass and broadleaf weeds. Since the product will injure or kill all green vegetation it should be directed only at targeted vegetation. Based upon a battery of acute toxicity studies, technical glufosinate ammonium is classified as a toxicity Category II. The chemical is neither teratogenic nor carcinogenic. Glufosinate ammonium is practically nontoxic to birds and aquatic species. Laboratory studies indicate the chemical is mobile and persistent.

Keywords: *Herbicides, *Toxicology, *Chemical properties, Pesticides, Environmental effects, Toxicity, Environmental transport, Biochemistry, *Ammonium glufosinate, Chemical information fact sheet, Use patterns, CAS 77182-82-2.

**PB93-219848/REB** PC **A03**/MF **A01**
**Pesticide Fact Sheet: GY-81/Enzone.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
17 Jun 93, 11p EPA/737/F-90/009

GY-81 / Enzone is applied via chemigation systems at a maximum application rate of 60 gallons per acre to control nematodes in grapefruit, lemons, oranges, and grapes, phylloxera in grapes, and root rot in grapefruit, lemons, oranges, and grapes. Adequate chemistry, toxicological, ecological effects, and environmental fate data have been submitted and reviewed to support the conditional registration of sodium tetrathiocarbonate for use as an insecticide, fungicide and nematicide in grapes, grapefruit, lemons, and oranges.

Keywords: *Insecticides, *Fungicides, *Toxicology, *Chemical properties, Pesticides, Environmental effects, Toxicity, Environmental transport, Biochemistry, Carbon disulfide, *Sodium tetrathiocarbonate, Nematicides, Chemical information fact sheet, Use patterns, CAS 7345-69-9.

**PB93-219988/REB** PC **A16**/MF **A03**
**Toxics Release Inventory: Public Release Data, 1991.**
Environmental Protection Agency, Washington, DC. Office of Pollution, Prevention, and Toxics.
May 93, 364p EPA/745/R-93/003
See also PB93-505873.

The 1991 reporting year marks the fifth year of the Toxics Release Inventory (TRI) program. According to the data, reported releases and transfers of listed toxic chemicals have declined for the fourth straight year. Included in the 1991 data for the first time is extensive additional waste management and pollution prevention data required by the Pollution Prevention Act of 1990. The new data provide a much more complete picture of waste generation and management than has ever before been available in TRI, covering not just releases and off-site treatment and disposal, but also recycling, energy recovery, on-site treatment, and source reduction activities. Because so many additional types of waste management activities are now reportable under TRI, the amount of toxic chemicals reported to TRI has increased greatly. The new TRI reports contain information about nearly 38 billion pounds of toxic chemicals managed or released by industry in 1991.

Keywords: *Hazardous materials, *Reporting, *Chemical compounds, Industrial plants, Waste recycling, Waste disposal, Waste processing, Waste treatment, Waste transfer plants, Water pollution, Air pollution, Land pollution, Pollution abatement, Pollution control, *Toxic Release Inventory, Emission inventories, POTW(Publicly-owned treatment works).

**PB93-221620/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Washington, DC.
**Genetic Damage in vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.**
Coriell Inst. for Medical Research, Camden, NJ.
T. Atherholt, M. Aronson, and G. Ginsberg. 15 Dec 92, 63p EPA/600/R-93/145, , OHEA-R-523
Sponsored by Environmental Protection Agency, Washington, DC.

Human diploid lung fibroblast cells were exposed to various dose levels of ethylene oxide (EtO) to determine the relationship between dose, dose-rate or concentration-time effects and the formation of chromosome aberrations (CA), aneuploidy, and DNA single strand breaks (SSB) 1 day and 14 days following exposure. The chromosomal location of each CA was determined. Some of the CA experiments were also conducted with and without caffeine in the post-exposure culture medium to determine the ability of caffeine to enhance CA formation. Following 60 minute exposures with dose levels up to 10-15 mM, EtO increased the number of CA, aneuploidy, and SSB observed 20-22 hours following exposure. These effects occurred at dose levels which also resulted in some lethality and reduction in the mitotic index. Caffeine appeared to enhance the formation of CA, but 0.25 mM caffeine did not inhibit the repair of SSB at 1 day following EtO exposure. With an assay sensitivity limit of approximately 1 percent, no detectable increase in the percentage of aberrant cells was observed 14 days following exposure. An increase in the number of aneuploid cells was observed 14 days following exposure. A small increase in SSB 14 days following exposure to 10-15 mM EtO was not considered significant.

Keywords: *Ethylene oxide, *Toxicity, *Chromosome aberrations, *DNA damage, *Cells(Biology), Humans, In vitro analysis, Sister chromatid exchange, Mutagens.

**PB93-221638/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.**
Illinois Dept. of Energy and Natural Resources, Champaign. Hazardous Waste Research and Information Center.
G. D. Miller, T. C. Lindsey, A. G. Ocker, M. C. Miller, and P. M. Randall. Aug 93, 74p EPA/600/R-93/144
Contract EPA-CR-815829
Prepared in cooperation with Daily and Associates Engineers, Inc., Champaign, IL. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Pollution prevention efforts studied in the report summarized here targeted the hazardous waste generated from a 5000-gal iron phosphating/degreasing bath used by a metal fabricator to clean and precondition steel parts for painting. The project was carried out in four stages: (1) initial assessment of the problem and evaluation of alternatives, (2) bench-scale screening of ultrafiltration membrane candidates, (3) pilot-scale study at the Illinois Hazardous Waste Research and Information Center (HWRIC), and (4) full-scale implementation and testing onsite at the company's facility.

Keywords: *Filtration, *Materials recovery, *Metal cleaning, Degreasing, Halohydrocarbons, Fabrication, Metal sheets, Baths, Phosphate coatings, Hazardous materials, Pollution control.

**PB93-221646/REB** PC **A09**/MF **A02**
**Environmental Fate Constants for Organic Chemicals under Consideration for EPA's Hazardous Waste Identification Projects.**
Environmental Research Lab., Athens, GA.
H. P. Kollig. Aug 93, 184p EPA/600/R-93/132

Under Section 301 of the Resources Conservation and Recovery Act (RCRA), EPA's Office of Solid Waste is required to develop and promulgate criteria for identifying and listing hazardous wastes, taking into account, among other factors, persistence and degradability in the environment of selected chemicals. A requirement of the legislation is for EPA to take an initial step toward defining wastes that do not merit regulation under Subtitle C of RCRA and can be managed under other regimes. For establishing exemption criteria, the Agency has selected some 200 chemical constituents that may occur in the various wastes. The report explains some of the means by which these chemicals may be transformed and provides hydrolysis degradation pathways and fate constants for the selected chemicals.

Keywords: *Hazardous materials, *Chemical compounds, Hydrolysis, Sorption, Chemical analysis, Environmental transport, Redox potential, Pollution regulations, *Environmental fate, Partition coefficients.

**PB93-221653/REB** PC **A07**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.** Final draft rept.
Research Triangle Inst., Research Triangle Park, NC.
W. F. Gutknecht, K. K. Luk, L. L. Hodson, J. A. O'Rourke, and D. S. Smith. Apr 93, 126p EPA/600/R-93/085
Contract EPA-68-02-4550
See also PB93-173128. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

A study of commercial lead test kits available as of fall, 1990, was performed. The intent was to perform an initial study of the general behavior and responsiveness of all kits to the same but limited number of test parameters and materials. The manufacturers' instructions provided with the test kits were followed without modification for performance of these evaluations.

Keywords: *Lead(Metal), *Field tests, *Chemical analysis, Paints, Dust, Soil analysis, Houses.

**PB93-221810/REB** PC **A03**/MF **A01**
**Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).** Book chapter.
Environmental Research Lab.-Narragansett, Newport, OR.
D. A. Young, A. J. Mearns, and R. W. Gossett. 1993, 13p EPA/600/A-93/163, ERLN-N144
Pub. in Organic Substances and Sediments in Water-Biological, v3 p159-169 1991.

Bottom sediments are a major reservoir for residues of the pesticide DDT and polychlorinated biphenyls (PCBs) released into aquatic environments. Fish consumption warnings or fishery closures in areas polluted by these chlorinated hydrocarbons are increasing. Thus, it is important to understand the processes by which such hydrophobic neutral synthetic organic compounds are incorporated into tissues of benthic seafood organisms. The fugacity model of bioaccumulation states that uptake is determined by the chemical fugacity differential between the organism and its environment. For benthic species the model most conveniently is tested by measuring residue concentrations in tissue and in the sediment to which the organism has been exposed. The authors describe such a test conducted through a field study of surficial sediments and a flatfish usedsuccessfully as a bioindicator for chlorinated hydrocarbon contamination in the Southern California Bight.

Keywords: *Pesticides, *Flatfishes, *Bioaccumulation, *Sediments, *Southern California Bight, DDE insecticide, Polychlorinated biphenyls, Chlorine organic compounds, Coasts, Hydrocarbons, Concentration(Composition), DDT, Aromatic compounds, Insecticides, Graphs(Charts), Sampling, Pesticide residues, Biphenyl/chloro.

**PB93-221828/REB** PC **A03**/MF **A01**
**DNA Alterations (Chapter 3).** Book chapter.
Environmental Research Lab., Narragansett, RI.
L. Shugart, J. Bickham, G. Jackim, G. McMahon, and W. Ridley. c1992, 33p EPA/600/A-93/164, ERLN-1087
Pub. in Biomarkers: Biochemical, Physiological and Histological Markers of Anthropogenic Stress, 1990.

The exposure of an organism to genotoxic chemicals may induce a cascade of genetic events. Initially, structural alterations to DNA are formed. Next, the DNA damage is processed and subsequently expressed in mutant gene products. Finally, diseases result from the genetic damage. The detection and quantitation of various events in the sequence may be employed as biomarkers of exposure and effects in organisms exposed to genotoxic agents in the environment. The methods to monitor exposure to genotoxic chemicals are based upon either: (1) direct measurement of DNA structural change; (2) the detection of their consequences by measuring DNA repair directly or indirectly; or (3) the production of mutations in the genome of the exposed organisms. Adducts are a type of structural change involving covalent attachments of a chemical or its metabolite to DNA. Several analytical procedures are currently used to monitor the formation of DNA adducts directly. (Copyright (c) 1992 by Lewis Publishers.)

Keywords: *Biological markers, *Organisms, *Exposure, *Toxicity, *Chemical compounds, Deoxyribonucleic acids, Mutations, DNA damage, Diseases, Cells(Biology), Monitoring, Chromosomes, DNA repair, Abnormalities, Bioassay, Reprints, Oncogenes activation.

**PB93-221836/REB** PC **A03**/MF **A01**
**Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).** Book chapter.
Environmental Research Lab., Narragansett, RI.
R. M. Burgess, and K. J. Scott. c1992, 41p EPA/600/A-93/165, ERLN-X187
Pub. in Sediment Toxicity Assessment, Boca Raton, FL., p129-165 1992. See also AD-P006 834 and AD-P006 912.

In the brief history of marine environmental toxicology, most research has been media oriented. A great deal of scientific and regulatory effort in aquatic toxicology has concentrated on characterizing the toxic effects in the water column environment resulting from contaminants of terrestrial origin. Likewise, the hazards posed by contaminated sediments also have been recognized. Now it is necessary for environmental scientists, managers, and regulators to expand the scope of their respective media-oriented research. This broadening of research scope must acknowledge the potential for interaction between the water column and sediment environments. The interaction, as a function of several chemical, physical, and biological processes, may result in the eventuality of detrimental effects in one medium (i.e., the water column) as a result of the contaminated status of another (i.e., the sediments). Understanding these processes and the resulting detrimental effects will provide us a greater foundation for studying, managing, and regulating the entire integrated aquatic environment. (Copyright (c) 1992 Lewis Publishers, Inc.)

Keywords: *Marine environments, *Sediments, *Toxicity, Water pollution, Environmental impact assessments, Sediment-water interfaces, Polychlorinated biphenyls, Heavy metals, Environmental transport, Chemical reactions, Separation, Reprints, Water column.

**PB93-221844/REB** PC **A02**/MF **A01**
Environmental Research Lab.-Narragansett, Newport, OR. Pacific Ecosystems Branch.
**Plume Definition in Regions of Strong Bending.** Doctoral thesis.
Oregon State Univ., Corvallis. Dept. of Civil Engineering.
W. E. Frick, C. G. Fox, and D. J. Baumgartner. c1991, 8p EPA/600/A-93/166, , CONTRIB-ERL-N-191
Pub. in Proceedings of the International Symposium on Environmental Hydraulics/Hong Kong, December 16-18, 1991. Sponsored by Environmental Research Lab.-Narragansett, Newport, OR. Pacific Ecosystems Branch.

In recent years most of the emphasis in plume modeling has been directed at improving the entrainment equations while the non-entrainment equations (momentum, energy, state, etc.) have been thought to be firmly established. In the report, it is shown that serious deficiencies remain in the non-entrainment equations. Inclusion of center-of-mass concepts, element overlap, and asymmetric entrainment shows that substantial changes in dilution predictions are effected by

these corrections. Consequently, it is inappropriate to develop elaborate entrainment functions until these deficiencies are corrected.

Keywords: *Ocean waste disposal, *Hydraulic engineering, *Mathematical models, Entrainment, Ocean currents, Outfall sewers, Plumes, Water pollution, Environmental engineering, Suspending(Mixing), Reprints.

**PB93-221851/REB** PC **A02/MF A01**
**Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.** Symposium paper.
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
C. W. Lewis, R. B. Zweidinger, L. D. Claxton, D. B. Klinedinst, and S. H. Warren. 17 Jun 93, 8p EPA/600/A-93/167
Presented at the Air and Waste Management Association/Environmental Protection Agency International Symposium, 'Measurement of Toxic and Related Air Pollutants', Durham, NC., May 3-7, 1993. See also PB91-219162. Prepared in cooperation with National Inst. of Standards and Technology, Gaithersburg, MD.

The U.S. Environmental Protection Agency has conducted a series of wintertime field studies in U.S. cities to measure ambient concentrations of fine particle EOM and associated mutagenicity. Receptor modeling has been employed with these measurements to determine the quantitative contributions of various emissions sources to both Extractable Organic Matter (EOM) and mutagenicity. The present work gives receptor modeling results for the 1988-1989 field study in Roanoke VA, an airshed whose principal sources of ambient EOM were anticipated to be woodsmoke, mobile sources and residential distillate oil combustion (RDOC).

Keywords: *Indoor air pollution, *Air pollution sampling, *Residential buildings, Tracer studies, Mobile pollutant sources, Metals, Carbon 14, Smoke, Organic materials, Winter, Mutagenicity, Reprints, Roanoke(Virginia), Extractable organic matter, IACP(Integrated Air Cancer Project), Volatile organic compounds.

**PB93-221869/REB** PC **A03/MF A01**
**Analysis of Protocol Gases: An On-Going Quality Assurance Audit (May 1993).**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
A. P. Hines. May 93, 11p EPA/600/A-93/168
See also PB93-168839.

In 1992, EPA's Atmospheric Research and Exposure Assessment Laboratory initiated a nationwide quality assurance (QA) program on the suppliers of EPA Protocol Gases. The program has three goals: to increase the acceptance and use of Protocol Gases by the air monitoring community, to provide a QA check for the suppliers of these gases, and to help the users of these gases to identify suppliers who can consistently provide accurately certified Protocol Gases. In this QA program which operates continuously, Protocol Gases are procured by EPA and the supplier's certification of the pollutant concentration(s) is verified by EPA. The results are published on the EPA Technology Transfer Network's electronic bulletin board. If a supplier's concentration differs from EPA's by more than 2%, the supplier is notified in writing immediately. The results obtained for SO2, CO and NO Protocol Gases are presented.

Keywords: *Air pollution detection, *Quality assurance, *Standards, *Gas analysis, Certification, Chemical analysis, US EPA, Sulfur dioxide, Carbon monoxide, Nitrogen oxide(NO), Concentration(Composition), Notification procedures, Auditing, Comparison, *Protocol gases, Standard reference materials.

**PB93-221877/REB** PC **A02/MF A01**
**VOCs in Mexico City Ambient Air.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
R. L. Seila, W. A. Lonneman, M. E. R. Santoyo, and J. T. Ruiz. 1993, 8p EPA/600/A-93/169
Prepared in cooperation with Instituto Mexicano del Petroleo, Mexico City.

Mexico City, with nearly 20 million people, 3 million vehicles, and 35,000 industrial businesses, has severe photochemical air pollution. The O3 standard of 0.11 ppm is exceeded over 300 days of the year. Because of the role of VOCs in the production of ozone, a study of the concentration and composition of VOCs in ambient air was undertaken. From March 6 to 26, 1992, 68 ambient air samples were collected on week-days in passivated stainless steel spheres at four sites in Mexico City. Most (52) sampling was in the morning from 6:00-9:00 am, however at 2 sites 16, 12:00-3:00 pm afternoon samples were collected. Ten morning samples were also taken at two upwind sites north of the city. The samples were analyzed by capillary gas chromatography/flame ionization detection (gc/fid) for C-2 to C-14 hydrocarbons. CO and CH4 were also determined. Total non-methane organic compound (TNMOC) concentrations were very high. In the 6-9 am period TNMOC ranged from 1.49 to 6.94 ppm. The afternoon results were lower, ranging from 0.48 to 3.06 ppm. TNMOC at the two boundary sites ranged from 0.16 to 1.64 ppm.

Keywords: *Volatile organic compounds, *Air pollution sampling, *Air pollution standards, Motor vehicles, Photochemical reactions, Ozone, Concentration(Composition), Sites, Gas chromatography, Chemical reactions, Ionization, Carbon 14, Carbon monoxide, Tables(Data), *Mexico City(Mexico), Ambient air, Flame ionization detection.

**PB93-221885/REB** PC **A02/MF A01**
**Acid Aerosol Measurement Methods: A Summary of U.S. EPA Intercomparisons.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
T. G. Ellestad. 1993, 8p EPA/600/A-93/170
See also PB90-212572 and PB92-191097.

Studies of human exposure to acid aerosols have been underway for several years, leading to the need to intercompare measurement methods for acidic aerosol concentrations. Over the past few years the U.S. EPA has sponsored several intercomparisons of the methods in use. The studies have included single component aerosols of sulfuric acid and ammonium bisulfate, photochemical aerosols, a sequence of compounds chosen to test for on-filter neutralization by ammonium nitrate, the addition of alkaline dust, laboratory-spiked samples, and atmospheric aerosol samples. These studies were designed to establish both intra- and interlaboratory precision and to attempt to separate the effects of differences in flow rate, extraction, and analysis.

Keywords: *Air pollution sampling, *Interlaboratory comparisons, Aerosols, Acidity, Photochemical oxidants, Ammonium sulfates, Ammonium nitrates, Sulfuric acid, Comparative analysis, Quality assurance, Reprints.

**PB93-221893/REB** PC **A03/MF A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Replacement of Charcoal Sorbent in the VOST.**
Radian Corp., Research Triangle Park, NC.
L. D. Johnson, R. G. Fuerst, A. L. Foster, and J. T. Bursey. 1993, 14p EPA/600/A-93/171
Contract EPA-68-D1-0010
See also PB84-234525. Presented at the Annual International Incineration Conference (12th), Knoxville, TN., May 5, 1993. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

EPA Method 0030, the Volatile Organic Sampling Train (VOST), for sampling volatile organics from stationary sources, specifies the use of petroleum-base charcoal in the second sorbent tube. Charcoal has proven to be a marginal performer as a sampling sorbent, partly due to inconsistency in analyte recovery. In addition, commercial availability of petroleum charcoal for VOST tubes has been variable. Lack of data on comparability and variability of charcoals for VOST application has created uncertainty when other charcoals are substituted. Five potential sorbent replacements for charcoal in Method 0030 were evaluated along with a reference charcoal. Two of the sorbents tested, Ambersorb XE-340 and Tenax GR, did not perform well enough to qualify as replacements. Three candidates, Anasorb 747, Carbosieve S-III and Kureha Beaded Activated Charcoal, performed adequately, and produced statistically equivalent results. Anasorb 747 appears to be an acceptable replacement for petroleum charcoal, based on a combination of performance, availability, and cost.

Keywords: *Testing, *Air pollution sampling, *Chemical tests, Charcoal, Sorbents, Incineration, Stationary sources, Reprints, *VOST(Volatile Organic Sampling Train), Volatile organic compounds, EPA Method 0030.

**PB93-221901/REB** PC **A03/MF A01**
**Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.**
Robert S. Kerr Environmental Research Lab., Ada, OK.
S. R. Hutchins, D. H. Kampbell, M. L. Cook, F. M. Pfeffer, and R. L. Cosby. 1993, 15p EPA/600/A-93/172
Pub. in Proceedings of the Conference on Hazardous Waste Research, Boulder, CO., June 1-2, 1993, p90-99. See also PB93-141513. Prepared in cooperation with ManTech Environmental Technology, Inc., Ada, OK., and Dynamac Corp., Ada, OK.

Rational design relates laboratory treatability studies at field scale to the distribution of contaminants and to the residence time of remedial fluids. The electron acceptor is usually the limiting factor in bioremediation. Ideally, the electron acceptor should not be depleted as water or air moves across the region contaminated with oily phase material. When all of the contaminated mass receives adequate supplies of electron acceptor, the course of remediation should parallel that established in the laboratory study. If regions of the contaminated mass are not adequately supplied, the course of remediation at field scale is not predicted in any straightforward way from the laboratory study. Rational design compares the residence time and concentration of electron acceptor at field scale to the demand demonstrated for the electron acceptor in the laboratory to ensure that the engineered implementation of in situ bioremediation is adequate.

Keywords: *Nitrates, *Oil spills, *Biodegradation, Land pollution control, Water pollution control, Ground water, Electrons, Binding energy, Bromides, Chemical analysis, In situ processes, Aquifers, Reprints, Park City(Kansas), Bioremediation, BTEX(Benzene Toluene Ethylbenzene Xylene), Contaminated soil, Microcosms.

**PB93-221919/REB** PC **A03/MF A01**
**Retrospective Performance Evaluation on In situ Bioremediation: Site Characterization.**
Robert S. Kerr Environmental Research Lab., Ada, OK.
J. T. Wilson, and D. H. Kampbell. 1993, 12p EPA/600/A-93/173
Pub. in Proceedings Symposium on Bioremediation of Hazardous Wastes: Research, Development, and Field Evaluations, Dallas, TX., May 4-6, 1993, p3-9.

Performance of in situ bioremediation was demonstrated at a shallow water site with subsurface contamination of used crankcase oil, diesel fuel, gasoline, and other oily phase products. Treatment involved ground water amendment by hydrogen peroxide and nutrients by a recharge gallery. The system was operated for 2 1/2 years. During treatment benzene and total BTEX concentrations in ground water were reduced in magnitude exceeding ten and twenty times, respectively. Vertical profile core samples showed a two feet thick interval near the water table containing significant amounts of hydrocarbons. The center of the interval had not been depleted of BTEX compounds, but the surrounding cortex had been physically and biologically weathered. The interval material was fine textured that restricted flow of remedial fluids which resulted in little opportunity for bioremediation.

Keywords: *Oil wastes, *Water pollution control, *Ground water, Aquifers, Biodegradation, Hydrogen peroxide, Subsurface environments, In-situ processing, Rocks, Reprints, *Bioremediation, BTEX(Benzene Toluene Ethylbenzene Xylene), Denver(Colorado), Heterogeneous materials.

**PB93-221927/REB** PC **A03**/MF **A01**
**Geochemical Indicators of Anaerobic Biodegradation of BTEX.**
Robert S. Kerr Environmental Research Lab., Ada, OK.
D. H. Kampbell, J. T. Wilson, S. R. Hutchins, L. G. Kennedy, and B. H. Wilson. 1992, 18p EPA/600/A-93/174
Pub. in Proceedings of the Conference on Hazardous Waste Research, Boulder, CO., June 1-2, 1992 p563-575. See also PB92-144005. Prepared in cooperation with Coastal Remediation Co., Norman, OK., and Dynamac Corp., Ada, OK.

A pipeline leak released refined petroleum to the subsurface at a Kansas flood plain site. Variable depth cluster wells from the water table to the bottom of the aquifer and single wells screened across the contaminated interval were installed at the site. Dissolved concentrations of alkylbenzenes, methane oxygen, and organic acids were used to locate what parts of the subsurface have acclimated to anaerobic biodegradation. Natural biological weathering has occurred at the site. Most predominant was that major fractions of the contaminant mass was removed by passive bioremediation.

Keywords: *Water pollution control, *Ground water, *Oil spills, Aquifers, Biodegradation, Anaerobic conditions, Soil contamination, Chemical reactions, Water wells, Subsurface investigations, Reprints, *Bioremediation, BTEX(Benzene Toluene Ethylbenzene Xylene), Southcentral Region(Kansas), Biological weathering.

**PB93-221935/REB** PC **A02**/MF **A01**
**Bioremediation of Chlorinated Solvents in the Vadose Zone.** Book chapter.
Robert S. Kerr Environmental Research Lab., Ada, OK.
D. H. Kampbell, and B. H. Wilson. 1993, 8p EPA/600/A-93/175
Pub. in In situ and On-Site Bioreclamation. The International Symposium (2nd), San Diego, CA., April 5-8, 1993. Prepared in cooperation with Dynamac Corp., Ada, OK.

Subsurface aeration can remove solvent spills by air stripping. The waste air streams that originate can be cleansed by sorption, combustion, or biodegradation. Laboratory soil microcosms once acclimated to gasoline vapors showed an enhanced mineralization of trichloroethylene and vinyl chloride. The biological cometabolism indicates that a potential exists for degradation of chlorinated solvent vapors in the soil vadose zone or in prepared soil bed bioreactors.

Keywords: *Biodegradation, *Solvents, Vinyl chloride, Land pollution control, Soil contamination, Bacteria, Chemical reactions, Bioreactors, Reprints, *Soil venting, Bioremediation, Vadose zone, Ethylene/trichloro, Cometabolization, Air stripping.

**PB93-221943/REB** PC **A02**/MF **A01**
**Performance of Pilot Scale Bioventing at an Aviation Gasoline Spill Site.** Book chapter.
Robert S. Kerr Environmental Research Lab., Ada, OK.
D. H. Kampbell. 1993, 8p EPA/600/A-93/176
Pub. in Environmental Restoration Technology Transfer Symposium Proceedings, 1993. See also PB93-221968 and PB92-121342.

An aviation gasoline (Avgas) spill of near 35,000 gallons occurred over 20 years ago at the U.S. Coast Guard Air Station in Traverse City, Michigan. The site has a relatively uniform subsurface of beach sand to a depth of 50 feet. A three-feet vertical smear of oily globules was near the water table depth of 15 feet. Two pilot-scale bioventing systems were evaluated on a portion of the 240 x 1100 foot surface area plume. The vadose zone contaminated with aviation gasoline was satisfactorily bioremediated by both venting systems. Differential performance between the two systems was not apparent. Operational time for clean-up was eight months. Surface emissions of gasoline vapor during systems operation were minimal.

Keywords: *Aviation gasoline, *Microbial degradation, *Soil contamination, Land pollution control, Soil gases, Biodegradation, Biological treatment, Emissions, Reprints, *Soil venting, Traverse City(Michigan), Bioremediation, Vadose zone, Microcosms.

**PB93-221950/REB** PC **A01**/MF **A01**
**Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.**
Robert S. Kerr Environmental Research Lab., Ada, OK.
D. H. Kampbell, D. D. Fine, and J. W. Anderson. 1993, 2p EPA/600/A-93/177
Pub. in EPA Symposium on Bioremediation of Hazardous Wastes: Research, Development and Field Evaluations, Abstracts, EPA/600/R-93/054. Prepared in cooperation with ManTech Environmental Technology, Inc., Ada, OK.

Chemical spillage and waste disposal during 40 years of manufacturing vinyl wallcovering had contaminated portions of a field site with various organic chemicals, predominately xylene and dioctyl phthalate. Laboratory treatability studies were conducted on core samples obtained from the site. The objective was to determine whether natural biodegradation processes would remediate the site. Nine core samples were collected at three locations in 3-ft increments from site locations of low contamination, moderate contamination, and high contamination. Analysis of a nine-sample composite showed that 95 percent of organic compound contamination was dioctyl phthalate. All core samples contained sufficient nitrogen and phosphorus to support viable soil microbiological processes. Extrapolating from laboratory data rates and assuming ideal field conditions, the predicted total time to naturally cleanse the site to less than 10 ppm pthalate would be 3 years and 10 years, respectively, for the moderate and high contaminated areas. Biodegradation of dioctyl phthalate was enhanced by the presence of xylene in a separate microcosm study.

Keywords: *Phthalates, *Biological treatment, *Soil contamination, Land pollution control, Biodegradation, Bacteria, In situ processing, Chemical reactions, Reprints, *Dioctyl phthalate, Vadose zone, Bioremediation.

**PB93-221968/REB** PC **A02**/MF **A01**
**Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.**
Robert S. Kerr Environmental Research Lab., Ada, OK.
D. H. Kampbell, C. J. Griffin, and F. A. Blaha. 1993, 9p EPA/600/A-93/178
Pub. in EPA Symposium on Bioremediation of Hazardous Wastes: Research, Development, and Field Evaluations, Abstracts, EPA/600/R-93/054. See also PB93-221943 and PB92-121342. Prepared in cooperation with Solar Universal Technologies, Inc., Traverse City, MI., and Coast Guard Civil Engineering Unit, Cleveland, OH.

Bioremediation pilot-scale subsurface venting and sparging systems were operated at a low aeration rate at an aviation gasoline spill site. Bioventing removed 99 percent of vadose zone contamination in 8 months with minimal surface emissions. The biosparging process is presently operating and has removed one-third of oily phase residue below the water table in 1 year. The ground water plume has been cleansed of benzene, toluene, ethylbenzene, and xylene (BTEX) components by sparging.

Keywords: *Microbial degradation, *Sparging, *Aviation gasoline, Biodegradation, Biological treatment, Water pollution control, Land pollution control, Ground water, Soil contamination, Reprints, *Soil venting, Bioremediation, BTEX(Benzene Toluene Ethylbenzene Xylene), Vadose zone.

**PB93-221976/REB** PC **A01**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Particle-Size-Dependent Efficiency of Air Cleaners.**
Research Triangle Inst., Research Triangle Park, NC. Center for Aerosol Technology.
D. S. Ensor, J. T. Hanley, and L. E. Sparks. 1991, 5p EPA/600/A-93/179
Grant EPA-R-814169
See also PB91-176735 and PB93-212397. Presented at ASHRAE IAQ 91, Washington, DC., September 2-5, 1991. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper gives results of tests with media filters, electrostatic filters, and electronic air cleaners. It also discusses results from system qualification tests to detect system artifacts. The collection efficiency of air cleaners as a function of particle diameter must be known to predict their ability to control specific sources. Collection efficiency from 0.01 to 3 micrometers has been measured with condensation particle counters and white-light and laser particle counters. The challenge aerosol is generated by nebulizing solutions to allow stability with respect to size distribution and concentration.

Keywords: *Air pollution control equipment, *Aerosols, *Air cleaners, Particle size, Air filters, Efficiency, Electrostatic precipitators, Fibers, Size distribution, Indoor air pollution.

**PB93-221984/REB** PC **A02**/MF **A01**
**Establishing Priorities in the U.S. EPA's Indoor Air Engineering Research Program.** Rept. for Nov 92-Jan 93.
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
M. C. Osborne. 1993, 8p EPA/600/A-93/180
Presented at Indoor Air '93, Helsinki, Finland, July 4-8, 1993.

The paper gives results of consultations by participants in the U.S. EPA's Indoor Air Engineering Research Program with a panel of key researchers and planners within government, industry, and academia to help identify priority program areas for indoor air research. Program elements including chemical source characterization, bioresponse testing, air cleaning, ventilation, biocontamination, cost/indoor quality modeling, and pollution prevention were ranked. The ranking was compared to existing program priorities and program recommendations were developed for use in program strategic planning sessions. A significant recommendation resulting from the process was to consider a major expansion of investigations into factors that influence growth and dispersion of biocontaminants.

Keywords: *US EPA, *Indoor air pollution, *Research programs, Air pollution control equipment, Air pollution abatement, Air pollution sources, Ventilation, Biological effects, Mathematical models, Recommendations, Reprints, *Priorities, Indoor Air Engineering Research Program, Indoor air quality, Biocontamination, Bioresponse.

**PB93-221992/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Fundamental Mass Transfer Models for Indoor Air Pollution Sources.**
Acurex Corp., Research Triangle Park, NC.
B. A. Tichenor, Z. Guo, and L. E. Sparks. 1993, 8p EPA/600/A-93/181
Contract EPA-68-DO-041
See also PB91-120279 and PB91-242966. Presented at Indoor Air '93, Helsinki, Finland, July 4-8, 1993. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper discusses a simple, fundamental mass transfer model, based on Fick's Law of Diffusion, for indoor air pollution wet sorbent-based sources. (Note: Models are needed to predict emissions from indoor sources. While empirical approaches based on dynamic chamber data are useful, a more fundamental approach is needed to fully elucidate the relevant mass transfer processes). In the model, the mass transfer rate is assumed to be gas-phase limited and controlled by the boundary layer mass transfer coefficient, the saturation vapor pressure of the material being emitted, and the mass of volatile material remaining. Results of static and dynamic chamber tests, as well as test house studies, are presented.

Keywords: *Indoor air pollution, *Diffusion, *Volatile organic compounds, *Pollution control, Mass transfer, Mathematical models, Sorbents, Test chambers, Emission factors, Sour, Residential buildings, Boundary layer, Static tests, Dynamic tests.

**PB93-222008/REB** PC **A03**/MF **A01**
**Technological Considerations for Planning the Global Carbon Future.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
R. P. Hangebrauck. 1993, 14p EPA/600/A-93/182

See also DE89014017, DE90000322, PB91-133322 and PB93-155976. Presented at the IEA Carbon Dioxide Disposal Symposium, Christ Church, United Kingdom, March 29-31, 1993.

The paper summarizes some of the recent literature relating to the longer-term technological considerations affecting the atmospheric level of carbon dioxide (CO2), the dominant variable in the anthropogenic influence of future global climate change. It also discusses some of the technological considerations for known prevention and mitigation approaches in the context of this longer-term problem. These approaches include: renewables (solar photovoltaics, wind, and biomass), conservation, flue gas and fuel CO2 sequestration via disposal on land or in the ocean, carbon recycling (chemical/biological utilization), and atmospheric CO2 fixation/utilization via terrestrial and marine approaches. These are discussed along with other strategies to identify those that: (1) could be major factors in preventing long-term CO2 buildup, (2) would be environmentally sound but likely to have more limited long-range CO2 impact, (3) would be environmentally uncertain or uncertain for other reasons, and (4) would be environmentally questionable or unlikely solutions for other reasons. Most recent analyses of the problem focus on the next 20 to 100 years.

Keywords: *Climatic changes, *Technology assessment, *Carbon dioxide, *Air pollution abatement, *Carbon, Global aspects, Forecasting, Long term effects, Mitigation, Environmental impacts, Renewable energy sources, Energy conservation, Waste disposal, Forests, Recycling.

**PB93-222016/REB** PC **A03**/MF **A01**
**Removal Efficiencies in Terms of Particle Size and Concentration in a Suburban Home of Console Air Cleaners.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
R. S. Steiber, and L. E. Sparks. 1993, 12p EPA/600/A-93/183
Presented at the AWMA National Conference, Denver, CO., June 14-18, 1993.

The paper presents data on the removal efficiencies of two commercially available console air cleaners, one equipped with a high efficiency filter, the other with an electrostatic precipitator (ESP). Room air particle size distribution is examined in detail, both before and during use, and time-slice data are given on the effect on overall concentration of the operation of the units. The data show that both the filter-equipped unit and the ESP unit are highly efficiency in removing particles with diameters of 1.0 micrometer and larger, the size range of pollens and spores, but less efficient at removing smaller particles. The paper concludes with a brief discussion of the cost/benefits of each unit.

Keywords: *Indoor air pollution, *Air cleaners, *Technology assessment, Electrostatic precipitators, Air filters, Performance tests, Particulates, Removal, Efficiency.

**PB93-222024/REB** PC **A02**/MF **A01**
*Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.*
**Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.** Rept. for Nov 92-Feb 93.
Research Triangle Inst., Research Triangle Park, NC.
K. Foarde, P. Dulaney, E. Cole, D. VanOsdell, and D. Ensor. 1993, 8p EPA/600/A-93/184
Grant EPA-R-817083-01-0
Presented at Indoor Air '93, Helsinki, Finland, July 4-8, 1993. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper discusses investigation of the impact of the building environment on the ability of building materials to support microbial growth, using static chambers with defined relative humidity, temperature, and light conditions. The ability of fungi to grow on materials is well established, given sufficient moisture and nutrition. Four types of ceiling tile were investigated: one aged, two mineral fiber/crystalline silica, and one fire-resistant. Ceiling tile pieces were placed in the chambers, allowed to chamber-equilibrate, and inoculated with either Penicillium glabrum or Aspergillus versicolor. The critical bulk moisture content for organism growth varied depending on both tile type and test mold. P. glabrum counts increased three orders of magnitude in 28 days. A versicolor did not grow as well. Organism related differences are apparent.

Keywords: *Ceilings(Architecture), *Fungi, *Buildings, Tiles, Tests, Microorganisms, Moisture, Spores, Penicillium Aspergillus, Reprints.

**PB93-222032/REB** PC **A02**/MF **A01**
**Bioresponse Testing of Sources of Indoor Air Contaminants.** Rept. for Jan 92-Mar 93.
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
W. G. Tucker. 1993, 8p EPA/600/A-93/185
See also PB91-201095. Presented at Indoor Air '93, Helsinki, Finland, July 4-8, 1993.

The paper reviews the concept of bioresponse testing of emissions from sources of indoor air contaminants. Examples of bioresponse methods that measure human, animal, or in vitro biological responses to emissions are briefly described. The current status of development of such methods is summarized by reporting on selected ongoing research and development projects. The potential value of bioresponse methods for evaluating health and sensory comfort in relation to indoor sources is discussed and related to product testing.

Keywords: *Indoor air pollution, *Bioassay, *Air pollution effects, Emissions, Exposure, Biological effects, Irritants, Stationary sources, Construction materials, Furniture, Reprints, *Bioresponse, Low-emitting materials, Eye irritation, Odor irritation, Airway irritation.

**PB93-222040/REB** PC **A02**/MF **A01**
**Status of ASHRAE Standard 62. Ventilation for Acceptable Indoor Air Quality.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
W. G. Tucker. 1993, 8p EPA/600/A-92/186
See also PB93-106797. Presented at Indoor Air '93, Helsinki, Finland, July 4-8, 1993.

The paper briefly describes the purpose, history, and major features of ASHRAE (American Society of Heating, Refrigerating and Air-conditioning Engineers) Standard 62. The primary focus of the paper is on the status of the review and revision process as of January 1993. The current working outline of the revised standard is presented and discussed. The complementary roles of ventilation, source management, and air cleaning are emphasized. Extending the standard beyond ventilation system design to include operation and maintenance of buildings and ventilation systems is also projected.

Keywords: *Air quality, *Ventilation, *Air pollution standards, *Indoor air pollution, Buildings, North America, Stationary sources, Design criteria, Standards, Space HVAC systems, Reprints, ASHRAE(American Society for Heating Refrigerating and Air conditioning Engineers).

**PB93-222057/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Evaluation of Carbon Black Slurries as Clean Burning Fuels.** Rept. for Jan 91-Jan 93.
Acurex Environmental Corp., Research Triangle Park, NC.
R. K. Srivastava, and W. P. Linak. 14 Apr 93, 20p EPA/600/A-93/187
Contract EPA-68-DO-0141
See also PB88-239223, PB89-128631 and DE91011971. Presented at the Annual Meeting (86th), Air and Waste Management Association, Denver, CO., June 13-18, 1993. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper describes the results of the combustion of carbon black slurries. (NOTE: The Hydrocarb process is being evaluated as a method of producing methanol hydrogen-rich fuel gas, and carbon black.) Since carbon black has significant heating value (33.78 million J/kg, 14,100 Btu/lb) and contains neither sulfur, nitrogen, nor inorganic ash, there is potential for its use as a clean burning fuel or fuel extender in boilers and industrial furnaces. To obtain a preliminary assessment of the potential, experiments were performed to examine the pumpability, atomization, and combustion characteristics of slurries made of mixtures of carbon black with No. 2 fuel oil and methanol.

Keywords: *Biomass, *Carbon black, *Slurries, *Fuel oil, Air pollution control, Methanol, Carbinols, Atomizing, Reprints, Hydrocarb process.

**PB93-222065/REB** PC **A03**/MF **A01**
*Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.*
**EPA's Indoor Air/Pollution Prevention Workshop.**
Radian Corp., Research Triangle Park, NC.
K. W. Leovic, J. B. White, and C. Sarsony. 1993, 14p EPA/600/A-93/188
Contract EPA-68-D1-0031
See also PB90-262817 and PB93-173730. Presented at the AWMA Meeting, Denver, CO., June 13-18, 1993. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper discusses a workshop held as a step toward EPA's prioritizing potential areas of research for applying pollution prevention to indoor air quality (IAQ). The workshop involved technical experts in the fields of IAQ, pollution prevention, and selected industries. Workshop goals were to identify major IAQ issues and their pollution prevention opportunities, and to suggest research strategies for IAQ/pollution prevention. The paper summarizes the suggestions made by workshop participants and highlights opportunities for IAQ/pollution prevention research.

Keywords: *Indoor air pollution, *Air pollution abatement, *Stationary sources, Emissions, Ventilation, Environmental engineering, Construction materials, Adhesives, Sealers, Wallboard, Office equipment, Microorganisms, Furniture, Textiles, Meetings, Reprints, Low-emitting materials, Biocontaminants.

**PB93-222073/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.** Rept. for Mar 91-Sep 92.
Commission of the European Communities, Ispra (Italy). Environmental Inst.
A. Colombo, M. De Bortoli, and B. A. Tichenor. 1993, 9p EPA/600/A-93/189
Contract EPA-68-DO-0141
See also PB90-110131. Presented at Indoor Air '93, Helsinki, Finland, July 4-8, 1993. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper discusses an interlaboratory comparison of three materials to assess the agreement among laboratories for characterizing volatile organic compounds emitted from indoor materials and products using small test chambers. Results from the 20 participating laboratories showed that chambers of different materials (glass and stainless steel) and of widely different capacities (0.035 to 1475 liters) appeared equally suitable. The repeatability of duplicate measurements (including sampling) within each laboratory was good. The test with a known n-dodecane source showed, for most laboratories, an unexpected and yet unexplained discrepancies. The interlaboratory agreement appeared reasonable (coefficient of variation 26-42%) with a polyvinyl chloride tile; but with a wax, the scatter was very high.

Keywords: *Construction materials, *Indoor air pollution, *Air pollution sampling, Emissions, Materials tests, Test chambers, Stationary sources, Waxes, Dodecane, Reprints, *Volatile organic compounds, PVC(Polyvinyl chloride).

**PB93-222081/REB** PC **A03**/MF **A01**
**Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.** Journal article.
Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
W. E. Pepelko, and C. Chen. c1993, 16p EPA/600/J-93/188, OHEA-C-502
Pub. in Regulatory Toxicology and Pharmacology 17, p52-65, 1993.

Quantitative estimates of lung cancer risk from exposure to diesel engine emissions were developed using data from three chronic bioassays with Fischer 344 rats. Human target organ dose was estimated with the aid of a comprehensive dosimetry model. The epithe-

lial tissue lining the alveoli and lower airways is the primary target site for induction of lung tumors. Dose was therefore based upon the concentration of carbon particulate matter per unit lung surface area.

Keywords: *Pulmonary neoplasms, *Diesel engine exhaust, *Risk, Bioassay, Tests, Rats, Dosimetry, Epithelium, Coal tar, Respiration, Reprints.

**PB93-222099/REB** PC **A03**/MF **A01**
Robert S. Kerr Environmental Research Lab., Ada, OK.
**Practical Simulation of Composting in the Laboratory.** Journal article.
Nebraska Univ.-Lincoln. Dept. of Agronomy.
A. M. T. Magalhaes, P. J. Shea, M. D. Jawson, W. A. Wicklund, and D. W. Nelson. c1993, 13p EPA/600/J-93/271
Contract DAMD17-89-9031
Pub. in Waste Management and Research 11, p143-154 1993. Also pub. as paper no. 9733, Journal Series, Nebraska Agricultural Research Division. Sponsored by Robert S. Kerr Environmental Research Lab., Ada, OK., and Army Medical Research and Development Command, Fort Detrick, MD.

A closed incubation system was developed for laboratory simulation of composting conditions at the interior of a large compost pile. A conductive heat flux control system (CHFC) was used to adjust the temperature of the internal wall to that of the compost center and compensate for heat loss. Insulated small vessels (400 cu cm) controlled by the CHFC system were compared with similar vessels maintained at 30 deg C (mesophilic) and 55 C (thermophilic), and with large vessels (10 000 cu cm) with and without the CHFC. The CHFC has particular utility in research requiring expensive chemicals or hazardous substances.

Keywords: *Composts, *Ammunition, *Soils, *Hazardous materials, Fermentation, Sewage sludge, TNT, RDX, Contamination, Microbiology, Reprints.

**PB93-222107/REB** PC **A02**/MF **A01**
Environmental Research Lab., Narragansett, RI.
**Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.** Journal article.
Manhattan Coll., Bronx, NY.
D. M. Di Toro, J. D. Mahony, D. J. Hansen, K. J. Scott, and A. R. Carlson. c1991, 8p EPA/600/J-93/272, , ERLN-1173
Grant EPA-R-816326
Pub. in Environmental Science and Technology, v26 n1 p96-101 1992. Prepared in cooperation with Science Applications International Corp., Narragansett, RI. Sponsored by Environmental Research Lab., Narragansett, RI.

Laboratory toxicity tests using amphipods, oligochaetes, and snails with spiked freshwater and marine sediments and with contaminated sediments collected from an EPA Superfund site demonstrate that no significant mortality occurs relative to controls if the molar concentration of acid volatile sulfide (AVS) in the sediment is greater than the molar concentration of simultaneously extracted cadmium and/or nickel. Although it is well-known that these metals can form insoluble sulfides, it apparently has not been realized that AVS is a reactive pool of solid-phase sulfide that is available to bind metals and render that portion unavailable and nontoxic to biota. Thus, the AVS concentration of a sediment establishes the boundary below which these metals cease to exhibit an acute toxicity in freshwater and marine sediments. (Copyright (c) 1991 American Chemical Society.)

Keywords: *Toxicity, *Cadmium, *Nickel, *Water pollution effects(Animals), Sediments, Fresh water environment, Marine environment, Chemical reactions, Biological availability, Aquatic animals, Annelida, Snails, Amphipoda, Reprints, *Acid volatile sulfides.

**PB93-222115/REB** PC **A01**/MF **A01**
**Measurement of Sediment Resuspension Rates in Long Island Sound.** Journal article.
Environmental Research Lab., Narragansett, RI.
H. Bokuniewicz, L. McTiernan, and W. Davis. c1991, 5p EPA/600/J-93/273
Pub. in Geo-Marine Letters 11, p159-161, 1991. Prepared in cooperation with State Univ. of New York at Stony Brook. Marine Sciences Research Center.

The resuspension rates have been measured on Long Island Sound sediments (New York/Connecticut, USA) under an oscillating grid, using a flume, and in place, using high frequency acoustics, transmissometers, and sediment traps. Despite differences, the results compare favorably. The methods all provide an order-of-magnitude estimate of the resuspension rate and increases under storm conditions can be estimated.

Keywords: *Sediment transport, *Suspended sediments, *Long Island Sound, Measurement, Flumes, Traps, Particle size, Estimates, Transmissometers, Acoustic detection, Storms, New York, Connecticut, Reprints, *Resuspension rates.

**PB93-222123/REB** PC **A02**/MF **A01**
**Organic Combustion Fingerprints of Three Common Home Heating Fuels.** Journal article.
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
R. S. Steiber. c1993, 7p EPA/600/J-93/274
Pub. in the Jnl. Air Waste Management Association 43, p859-863 Jun 93. See also PB91-223222.

The paper discusses the chemical structures of three common home heating fuels: wood, coal, and No. 2 fuel oil. GC and GC/MS data are then presented which demonstrate how the thermal destruction of each fuel results in the production of a characteristic group of organic 'fingerprint' compounds. For wood, where the chief structural element is lignin polymer, they are methoxy benzenes, methoxy phenols, and alkyl benzenes. For coal, where the polymer contains more fused-ring structures, the chief products are fused-ring aromatics with structures cf three or more rings, benzothiophenes, and to a lesser extent methyl-substituted phenols. For oil, the chief byproducts are unburned droplets of the oil. The paper concludes with a brief discussion of how these fingerprints can be used as apportionment guides in complex airsheds.

Keywords: *Organic compounds, *Heating fuels, *Combustion products, *Air pollution control, Residential buildings, Wood, Coal, Heat transfer, Fuel oils, Byproducts, Polymers, Lignin, Phenols, Benzene, Gas chromatography, Mass spectrometers, Structural members, Reprints, Benzothiophenes.

**PB93-222180/REB** PC **A12**/MF **A03**
Agency for International Development, Washington, DC.
**Guidelines for Water Use.** Manual.
Environmental Protection Agency, Cincinnati, OH. Center for Environmental Research Information.
J. Crook, and D. Ammerman. Sep 92, 263p EPA/625/R-92/004
See also PB81-105017. Sponsored by Agency for International Development, Washington, DC.

The manual is a valuable tool for regulatory agencies at all levels of government, engineers, planners, and all other groups affected by water reuse problems. Key water reuse planning issues are identified and discussed in a manner that librally employs case study experience to illustrate the importance of each issue and successful solutions. A comprehensive listing of state water reuse guidelines by category of reuse is provided, along with an analysis of the variations between states within each category. The analysis is then followed with a series of suggested guidelines for water quality required for each category of reuse. These guidelines are based on the state guidelines and experience described earlier, and they offer a suggested starting point for state, regional, and local governments that plan to establish water reuse procedures, both in terms of water quality requirements and procedures for design, operation, and monitoring.

Keywords: *Water reclamation, *Waste water reuse, *Manuals, Water treatment, Technology transfer, Government policies, Regulations, Law(Jurisprudence), Guidelines, Economic analysis, Irrigation, Industry, Artificial recharge, Water supply, Case studies.

**PB93-222198/REB** PC **A10**/MF **A03**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.**
Pittsburgh Univ., PA. Dept. of Civil Engineering.
F. G. Pohland, W. H. Cross, J. P. Gould, and D. R. Reinhart. Aug 93, 215p EPA/600/R-93/137A
See also Volume 2, PB93-222206. Prepared in cooperation with Georgia Inst. of Tech., Atlanta. School of Civil Engineering, and University of Central Florida, Orlando. Dept. of Civil Engineering. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Organic and inorganic priority pollutants codisposed with municipal solid waste (MSW) in ten pilot-scale simulated landfill columns, operated under single pass leaching or leachate recycle, were capable of being attenuated by microbially-mediated landfill stabilization processes. The results of the investigation have indicated that columns operated with leachate recycle stabilized more rapidly and completely than columns operated under single pass leaching. The behavior and attenuation of admixed priority pollutant loadings were reflected by changes in leachate characteristics and in the total gas production, the gas production rate, and the methane content of the gas produced by the simulated landfill columns. Leachate constituents were retained in the recycle columns, but were principally removed from the single pass columns due to washout. An explicit inhibition threshold for stabilization consequenced by the priority pollutant loadings was not observed for the recycle columns, although retardation was evident for the test column most heavily loaded with heavy metals. In contrast, stabilization in all single pass columns containing organic and inorganic priority pollutant loadings was inhibited. The organic priority pollutants appeared to have less impact on landfill stabilization than the heavy metals.

Keywords: *Organic compounds, *Inorganic compounds, *Municipal wastes, *Biological treatment, *Solid waste disposal, Hazardous materials, Stabilization, Waste management, Leaching, Earth fills, Methane, Gas production, In-situ processing, Technology innovation, Recycling, Environmental effects, Heavy metals, *Waste codisposal.

**PB93-222206/REB** PC **A15**/MF **A03**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.** Final rept.
Pittsburgh Univ., PA. Dept. of Civil Engineering.
F. G. Pohland, W. H. Cross, J. P. Gould, and D. R. Reinhart. Aug 93, 327p EPA/600/R-93/137B
See also Volume 1, PB93-222198. Prepared in cooperation with Georgia Inst. of Tech., Atlanta. School of Civil Engineering, and University of Central Florida, Orlando. Dept. of Civil Engineering. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Organic and inorganic priority pollutants codisposed with municipal solid waste (MSW) in ten pilot-scale simulated landfill columns, operated under single pass leaching or leachate recycle, were capable of being attenuated by microbially-mediated landfill stabilization processes. The results of the investigation have indicated that columns operated with leachate recycle stabilized more rapidly and completely than columns operated under single pass leaching. The behavior and attenuation of admixed priority pollutant loadings were reflected by changes in leachate characteristics and in the total gas production, the gas production rate, and the methane content of the gas produced by the simulated landfill columns. The volume contains the appendices for Volume I (PB93-222198).

Keywords: *Organic compounds, *Inorganic compounds, *Municipal wastes, *Biological treatment, *Solid waste disposal, Hazardous materials, Stabilization, Waste management, Leaching, Earth fills, Methane, Concentration(Composition), Tables(Data), Gas production, In-situ processing, Technology innovation, Recycling, Environmental effects, Heavy metals, *Waste codisposal.

**PB93-222214/REB** PC **A10**/MF **A03**
Environmental Protection Agency, Cincinnati, OH. Water Engineering Research Lab.
**Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.**
Jefferson Parish Dept. of Public Works, LA.
W. E. Koffskey, and B. W. Lykins. Aug 93, 209p EPA/600/R-93/136

See also PB83-194506 and PB87-146700. Sponsored by Environmental Protection Agency, Cincinnati, OH. Water Engineering Research Lab.

The effects of the use of alternative disinfectants on the formation of halogenated disinfection by-products (DBPs) including total organic halide, trihalomethanes, haloacetic acids, haloacetonitriles, haloketones, chloral hydrate, and chloropicrin, were examined along with the ability of granular activated carbon (GAC) to remove these by-products and their precursors. Microbiological information was also obtained on the operating system and included heterotropic plate count, total coliform, and assimilable organic carbon (AOC). The ability of the alternative disinfectants to inactivate MS2 coliphage was also examined. One other aspect of the project was to provide sampling sites for health effects research by EPA which will be reported elsewhere. The operating system was comprised of four parallel pilot column process streams consisting of a 30 min contact chamber followed by a sand column in series with a GAC column having a 20 min empty bed contact time. One of four disinfectants, ozone, chlorine dioxide, chlorine, or chloramines, was applied at the beginning of each process stream. A fifth nondisinfected process stream consisting of only a sand column in series with a GAC column was used as a control.

Keywords: *Disinfectants, *Environmental chemical substitutes, *Water treatment, *Byproducts, *Granular activated carbon treatment, Potable water, Water pollution control, Filtration, Water quality, Alternatives, Microorganisms, Halogen organic compounds, Performance evaluation, Graphs(Charts), Safe Drinking Water Act.

**PB93-222222/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Gasoline and Methanol Exposures from Automobiles within Residences and Attached Garages.**
Environmental and Occupational Health Sciences Inst., Piscataway, NJ. Exposure Measurement and Assessment Div.
C. P. Weisel, N. J. Lawryk, A. H. Huber, and G. H. Crescenti. 1993, 9p EPA/600/A-93/190
Contract EPA-CR82023501
Presented at the International Conference on Indoor Air Quality (6th), Helsinki, Finland, July 4-8, 1993. See also PB91-146571. Prepared in cooperation with Robert Wood Johnson Medical School, Piscataway, NJ. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

A pilot study was conducted to evaluate the characteristics of the air concentrations within a garage microenvironment. The air exchange rate between the garage and the house, the windspeed in front of the garage door, the fuel tank temperature, and the air concentrations of benzene (from gasoline) and methanol (from M100 fuel) were measured after an automobile containing US summer grade gasoline or a fabricated fuel tank containing M100 fuel entered the garage and its door was closed. The air concentrations in the garage were greatly elevated after the car or M100 fuel tank entered the garage compared to the ambient levels which were present prior to the car's entry. A steady state concentration was often reached within 90 minutes of the automobile or fuel tank entering the garage and the air concentration remained level until the fuel tank temperature returned to ambient levels, several hours later.

Keywords: *Indoor air pollution, *Fuel tank emissions, *Air flow, Air pollution monitoring, Garages, Houses, Gasoline, Methanol, Fuel tank evaporation, Ventilation, Tracer gases, High temperature tests, Wind velocity, Ventilation, Exposure, Reprints, Fugitive emissions.

**PB93-222230/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.**
Research Triangle Inst., Research Triangle Park, NC.
B. A. Pate, M. R. Peterson, R. K. M. Jayanty, F. W. Wilshire, and J. E. Knoll. 1993, 9p EPA/600/A-93/191
Pub. in Proceedings of the Environmental Protection Agency/Air and Waste Management Association International Symposium, Durham, NC. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

Methanol was designated under Title III of the Clean Air Act Amendments of 1990 as a pollutant to be regulated. The U.S. EPA, through a contract with Research Triangle Institute, has developed a test method for the measurement of methanol emissions from stationary sources. The methanol sampling train (MST) consists of a glass-lined heated probe, two knockout traps and three sorbent cartridges packed with Anasorb 747, a beaded, activated carbon. Anasorb 747 samples are desorbed with a 1:1 mixture of carbon disulfide and N,N-dimethylformamide. Samples are analyzed by gas chromatography with flame ionization detection. Following laboratory testing, field tests of the MST and the National Council for Air and Stream Improvement (NCASI) sampling method for methanol were conducted at a paper and pulp mill. The sampling location was an inlet vent to a softwood bleach plant scrubber. In accordance with EPA Method 301, two pairs of trains were run in parallel for six runs, collecting a total of twenty-four samples by each method.

Keywords: *Methanol, *Emissions, *Pulp mills, *Flue gases, *Air pollution control, Paper mills, Test methods, Activated carbon treatment, Carbon disulfide, Chemical analysis, Waste processing, Gas chromatography, Air sampling, Field tests, Scrubbers, Vents, Sorbents, Stationary sources, Clean Air Act Amendments of 1990.

**PB93-222248/REB** PC **A02**/MF **A01**
Environmental Research Lab., Athens, GA.
**Role and Design of Water Quality Monitoring on Forested Watersheds.**
Georgia Univ., Athens. School of Forest Resources.
Y. D. Chen, and T. C. Rasmussen. 1993, 6p EPA/600/A-93/192
Pub. in Proceedings of the 1993 Georgia Water Resources Conference, Athens, GA., p138-141. See also PB92-104520. Sponsored by Environmental Research Lab., Athens, GA.

The role of water quality monitoring is important for resolving issues related to the selection of Best Management Practices for silvicultural nonpoint source pollution control. Water quality monitoring provides direct information related to the suitability of various management options and to the simulation of water quality processes. In addition to the traditional physical and chemical parameters, the monitoring should focus on other environmental and biological indicators of ecosystem structure and function. A framework for designing water quality monitoring systems is presented that includes the special conditions exhibited by forested watersheds.

Keywords: *Water quality management, *Forest management, Silviculture, Nonpoint sources, Monitors, Georgia, Federal region IV, Reprints.

**PB93-222255/REB** PC **A04**/MF **A01**
**Histopathologic Biomarkers (Chapter 3).** Book chapter.
Environmental Research Lab., Narragansett, RI.
D. E. Hinton, P. C. Baumann, G. R. Gardner, W. E. Hawkins, and J. D. Hendricks. c1992, 58p EPA/600/A-93/193, ERLN-1357
Pub. in BIOMARKERS Biochemical, Physiological, and Histological Markers of Anthropogenic Stress, p155-309 1992.

Histopathologic alterations in fish tissues are biomarkers of effect of exposure to environmental stressors. The category of biomarkers has the advantage of allowing one to examine specific target organs and cells as they are affected under in vivo conditions. Furthermore, for field assessment, histopathology is the most rapid method of detecting adverse acute and chronic effects of exposure in the various tissues and organs comprising an individual finfish or shellfish. Although very numerous, environmental pollutants act through a finite number of ultimately toxic mechanisms to produce a finite number of histopathologic lesions. While only broad generalizations regarding the specific etiologic agent(s) responsible for such lesions can be made, the ability to determine the magnitude of toxic impairment strengthens efforts to predict eventual impact on the survival of the affected individual and, in some instances, the population. Confounding issues for histopathologic biomarkers include distinguishing changes caused by anthropogenic toxicants from those due to infectious disease, normal physiologic variation, or natural toxins. (Copyright (c) 1992 by Lewis Publishers.)

Keywords: *Shellfish, *Fishes, *Exposure, *Environmental pollution, *Fish diseases, Biological markers, Tissues(Biology), Organs, Toxicity, Histology, Stress(Physiology), Reprints, Lesions.

**PB93-222263/REB** PC **A03**/MF **A01**
**Chemically Induced Histopathology in Aquatic Invertebrates (Chapter 14).** Book chapter.
Environmental Research Lab., Narragansett, RI.
G. R. Gardner. c1993, 36p EPA/600/A-93/194, ERLN-1228
Pub. in Advances in Fisheries Science PATHOBIOLOGY of Marine and Estuarine Organisms, p359-391 1993.

The paper surveys pathology of invertebrates resulting from exposure to chemicals and environmental hazards without judgment of methodologies, chemicals, or species studied. Reference sources are scientific papers, conference proceedings, monographs, reviews, and synoptic views in existing literature.

Keywords: *Aquatic animals, *Water pollution effects(Animals), *Pathology, Invertebrates, Neoplasms, Chemical compounds, Metals, Pesticides, Toxicity, Marine environments, Case studies, Tables(Data), Reprints, Animal organs, Chemical effects, Dose-response relationships.

**PB93-222271/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Climate Change Impacts on Net Primary Production in China.** Symposium paper.
ManTech Environmental Technology, Inc., Corvallis, OR.
D. Bachelet. 1993, 11p EPA/600/A-93/195
Pub. in Proceedings of the International Symposium on Climate Change, Natural Disasters and Agricultural Strategies, Beijing, China, May 25-29, 1993. Sponsored by Corvallis Environmental Research Lab., OR.

Several studies have estimated the potential effects of greenhouse gas-induced climate change on various systems using outputs of general circulation models (GCMs). The purpose of the present study was to generate comparable estimates of potential impacts on net primary production using the GCM climate scenarios in a very simple net primary production model and to identify the most likely limiting factor that would follow a change in global climate. The study emphasizes that climatic thresholds that limit production across China will be modified following a doubling of atmospheric CO2 concentration. Detailed studies are underway to determine the direct impacts of such changes on the water budgets of both natural and agricultural ecosystems in western China. Detailed observations of vegetation response to past drought and flood years would be of great interest in order to better predict what might happen in the future, given the physiological changes that have been documented to occur when plants are grown at elevated carbon dioxide concentrations.

Keywords: *Climatic changes, *China, *Greenhouse gases, *Environmental impacts, *Air pollution, Global warming, General Circulation Models, Water budgets, Ecosystems, Agriculture, Forecasting, Carbon dioxide, Plants(Botany), Vegetation.

**PB93-222289/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Comparing Sampling Designs for Monitoring Ecological Status and Trends: Impact of Temporal Patterns (Chapter 3).** Book chapter.
Oregon State Univ., Corvallis.
N. S. Urquhart, W. S. Overton, and D. S. Birkes. c1993, 18p EPA/600/A-93/196
Pub. in Statistics for the Environment, Chapter 3, p71-85 1993. See also PB92-103449. Sponsored by Corvallis Environmental Research Lab., OR.

The paper presents a comparison of two classes of sampling designs suggested for long-term environmental monitoring. One class is based on a rotating panel design that prescribes visiting a panel of sites for several consecutive years with partial replacement of sites each year; the other class is based on a serially

alternating design which prescribes returning to sampling sites every four years. A random effects linear model is used to investigate and compare the proposed sampling designs because the sites to be visited and the years of visits may manifest substantial random contributions. The class of designs based on the serially alternating design lead to more precise estimates of current status and of trends in the ecological resource when the site components of variance is substantially greater than the year component and/or when the sample sizes are smaller.

Keywords: *Environmental monitoring, *Biological indicators, *Statistical analysis, Sampling, Design criteria, Environmental surveys, Ecology, Environment pollution, Long term effects, Reprints, Status and trends.

**PB93-222297/REB** PC **A03**/MF **A01**
**Dynamometer Testing of On-Road Vehicles from the Los Angeles In-Use Emissions Study.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
K. T. Knapp. 1993, 17p EPA/600/A-93/197

One part of the CARB/EPA coordinated In-Use Automobile Emissions field study of 1991 carried out in the Los Angeles area was the phase to examine the operation and emissions characteristics of high emitting carbon monoxide (CO) and hydrocarbon (HC) vehicles. In the part of the study, high CO and HC emitting in-use, consumer vehicles were detected by the cross-road remote sensors and pulled over for I/M testing. Vehicles were selected from those tested on the roadside inspection for further testing on a portable dynamometer set up in a nearby park. The selected vehicles were chosen by the author and had to meet the qualifications of having good tires, no coolant leaks and no exhaust leaks. The dynamometer test took between 20 and 30 minutes and was voluntary.

Keywords: *Exhaust emissions, *Automobile exhaust, *Dynamometers, Field tests, Carbon monoxide, Nitrogen oxides, Motor vehicles, Road tests, Reprints, *Los Angeles(California).

**PB93-222305/REB** PC **A06**/MF **A02**
Corvallis Environmental Research Lab., OR.
**Habitat Quality Assessment of Two Wetland Treatment Systems in the Arid West: A Pilot Study.**
ManTech Environmental Technology, Inc., Corvallis, OR.
L. S. McAllister. Aug 93, 118p EPA/600/R-93/117
See also PB93-135614. Sponsored by Corvallis Environmental Research Lab., OR.

The use of wetland treatment systems (WTS) for treating municipal wastewater is increasing in the United States, but little is known about the ability of these systems to duplicate or sustain wetland functions. The pilot study was designed to examine methods and the usefulness of various wetland indicators for assessing the wildlife habitat quality in six WTS sites throughout the United States and to identify any major differences in indicator values between WTS and non-WTS. The report focusses on two of the sites, one located in east-central Arizona and one in the Carson Valley in Nevada. Habitat indicator data collected in the field, as well as existing data, were summarized and compared with ranges of values for the same indicators from non-WTS. Of the indicators measured, vegetation, invertebrates, site morphology, and birds appear to be the most promising for assessing and monitoring habitat quality in terms of reliability of data.

Keywords: *Municipalities, *Wetlands, *Habitats, *Sewage treatment, *Biological effects, *Water pollution effects, Wildlife, Bioindicators, Toxicity, Vegetation, Invertebrates, Birds, Aquatic ecosystems, Water quality data, Risk assessment, Arid land, Arizona, Nevada, Constructed wetlands.

**PB93-222313/REB** PC **A06**/MF **A02**
Corvallis Environmental Research Lab., OR.
**Global Climates: Past, Present, and Future. Activities for Integrated Science Education.**
ManTech Environmental Technology, Inc., Corvallis, OR.
S. Henderson, S. R. Holman, and L. L. Mortensen. Jun 93, 119p EPA/600/R-93/126
Prepared in cooperation with Nebraska Univ., Lincoln. Sponsored by Corvallis Environmental Research Lab., OR.

The report is the product of a partnership designed to help bridge the gap between the scientific and educational communities. The curriculum uses a current environmental issue as the vehicle for teaching science education. It is not the intent of the curriculum to convince students that global temperatures are rising at an unprecedented rate, but rather to present the results of research and encourage students to apply critical thinking skills to complex issues such as global climate change.

Keywords: *Climatic change, *Education, *Environmental effects, Greenhouse effects, Carbon cycle, Carbon dioxide, Weather, Climate, Sea level, Instructional aids.

**PB93-222321/REB** PC **A05**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Stream Indicator and Design Workshop.**
ManTech Environmental Technology, Inc., Corvallis, OR.
R. M. Hughes. Jul 93, 93p EPA/600/R-93/138
See also PB92-232917. Sponsored by Corvallis Environmental Research Lab., OR.

The primary objective of the U.S. Environmental Protection Agency's Environmental Monitoring and Assessment Program for Surface Waters (EMAP-SW) is to estimate - regionally and with known confidence - the status of, and trends in, indicators of the condition of U.S. lakes and streams. Given the objective, it is critical to document the process by which indicators are developed, evaluated, and eventually selected for implementation. The purpose of the report is to record the major conclusions reached in a workshop on stream indicators. Based on the independent assessments of the individual groups and review by EMAP indicator leads, the assemblages are ranked in order by total criteria score and then by critical criteria.

Keywords: *Water pollution effects, *Aquatic ecosystems, *Meetings, Lakes, Streams, Aquatic animals, Aquatic plants, Surface waters, Ecology, Metabolism, Animal behavior, Habitability.

**PB93-222339/REB** PC **A07**/MF **A02**
**Effects of CO2 and Climate Change on Forest Trees.** Research rept.
Corvallis Environmental Research Lab., OR. Global Processes and Effects Program.
Apr 93, 147p EPA/600/R-93/146

Concentrations of carbon dioxide (CO2) and other trace gases such as methane are increasing in the atmosphere due to human activities. Evidence suggests that increased levels of these gases will produce increases in global temperatures and associated changes in precipitation patterns and amount, cloudiness, and other atmospheric factors which are collectively known as 'climate change.' The U.S. Environmental Protection Agency (EPA) has created the Global Climate Research Program (GCRP) to provide integrated research on all aspects of the trace gases and climate change. An important focus of the GCRP at the EPA's Environmental Research Laboratory in Corvallis, Oregon (ERL-C), is to understand how CO2 and climate change will affect vegetation in North America.

Keywords: *North America, *Carbon dioxide, *Climate changes, *Forest trees, *Growth, Global warming, Trace gases, Biological productivity, Mathematical models, Soils, Environmental impacts, Vegetation, Air pollution effects(Plants), Graphs(Charts), Tables(Data).

**PB93-222354/REB** PC **A03**/MF **A01**
**Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.** Journal article.
Environmental Research Lab.-Duluth, MN.
J. Serrano, D. W. Kuehl, and S. Naumann. c1993, 13p EPA/600/J-93/277
Pub. in Jnl. of Chromatography 615, p203-213 1993. Prepared in cooperation with AScI Corp., Duluth, MN.

Analytical procedures and quality assurance criteria have been established for enzymatic hydrolysis of fish tissue DNA to free nucleosides and their subsequent characterization by liquid chromatography-photodiode-array ultraviolet spectroscopy and liquid chromatography-thermospray mass spectrometry. Optimization of enzymatic efficiency to assure minimal loss of modified nucleosides is described. Variability in analyte capacity factors and multiwavelength response have been compared for analyte standards and hydrolysates, and results have been used to derive qualitative and quantitative quality assurance criteria. A comparison of DNA mole percent calculated using single-wavelength quantification and multiwavelength averaging quantification indicates that less variability in data may be expected using the multiwavelength technique. Finally, the comparison of DNA from liver of three species of fish widely used in mutagen/carcinogen laboratory and field studies, rainbow trout (Onchorynchus mykiss), medaka (Oryzias latipes), and brown bullhead (Ictalurus nebulosus), has been determined. Identification of deoxyuridine in the DNA hydrolysates of each fish indicates that this analyte should be measured to accurately report DNA deoxynucleoside mole percent, especially when reporting data for the methylation of deoxycytidine. (Copyright (c) 1993 Elsevier Science Publishers B.V.)

Keywords: *Chemical analysis, *Deoxyribonucleic acids, *Nucleosides, *Fishes, Liquid chromatography, Ultraviolet spectrophotometry, Mass spectroscopy, Quality control, Reprints.

**PB93-222362/REB** PC **A03**/MF **A01**
**Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.** Journal article.
Environmental Research Lab.-Duluth, MN.
D. A. Benoit, G. L. Phipps, and G. T. Ankley. c1993, 12p EPA/600/J-93/278
Pub. in Water Research, v27 n9 p1403-1412 May 93. See also PB92-137488.

A sediment testing intermittent renewal (STIR) system (stationary or portable) for invertebrate toxicity testing with contaminated sediments has been successfully developed and thoroughly tested at ERL-Duluth. Both the stationary and portable systems enable the maintenance of acceptable water quality (e.g. DO) through the capability of automatically renewing overlying water in sediment tests at rates ranging from 1 to 21 volume renewals/day. The STIR system not only significantly reduces the labor associated with renewal of overlying water but also affords a gentle exchange of water that results in virtually no sediment resuspension. Both systems can also be installed in a compact vented enclosure to permit safe testing of hazardous contaminated sediments. To date the STIR system has been used extensively for conducting 10-day bulk sediment tests with Chironomus tentans, Hyalella azteca and Lumbriculus variegatus.

Keywords: *Sediments, *Test equipment, *Water pollution effects, *Toxicity, Invertebrates, Portable equipment, Bacteria, Safety, Photographs, Reprints, STIR system, Chironomus tentans.

**PB93-222370/REB** PC **A02**/MF **A01**
Robert S. Kerr Environmental Research Lab., Ada, OK.
**Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.** Journal article.
ManTech Environmental Technology, Inc., Ada, OK.
J. L. Sinclair, D. H. Kampbell, M. L. Cook, and J. T. Wilson. c1993, 8p EPA/600/J-93/279
Contract EPA-68-C8-0025
Pub. in Applied and Environmental Microbiology, v59 n2 p467-472 Feb 93. See also PB89-130397. Sponsored by Robert S. Kerr Environmental Research Lab., Ada, OK.

Numbers of protozoa in the subsurface of aviation gasoline and jet fuel spill areas at a Coast Guard base at Traverse City, Mich., were determined. Boreholes were drilled in an uncontaminated location, in contaminated but untreated parts of the fuel plumes, and in the aviation gasoline source area undergoing H2O2 biotreatment. Protozoa were found to occur in elevated numbers in the unsaturated zone, where fuel vapors mixed with atmospheric oxygen, and below the layer of floating fuel, where uncontaminated groundwater

came into contact with fuel. Numbers of protozoa in some contaminated areas equalled or exceeded those found in surface soil. The abundance of protozoa in the biotreatment area was high enough that it would be expected to significantly reduce the bacterial community that was degrading the fuel. (Copyright (c) 1993, American Society for Microbiology.)

Keywords: *Aviation gasoline, *Protozoa, *Bacteria, Soil contamination, Ground water, Plumes, Subsurface investigations, Hydrogen peroxide, Soil gases, Reprints, Traverse City(Michigan), Unsaturated zone, Bioremediation.

**PB93-222388/REB** PC **A03/MF A01**
**Global Flux of Methane from Shallow Submarine Sediments.** Journal article.
Environmental Research Lab., Athens, GA.
M. Hovland, A. G. Judd, and R. A. Burke. c1993, 22p EPA/600/J-93/280
Pub. in Chemosphere, v26 n1-4 p559-578 Apr 93. Prepared in cooperation with Norske Stats Oljeselskap A/S, Stavanger, Sunderland Univ. (England). School of the Environment, and Texas A and M Univ., College Station. Geochemical and Environmental Research Group.

The seepage of methane through the seabed of the world's continental shelves is considered. Methane may be generated by both bacterial and thermogenic processes acting on the complex organic matter stored in the seabed. Because these processes are ubiquitous, occurrences of gas and gas seepages are probably widespread. Although numerous observations of methane seepages from shallow marine sources have been reported, there are few documented flux measurements. A rough estimation of the global flux suggests that between 8 and 65 Tg of methane passes through the seabed of the continental shelves annually. If a significant proportion of this passes through the water column and into the atmosphere, the oceans may represent a more significant source of methane than has been suggested previously.

Keywords: *Methane, *Seeps, *Marine environments, Natural gas deposits, Seepage, Case studies, Santa Barbara Channel, Mexico Gulf, Cape Lookout Bight, North Sea, Black Sea, Reprints.

**PB93-222396/REB** PC **A02/MF A01**
Environmental Research Lab., Athens, GA.
**Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.** Journal article.
Jackson State Univ., MS. Dept. of Biology.
H. M. Hwang, R. E. Hodson, D. L. Lewis, and R. Scholze. c1993, 10p EPA/600/J-93/281
Contract DACW8891MO321
Pub. in Bulletin of Environmental Contamination and Toxicology 50, n6 p856-863 Jun 93. See also PB89-197511. Prepared in cooperation with Georgia Univ., Athens. Sponsored by Environmental Research Lab., Athens, GA., Construction Engineering Research Lab. (Army), Champaign, IL., and Department of Energy, Washington, DC.

The microbial fate and effects of toxic organic chemicals at the ambient concentration in leachates derived from a waste disposal landfill site are examined. Groundwater downslope from the burial site contains high levels of dissolved organic chemicals such as toluene, xylene, benzene, and methylene chloride. p-Cresol and toluene were used as model compounds; their microbiological dissimilation over a wide range of substrate concentrations was investigated. In addition, the effects of inorganic nutrients, the presence of other chemical pollutants, and alternative electron acceptors (sulfate and nitrate) on microbial degradative activity were assessed.

Keywords: *Ground water, *Waste disposal, *Microorganism control(Water), *Organic compounds, *Earth fills, Biodegradation, Leachate, Sites, Cresols, Toxicity, Substrates, Bacteria, Reaction kinetics, Chloromethanes, Toluene, Aromatic hydrocarbons, Risk assessment, Inorganic compounds, Anaerobic processes, Reprints.

**PB93-222404/REB** PC **A02/MF A01**
**Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.** Journal article.
Environmental Research Lab., Athens, GA.
T. G. Hallam, G. A. Canziani, and R. R. Lassiter. c1993, 10p EPA/600/J-93/282
Pub. in Environmental Toxicology and Chemistry, v12 n5 p947-954 May 93. See also PB92-179829. Prepared in cooperation with Tennessee Univ., Knoxville, and Instituto Argentino de Matematica, Buenos Aires (Argentina).

The study of a Daphnia population model suggests that sublethal effects of nonpolar narcotics on growth of individual organisms can result in ultimate extinction of the population at chronic chemical concentrations near the effect concentration that leads to a 50% reduction in individual growth (the 16-d EC50 for growth). A quantitative dose-response relationship (QDRR)--a population extinction threshold, relating the minimal chronic chemical concentration that yields population persistence and the octanol/water partition coefficient (K(ow))--is generated from numerical simulation studies of a Daphnia population model. The transition from population persistence to extinction is examined in terms of density functions in the lipid, structure, and age variables associated with models of individual daphnids. The densities of populations undergoing transition from persistence to extinction due to increased toxicity suggest that critically stressed populations are age-bimodal with a component of old, large individuals and a component of small, nonreproductive individuals. The populations that persist near the threshold for extinction are unexpectedly diverse in age density and consist of relatively small individuals. (Copyright (c) 1993 SETAC.)

Keywords: *Daphnia, *Water pollution effects(Animals), *Toxicity, *Growth, Dose-response relationships, Populations, Aquatic biology, Models, Reprints.

**PB93-222438/REB** PC **A01/MF A01**
**Industrial Boiler Furnace Sorbent Injection Algorithm Development.** Project summary.
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
J. Maddox. Apr 88, 4p EPA/600/S8-88/065
See also PB88-184890.

The Industrial Combustion Emission (ICE) Model is one of four stationary source emission and control cost forecasting models developed by EPA for the National Acid Precipitation Assessment Program (NAPAP). The ICE Model projects air pollution emissions (sulfur dioxide, sulfates, nitrogen oxides, and particulate matter), cost, and fuel mix for industrial fossil-fuel-fired (natural gas, distillate and residual fuel oil, and coal) boilers by state and year (1980) baseline, 1990, 1995, 2000, 2010, 2020, and 2030). The report describes the development of a performance and control cost algorithm for the ICE Model.

Keywords: *Boilers, *Air pollution control, *Cost analysis, Air pollution economics, Flue gases, Stationary sources, Industrial plants, Algorithms, Cost estimates, Operating costs, Capitalized costs, Sorbent injection.

**PB93-222545/REB** PC **A01/MF A01**
**Preliminary Diagnostic Procedures for Radon Control. Project Summary.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
B. H. Turk, J. Harrison, R. J. Prill, and R. G. Sexton.
Nov 88, 5p EPA/600/S8-88/084
See also PB88-225115.

Analytical procedures for diagnosing radon entry mechanisms into buildings are described. Flowcharts are presented that develop a logical sequence of events in the diagnostic process, including problem diagnosis, selection and implementation of mitigation systems, and post-mitigation evaluation. The initial problem assessment procedures rely on an organized set of measurements to characterize the structure, the surrounding soil, and the likely entry pathways from the soil into the building.

Keywords: *Radon, *Indoor air pollution, *Air pollution control, Residential buildings, Radionuclide migration, Soil dynamics, Soil-structure interactions, Soil gases, Air flow, Leakage, Diagnostic techniques, Problem analysis.

**PB93-222552/REB** PC **A01/MF A01**
**Projections of Regional Fuel Oil and Natural Gas Prices. Project Summary.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
T. Hogan. Jan 89, 4p EPA/600/S8-88/104

The report presents delivered regional oil and natural gas price forecasts for the industrial and electric utility sectors. Delivered energy price projections by Federal region through the year 2045 are provided for distillate fuel oil, residual fuel oil and natural gas. Methodology and major assumptions are also described.

Keywords: *Fuel oil, *Natural gas, *Prices, *Forecasting, Crude oil, Fuel substitution, Projection, Economic analysis.

**PB93-222560/REB** PC **A01/MF A01**
**Baseline Emissions Forecasts for Industrial Non-Boiler Sources. Project Summary.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
T. Hogan. Feb 89, 4p EPA/600/S8-88/102
See also PB89-118723.

The Process Model Projection Technique (PROMPT), one of a number of National Acid Precipitation Assessment Program emission forecasting models, projects the emissions of nitrogen oxides and sulfur oxides from industrial sources such as process heaters, wood boilers, furnaces, dryers, kilns, engines, and turbines through the year 2030. The document presents regional air emission forecasts from three PROMPT runs.

Keywords: *Industrial heating, *Heating equipment, *Emissions, Nitrogen oxides, Sulfur oxides, Process heat, Wood burning appliances, Forecasting, Acid rain, Air pollution, Computerized simulation, PROMPT(Process Model Projection Technique).

**PB93-222578/REB** PC **A01/MF A01**
**Industrial Boiler Low NOx Combustion Retrofit Cost Algorithm Development. Project Summary.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
K. L. Johnson. Nov 88, 4p EPA/600/S8-88/091
See also PB88-239074.

The report documents the development of low NO(sub x) burner (LNB) retrofit cost algorithms for industrial boilers. Also included are cost algorithms for overfire air (OFA) and low excess air (LEA) systems. Costs (in 1985 dollars) are estimated for new systems as well as retrofit applications. Included are summaries of the data sources and the methodology used to generate the cost algorithms.

Keywords: *Boilers, *Air pollution control equipment, *Nitrogen oxides, Air pollution economics, Cost estimates, Economic analysis, Algorithms, Retrofitting, Burners, Combustion products.

**PB93-222586/REB** PC **A01/MF A01**
**Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).**
Environmental Monitoring Systems Lab., Las Vegas, NV.
L. J. Arent, M. O. Morison, and C. S. Soong. Apr 90, 5p EPA/600/S4-88/025
See also PB90-146275.

The National Surface Water Survey was designed to characterize surface water chemistry in regions of the United States believed to be potentially sensitive to acidic deposition. The National Stream Survey was a synoptic survey designed to quantify the chemistry of streams in areas of the United States known to contain low alkalinity waters. Phase II of the Eastern Lake Survey was designed to address temporal variability of chemical and biological characteristics of a subset of Phase 1 lakes. The document describes the centralized processing laboratory operations associated with the 1986 surveys.

Keywords: *United States, *Lakes, *Streams, *Acidification, Acid rain, Water chemistry, Chemical analysis, Dissolved solids, Color, Turbidity, Conductivity, pH, Alkalinity, National Surface Water Survey, National Lake Survey, National Stream Survey.

**PB93-222594/REB** PC **A02**/MF **A01**
**Clinton, New Jersey, Radon Mitigation Follow-Up and Long-Term Monitoring. Project Summary.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
J. Carvitti. May 88, 6p EPA/600/S7-88/005
See also PB88-198528.

During 1986, the U.S. Environmental Protection Agency demonstrated radon reduction techniques in 10 houses in Clinton, New Jersey. Since January 1987 the radon levels in the 10 houses have been monitored with alpha track detectors. Results of the comparison between the radon concentration measured during the first and second quarters of 1987 showed that most of the houses had slightly higher concentrations during the second quarter. These results are contrary to expected trends.

Keywords: *Indoor air pollution, *Radon, *Air pollution control, Air pollution monitoring, Residential buildings, Alpha detection, Emanometers, Mitigation, Activated carbon, Clinton(New Jersey), Charcoal canisters.

**PB93-222602/REB** PC **A02**/MF **A01**
**Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.**
Environmental Monitoring Systems Lab., Research Triangle Park, NC.
J. C. Chuang, G. A. Mack, J. W. Stockrahm, S. W. Hannan, and C. Bridges. Sep 88, 7p EPA/600/S4-88/028
See also PB88-242565.

The objectives of the study were to determine the feasibility of the use of newly developed indoor air samplers in residential indoor air sampling and to evaluate methodology for characterization of the concentrations of polynuclear aromatic hydrocarbons (PAH), PAH derivatives, and nicotine in residential air.

Keywords: *Indoor air pollution, *Air pollution sampling, *Field tests, Air samplers, Residential buildings, Performance evaluation, Polycyclic aromatic hydrocarbons, Nicotine, Cooking devices, Heating equipment, Air pollution sources, Columbus(Ohio).

**PB93-222610/REB** PC **A02**/MF **A01**
**Guidelines for Stack Testing at Municipal Waste Combustion Facilities. Project Summary.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
C. L. Haile, and J. C. Harris. Nov 88, 7p EPA/600/S8-88/085
See also PB88-234893.

As part of the current federal regulatory process, permitting agencies need guidance on identifying critical emission parameters for municipal waste combustors (MWCs) and on methods that can be used to measure those parameters, especially toxic substances. Specific testing recommendations, emissions, measurement methods, and recommended reporting formats are presented. These recommendations are not intended to prescribe regulatory requirements, but to recommend emissions test programs responsive to typical requirements.

Keywords: *Incinerators, *Air pollution monitoring, *Combustors, *Flue gases, Municipal wastes, Stack disposal, Release limits, Combustion products, Pollution regulations, Guidelines, Compliance.

**PB93-222628/REB** PC **A01**/MF **A01**
**Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
G. L. Loper, R. C. Corbin, M. L. Takayama, R. A. Clifton, and J. A. Gelbwachs. Nov 88, 4p EPA/600/S7-88/011
See also PB88-224332.

The report describes the development of a breadboard version of CO2 laser photoacoustic detector. The CO2 laser photoacoustic technique has been demonstrated to be capable of detecting, with high specificity, a variety of toxic compounds a low parts-per-billion (ppb) levels in multicomponent air samples. The technique can be used for monitoring trace levels of various hazardous compounds in ambient air samples.

Keywords: *Toxic substances, *Air pollution monitors, Vapors, Hazardous materials, Air samplers, Photoacoustic spectrometers, Carbon dioxide lasers, Chemical analysis, Threshold limit values.

**PB93-222636/REB** PC **A02**/MF **A01**
**Advanced Utility Simulation Model. Project Summary.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
L. G. Jones. Jun 89, 6p EPA/600/S8-88/071
See also PB89-166649.

The Advanced Utility Simulation Model (AUSM) is one of four stationary source emission and control cost forecasting models developed by EPA for the National Acid Precipitation Assessment Program. The AUSM projects air pollution emissions (SO2 and NO(sub x)), generating technology types and costs of operation, and combinations of fuels and emission control technologies to simultaneously meet electric demand and emission constraints on a least cost basis for each year through 2010. Thirteen electric demand regions are simulated, and output is provided for each of the contiguous 48 states.

Keywords: *Electric utilities, *Air pollution economics, *Forecasting, Air pollution control, Emissions, Sulfur dioxide, Nitrogen oxides, State government, National government, Planning, Computerized simulation, AUSM(Advanced Utility Simulation Model).

**PB93-222644/REB** PC **E99**/MF **E99**
Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
**Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. (Chapters 1 through 8).**
Syracuse Research Corp., NY.
Aug 92, 863p-in 8v*
Set includes PB93-222651 through PB93-222727.
Sponsored by Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.

No abstract available.

Keywords: *Tetrachlorodibenzodioxin, *Dioxins, *Toxicity, *Risk assessment, Public health, Exposure, Animals, Humans, Pharmacokinetics, Epidemiology, Health effects, Dose-response relationships, Immunotoxicity, Carcinogenicity.

**PB93-222651/REB** PC **A07**/MF **A02**
Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
**Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 1. Disposition and Pharmacokinetics.** Review draft.
Syracuse Research Corp., NY.
J. Olson. Aug 92, 134p EPA/600/AP-92/001A, , OHEA-I-486-VOL-1
Contract EPA-68-C0-0043
See also Volume 2, PB93-222669. Sponsored by Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
Also available in set of 8 reports PC E99/MF E99, PB93-222644.

The U.S. Environmental Protection Agency (EPA) is conducting a scientific reassessment of the risks of exposure to 2,3,7,8- tetrachlorodibenzo-p-dioxin (TCDD) and chemically similar compounds collectively known as dioxin. The disposition and pharmacokinetics of TCDD and related compounds have been investigated in several species and under various exposure conditions. During the last 6 years considerably more data have been published on this class of compounds. The chapter reviews the disposition and pharmacokinetics and identifies congener and species-specific factors that may have an impact on the dose-related biological responses of these compounds.

Keywords: *Tetrachlorodibenzodioxin, *Dioxins, *Pharmacokinetics, Toxicity, Public health, Risk assessment, Species specificity, Exposure, Biological availability, Absorption(Biology), Metabolism, Excretion, Dose-response relationships.

**PB93-222669/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
**Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 2. Mechanisms of Toxic Actions.** Review draft.
Syracuse Research Corp., NY.
J. Whitlock. Aug 92, 41p EPA/600/AP-92/001B, , OHEA-I-486-VOL-2
Contract EPA-68-C0-0043
See also Volume 1, PB93-222651 and Volume 3, PB93-222677. Prepared in cooperation with Stanford Univ., CA. School of Medicine. Sponsored by Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
Also available in set of 8 reports PC E99/MF E99, PB93-222644.

Knowledge of the mechanisms of TCDD action may facilitate the risk assessment process by imposing constraints upon the assumptions used to estimate an acceptable exposure to dioxin. The chapter reviews the current knowledge of dioxin action, with emphasis on the contribution of the Ah receptor to the mechanism.

Keywords: *Tetrachlorodibenzodioxin, *Dioxins, *Biochemistry, *Toxicity, Public health, Risk assessment, Binding sites, Ligands, Exposure, Biological effects, Aryl hydrocarbon receptors, Biological response, Dose-response relationships.

**PB93-222677/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
**Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 3. Acute, Subchronic, and Chronic Toxicity.** Review draft.
Syracuse Research Corp., NY.
U. G. Ahlborg. Aug 92, 75p EPA/600/AP-92/001C, , OHEA-I-486-VOL-3
Contract EPA-68-C0-0043
See also Volume 2, PB93-222669 and Volume 4, PB93-222685. Prepared in cooperation with Karolinska Inst., Stockholm (Sweden). Sponsored by Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
Also available in set of 8 reports PC E99/MF E99, PB93-222644.

The chapter is intended to summarize knowledge of the general toxicology of TCDD, but includes references to other dioxin-like compounds when relevant data are available. Various data that are considered particularly important to the understanding of the health risks from exposure to dioxin and related compounds have been selected.

Keywords: *Tetrachlorodibenzodioxin, *Dioxins, *Toxicity, Public health, Risk assessment, Health hazards, Exposure, Enzyme induction, Lipid peroxides, Vitamin A deficiency, Wasting syndrome, Hepatotoxicity, Epidermal effects, Endocrine effects.

**PB93-222685/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
**Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 4. Immunotoxic Effects.** Review draft.
Syracuse Research Corp., NY.
N. Kerkvliet. Aug 92, 66p EPA/600/AP-92/001D, , OHEA-I-486-VOL-4
Contract EPA-68-C0-0043
See also Volume 3, PB93-222677 and Volume 5, PB93-222693. Prepared in cooperation with Oregon State Univ., Corvallis. Coll. of Veterinary Medicine. Sponsored by Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
Also available in set of 8 reports PC E99/MF E99, PB93-222644.

The U.S. Environmental Protection Agency (EPA) is conducting a scientific reassessment of the risks of exposure to 2,3,7,8- tetrachlorodibenzo-p-dioxin (TCDD) and chemically similar compounds collectively known as dioxin. Extensive evidence has accumulated over the past 20 years to demonstrate that the immune systems of several species are a target for toxicity of TCDD and structurally related halogenated aromatic hydrocarbons, including the chlorinated dibenzofurans, polychlorinated biphenyls, and polybrominated biphenyls.

Keywords: *Tetrachlorodibenzodioxin, *Dioxins, *Toxicity, Immune system, Public health, Risk assessment, Exposure, Polychlorinated biphenyls, Polybrominated biphenyls, Halogenated aromatic hydrocarbons, Furans, Thymus gland, *Immunotoxicity, Aryl hydrocarbon, Biological effects.

**PB93-222693/REB** PC **A06**/MF **A02**
Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
**Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.** Review draft.
Syracuse Research Corp., NY.
R. Peterson. Aug 92, 112p EPA/600/AP-92/001E, , OHEA-I-486-VOL-5
Contract EPA-68-C0-0043
See also Volume 4, PB93-222685 and Volume 6, PB93-222701. Sponsored by Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
Also available in set of 8 reports PC E99/MF E99, PB93-222644.

The chapter provides a discussion of female and male reproductive toxicity, and developmental toxicity. The manifestations of developmental toxicity have been divided into three categories for convenience in assessing the data base with respect to an Ah-receptor mediated response. These categories include: death/growth/clinical signs, structural malformations, and functional alterations.

Keywords: *Tetrachlorodibenzodioxin, *Dioxins, *Reproduction(Biology), *Growth abnormalities, *Toxicity, Public health, Risk assessment, Exposure, Sensitivity and specificity(Epidemiology), Fetal development, Fetal death, Dose-response relationships, Aryl hydrocarbon receptors.

**PB93-222701/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
**Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 6. Carcinogenicity of TCDD in Animals.** Review draft.
Syracuse Research Corp., NY.
G. Lucier. Aug 92, 73p EPA/600/AP-92/001F, , OHEA-I-486-VOL-6
Contract EPA-68-C0-0043
See also Volume 5, PB93-222693 and Volume 7, PB93-222719. Prepared in cooperation with National Inst. of Environmental Health Sciences, Research Triangle Park, NC. Sponsored by Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
Also available in set of 8 reports PC E99/MF E99, PB93-222644.

Tumor incidence data in experimental animals were available in 1988 to demonstrate that TCDD is a carcinogen at multiple sites in rats and mice. Since 1988, TCDD has been shown to be a carcinogen in hamsters and some of the tumor incidence data in rat liver has been reevaluated. The chapter discusses approaches to risk assessment and recent advances on mechanisms of tumor promotion and dose-response relationships for biochemical and biological events relevant to the carcinogenic actions of dioxin.

Keywords: *Tetrachlorodibenzodioxin, *Dioxins, *Toxicity, Exposure, Neoplasms, Carcinogens, Bioassay, Biochemistry, Hamsters, Rats, Mice, *Carcinogenicity, Aryl hydrocarbon receptors, Dose-response relationships.

**PB93-222719/REB** PC **A07**/MF **A02**
Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
**Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 7. Epidemiology/Human Data.** Review draft.
Syracuse Research Corp., NY.
D. Bayliss. Aug 92, 129p EPA/600/AP-92/001G, , OHEA-I-486-VOL-7
Contract EPA-68-C0-0043
See also Volume 6, PB93-222701 and Volume 8, PB93-222727. Sponsored by Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
Also available in set of 8 reports PC E99/MF E99, PB93-222644.

The chapter provides an analysis of the literature on cancer and non-cancer effects. The original research reports are discussed in 4 groups: (1) follow-up studies of chemical manufacturing and processing workers, (2) case-control studies in general populations, (3) studies of pulp and paper mill workers, and (4) other studies (e.g., pesticide applicators, Vietnam veterans potentially exposed to Agent Orange, residents of Seveso, Italy, and victims of contaminated rice oil poisonings).

Keywords: *Tetrachlorodibenzodioxin, *Dioxins, *Epidemiology, *Toxicity, Public health, Risk assessment, Neoplasms, Mortality, Exposure, Populations, Case studies, Health effects.

**PB93-222727/REB** PC **A11**/MF **A03**
Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
**Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 8. Dose-Response Relationships.** Review draft.
Syracuse Research Corp., NY.
S. P. Bayard. Aug 92, 233p EPA/600/AP-92/001H, , OHEA-I-486-VOL-8
Contract EPA-68-C0-0043
See also Volume 7, PB93-222719. Sponsored by Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
Also available in set of 8 reports PC E99/MF E99, PB93-222644.

The chapter discusses mathematical modeling and its importance to risk assessment, particularly the current effort to reevaluate the risk of exposure to dioxins using more of the biological information available to risk assessors. The work represents some of the most extensive Agency efforts to develop a 'biological based risk assessment.'

Keywords: *Tetrachlorodibenzodioxin, *Dioxins, *Toxicity, Risk assessment, Public health, Exposure, Tolerances(Physiology), Neoplasms, Reproduction(Biology), Fetal development, Behavioral symptoms, Growth abnormalities, Immune system, Nervous system, *Dose-response relationships, Health effects.

**PB93-222735/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.** Journal article.
Tennessee Univ., Knoxville. Dept. of Chemistry.
M. Salvi-Narkhede, J. L. Adcock, A. Gakh, and W. Van Hook. c1993, 7p EPA/600/J-93/276
Contract EPA-CR-815147
Pub. in Jnl. of Chemical Thermodynamics, v25 p643-647 1993. See also PB92-179746. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

Thermophysical properties have been reported for a number of fluorinated ethers and perfluoro ethers. The present paper reports results for the final members of the series of compounds chosen for study. New measurements for CF3OCF2CF2CF3 and c-CF2CF2CF2CF2O are reported from T = 235 K to the critical temperature. Volumetric results for liquid CF3OCF2OCF3 and CF3OCF2CF2H are reported for $235 < T/K < 303$ supplementing the values given earlier for these compounds. The compounds are of interest as possible substitutes for environmentally unacceptable chlorofluorocarbons used as refrigerant working gases and blowing agents. (Copyright (c) 1993 Academic Press Limited.)

Keywords: *Environmental chemical substitutes, *Air pollution abatement, *Thermophysical properties, *Fluorine organic compounds, *Ethers, Fluorohydrocarbons, Vapor pressure, Critical pressure, Critical temperature, Critical volume, Melting points, Boiling points, Reprints, *Fluorinated ethers, Vinal coefficients, Molar volume.

**PB93-222743/REB** PC **A02**/MF **A01**
**Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.** Journal article.
Environmental Research Lab., Athens, GA.
P. G. Tratnyek, and N. L. Wolfe. c1993, 6p EPA/600/J-93/283
Pub. in Jnl. of Environmental Quality 22, n2 p375-378 Apr-Jun 93. See also PB90-245614. Prepared in cooperation with Oregon Graduate Inst. of Science and Technology, Beaverton.

An important aspect of studies on the fate of organic pollutants is identification of environmental agents that are responsible for observed degradation reactions. To this end, many studies using natural water, soil, or sediment as a medium rely heavily on autoclaved control experiments to distinguish abiotic from biotic processes. The effect of autoclaving on the acid/base and redox properties of anaerobic sediment slurries was determined to facilitate the interpretation of autoclaved controls in studies of environmental reduction reactions. Autoclaving decreased electrode measurements of pH by 0.26 to 0.68 units and increased electrode measurements of Eh by 34 to 94 mV. To corroborate this effect, the authors added redox indicators to the slurries and observed that autoclaving caused a shift in color consistent with the change in electrode measurements. Further investigation demonstrated that the observed effects are a common characteristic of autoclaving anaerobic sediment and are not limited to very restricted sediment types and are not artifacts of the way the experiments were performed.

Keywords: *Sediment-water interfaces, *Oxidation reduction reactions, *Acidification, *Anaerobic processes, *Water pollution control, Environmental effects, Land pollution control, Soil properties, pH, Organic matter, Chemical properties, Water chemistry, Microorganisms, Reprints, *Autoclaving.

**PB93-222750/REB** PC **A03**/MF **A01**
National Inst. of Environmental Health Sciences, Research Triangle Park, NC.
**Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.** Journal article.
Environmental Research Lab., Athens, GA.
A. L. Roberts, P. M. Jeffers, N. L. Wolfe, and P. M. Gschwend. c1993, 41p EPA/600/J-93/284
Grant NIEHS-2-P30-ESO-2109-11
Pub. in Critical Reviews in Environmental Science and Technology 23, n1 p1-39 Jan 93. Prepared in cooperation with Massachusetts Inst. of Tech., Cambridge, and State Univ. of New York Coll. at Cortland. Sponsored by National Inst. of Environmental Health Sciences, Research Triangle Park, NC.

Current information is inadequate to predict the rates at which polyhalogenated alkanes undergo dehydrohalogenation reactions under environmental conditions, forming olefins that are frequently more toxic and more recalcitrant than the products of substitution reactions. To permit evaluation of the relative importance of different potential transformation products, qualitative relationships between structure and reactivity via substitution and dehydrohalogenation pathways are reviewed. Parameters needed for preliminary estimates of dehydrohalogenation reactivity for new compounds are provided. In addition, information is furnished concerning the design of future experiments in buffered aqueous solution.

Keywords: *Environmental effects, *Dehydrohalogenation, *Haloalkanes, *Polymers, *Structure-activity relationships, Bromoalkanes, Chloroalkanes, Path of pollutants, Molecular structure, Chemical reactions, Substitution reactions, Reviews, Land pollution, Water pollution, Chemical reaction mechanisms.

**PB93-222768/REB** PC **A02**/MF **A01**
**Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.** Journal article.
Environmental Research Lab., Athens, GA.
H. Gan, J. W. Stucki, and G. W. Bailey. c1992, 9p EPA/600/J-93/285
Pub. in Clays and Clay Minerals, v40 n6 p659-665 Dec 92. Prepared in cooperation with Illinois Univ. at Urbana-Champaign. Dept. of Agronomy.

The oxidation state of structural iron greatly influences the physical-chemical properties of clay minerals, a

phenomenon that may have significant implications for pollutant fate in the environment, for agricultural productivity, and for industrial uses of clays. Knowledge of redox mechanisms is fundamental to understanding the underlying basis for iron's effects on clays. Past studies revealed that the extent of Fe reduction varied depending on the reducing agent used, but this variation may not have been a simple function of the reduction potential of the reducing agent. The objective of the study was to identify the relationship between the Fe reduction mechanism and the free radical activity in the reducing agent. Several reducing agents and their mixtures with the Na-saturated, 0.5 to 2 micrometers size fraction of ferruginous smectite (SWa-1) were analyzed by electron spin resonance (ESR) spectroscopy to determine the presence of unpaired electrons or free radicals. (Copyright (c) 1992, The Clay Minerals Society.)

Keywords: *Environmental effects, *Oxidation reduction reactions, *Clay minerals, *Soil properties, *Land pollution, Reducing agents, Free radicals, Smectite, Agricultural products, Industrial plants, Physicochemical properties, Electron transfer, Electron paramagnetic resonance, Iron, Reprints, *Structural iron, *Ferruginous smectite, Chemical reaction mechanisms.

**PB93-222776/REB** PC **A02**/MF **A01**
Environmental Research Lab., Athens, GA.
**Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.** Journal article.
Marine Biological Lab., Woods Hole, MA. Ecosystems Center.
W. T. Peterjohn, J. M. Melillo, F. P. Bowles, and P. A. Steudler. c1993, 10p EPA/600/J-93/286
Pub. in Oecologia 93, n1 p18-24 Feb 93. Sponsored by Environmental Research Lab., Athens, GA.

The paper describes a series of experiments conducted to determine an appropriate design for a soil warming experiment. A design that would allow determination of how warming a forest soil would affect the exchange of trace gases between the land and atmosphere is of particular importance.

Keywords: *Soils, *Greenhouse effect, *Temperature, *Environmental effects, Temperate regions, Forests, Soil gases, Carbon dioxide, Vegetation, Ecosystems, Experimental design, Tests, Air-land interactions, Reprints, Soil warming, Biogeochemistry.

**PB93-222784/REB** PC **A02**/MF **A01**
Environmental Research Lab., Athens, GA.
**Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.** Journal article.
New York Univ. Medical Center, NY.
M. M. Haeggblom, M. D. Rivera, and L. Y. Young. c1993, 8p EPA/600/J-93/287
Grant EPA-R-814611
Pub. in Applied and Environmental Microbiology 59, n4 p1162-1167 Apr 93. Sponsored by Environmental Research Lab., Athens, GA., and Hudson River Foundation for Science and Environmental Research, Inc., New York.

Nitrate, sulfate, and carbonate were used as electron acceptors to examine the anaerobic biodegradability of chlorinated aromatic compounds in estuarine and freshwater sediments. The respective denitrifying, sulfidogenic, and methanogenic enrichment cultures were established on each of the monochlorinated phenol and monochlorinated benzoic acid isomers, using sediment from the upper (freshwater) and lower (estuarine) Hudson River and the East River (estuarine) as source materials. Utilization of each chlorophenol and chlorobenzoate isomer was observed under at least one reducing condition; however, no single reducing condition permitted the metabolism of all six compounds tested. The anaerobic biodegradation of the chlorophenols and chlorobenzoates depended on the electron acceptor available and on the position of the chlorine substituent. In general, similar activities were observed under the different reducing conditions in both the freshwater and estuarine sediments. (Copyright (c) 1993, American Society for Microbiology.)

Keywords: *Biodeterioration, *Electron acceptors, *Chlorinated hydrocarbons, *Phenols, *Benzoic acids, *Chemical water pollutants, Anaerobic processes, Sediments, Fresh water, Estuaries, Reprints.

**PB93-222792/REB** PC **A02**/MF **A01**
**Simple Mini-Method to Extract DNA Directly from Soil for Use with Polymerase Chain Reaction Amplification.** Journal article.
Corvallis Environmental Research Lab., OR.
L. A. Porteous, and J. L. Armstrong. c1993, 6p EPA/600/J-93/288
Pub. in Current Microbiology, v27 p115-118 1993. See also PB92-108141.

A rapid, simple method is used that yields amplifiable fungal and bacterial DNAs directly from soil. DNA is separated from soil contaminants by electrophoresis in low-melting-temperature agarose and used directly in polymerase chain reaction amplification. Fifty 20-mg samples can be processed in one day. Fragments of 16S and 18S ribosomal RNAs are amplified by polymerase chain reaction with DNA extracted from the soil. Universal primers are used that are capable of amplifying ribosomal DNA from a wide variety of bacteria and fungi. Eubacterial and fungal primers are used that are capable of distinguishing between eubacterial and fungal DNAs. Restriction enzyme digests are performed on amplified DNA fragments from five soil samples. (Copyright (c) Springer-Verlag Inc. 1993.)

Keywords: *Deoxyribonucleic acids, *Enzymes, Soils, Electrophoresis, Bacteria, Fungi, Extraction, Separation, Reprints, Polymerase chain reactions, Ecological studies.

**PB93-222800/REB** PC **A02**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.** Journal article.
Louisiana State Univ., Baton Rouge. Wetland Biogeochemistry Inst.
Z. Wang, R. D. Delaune, C. W. Lindau, and W. H. Patrick. c1992, 10p EPA/600/J-93/289
Contract DE-FC03-90-ER61010
Pub. in Fertilizer Research 33, p115-121 1992. See also PB93-222818. Sponsored by Corvallis Environmental Research Lab., OR., and Department of Energy, Washington, DC.

Laboratory experiments were conducted on the effects of rice straw application and inorganic N fertilization on methane (CH4) production from a flooded Louisiana, USA, rice soil. A significant increase of CH4 production was observed following rice straw application. Methane production increased in proportion to the application rate. Urea fertilization also enhanced CH4. The increase in soil pH following urea hydrolysis may have stimulated CH4-generating bacteria by providing more optimal soil pH conditions or contributed to the drop in redox potential (Eh). The significant decrease in both the production rate and the total amount of CH4 by application of NH4NO3 was associated with increases and almost completely inhibited CH4 production. However, this inhibitory effect was short-termed. A direct inhibitory effect of sulfate on methanogenesis might have been more important.

Keywords: *Gas production, *Methane, *Biomass, *Natural emissions, *Agricultural products, *Air pollution, Fertilization, Soil chemistry, Soil gases, Rice, Louisiana, Flooding, pH, Anaerobic processes, Pollution sources, Oxidation reduction reactions, Organic matter, Reprints.

**PB93-222818/REB** PC **A02**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.** Journal article.
Louisiana State Univ., Baton Rouge. Wetland Biogeochemistry Inst.
Z. P. Wang, R. D. DeLaune, P. H. Masscheleyn, and W. H. Patrick. c1993, 6p EPA/600/J-93/290
Pub. in Soil Science Society of American Jnl. 57, p382-385 1993. See also PB93-222800. Prepared in cooperation with Ghent Rijksuniversiteit (Belgium). Faculteit Landbouwwetenschappen. Sponsored by Corvallis Environmental Research Lab., OR.

Methane formation in soil is a microbiological process controlled by many factors. Of them soil redox potential (Eh) and soil pH are considered as critical controls. A laboratory incubation experiment was conducted to study the critical initiation soil Eh, the optimum soil pH, and the interaction of Eh and pH on methane production. A small decrease in pH resulting from the introduction of acidic materials significantly decreased methane production. However, a slight increase in soil pH (about 0.2 unit higher than the natural soil suspension pH) resulted in an enhancement of methane production by 11-20 percent and 24-25 percent at controlled Eh of -250 mV and -200 mV, respectively. Results suggest that decrease in methane emission could be obtained by a small reduction in soil pH in Crowley soil.

Keywords: *Methane, *Biomass, *Soil chemistry, *Air pollution, *Gas production, Rice, Flooding, Oxidation reduction and reactions, pH, Microorganisms, Agricultural products, Organic matter, Greenhouse gases, Anaerobic processes, Reprints.

**PB93-222826/REB** PC **A02**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Relationship of Total Viable and Culturable Cells in Epiphytic Populations of 'Pseudomonas syringae'.** Journal article.
California Univ., Berkeley. Dept. of Plant Pathology.
M. Wilson, and S. E. Lindow. c1992, 8p EPA/600/J-93/291
Grant EPA-R-815305
Pub. in Applied and Environmental Microbiology 58, n12 p3908-3913 Dec 92. Sponsored by Corvallis Environmental Research Lab., OR.

The direct viable count method, used to detect viable but nonculturable bacteria in aquatic systems, was modified to examine epiphytic populations of Pseudomonas syringae. Viable-population sizes determined from the number of cells that elongated when incubated with yeast extract and nalidixic acid were compared with those determined by the conventional plate count method. The plate count method accurately determined the number of viable cells in epiphytic P. syringae populations in a state of active growth under conditions of high relative humidity. The plate count method also accurately determined the number of viable cells in P. syringae inoculum, or a growing P. syringae population, subject to desiccation stress under conditions of low relative humidity. In epiphytic populations of P. syringae older than 80 h, however, the plate count underestimated the viable-population size by about two- to fourfold, suggesting that up to 75% of the P. syringae population was nonculturable. These nonculturable cells may have entered a starvation-survival state, induced by low nutrient availability in the phyllosphere environment. Epiphytic P. syringae populations undergoing rapid size changes due to growth and death under fluctuating environmental conditions in the field should be accurately enumerated by the plate count method. However, the possible underestimation of viable-population size under some circumstances should be considered in epidemiological studies of phytopathogenic bacteria and when genetically engineered microorganisms in terrestrial ecosystems are monitored. (Copyright (c) 1992, American Society for Microbiology.)

Keywords: *Microbial colony count, *Phaseolus, Culture media, Nalidixic acid, Genetic engineering, Reprints, *Pseudomonas syringae.

**PB93-222834/REB** PC **A02**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Recovery of DNA from Soils and Sediments.** Journal article.
Louisville Univ., KY. Dept. of Biology.
R. J. Steffan, J. Goksoeyr, A. K. Bej, and R. M. Atlas. c1988, 9p EPA/600/J-93/292
Pub. in Applied and Environmental Biology, v54 n12 p2908-2915 Dec 88. Prepared in cooperation with Bergen Univ. (Norway). Dept. of Microbiology and Plant Physiology. Sponsored by Corvallis Environmental Research Lab., OR.

Experiments were performed to evaluate the effectiveness of different methodological approaches for recovering DNA from soil and sediment bacterial communities; cell extraction followed by lysis and DNA recovery (cell extraction method) versus direct cell lysis and alkaline extraction to recover DNA (direct lysis method). Efficiency of DNA recovery by each method was determined by spectrophotometric absorbance using a tritiated thymidine tracer. With both procedures, the use of polyvinylpolypyrrolidone was important for the removal of humic compounds to improve the purity of the recovered DNA; without extensive purification, various restriction enzymes failed to cut added target DNA. Milligram quantities of high-purity DNA were recovered from 100-g samples of both soils and sediments by the direct lysis methods, which was

a >1-order-of-magnitude-higher yield than by the cell extraction methods. (Copyright (c) 1988, American Society for Microbiology.)

Keywords: *Deoxyribonucleic acids, *Cells(Biology), *Recovery, *Bacteria, *Soil microbiology, Extraction, Purification, Test methods, Spectrophotometry, Absorption, Sediments, Thymidines, Labeled substances, Comparison, Humic acids, Isotopic labeling, Tables(Data), Reprints, Lysis method, Organic soils.

**PB93-222842/REB** PC **A02/MF A01**
**Armitage-Doll Two-Stage Model: Implications and Extension.** Journal article.
Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
C. W. Chen. c1993, 9p EPA/600/J-93/293, OHEA-C-462
Pub. in Society for Risk Analysis, v13 n3 p273-282 1993.

The objective of the paper is twofold: (1) to provide insight on the simplified MVK model of carcinogenesis by revealing the relationship between the Armitage-Doll two-stage model (ADT model) and the simplified MVK model; and (2) to extend the ADT model to one with time-varying (piece-wise constant) parameters. It is shown that the simplified MVK model is a special case of the Armitage-Doll two-stage model , and many applications of the simplified MVK model involving intermittent exposures or exposures to different compounds in different time periods can be derived easily from the ADT model with piece-wise constant parameters. The limitations of the ADT model are discussed. (Copyright (c) 1993 Society for Risk Analysis.)

Keywords: *Carcinogens, *Risk assessment, *Mathematical models, Hazards, Cancer, Exposure, Reprints, MVK model, Two-stage models, ADT model.

**PB93-222859/REB** PC **A02/MF A01**
**Mechanical Integrity Testing and Training Facility, Ada, Oklahoma.** Journal article.
Robert S. Kerr Environmental Research Lab., Ada, OK.
J. T. Thornhill. c1993, 9p EPA/600/J-93/294
Pub. in Jnl. of Applied Ground-Water Protection, v1 n1 p37-43 Jul 93. See also PB91-145631.

Underground injection control regulations of the U.S. Environmental Protection Agency require that all injection wells demonstrate mechanical integrity. A Mechanical Integrity Testing and Training Facility has been developed by the Robert S. Kerr Environmental Research Laboratory in conjunction with East Central University. The Facility includes three 'logging' wells, a 'calibration' well, a 'leak test' well, and three 'monitoring' wells. The test wells range in depth from 190 to 1,580 feet and are specially designed to facilitate research into Parts 1 and 2 of the mechanical integrity question.

Keywords: *Injection wells, *Leak testing, US EPA, Well logging, Mechanical tests, Packings, Linings, Reliability, Pressurizing, Well tests, Oklahoma, Education, Reprints.

**PB93-222867/REB** PC **A02/MF A01**
Robert S. Kerr Environmental Research Lab., Ada, OK.
**Microcosm and In situ Field Studies of Enhanced Biotransformation of Trichloroethylene by Phenol-Utilizing Microorganisms.** Journal article.
Stanford Univ., CA. Dept. of Civil Engineering.
G. D. Hopkins, L. Semprini, and P. L. McCarty. c1993, 10p EPA/600/J-93/295
Grant EPA-R-815738
Pub. in Applied and Environmental Microbiology, v59 n7 p2277-2285 Jul 93. Prepared in cooperation with Oregon State Univ., Corvallis. Dept. of Civil Engineering. Sponsored by Robert S. Kerr Environmental Research Lab., Ada, OK., and Department of Energy, Washington, DC.

The ability of different aerobic groundwater microorganisms to cometabolically degrade trichloroethylene (TCE), 1,2-cis-dichloroethylene (c-DCE), and 1,2-trans-dichloroethylene (t-DCE) was evaluated both in groundwater-fed microcosms and in situ in a shallow aquifer. Microcosms amended with phenol or toluene were equally effective in removing c-DCE (>90%) followed by TCE (60 to 70%), while the microcosm fed methane was most effective in removing t-DCE (>90%). At the Moffett Field groundwater test site, in situ removal of c-DCE and TCE coincided with biostimulation through phenol and oxygen injection and utilization, with c-DCE removed more rapidly than TCE. Greater TCE and c-DCE removal was observed when the phenol concentration was increased. Over 90% removal of c-DCE and TCE was observed in the 2-m biostimulated zone. This compares with 40 to 50% removal of c-DCE and 15 to 25% removal of TCE achieved by methane-grown microorganisms previously evaluated in an adjacent in situ test zone. (Copyright (c) 1993, American Society for Microbiology.)

Keywords: *Microorganisms, *Water pollution control, *Biodegradation, Ground water, Aquifers, Chlorinated aliphatic hydrocarbons, In-situ processing, Aerobic conditions, Enzymes, Phenol, Reprints, Ethylene/trichloro, Ethylene/dichloro, Microcosms, Bioremediation, Biotransformation.

**PB93-222875/REB** PC **A02/MF A01**
**Removal of Radionuclides by Electrokinetic Soil Processing.** Journal article.
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
R. A. Parker. c1993, 6p EPA/600/J-93/296
Pub. in Jnl. of the National Technical Association, v66 n2 p43-46 Spring 1993.

Electrokinetics promises to be an innovative treatment process for in-situ treatment of soils and groundwater contaminated with heavy metals and radionuclides. Electrokinetics refers to the movement of ionic liquids and charged particles relative to one another under the action of an applied direct current electric field. The paper summarizes the results of laboratory tests for the removal of uranium, thorium, and radium, conducted from February 28, 1991 to March 30, 1991 and a review of progress to date.

Keywords: *Radioactive materials, *Electrokinetics, *Soil contamination, Remediation, Uranium, Thorium, Radium, Soil chemistry, Soil properties, Ions, Electroosmosis, Electrochemistry, Reprints, SITE(Superfund Innovative Technology Evaluation).

**PB93-222883/REB** PC **A01/MF A01**
**Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.** Journal article.
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
J. C. Ireland, P. Klostermann, E. W. Rice, and R. M. Clark. c1993, 5p EPA/600/J-93/297
Pub. in Applied and Environmental Microbiology, v59 n5 p1668-1670 May 93.

Titanium dioxide in the anatase crystalline form was used as a photocatalyst to generate hydroxyl radicals in a flowthrough water reactor. Experiments were performed on pure cultures of Escherichia coli in dechlorinated tap water and a surface water sample to evaluate the disinfection capabilities of the reactor. In water devoid of significant amounts of inorganic-radical scavengers, rapid cell death was observed with both pure cultures and members of the indigenous flora in a natural water sample. (Copyright (c) 1993, American Society for Microbiology.)

Keywords: *Titanium dioxide, *Water treatment, *Escherichia coli, *Oxidation, *Photochemistry, Catalysis, Disinfection, Potable water, Free radicals, Reprints.

**PB93-222891/REB** PC **A02/MF A01**
**Investigating the Preferential Dissolution of Lead from Solder Particulates.** Journal article.
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
D. A. Lytle, M. R. Schock, N. R. Dues, and P. J. Clark. cJul 93, 10p EPA/600/J-93/298
Pub. in Jnl. of American Water Works Association, v58 n7 p104-110 Jul 93.

Water samples taken in a building corrosion control study having high lead levels often contained particulate material at the bottom of the acid-preserved sample bottles. Scanning electron microscope analysis of the particles revealed the presence of tin and absence of lead, indicating the source of lead to be lead-tin solder. A leaching study was performed to further investigate the effectiveness of the historically-standard 0.15% HNO3 preservation procedure in dissolving lead corrosion by-products. Results indicated that the standard preservation technique of acidification to 0.15% HNO3 was sufficient for dissolving lead from lead-tin solder particles, but not dissolving tin.

Keywords: *Lead(Metal), *Water pollution detection, *Piping systems, *Corrosion prevention, *Potable water, *Particulates, Solders, Dissolving, Chemical analysis, Tin, Sample preparation, Water pollution sampling, Distribution systems, Water pollution control, Buildings, Concentration(Composition), Scanning electron microscopy, Reprints.

**PB93-222909/REB** PC **A03/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.** Journal article.
General Electric Corporate Research and Development, Schenectady, NY.
B. D. Erickson, and F. J. Mondello. c1992, 12p EPA/600/J-93/299
Pub. in Jnl. of Bacteriology, v174 n9 p2903-2912 May 92. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The DNA region encoding biphenyl dioxygenase, the first enzyme in the biphenyl-polychlorinated biphenyl degradation pathway of Pseudomonas species strain LB400, was sequenced. Six open reading frames were identified, four of which are homologous to the components of toluene dioxygenase from Pseudomonas putida F1 and have been named bphA, bphE, bphF, and bphG. From this comparison, biphenyl dioxygenase was found to be a multicomponent enzyme containing a two-subunit iron-sulfur protein, a ferredoxin, and a reductase. Comparison of the large subunit of the iron-sulfur protein and the ferredoxin with other multicomponent dioxygenases identified amino acid sequences similar to Rieske iron-sulfur proteins from binding a (2Fe-2S) cluster. Sequences have also been identified in the reductase component that match the consensus sequence for FAD or NAD binding. Transcription of the biphenyl dioxygenase region was examined, and three transcription initiation sites were identified. Transcription initiating at the site furthest upstream is greatly increased when the LB400 cells are grown on biphenyl as the sole carbon source. (Copyright (c) 1992, American Society for Microbiology.)

Keywords: *DNA sequence analysis, *Genetic transcription, *Pseudomonas, *Polychlorobiphenyl compounds, *Biodeterioration, Deoxyribonucleic acids, Amino acid sequence homology, Reprints, *Biphenyl dioxygenase.

**PB93-222933/REB** PC **A24/MF A04**
Environmental Protection Agency, Washington, DC. Criteria and Standards Div.
**Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources. March 1991 Edition.**
Pirnie (Malcolm), Inc., Paramus, NJ.
Mar 91, 568p
Contract EPA-68-01-6989
Supersedes PB90-148016. Prepared in cooperation with HDR Engineering, Inc., El Dorado Hills, CA. Sponsored by Environmental Protection Agency, Washington, DC. Criteria and Standards Div.

The manual provides guidance to EPA Regional offices, primacy agencies, and affected utilities in the implementation of the Surface Water Treatment Rule, and to help assure that implementation is consistent.

Keywords: *Regulatory guides, *Water utilities, *Compliance, Filtration, Disinfection, Surface waters, Water treatment, Water supply, Pollution regulations, Requirements, Manuals, Surface Water Treatment Rule.

**PB93-222941/REB** PC **A07/MF A02**
**Water Employees Together with America's Youth (WET WAY). Celebration of the 20th Anniversary of the Clean Water Act and Promotion of National Geography Awareness Week.**
Environmental Protection Agency, Washington, DC. Office of Water.
9 Nov 92, 127p

In support of the Sixth Annual National Geography Awareness Week (proclaimed by Congress) November 15-21, and in celebration of the Year of Clean Water, EPA launched WET WAY (Water Employees Together with America's Youth), an environmental 'teach-in' across the country. EPA staff acted as additional resources for classes throughout November and offered additional help for teachers throughout the academic year.

Keywords: *US EPA, *Education, *Water quality, *Public relations, Personnel, Students, Schools, Surface waters, Ground water, Water pollution, Water treatment, Drinking water, National Geography Awareness Week, Office of Water, Instructional aids.

**PB93-22[illegible]58/REB** PC **A06**/MF **A02**
**Drinking Water Information Guide.**
Environmental Protection Agency, Washington, DC. Office of Water.
M. Cook. Dec 90, 107p

The guide describes EPA's information sources that cover Federal Public Water System supervision rules, public water systems, health effects of drinking water contaminants, risk analysis, economic analysis of public water system supervision rules, and compliance with these rules. The guide also identifies information routinely available from the states.

Keywords: *Drinking water, *Public health, *Water pollution control, Manuals, Regulations, Compliance, Water distribution, Distribution systems, Public utilities, Surface waters, Communities, Economic analysis, Benefit cost analysis, Safety, Violations, Guidelines, Requirements, Disinfection, States(United States), Listings, Small water systems.

**PB93-222990/REB** PC **A09**/MF **A03**
Environmental Protection Agency, Washington, DC.
**Multiple Chemical Sensitivities. Addendum to Biologic Markers in Immunotoxicology.** Final rept.
National Research Council, Washington, DC. Board on Environmental Studies and Toxicology.
1992, 197p ISBN-0-309-04736-6
See also PB92-238351. Library of Congress catalog card no. 92-80854. Sponsored by Environmental Protection Agency, Washington, DC., and National Inst. of Environmental Health Sciences, Research Triangle Park, NC.

The diagnostic label of multiple chemical sensitivity is being applied increasingly, although definition of the phenomenon is elusive and its pathogenesis as a distinct entity is not confirmed. Multiple chemical sensitivity has become more widely known and increasingly controversial as more patients have received the label.

Keywords: *Environmental health, *Hypersensitivity, *Air pollution effects(Humans), Immunology, Toxicology, Allergies, Indoor air pollution, Exposure, Sensitivity and specificity(Epidemiology), Meetings, *Chemical sensitivity, Occupational asthma.

**PB93-223014/REB** PC **A03**
**Nonpoint Source Pollution: Land Use and Water Quality.**
Environmental Protection Agency, Washington, DC. Office of Wetlands, Oceans and Watersheds.
S. Perry. 1993, 34p

The book is designed for professional, policy makers, and individuals concerned about land use and water quality. It gives an overview of the nonpoint source pollution problem, some possible solutions, and describes the agencies and programs in Wisconsin involved in reducing the pollution.

Keywords: *Wisconsin, *Water pollution abatement, *Nonpoint sources, Land use, Erosion, Construction, Agricultural wastes, Urban areas, Runoff, Rainfall, Topography, Sediments, Nutrients, Pollution regulations, State government.

**PB93-223022/REB** PC **A01**/MF **A01**
**Volatile Organic Compound Model Quality Assurance and Sensitivity Testing (Version 1.8).**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
M. S. Jennings, and T. E. Emmel. Nov 88, 4p EPA/600/S8-88.088
See also PB88-234166.

The report presents test runs of the Volatile Organic Compound Model (VOCM). VOCM predicts future emission levels of volatile organic compounds (VOCs) by projecting uncontrolled base year emissions into the future. These projected emissions are then reduced by constraints to predict future controlled emissions of VOCs. VOCM also predicts VOC emission control costs. VOCM is a program that runs on the IBM-PC series of computers. The Project Summary was developed by EPA's Air and Energy Engineering Research Laboratory, Research Triangle Park, NC, to announce key findings of the research project that is fully documented in a separate report of the same title.

Keywords: *Acid rain, *Volatile organic compounds, *Air pollution control, Quality assurance, Emission control, Mathematical models, Sensitivity, Forecasting, Specifications, Cost analysis, Industrial wastes, Constraints, Tests, US EPA, National Acid Precipitation Assessment Program (NAPAP), Personal computers.

**PB93-223048/REB** PC **A14**/MF **A03**
**Guidance Manual for the Review of Permitted and Civil Works Projects for the Ocean Disposal of Dredged Material.**
Environmental Protection Agency, Washington, DC. Office of Water.
Dec 92, 325p EPA/842/B-92/007

The regulation of dredged material disposal within waters of the United States and ocean waters is the shared responsibility of the Environmental Protection Agency (EPA) and the United States Army Corps of Engineers (USACE). Two statutes principally govern dredged material disposal in United States waters: the Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA) (Public Law 92-532), also called the Ocean Dumping Act, and the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500), also called the Clean Water Act (CWA). The document offers procedural and technical guidance to EPA Regional staff in their independent review of proposals for disposing of dredged material in ocean waters under the MPRSA. Responsibilities of the EPA and the USACE under related programs and statutes are briefly described to explain the statutory and programmatic relationship between the two agencies in regulating ocean disposal practices.

Keywords: *Dredging, *Ocean waste disposal, *Territorial seas, *Coasts, *United States, Manuals, Regulations, US EPA, US ACE, Clean Water Act, Statutes, Project management, Licenses, Guidelines, Environmental protection, Compliance, Spoil, Specifications, Marine Protection, Research, and Sanctuaries Act of 1972, Federal Water Pollution Control Act Amendment of 1972.

**PB93-223154/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Acid Precipitation in North America: 1986 Annual and Seasonal Data Summaries from Acid Deposition System Data Base.**
Battelle Pacific Northwest Labs., Richland, WA.
J. K. Sweeney, and A. R. Olsen. Jan 89, 75p EPA/600/4-89/005
See also PB88-166897. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

The report summarizes the 1986 wet deposition precipitation chemistry data collected in North America and available in the Acid Deposition System (ADS) data base. Interpretative analyses are not a focus of the report; however, users of the report will learn about major wet deposition monitoring networks in North America, the extent of their geographic coverage, and general characteristics of wet deposition for 1986. An overview of each network is given. Annual and seasonal statistical summaries for 1986 are provided for pH, hydrogen ion (derived from pH), and the ion species sulfate, nitrate, ammonium, calcium, chloride, sodium, magnesium and potassium.

Keywords: *Acid rain, *North America, *Environmental monitoring, Air pollution effects, Chemical analysis, pH, Ions, Sulfates, Nitrates, Ammonium, Precipitation(Meteorology), Seasonal variations, Acid Deposition System Data Base, Wet deposition.

**PB93-223162/REB** PC **A05**/MF **A01**
**Volunteer Lake Monitoring Program, 1992. Volume 5. East-Central Illinois Region.** Annual rept.
Illinois State Environmental Protection Agency, Springfield. Div. of Water Pollution Control.
A. J. Burns. Jun 93, 87p IEPA/WPC/93-061E
See also PB93-102234 and PB93-219111.

The Illinois Environmental Protection Agency initiated the Illinois Volunteer Lake Monitoring Program (VLMP) in 1981 as a result of growing public interest in lakes and the need to expand the state's data base on lake water quality. The Regional Report volume is a compilation of lake monitoring data for 32 lakes in the East-Central Illinois region. A regional lake location map is shown in Figure 1 and a ranking of lakes by average transparency in Figure 2 of this section. Section II contains lake data and individual lake summaries for those Illinois VLMP lakes that were monitored during four or more semi-monthly sampling periods in the 1992 season. Data collected under IEPA's Ambient Lake Monitoring Program in 1992 is also included where available.

Keywords: *Illinois, *Lakes, *Water quality data, Water pollution detection, Transparency, Color, Suspended sediments, Aquatic plants, Tables(Data), Graphs(Charts), East-Central Region(Illinois).

**PB93-223170/REB** PC **A06**/MF **A02**
Fish and Wildlife Service, Denver, CO.
**Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.**
Environmental Protection Agency, Research Triangle Park, NC. Technical Support Div.
A. Cimorelli, J. Irwin, J. Vimont, R. Fisher, and E. Rolofson. Apr 93, 113p EPA/454/R-93/015
See also PB92-213248. Prepared in cooperation with National Park Service, Denver, CO. Air Quality Div., and Forest Service, Fort Collins, CO. Sponsored by Fish and Wildlife Service, Denver, CO.

The Phase I Report is published by the Interagency Workgroup on Air Quality Modeling (IWAQM) in an effort to provide the sponsoring agencies and other interested parties information on appropriate off-the-shelf methods for estimating long range transport impacts of air pollutants on Federal Class I areas and impacts on regional visibility.

Keywords: *Atmospheric diffusion, *Mathematical models, *Air pollution control, Aerosols, Long range transport, Environmental impacts, Regions, Visibility, National parks, Forest land, Meteorological data, Air water interactions, Distance, Guidelines, *Wilderness areas, Air land interactions.

**PB93-223188/REB** PC **A01**/MF **A01**
**Emergency Disinfection of Drinking Water.**
Environmental Protection Agency, Washington, DC. Office of Water.
Jul 93, 5p* EPA/810/F-93/002
See also PB80-112964.

There are two general methods by which small quantities of water can be effectively disinfected. One method is by boiling. It is the most positive method by which water can be made bacterially safe to drink. Another method is chemical treatment. If applied with care, certain chemicals will make most waters free of harmful or pathogenic organisms. When the home water supply system is interrupted by natural or other forms of disaster, limited amounts of water may be obtained by draining the hot water tank or melting ice cubes. When emergency disinfection is necessary, the physical condition of the water must be considered. The degree of disinfection will be reduced in water that is clouded. Murky or colored water should be filtered through clean cloths or allowed to settle, and the clean water drawn off before disinfection. Water prepared for disinfection should be stored only in clean, tightly covered, containers not subject to corrosion.

Keywords: *Drinking water, *Disinfection, *Water treatment, Emergencies, Water supply, Residential buildings, Boiling, Chemicals, Iodine, Chlorine, Bleaching agents, Taste, Aeration, Calcium hypochlorites, Small quantities.

**PB93-223204/REB** PC **A03**/MF **A01**
**Office of Wastewater Enforcement and Compliance Strategic Plan.**
Environmental Protection Agency, Washington, DC. Office of Water.
Jan 93, 50p EPA/830/R-93/001

Table of Contents: Summary of OWEC Strategic and Operation Principles: Strategic Program Directions and Summary of Policy Goals; Policy Goal 1 - Permitting Priorities; Policy Goal 2 - Integrated Compliance; Policy Goal 3 - Pollution Prevention; Policy Goal 4 - Funding Leadership; Policy Goal 5 - Effective Coordinatin w/Other Organizations; Policy Goal 6 - Developing an Empowered Workplace; Policy Goal 7 - State and Local Capacity Building; and Detailed Description of Policy Goals.

Keywords: *US EPA, Waste water, Water pollution control, Pollution regulations, Government policies, Enforcement, Compliance, Objectives, Water pollution abatement, Interagency cooperation, Personnel, Surface waters, OWEC(Office of Wastewater Enforcement and Compliance), Water quality management.

**PB93-223410/REB** PC **A03**/MF **A01**
**NPDES Storm Water Program. Question and Answer Document. Volume 1.**
Environmental Protection Agency, Washington, DC. Office of Wastewater Enforcement and Compliance.
Mar 92, 27p EPA/833/F-93/002
See also PB92-227669.

The report is a collection of 78 questions and answers pertaining to industrial permit applications.

Keywords: *Storm water runoff, *Water pollution control, *Permit applications, Water treatment, Industry, Sectoral analysis, Permits, Guidelines, Compliance, Pollution regulations, Regulations, Regulatory guides, NPDES(National Pollutant Discharge Elimination System).

**PB93-223428/REB** PC **A06**/MF **A02**
**Public Health Action Agenda for the Gulf of Mexico: Frame Work for Action.**
Environmental Protection Agency, Stennis Space Center, MS. Gulf of Mexico Program.
Sep 93, 110p EPA/800/K-93/001, ISBN-0-16-036286-5
Also available from Supt. of Docs. See also PB93-223469.

Many pollutants found in Gulf of Mexico waters have the potential to produce acute and chronic human health effects. Whether these pollutants pose human health risks depends upon the specific characteristics of the pollutants (e.g. whether they biodegrade or are persistent), as well as their potential to reach and thereby cause adverse impacts in humans. Humans can be exposed to potentially hazardous contaminants in the Gulf of Mexico through two principal pathways-indirectly through consumption of fish and shellfish, and directly from contact with water and aerosols. Consumption of contaminated seafood can be a significant route of exposure to toxic organic chemicals and metals because these substances are able to persist and accumulate in fish and shellfish. Exposure to toxic constituents from water contact is generally considered to be less significant, except near storm drains, industrial discharges, and sewage overflow points.

Keywords: *Mexico Gulf, *Marine pollution, *Public health, Water pollution effects(Humans), Risk assessment, Path of pollutants, Food chains, Hazardous materials, Pathogens, Toxicology.

**PB93-223444/REB** PC **A03**/MF **A01**
**Summary of the 1987 EPA National Performance Audit Program on Source Measurements.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
E. W. Streib, and W. J. Mitchell. Jan 89, 35p EPA/600/3-89/005
See also PB90-235086 and PB88-182209.

The Environmental Protection Agency's (EPA's) Atmospheric Research and Exposure Assessment Laboratory (AREAL) at Research Triangle Park, North Carolina, established an audit program in 1977 to evaluate the performance of companies that conduct compliance testing using EPA reference methods. The audits check the participants' analytical accuracy in applying the analytical phase of EPA Reference Methods 3, 6, 7, and 19 and the calibration accuracy of the Method 5 control. console. By participating in this free and voluntary program, testing companies can compare their performance to the performance of other laboratories conducting similar measurements.

Keywords: *Air pollution detection, *Performance testing, *Standards compliance, Carbon oxides, Nitrogen oxides, Sulfur oxides, Chemical analysis, Stationary sources, Performance evaluation, Comparison, Quality assurance, Calibration, National Performance Audit Program, Research and development, Testing methods.

**PB93-223469/REB** PC **A08**/MF **A02**
**Marine Debris Action Agenda for the Gulf of Mexico: Framework for Action.**
Environmental Protection Agency, Stennis Space Center, MS. Gulf of Mexico Program.
Sep 93, 160p EPA/800/K-93/002, ISBN-0-16-036287-3
Also available from Supt. of Docs. See also PB93-223428.

The purpose of the Action Plan is to specify the primary activities needed to reduce, and eventually eliminate, marine debris from Gulf of Mexico shores and waters. The Marine Debris Subcommittee has been meeting for more than three years. In that time, the Subcommittee has reviewed information and data collected by citizens and scientists, discussed actions that can resolve the problem, and evaluated methods for achieving and monitoring results. Fifty-five activities, called 'action items,' describe specific tasks that have been developed to meet the goals. Selected by the Gulf of Mexico Program Marine Debris Subcommittee are those activities that are most significant and most achievable. The document's list of action items is fairly comprehensive, but not exhaustive. It does not reflect all of the activities necessary to eliminate the problem, nor does it list activities in order of priority.

Keywords: *Mexico Gulf, *Marine pollution, *Environmental policy, Marine disposal, Water pollution control, Water pollution abatement, Regional planning, State government, National government, International cooperation.

**PB93-223543/REB** PC **A04**/MF **A01**
**Setting Priorities: The Key to Nonpoint Source Control.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Water Regulations and Standards.
R. P. Maas, M. D. Smolen, C. A. Jamieson, A. C. Weinberg, and F. J. Humenik. Jul 87, 63p EPA/841/B-87/110
Prepared in cooperation with North Carolina Agricultural Extension Service, Raleigh.

Targeting is a straightforward concept--identify priority water resources and treat the major sources of pollutants that impair those resources first. However, variability in hydrological systems can complicate the targeting procedure. The document is a working outline of the procedure and can provide insight for state and local decision-makers involved in developing, administering and implementing nonpoint sources (NPS) control programs.

Keywords: *Water pollution control, *Nonpoint sources, *Pollution regulations, Agricultural wastes, Runoff, Watersheds, State government, Local government, Requirements, Priorities, Decision making, Planning, Water quality management, Clean Water Act, Water Quality Act, Critical areas.

**PB93-223550/REB** PC **A03**/MF **A01**
**Storm Water Management for Construction Activities. Developing Pollution Prevention Plans and Best Management Practices. Summary Guidance.**
Environmental Protection Agency, Washington, DC. Office of Water.
Oct 92, 39p EPA/833/R-92/001
See also PB92-235951.

The booklet provides summary guidance on the development of storm water pollution prevention plans and identification of appropriate Best Management Practices (BMPs) for construction activities. It provides technical assistance and support for construction activities subject to pollution prevention requirements established under National Pollutant Discharge Elimination System (NPDES) permits for storm water point source discharges. EPA's storm water program significantly expands the scope and application of the existing NPDES permit system for municipal and industrial process wastewater discharges. It emphasizes pollution prevention and reflects a heavy reliance on BMPs to reduce pollutant loadings and improve water quality. The booklet provides summary guidance in both of these areas.

Keywords: *Construction, *Storm water runoff, *Water pollution, Technical assistance, Discharge(Water), Manuals, USEPA, Licenses, Guidelines, Drainage, Pollution prevention, Design criteria, Sites, Soil erosion, Local government, State government, Requirements, Soil stabilization, Point sources, Best Management Practices.

**PB93-223568/REB** PC **A04**/MF **A01**
**Dredged Material Ocean Dumping Reference Document.**
Environmental Protection Agency, Washington, DC. Office of Water.
Sep 92, 58p EPA/842/B-92/006

The document provides a useful, easy-to-access, annotated bibliography of essential and secondary policy and technical documents relating to dredged material disposal. A statutory and regulatory overview is presented for background information on dredged material disposal. The essential policy documents that are annotated in the document include EPA and U.S. Army Corps of Engineers (USACE) ocean disposal-related regulations located at Title 40 Code of Federal Regulations, Parts 220-229 (40 CFR 220-229) and 33 CFR 320-330 and 335-338, respectively; Evaluation of Dredged Material Proposed for Ocean Disposal -- Testing Manual (EPA/USACE, 1991).

Keywords: *Dredging, *Ocean waste disposal, *Documents, *Regulations, Technical reports, Government policies, US EPA, Statutes, Classifications, Water resources, USACE, Manuals, Guidelines.

**PB93-223576/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Washington, DC. Nonpoint Sources Branch.
**Methodology for Analysis of Detention Basins for Control of Urban Runoff Quality.**
Woodward-Clyde Consultants, Walnut Creek, CA.
Sep 86, 73p
Sponsored by Environmental Protection Agency, Washington, DC. Nonpoint Sources Branch.

The report describes an analysis methodology and presents graphs and example computations to guide planning level evaluations and design decisions on two techniques for urban runoff quality control. The control techniques addressed, recharge or infiltration devices, and wet pond detention devices (basins that maintain a permanent pool of water), were shown by the Nationwide Urban Runoff Program (NURP) studies to be the most consistently effective at pollutant reduction of any of the Best Management Practice (BMP) approaches considered.

Keywords: *Storm water runoff, *Urban areas, *Water pollution control, Pavements, Best management practices, Discharge(Water), Fluid infiltration, Lagoons(Ponds), Catch basins, Storm sewers, Overflow, Water storage, Rainfall, Periodic variations, Statistical analysis, Mathematical models, Computer programs, NURP(Nationwide Urban Runoff Program).

**PB93-223584/REB** PC **A03**/MF **A01**
**Sewage Treatment Plant NSPS: Responses to Comments on April 1986 Proposed Revisions.** Final rept.
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
Oct 88, 46p EPA/450/3-84/10B

On April 18, 1986, the U.S. Environmental Protection Agency (EPA) proposed revisions to the monitoring, recordkeeping, reporting and testing requirements associated with the new source performance standards (NSPS) for sewage treatment plants. The standard limits atmospheric emissions of particulate matter (PM) from new, modified, or reconstructed sewage sludge incinerators. The April 18, 1986, Federal Regis-

ter notice proposed additional monitoring, recordkeeping, and reporting requirements and additional performance test requirements for owners and operators of existing and future sewage sludge incinerators subject to the NSPS. Public comments were requested on the proposal in the Federal Register notice. The public comments are summarized in the document along with responses to the comments.

Keywords: *Sewage treatment plants, *Air pollution control, *Pollution regulations, Sewage sludge, Incinerators, Particulates, Release limits, Requirements, Public opinion, *NSPS(New Source Performance Standards), Clean Air Act.

**PB93-223592/REB** PC **A08**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Workbook for Plume Visual Impact Screening and Analysis (Revised).**
Sigma Research Corp., Concord, MA.
Oct 92, 154p EPA/454/R-92/023
Contract EPA-68-D9-0067
See also PB89-151286. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The guidance document is designed to assist the user in the evaluation of plume visual impact as required by the Prevention of Significant Deterioration (PSD) and visibility regulations of the U.S. Environmental Protection Agency (EPA). A plume will be visible if its constituents scatter or absorb sufficient light so that the plume is brighter or darker than its viewing background (e.g., the sky or a terrain feature such as a mountain). The objective of the document is to provide guidance on the assessment of plume visual impacts, including the use of a plume visual impact screening model (VISCREEN), which can be used to calculate the potential visual impact of a plume of specified emissions for specific transport and dispersion (meteorological) conditions.

Keywords: *Air pollution effects, *Visibility, *Computerized simulation, Plumes, Combustion products, Exhaust emissions, Meteorological data, Atmospheric diffusion, Particulates, Nitrogen oxides, Handbooks, Air Quality Dispersion Model, VISCREEN model, Visual impact screening.

**PB93-226017/REB** PC **A03**/MF **A01**
**Chesapeake Bay American Eel Fishery Management Plan. Agreement Commitment Report 1991.**
Environmental Protection Agency, Annapolis, MD. Chesapeake Bay Program.
1992, 41p

Contents: Executive Summary; Introduction; Section (1) Biological Background; Section (2) American Eel Management; ((1) Goal and Objectives; (2) Problem Areas and Management Strategies); and Appendix: American Eel Implementation Matrix.

Keywords: *Fisheries, *Eels, *Management planning, *Chesapeake Bay, Life cycles, History, Economic analysis, Fresh water fishes, Economic conditions, Harvesting, Objectives, Reproduction(Biology), Habitats, Maryland, Water pollution, Population migrations, Virginia, *Anquilla rostrata, American eels, *Commercial fishing, Bait fish.

**PB93-226058/REB** PC **A04**/MF **A01**
**Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans, December 1992.** Annual progress rept.
Environmental Protection Agency, Annapolis, MD. Chesapeake Bay Program.
Dec 92, 72p CBP/MAY-93/101
See also report dated December 1991, PB93-122182.

Contents: List of Figures and Tables; Introduction; Alosid Management Plan; Blue Crab Management Plan; Oyster Management Plan; Bluefish Management Plan; Weakfish/Spotted Seatrout Management Plan; and American Eel Management Plan.

Keywords: *Management planning, *Fisheries, *Chesapeake Bay, Crabs, Herrings, Trout, Populations, Monitoring, Abundance, Oysters, Eels, Populations, Estimates, Mortality, Habitats, Losses, Water pollution, *Alosids, *Commercial fishing, Overfishing.

**PB93-226082/REB** PC **A03**/MF **A01**
**Protocol for Determining the Best Performing Model.**
Environmental Protection Agency, Research Triangle Park, NC. Technical Support Div.
W. M. Cox. Dec 92, 37p EPA/454/R-92/025

The document describes a recommended procedure for evaluating the performance of air quality dispersion models, and for selecting the best performing model for particular regulatory applications. The procedure is based on direct comparisons between measured and model-predicted concentrations to establish the accuracy of each model. The document includes an example evaluation using SO2 data collected at four midwestern power plants in which the performance of MPTER and one other rural air quality model were compared.

Keywords: *Air pollution dispersion, *Environment transport, *Computerized simulation, Power plants, Rural areas, Point sources, Sulfur dioxide, Pollution regulations, Performance evaluation, MPTER model.

**PB93-226090/REB** PC **A06**/MF **A02**
**General Provisions for 40 CFR Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories. Background Information for Proposed Regulation.**
Environmental Protection Agency, Research Triangle Park, NC. Technical Support Div.
Jun 93, 118p EPA/450/3-91/019

General provisions are being proposed for 40 CFR Part 63 (a new part) which will include national emission standards for hazardous air pollutants (NESHAP) for source categories to be established pursuant to Section 112 of the Clean Air Act Amendments of 1990 (CAAA). The proposed general provisions eliminate the need to repeat general information and requirements within these standards; they include 'generic' information, such as definitions of terms, and sections that spell out the administrative responsibilities of EPA and the compliance responsibilities of owners or operators who are subject to a relevant emission standard or other requirement. The document contains a summary of the requirements and history of general provisions codified in 40 CFR Parts 60 and 61 from which the proposed general provisions were adapted; it also contains an explanation of why such requirements were needed and a summary of the statutory requirements of the CAAA that affect the proposed general provisions for Part 63.

Keywords: *Air pollution control, *Pollution regulations, *Hazardous materials, Requirements, Compliance, Administrative procedures, Emissions, Air pollution sources, Air pollution standards, Appropriate technology, State government, Law(Jurisprudence), Clean Air Act Amendments of 1990, Best available technology, New source performance standards.

**PB93-226108/REB** PC **A04**/MF **A01**
**Modeling Protocol for Applying MESOPUFF II to Long Range Transport Problems.**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
G. L. Gipson. Oct 92, 71p EPA/454/R-92/021
See also PB84-184753, PB84-181775, PB86-245248, PB87-142337, PB87-142345 and PB93-219095.

Several environmental problems may occur as a result of the transport of air pollutants over long distances. For example, air emissions from a source located in one political jurisdiction may be impeding progress towards attaining the National Ambient Air Quality Standards (NAAQS) in a different political jurisdiction. Similarly, a proposed new source may cause deterioration in air quality at a remote, pristine area far removed from the source. From a regulatory perspective, these types of problems must be addressed by first quantifying the air quality impacts of existing or proposed sources and then determining the appropriate level of emission control that is needed to mitigate those impacts. One approach for performing these types of assessments entails applying an air quality dispersion model to determine the source-receptor relationships associated with long range transport. The document presents a protocol for applying one such model, the MESOPUFF II dispersion model, to long range transport problems within a regulatory framework.

Keywords: *Air pollution dispersion, *Environmental transport, *Computerized simulation, Point sources, Power plants, Flue gases, Chemical reactions, Regional airsheds, Air quality control regions, Air quality standards, Pollution regulations, MESOPUFF II model, Long range transport.

**PB93-226199/REB** PC **A03**/MF **A01**
**Pesticide Reregistration Progress Report, April 1993.**
Environmental Protection Agency, Washington, DC. Office of Pesticides and Toxic Substances.
Apr 93, 28p EPA/730/R-93/001
See also PB93-178994 and PB93-206605.

The Pesticide Reregistration Progress Report is produced quarterly to provide information on progress towards pesticide reregistration as mandated under the 1988 amendments to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Progress is reported both for the current quarter and cumulatively. The current report provides the status of reregistration through the second quarter of the 1993 fiscal year (FY 93). The cumulative information is provided in Appendix A, entitled Cumulative Summary of Reregistration Actions.

Keywords: *Pesticides, *Pollution regulations, *Standards compliance, Administrative procedures, Requirements, Government policies, Reviewing, Suspending, Rejection, Evaluation, Reregistration.

**PB93-226595/REB** PC **A04**/MF **A01**
**Drinking Water Handbook for Public Officials.**
Environmental Protection Agency, Washington, DC. Office of Ground Water and Drinking Water.
Dec 92, 62p EPA/810/B-92/016

Contents: General Water Supply Considerations; Ground Water Sources and Treatment; Surface Water Sources and Tretment; Water Plant Operation; Water Distribution System Operation and Maintenance; Water System Management; Water System Operation Programs; Appendix A--Sources of Additional Information and Assistance; Appendix B--Listing Of USEPA Regional Offices; Appendix C--Listing Of State Drinking Water Agencies and Rural Community Assistance Program Agencies; and Appendix D--Helping Small Systems With the Safe Drinking Water Act--The Role of Reconstructuring EPA/812-K-92-001.

Keywords: *Drinking water, *Water supply, *Potable water, Ground water, Surface waters, Water quality, Water treatment plants, Treatment facilities, Water distribution, Pollution regulations, Handbooks, Safe Drinking Water Act.

**PB93-226611/REB** PC **A05**/MF **A01**
**Region 10 In-Stream Biological Monitoring Handbook: For Wadable Streams in the Pacific Northwest.**
Environmental Protection Agency, Seattle, WA. Environmental Services Div. Lab.
G. A. Hayslip. Jul 93, 84p EPA/910/9-92/013

The handbook provides a reference for those interested in conducting biological assessments of wadable streams in EPA Region 10. The document describes the minimum level of data that needs to be collected, as well as methods for additional levels of intensity, for each category (macroinvertebrates, fish, water column and physical habitat). The handbook is an attempt to provide a consistent minimal set of methods to facilitate information exchange and interpretation.

Keywords: *Streams, *Biological monitoring, *Water pollution detection, Water quality management, Surface waters, Invertebrates, Fishes, Habitability, Water pollution effects(Animals), Research programs, Handbooks, Pacific Northwest(United States), EPA Region 10, Bioassessment.

**PB93-226629/REB** PC **A03**/MF **A01**
**Chesapeake Bay Atlantic Croaker and Spot Fishery Management Plan: Agreement Commitment Report 1991.**
Environmental Protection Agency, Annapolis, MD. Chesapeake Bay Program.
1991, 45p

One of the strategies for implementing the Living Resources Commitments of the 1987 Chesapeake Bay Agreement is to develop and adopt a series of baywide

fishery management plans (FMPs) for commercially, recreationally, and selected ecologically valuable species. The FMPs are to be implemented by the Commonwealth of Pennsylvania, Commonwealth of Virginia, District of Columbia, Potomac River Fisheries Commission, and State of Maryland as appropriate. Under a timetable adopted for completing management plans for several important species, the Atlantic Croaker and Spot FMP was scheduled for completion in December 1991.

Keywords: *Natural resource management, *Marine fishes, *Chesapeake Bay, Ecology, Socioeconomic conditions, Harvesting, Recreation, Summer, Life cycles, History, Agreements, Regulations, Population growth, Reproduction(Biology), Trends, Habitats, Graphs(Charts), Tributaries, *Atlantic Coast Region(United States), *Commercial fishing, Overfishing, Micropogonias undulatus, Leiostomus Xanthurus.

**PB93-226637/REB** PC **A03**/MF **A01**
**Chesapeake Bay Summer Flounder Fishery Management Plan: Agreement Commitment Report 1991.**
Environmental Protection Agency, Annapolis, MD. Chesapeake Bay Program.
1991, 50p

One of the strategies for implementing the Living Resources Commitments of the 1987 Chesapeake Bay Agreement is to develop and adopt a series of baywide fishery management plans (FMPs) for commercially, recreationally, and selected ecologically valuable species. The goal of the Chesapeake Bay Summer Flounder Management Plan is to enhance and perpetuate summer flounder stocks in the Chesapeake Bay and its tributaries, and throughout their Atlantic coast range, so as to generate optimum long-term ecological, social and economic benefits from their commercial and recreational harvest and utilization over time.

Keywords: *Natural resource management, *Flatfishes, *Chesapeake Bay, Ecology, Socioeconomic conditions, Harvesting, Recreation, Summer, Life cycles, History, Population growth, Habitats, Regulations, Reproduction(Biology), Trends, *Atlantic Coast Region(United States), *Commercial fishing, Overfishing, Catch statistics, Paralichthys dentatus.

**PB93-226694/REB** PC **A04**/MF **A01**
**Role of Ozone Precursors in Tropospheric Ozone Formation and Control: A Report to Congress.**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
Jul 93, 70p EPA/454/R-93/024
See also PB93-226702 and PB92-223221.

Tropospheric ozone pollution, which occurs at ground level and is the major component of ground-level summertime smog, remains an important environmental and health concern despite nearly 20 years of regulatory efforts. Ozone is a secondary pollutant formed in the atmosphere by reactions of volatile organic compounds (VOCs) and oxides of nitrogen (NOx) in the presence of sunlight. Carbon monoxide (CO) also plays a role in the formation of ozone. Major sources of VOCs include exhaust and evaporative emissions from motor vehicles, emissions from solvent use and emissions from the chemical and petroleum industries. The following EPA perspectives identify two key components (strategy selection; modeling and data bases) which must be addressed in resolving the tropospheric ozone problem.

Keywords: *Ozone depletion, *Air pollution, *Troposphere, *Urban areas, Air pollution effects, Volatile organic compounds, Nitrogen oxides, Climatic changes, Mathematical models, Precursors, Sources, US EPA, Emissions, Inventory, Data bases, Reduction, Photochemical reactions, Evaluation, CAAA(Clean Air Act Amendments of 1990).

**PB93-226702/REB** PC **A03**/MF **A01**
**Summary of Public Comments and EPA Responses on the Draft Report: The Role of Ozone Precursors in Tropospheric Ozone Formation and Control.** Draft rept.
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
Jul 93, 33p EPA/454/R-93/025
See also PB93-226694.

The Report is Attachment 3 of the CAA Section 185B Report entitled, The Role of Ozone Precursors in Tropospheric Ozone Formation and Control. The summary includes comments and EPA responses based on a 30 day review of the draft Section 185B Report.

Keywords: *Ozone depletion, *Air pollution control, *Troposphere, *Urban areas, Public opinion, Attitudes, Precursors, Air pollution effects, US EPA, Response, Volatile organic compounds, Nitrogen oxides, Photochemical reactions, Monitoring, Fuels, Smog, Evaluation.

**PB93-226710/REB** PC **A02**/MF **A01**
**Private Wells: Guidance for What to Do After the Flood.**
Environmental Protection Agency, Washington, DC. Office of Water.
Aug 93, 6p

The guidance is intended to supplement flood precautions issued by state and local health and environmental departments for water wells and pumps, water quality and hardware could need inspections.

Keywords: *Floods, *Water wells, *Water pollution, *Emergencies, Public health, Guidelines, Disinfection, Risk assessment, Pumps, Inspection, Electric shocks, Instructions, US EPA.

**PB93-226728/REB** PC **A06**/MF **A02**
**National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges (40CFR Parts 122, 123, and 124 Final Rule).**
Environmental Protection Agency, Washington, DC. Office of Water.
Nov 90, 104p EPA/833/Z-90/100
See also AD-A235 949, PB92-114578 and PB92-199058.

The rule begins to implement section 402(p) of the Clean Water Act which requires the EPA to establish regulations setting forth National Pollutant Discharge Elimination System permit application requirements for storm water discharges associated with industrial activity, discharges from a municipal separate storm sewer system serving a population of 250,000 or more, and discharges from municipal separate storm sewer systems serving a population of 100,000 or more, but less than 250,000.

Keywords: *Permit applications, *Water pollution standards, *Storm water runoff, Storm sewers, Discharge rates, Permits, Pollution regulations, Law(Jurisprudence), Surface water runoff, Industrial wastes, Municipal wastes, Waste water, National Pollutant Discharge Elimination System, Clean Water Act.

**PB93-226736/REB** PC **A05**/MF **A01**
**Office of Wastewater Enforcement and Compliance (OWEC): Primer.**
Environmental Protection Agency, Washington, DC. Office of Water.
Jul 93, 78p EPA/830/K-93/001
See also PB93-223204.

The purpose of the Primer is to inform new employees on the mission and program activities of OWEC. Program activities from the former Office of Water Enforcement and Permits and the former Office of Municipal Pollution Control have been integrated where appropriate and are continuing more effectively in the Office of Wastewater Enforcement and Compliance. Included in the Primer is information on the programs OWEC administers in order to reduce and eliminate water pollution from industrial and municipal discharge pipes as well as diffuse sources such as stormwater, combined sewer overflows, and sludge.

Keywords: *US EPA, *Administrative procedures, *Water pollution standards, *Pollution regulations, Waste water, Industrial wastes, Municipal wastes, Waste management, Sewage sludge, Federal agencies, Budgeting, Compliance, Enforcement, Permits, Publicly-owned treatment works, Pretreatment.

**PB93-226744/REB** PC **A13**/MF **A03**
**Ethylene Oxide Emissions from Commercial Sterilization/Fumigation Operations: Background Information for Proposed Standards.** Final rept.
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
Mar 93, 293p EPA/453/D-93/016
See also PB93-216703.

Table of Contents: Ethylene Oxide Sterilization/Fumigation Processes and Emissions; Emission Control Techniques; Regulatory Alternatives; Environmental Impacts; Emission Control Costs, and The Economic Impacts of the Candidate Neshap Controls.

Keywords: *Ethylene oxide, *Sterilization, *Fumigation, *Air pollution standards, *Environmental impact statements-draft, Air pollution control, Pollution regulations, Requirements, Cost analysis, Economic impact, Aeration, Environmental impacts, Chlorofluorocarbons, Clean Air Act, National Emission Standards for Hazardous Air Pollutants, Regulatory alternatives.

**PB93-226751/REB** PC **A08**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Technical Support Div.
**Comparison of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model and Wind Tunnel Data.** Final rept.
Pacific Environmental Services, Inc., Research Triangle Park, NC.
Oct 92, 175p EPA/454/R-92/014
Contract EPA-68-D0-0124
See also PB93-226777 and PB92-232446. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Technical Support Div.

The report summarizes the results of comparison between a new numerical integration algorithm for modeling area source dispersion, as implemented in the Industrial Source Complex Short Term (ISCST2) model using wind tunnel data collected in the U.S. Environmental Protection Agency's Fluid Modeling Facility. Area sources referred to can be characterized as low level releases with little buoyance due to either momentum or temperature such as landfills or lagoons that are commonly found at superfund sites. The results of the analyses show that the new ISCST2 area source algorithm predicts the concentration distribution with relatively good accuracy, especially for ground-level area sources. The conclusion seems also valid for the various source shapes and orientations thus suggesting the ability of the model to accurately depict the plume shape for complex source-receptor geometries.

Keywords: *Air pollution dispersion, *Algorithms, *Mathematical models, Flue gases, Stationary sources, Diffusion modeling, Plumes, Wind tunnel models, Meteorological data, Performance evaluation, Graphs(Charts), ISCST2 model, Short term models, Fugitive emissions.

**PB93-226769/REB** PC **A05**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Technical Support Div.
**Sensitivity Analysis of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model.** Final rept.
Pacific Environmental Services, Inc., Research Triangle Park, NC.
Oct 92, 81p EPA/454/R-92/015
Contract EPA-68-D0-0124
See also PB93-226751. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Technical Support Div.

The report includes information on an improved algorithm for modeling dispersion from area sources, which has been developed based on a numerical integration of the point source concentration function. A sensitivity analysis is presented of the algorithm as implemented in the short-term version of the Industrial Source Complex (ISC2) model. The report is being released to establish a basis for reviews of the capabilities of the methodology and of the consequences resulting from use of the methodology in routine dispersion modeling of air pollutant impacts.

Keywords: *Air pollution dispersion, *Algorithms, *Mathematical models, Flue gases, Stationary sources, Diffusion modeling, Plumes, Sensitivity analysis, Meteorological data, Performance evaluation,

Graphs(Charts), ISCST2 model, Short term models, Fugitive emissions.

**PB93-226777/REB** PC **A06**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Technical Support Div.
**Development and Evaluation of a Revised Area Source Algorithm for the Industrial Source Complex Long Term Model.** Final rept.
Pacific Environmental Services, Inc., Research Triangle Park, NC.
Oct 92, 106p EPA/454/R-92/016
Contract EPA-68-D0-0124
See also PB93-226769. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Technical Support Div.

The report documents the development and evaluation of a new area source algorithm for the ISCLT2 model, based on the numerical integration algorithm recently developed for the ISC2 Short Term (ISCST2) model. The evaluation of the performance of the new ISCLT2 area source algorithm includes performance tests, statistical analyses, and sensitivity analyses. The technical description of the new ISCLT2 area source algorithm is provided in Section 2. The results of the performance tests are presented in Section 3, and the results of the sensitivity analyses involving comparisons with the virtual point source algorithm are given in Section 4. The conclusions of the study are presented in Section 5.

Keywords: *Air pollution dispersion, *Algorithms, *Mathematical models, Flue gases, Stationary sources, Plumes, Diffusion modeling, Meteorological data, Performance evaluation, Graphs(Charts), Sensitivity analysis, ISCLT2 model, Long term models.

**PB93-227114/REB** PC **E99**/MF **E99**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana.**
Science Applications International Corp., McLean, VA.
Jul 93, 1666p-in 4v*
Set includes PB93-227122 through PB93-227155.
Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

No abstract available.

**PB93-227122/REB** PC **A08**/MF **A02**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 1.**
Science Applications International Corp., McLean, VA.
T. Wagner. Jul 93, 154p EPA/540/R-92/079A
Contract EPA-68-C0-0048
See also Volume 2, Part 1, PB93-227130. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
Also available in set of 4 reports PC E99/MF E99, PB93-227114.

The report summarizes the findings of an evaluation of the Basic Extractive Sludge Treatment (B.E.S.T.) solvent extraction technology developed by Resources Conservation Company (RCC). During the demonstration test, the B.E.S.T. system was used to treat composited sediments from two areas of the Grand Calumet River. Contaminant concentration reductions of 96 percent for total polynuclear aromatic hydrocarbons (PAHs) and greater than 99 percent for total polychlorinated biphenyls (PCBs) were achieved for Sediment A. Contaminant concentration reductions of greater than 99 percent for total PAHs and greater than 99 percent for total PCBs were achieved for Sediment B. Removal efficiencies in excess of 98 percent were realized for both sediments for oil and grease (O&G).

Keywords: *Pollution control, *Solvent extraction, *Superfund, Grand Calumet River, Polychlorinated biphenyls, Polycyclic aromatic hydrocarbons, Remedial action, Sediments, Waste treatment, Oils, Greases, Technology utilization, Gary(Indiana), SITE(Superfund Innovative Technology Evaluation), BEST(Basic Extractive Sludge Treatment).

**PB93-227130/REB** PC **A24**/MF **A04**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 1.**
Science Applications International Corp., McLean, VA.
T. Wagner. Jul 93, 556p EPA/540/R-92/079B
Contract EPA-68-C0-0048
See also Volume 1, PB93-227122 and Volume 2, Part 2, PB93-227148. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
Also available in set of 4 reports PC E99/MF E99, PB93-227114.

The report summarizes the findings of an evaluation of the Basic Extractive Sludge Treatment (B.E.S.T.) solvent extraction technology developed by Resources Conservation Company (RCC). During the demonstration test, the B.E.S.T. system was used to treat composited sediments from two areas of the Grand Calumet River. Contaminant concentration reductions of 96 percent for total polynuclear aromatic hydrocarbons (PAHs) and greater than 99 percent for total polychlorinated biphenyls (PCBs) were achieved for Sediment A. Contaminant concentration reductions of greater than 99 percent for total PAHs and greater than 99 percent for total PCBs were achieved for Sediment B. Removal efficiencies in excess of 98 percent were realized for both sediments for oil and grease (O&G).

Keywords: *Pollution control, *Solvent extraction, *Superfund, Grand Calumet River, Polychlorinated biphenyls, Polycyclic aromatic hydrocarbons, Waste treatment, Environmental surveys, Sediments, Chemical analysis, Sampling, Gary(Indiana), SITE(Superfund Innovative Technology Evaluation), BEST(Basic Extractive Sludge Treatment).

**PB93-227148/REB** PC **A99**/MF **A06**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grant Calumet River, Gary, Indiana. Volume 2. Part 2.**
Science Applications International Corp., McLean, VA.
T. Wagner. Jul 93, 726p EPA/540/R-92/079C
Contract EPA-68-C0-0048
See also Volume 2, Part 1, PB93-227130 and Volume 2, Part 3, PB93-227155. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
Also available in set of 4 reports PC E99/MF E99, PB93-227114.

The report summarizes the findings of an evaluation of the Basic Extractive Sludge Treatment (B.E.S.T.) solvent extraction technology developed by Resources Conservation Company (RCC). During the demonstration test, the B.E.S.T. system was used to treat composited sediments from two areas of the Grand Calumet River. Contaminant concentration reductions of 96 percent for total polynuclear aromatic hydrocarbons (PAHs) and greater than 99 percent for total polychlorinated biphenyls (PCBs) were achieved for Sediment A. Contaminant concentration reductions of greater than 99 percent for total PAHs and greater than 99 percent for total PCBs were achieved for Sediment B. Removal efficiencies in excess of 98 percent were realized for both sediments for oil and grease (O&G).

Keywords: *Pollution control, *Solvent extraction, *Superfund, Grand Calumet River, Polychlorinated biphenyls, Polycyclic aromatic hydrocarbons, Waste treatment, Sampling, Chemical analysis, Environmental surveys, Tables(Data), Gary(Indiana), SITE(Superfund Innovative Technology Evaluation), BEST(Basic Extractive Sludge Treatment), Laboratory results.

**PB93-227155/REB** PC **A11**/MF **A03**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 3.**
Science Applications International Corp., McLean, VA.
T. Wagner. Jul 93, 230p EPA/540/R-92/079D
Contract EPA-68-C0-0048
See also Volume 2, Part 2, PB93-227148. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
Also available in set of 4 reports PC E99/MF E99, PB93-227114.

The report summarizes the findings of an evaluation of the Basic Extractive Sludge Treatment (B.E.S.T.) solvent extraction technology developed by Resources Conservation Company (RCC). During the demonstration test, the B.E.S.T. system was used to treat composited sediments from two areas of the Grand Calumet River. Contaminant concentration reductions of 96 percent for total polynuclear aromatic hydrocarbons (PAHs) and greater than 99 percent for total polychlorinated biphenyls (PCBs) were achieved for Sediment A. Contaminant concentration reductions of greater than 99 percent for total PAHs and greater than 99 percent for total PCBs were achieved for Sediment B. Removal efficiencies in excess of 98 percent were realized for both sediments for oil and grease (O&G).

Keywords: *Pollution control, *Solvent extraction, *Superfund, Grand Calumet River, Polychlorinated biphenyls, Polycyclic aromatic hydrocarbons, Waste treatment, Sampling, Chemical analysis, Well logging, Gary(Indiana), SITE(Superfund Innovative Technology Evaluation), BEST(Basic Extractive Sludge Treatment), Laboratory results.

**PB93-227163/REB** PC **A11**/MF **A03**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.** Final rept. 1 Jan 91-1 Dec 92.
Radian Corp., Research Triangle Park, NC.
J. T. Bursey, R. G. Merrill, R. A. McAllister, J. F. McGaughey, and M. D. Jackson. Sep 93, 236p EPA/600/R-93/123A
Contract EPA-68-D1-0010
See also PB93-227171. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

The Clean Air Act Amendments of 1990, Title III, present a need for stationary source sampling and analytical methods for the list of 189 compounds. EPA has used Volatile Organic Sampling Train (VOST) and Semivolatile Organic Sampling Train (SemiVOST) sampling and analytical methods for the type of sampling of organic compounds in the past, but these methodologies have been completely validated for only a few of the organic compounds. In the study, the applicability of VOST and SemiVOST techniques to Clean Air Act halogenated compounds has been evaluated under laboratory conditions. The methods were evaluated first to determine whether the compounds could be analyzed successfully. The report presents the results of the laboratory experiments.

Keywords: *Air pollution sampling, *Halogenated hydrocarbons, *Chemical analysis, Stationary pollutant sources, Gas chromatography, Mass spectroscopy, Sorbent recovery systems, Detection, Clean Air Act Amendments of 1990, Volatile organic compounds, Spiking.

**PB93-227171/REB** PC **A12**/MF **A03**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.** Final rept.
Radian Corp., Research Triangle Park, NC.
M. D. Jackson, J. T. Bursey, R. G. Merrill, R. A. McAllister, and J. F. McGaughey. 29 Apr 93, 257p EPA/600/R-93/123B
Contract EPA-68-D1-0010
See also PB93-227163. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

The Clean Air Act Amendments of 1990, Title III, present a need for stationary source sampling and analytical methods for the list of 189 compounds. EPA has used Volatile Organic Sampling Train (VOST) and Semivolatile Organic Sampling Train (SemiVOST) sampling and analytical methods for the type of sampling of organic compounds in the past, but these methodologies have been completely validated for only a few of the organic compounds. In the study, the applicability of VOST and SemiVOST techniques to Clean Air Act halogenated compounds has been evaluated under laboratory conditions. The methods were evaluated first to determine whether the compounds could be analyzed successfully.

Keywords: *Air pollution sampling, *Halogenated hydrocarbons, *Chemical analysis, Stationary pollutant sources, Gas chromatography, Mass spectroscopy, Sorbent recovery systems, Detection, Tables(Data), Graphs(Charts), Clean Air Act Amendments of 1990, Volatile organic compounds, Spiking.

**PB93-227197/REB** PC **A08**/MF **A02**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Use of Alternative Materials for Daily Cover at Municipal Solid Waste Landfills.** Final rept.
Pittsburgh Univ., PA. Dept. of Civil Engineering.
F. G. Pohland, and J. T. Graven. Sep 93, 168p EPA/600/R-93/172
Contract EPA-68-C1-0018
Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The current applicability of alternative materials as daily cover at landfills was assessed from an operational, performance, environmental, and economic perspective. The types of products and materials considered included commercially available foams, sprayons and geosynthetics, as well as indigenous materials, such as ash-based materials, green waste, sludge, compost and shredded tires. Information on characteristics, material and equipment requirements, methods of preparation and application, climatic and operational considerations, effectiveness, and costs were obtained from manufacturers/users of alternative daily cover materials (ADCMs) and from available reports. Results of the investigation indicated that use of alternative materials for daily cover in lieu of soil can augment landfill operations and performance, while enhancing environmental control. Although applicability varied depending on site specificity and the particular alternative material used, most materials were easily applied, satisfied operational and regulatory requirements, saved landfill capacity, decreased requirements for soil, and facilitated leachate and gas management and control.

Keywords: *Landfills, *Coverings, *Substitutes, Capping, Leaching, Foam, Compost, Ashes, Dredged materials, Performance evaluation, Land disposal, Solid waste management, Tables(Data), Photographs, Alternative daily cover materials, Geosynthetic materials, Spray-on covers.

**PB93-227205/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.** Final rept.
Aluminum Co. of America, Pittsburgh, PA.
P. K. T. Liu, R. L. Gregg, and H. K. Sabol. Aug 93, 70p EPA/540/R-93/521
Grant EPA-R-816813
Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

An engineered biofilter was developed to digest hazardous organic emissions from soil, water and air decontamination processes. A bench scale unit was tested for over 11 months for the removal of low levels of toluene in air under the SITE Emerging Technology Program. The bioscrubber contains a selected activated carbon medium to support microbial growth. The bioscrubber was designed for large volumes of air streams containing trace volatile organics. Almost complete removal of hazardous organics was demonstrated. Comparing with other biofilters using compost or other naturally occurred media, the use of activated carbon in the bioscrubber enhanced the degradation efficiency substantially for the test performed.

Keywords: *Filtration, *Microorganisms, *Scrubbers, *Air pollution control, Adsorption, Biodegradation, Toluene, Trace amounts, Superfund, Sites, VOC(Volatile Organic Compounds).

**PB93-227551/REB** PC **A06**/MF **A02**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.** Final rept. Jul 92-Dec 92.
Environmental Quality Management, Inc., Cincinnati, OH.
J. R. Kominsky, R. W. Freyberg, J. A. Brownlee, D. R. Gerber, and G. J. Centifonti. 31 Dec 92, 108p EPA/600/R-93/159
Contract EPA-68-D2-0058
Prepared in cooperation with New Jersey State Dept. of Health, Trenton. Environmental Health Service. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

A study was conducted to determine the level of airborne asbestos concentrations during routine spray buffing of asbestos-containing floor tiles at 17 schools in northern, central, and southern New Jersey. Although the schools selected do not represent a statistical random sample, they do represent a cross section of floor conditions and floor-care maintenance practices. Increased airborne asbestos levels during spray buffing were measured at 12 of the 17 schools. The increase was statistically significant at 7 of the 17 schools. Overall, the mean relative increase in airborne asbestos concentrations during spray-buffing with the high-speed machines (1000 to 1500 revolutions per minute) was statistically significantly higher than that during buffing with low-speed machines (175 to 330 revolutions per minute). Machine speed appeared to have a significant effect on the structure morphology of the airborne asbestos structures generated during spray-buffing.

Keywords: *Asbestos, *Buffing, *Air pollution sampling, Floors, Tiles, Mechanical polishing, Particles, New Jersey, School buildings, Machine speed, Airborne concentrations.

**PB93-227636/REB** PC **A03**/MF **A01**
**Federal Register Volume 57 No. 175 Wednesday, September 9, 1992 Notices. Part 2. Final NPDES General Permits for Storm Water Discharges from Construction Sites; Fact Sheet.**
Environmental Protection Agency, Washington, DC. Office of Water.
9 Sep 92, 37p
See also PB92-114578.

The Regional Administrators of Regions I, II, III, IV, V, VI, VIII, IX, and X (the 'Regions' or the 'Directors') are issuing final NationalPollutant Discharge Elimination System (NPDES) general permits for storm water discharges associated with industrial activity from construction sites. These general permits establish Notice of Intent (NOI) requirements, special conditions, requirements to develop and implement storm water pollution prevention plans, and requirements to conduct site inspections for facilities with discharges authorized by the permit.

Keywords: *Water pollution standards, *Storm water runoff, *Permits, Nonpoint sources, Construction, Discharge rates, Requirements, Pollution regulations, Notification procedures, Standards compliance, National Pollutant Discharge Elimination System.

**PB93-227858/REB** PC **A02**/MF **A01**
**Drinking Water State Revolving Fund: Ensuring Safe Drinking Water for America.**
Environmental Protection Agency, Washington, DC. Office of Water.
1993, 8p

President Clinton recently proposed a new Drinking Water State Revolving Fund (SRF) to help public water systems comply with the Safe Drinking Water Act. The Environmental Protection Agency submitted the Administration's statement of principles for the Drinking Water SRF to Congress. The paper outlines the benefits of the SRF and complying with the Safe Drinking Water Act. Water System Compliance trends are also discussed.

Keywords: *Drinking water, *Water pollution standards, *Funds, Standards compliance, State government, Economic analysis, Water supply, Water distribution, Distribution systems, Public utilities, Water services, Water quality, Pollution regulations, Safe Drinking Water Act, State Revolving Fund, Publicly-owned treament works.

**PB93-227866/REB** PC **A05**/MF **A01**
**Wildlife Criteria Portions of the Proposed Water Quality Guidance for the Great Lakes System.**
Environmental Protection Agency, Washington, DC. Office of Water.
Jul 93, 94p EPA/822/R-93/006
See also PB93-154722.

The document was produced to facilitate review of and comment on the proposed wildlife criteria approach by persons who may not keep abreast of FEDERAL REGISTER notices, including the larger scientific community.

Keywords: *Hazardous materials, *Wildlife, *Water quality management, *Great Lakes, Guidelines, Proposals, Methodology, Technical assistance, Implementation, Toxicity, Agreements, Comparison, National government, Protection, Exposure, *Water quality criteria, Chemicals.

**PB93-228138/REB** PC **A07**/MF **A02**
**Final Regulatory Impact Analysis and Summary and Analysis of Comments: Control of Vehicular Evaporative Emissions.**
Environmental Protection Agency, Ann Arbor, MI. Office of Mobile Sources.
Feb 93, 127p*

The document summarizes the results of all analyses conducted in support of the final rule for evaporative emission regulations for gasoline and methanol fueled light-duty vehicles, light-duty trucks and heavy duty vehicles. The document also includes the test procedures, the technological feasibility, economic impact, environmental effects, cost-effectiveness of the standards and appendixes describing evaporative modeling with in-use driving patterns including MOBILE5 input and output computer files.

Keywords: *Evaporative emissions, *Motor vehicles, *Emission tests, Regulations, Heavy duty vehicles, Exhaust emission control costs, Costs, Air pollution control, Economic analysis, Standards, Gasoline, Methanol, Evaporative emission control, Light duty vehicles, Light duty trucks, MOBILE 5 computer files.

**PB93-228146/REB** PC **A09**/MF **A02**
**State and Local Funding of Nonpoint Source Control Programs.**
Environmental Protection Agency, Washington, DC. Office of Water.
Sep 92, 188p* EPA/841/R-93/003
Also available from Supt. of Docs.

The technical measures or best management practices which can be used to abate nonpoint source (NPS) pollution are improving, and states and local governments are employing them to address a wide variety of NPS problems. At the same time, resources for NPS programs at all levels remain relatively static. Because some states and localities have developed particularly effective methods for funding NPS programs and have thereby increased the Nation's capacity to utilize BMPs to control NPS pollution, EPA has sought the cooperation of several state and local agencies to assist in the development of case studies and related materials on NPS funding. These case studies demonstrate a variety of effective techniques which are currently being used by state and local governments to fund NPS programs.

Keywords: *Water pollution control, *Nonpoint sources, *Budgeting, State government, Local government, Funds, Allocations, Water pollution economics, Case studies, Pollution regulations, Law(Jurisprudence).

**PB93-228443/REB** PC **A02**/MF **A01**
**Storm Water Management Model User's Manual, Version 4. Project Summary.**
Environmental Research Lab., Athens, GA. Office of Research and Development.
W. C. Huber, R. E. Dickinson, L. A. Roesner, and J. A. Aldrich. Aug 88, 7p EPA/600/S3-88/001

See also PB88-236641 and PB88-236658.

Version 4 of the U.S. Environmental Protection Agency's (EPA) Storm Water Management Model (SWMM) is the latest edition of this comprehensive computer model for analysis of quantity and quality problems associated with urban runoff. Both single-event and continuous simulation may be performed on catchments having storm sewers, combined sewers and natural drainage, for prediction of flows, stages and pollutant concentrations anywhere in the system. The EXTRAN Block solves the complete dynamic flow routing equations (the St. Venant equations) for accurate simulation of backwater, looped connections, surcharging, and pressure flow.

Keywords: *Storm sewers, *Combined sewers, *Runoff, *Water pollution, *Urban areas, *Computer programs, Mathematical models, Drainage, Storm water runoff, Sewage treatment.

**PB93-228450/REB** PC **A02**/MF **A01**
**Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
D. W. Pershing, M. P. Heap, and W. R. Seeker. Feb 90, 8p EPA/600/S7-89/005
See also PB89-200810.

The report addresses the evaluation of a technology which is a combination of two technologies used to control the atmospheric emission of NOx by stationary sources: (1) combustion modification (controls flame temperature and maximizes fuel-rich residence time to minimize NOx formation); and (2) flue gas cleaning (uses a reducing agent with or without a catalyst to remove NOx from combustion products). The combined technology uses fuel as a reducing agent to remove NOx. The process (referred to as in-furnace NOx reduction, reburning, and staged fuel injection) can be applied to many types of combustion systems. In fact, reburning is the process which allows the 'in-furnace NOx reduction' to take place.

Keywords: *Afterburning, *Air pollution control, *Nitrogen oxides, *Coal, *Combustion products, Stationary sources, Flue gases, Pulverized fuels, Combustion modification, Reducing agents, Catalysts, Staged combustion, Oxidation, Reduction(Chemistry), Bench-scale experiments.

**PB93-228468/REB** PC **A02**/MF **A01**
**Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
B. A. Folson, A. R. Abele, J. L. Reese, and T. M. Sommer. Jan 89, 10p EPA/600/S7-88/019
See also PB88-250535, PB88-250550 and PB88-250543.

The Distributed Mixing Burner (DMB) is a low-NOx pulverized-coal burner for wall-fired boiler applications. The burner operates under reducing conditions in the primary flame zone to minimize NOx emissions while an overall oxidizing environment is maintained in the furnace to minimize slagging and corrosion. The operation is accomplished by using air ports around the burner throat to provide staged combustion conditions at each individual burner. The report gives results of a field evaluation of the DMB on a 98 kg/hr (215,000 lb/hr) steaming capacity, four-burner, front-wall-fired boiler.

Keywords: *Boilers, *Air pollution control equipment, *Nitrogen oxides, Coal, Combustion, Exhaust gases, Retrofitting, Stationary sources, Emissions.

**PB93-228484/REB** PC **A02**/MF **A01**
**Evaluation of FGD Dry Injection Sorbents and Additives. Volume 1. Development of High Reactivity Sorbents. Project Summary.**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
W. Jozewicz, and J. C. S. Chang. Jan 90, 7p EPA/600/S7-89/006A
See also PB89-208920.

EPA's efforts to develop low cost, retrofit flue gas cleaning technology include the development of highly reactive sorbents. Recent work addressing lime enhancement by slurrying with siliceous materials and testing in a laboratory packed-bed reactor is discussed in the report. The solids generated from a furnace limestone injection process were reactivated by slurrying at elevated temperatures. Compared with untreated solids, reactivity toward SO2 was significantly enhanced by hydration. The SO2 capture by solids increased with increasing time and temperature of hydration. The SO2 capture was probably enhanced by the calcium aluminate silicate hydrates formed during the slurrying process.

Keywords: *Air pollution control, *Flue gases, *Sorbents, Dry methods, Desulfurization, Chemical reactions, Additives, Sulfur dioxide, Silicon dioxide, Slurries, Boilers, Clays, Calcium oxides, Hydration, Limestone injection.

**PB93-228492/REB** PC **A02**/MF **A01**
**Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.**
Environmental Monitoring Systems Lab., Las Vegas, NV.
V. F. Hodge, D. A. Darby, W. E. Thompson, and C. L. Jones. Apr 88, 7p EPA/600/S4-88/012
See also PB88-171434.

The study examined the application of these two powerful beryllium detection methods to the analysis of selected liquid and solid samples after digestion by appropriate SW-846 methods. Method performance data, including: detection limits, optimum concentration ranges (linearity), spike recoveries, interferences, precision, accuracy, and optimum instrument operating parameters, are presented and discussed.

Keywords: *Beryllium, *Spectrophotometry, *Chemical analysis, Absorption spectroscopy, Flame photometry, Tests, Accuracy, Performance evaluation, Solid wastes, EPA Method 7090, EPA Method 7091.

**PB93-228500/REB** PC **A02**/MF **A01**
**Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.**
Environmental Monitoring Systems Lab., Las Vegas, NV.
B. C. Hess, J. E. Rocchio, D. J. Chaloud, L. J. Arent, and J. L. Engels. Apr 88, 9p EPA/600/S4-88/009
Also available from Supt. of Docs. See also PB88-165717 and PB87-212817.

Accurate measurement of snowfall is critical to the assessment of acidic deposition trends, particularly in areas where snow represents 30 percent or more of the annual precipitation. Such areas include the intermountain west, where complex topography and meteorology, heavy precipitation, and extreme cold. Instruments selected for evaluation included the Aerochem Metrics Model 301 wet/dry deposition collector, the Belfort Model 5-780 weighing rain gage, and the U.S. Geological Survey designed 46-cm bulk samplers.

Keywords: *Acidification, *Snow, *Collecting methods, *Water pollution, *Evans Mountain, Meteorological instruments, Rain gages, Precipitation(Meteorology), Samplers, Evaluation, Reliability, Quality control, Standards, Colorado, Terrain, High altitude, National Atmospheric Deposition Program.

**PB93-228518/REB** PC **A02**/MF **A01**
Environmental Research Lab., Narragansett, RI.
**Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.**
Science Applications International Corp., Narragansett, RI.
G. A. Tracey, C. James, G. Hatcher, and W. Nelson. c1991, 10p EPA/600/A-93/212, , CONTRIB-1326
Contract EPA-68-C1-0005
Sponsored by Environmental Research Lab., Narragansett, RI.

The potential remobilization of pollutants during dredging and disposal of contaminated sediments is of principal concern to environmental managers in the selection of dredging methods and disposal options. In the study, the authors describe methods for estimation of pollutant transport within New Bedford Harbor (NBH), an urbanized estuary between the cities of New Bedford and Fairhaven, MA. On eight separate dates corresponding to various dredging activities, current velocity and total suspended solids (TSS) profiles were taken across a narrow constriction (separating the upper and lower harbor) in conjunction with chemical sampling for dissolved and particulate PCB analyses. Three methods of estimating PCB transport were compared.

Keywords: *Water pollution sampling, *Environmental transport, *Estuaries, *New Bedford Harbor, Chemical analysis, Polychlorinated biphenyls, Suspended solids, Dredging, Tidal currents, Sediments, Urban areas, Reprints.

**PB93-228526/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Development and Evaluation of a Transportable Fast Gas Chromatograph for the Monitoring of Organic Vapors in Air.**
Michigan Univ., Ann Arbor. School of Public Health.
J. A. Gonzalez, S. P. Levine, and R. E. Berkley. 1993, 9p EPA/600/A-93/213
Grant EPA-R817123
Prepared in cooperation with Puerto Rico Univ., San Juan. School of Public Health. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

Gas chromatography has the potential to be a real-time or near real-time monitoring method for organics in air. A transportable fast GC with FID/ECD and PID/ECD configurations has been developed. Preliminary evaluation has shown that all design features and improvements of the instrument worked successfully.

Keywords: *Air pollution detection, *Gas chromatography, *Organic compounds, Gas analysis, Electrometers, Electric measuring instruments, Laboratory equipment, Air pollution monitors, Reprints, FID(Flame ionization detector), PID(Photoionization detector), ECD(Electron capture detector).

**PB93-228534/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.** Symposium paper.
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
R. K. Stevens, A. J. Hoffman, J. D. Baugh, C. W. Lewis, and R. B. Zweidinger. 1993, 8p EPA/600/A-93/214
Pub. in Proceedings of the American Waste Management Association/Environmental Protection Agency Symposium 'Measurement of Air Toxic and Related Air Pollutants', Durham, NC., May 3-7, 1993. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

As part of the U.S. Environmental Protectional Agency's Integrated Air Cancer Project (IACP) field air quality monitoring studies in four U.S. cities were conducted between 1984 and 1989. The chronology of the field studies was: (1) December 1984 to March 1985 in Albuquerque, NM; (2) January 1985 to March 1985 in Raleigh, NC; (3) December 1986 to March 1987 in Boise, ID; and (4) October 1988 to February 1989 in Roanoke, VA. Aerosol and gas phase pollutants collected at these locations were used in receptor models to apportion the contributions of emissions from wood burning and mobile sources to fine particle organic matter concentrations. The paper compares the composition of air pollutants measured in the four IACP studies, with regard to temporal variation and geographic location.

Keywords: *Air pollution monitoring, *Carcinogens, *Emissions, Aerosols, Combustion products, Mobile pollutant sources, Chemical analysis, Particulates, Rare earths, Potassium, Lead(Metal), Bromine, Tracer techniques, Reprints, Roanoke(Virginia), Albuquerque(New Mexico), Boise(Idaho), Integrated Air Cancer Project, Volatile organic compounds.

**PB93-228542/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

**Chemical Contaminants in House Dust: Occurrences and Sources.**
Battelle, Columbus, OH.
J. W. Roberts, W. T. Budd, J. Chuang, and R. G. Lewis.
1993, 8p EPA/600/A-93/215
Contract EPA-68-D0-0007
See also PB90-192006. Prepared in cooperation with Environmetrics, Seattle, WA., Engineering Plus, Seattle, WA., and Environmetrics, Inc., Seattle, WA. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

Pesticides, polynuclear aromatic hydrocarbons (PAHs), lead (Pb), and other metals accumulate in home soil and house dust. Exposure of infants and toddlers to Pb by dust may be greater than other pathways. Many pollutants found in carpet dust are protected from degradation and accumulate over time. Greater numbers of pesticides are found in house dust than in indoor air. Pb and PAH concentrations appear to be magnified in house dust when compared with midyard and walkway soil samples. Studies using methods developed by the U.S. EPA show evidence of track-in and/or carry-in of Pb, PAHs and pesticides on clothes. Preliminary results of an eight-home study report PAHs inhouse dust at 1 to 100 ppm and suggest track-in as a major source of PAHs in house dust.

Keywords: *Dust, *Houses, *Pollution detection, Soils, Lead(Metal), Polycyclic aromatic hydrocarbons, Pesticides, Carpets, Floors, Exposure, Sampling, Environmental monitoring, Reprints, Indoor environments.

**PB93-228559/REB** PC **A02/MF A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Exposure Modeling of Acid Aerosols.**
National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div.
M. Zelenka, and H. Suh. 1993, 9p EPA/600/A-93/216
Grant EPA-R-816740
Presented at the International Symposium on Measurement of Toxic and Related Air Pollutants, Durham, NC., May 3-7, 1993. Prepared in cooperation with Harvard School of Public Health, Boston, MA. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

The U.S. Environmental Protection Agency (EPA) is conducting field measurements in Philadelphia, Pennsylvania to: (1) characterize the spatial and temporal variations of acid aerosol species in an urban environment, (2) investigate the complex chemistry of acid aerosols and other acidic species, including formation/removal mechanisms, and (3) provide acidic aerosol and particulate data base for exposure modeling and a study of pollution health effects. One of the goals of the EPA's aerosol acidity study is to develop models of human exposure to acid aerosol species. Exposure models will be used to estimate the distribution of human exposures to acid aerosols. The models would be an important planning tool for assessing exposures by: (1) determining acid aerosol exposures in high-risk groups; (2) facilitating planning of subsequent sampling strategies; and (3) evaluating the effectiveness of proposed or implemented mitigation efforts on reducing human exposures to acid aerosols. The paper focuses on issues to be addressed in developing models of human exposure to acid aerosols. The intent is to describe a sampling scheme that provides the information needed for development of an acid aerosol exposure model.

Keywords: *Air pollution sampling, *Exposure, *Risk assessment, Aerosols, Acidity, Urban areas, Public health, Air pollution identification, Chemical analysis, Ammonia, Models, Hydrogen ions, Reprints, Philadelphia(Pennsylvania), Metropolitan Aerosol Acidity Characterization Study.

**PB93-228567/REB** PC **A02/MF A01**
**SITE Program Demonstration of the SBP Technologies, Inc., Membrane Filtration System on Creosote-Contaminated Water.** Journal article.
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
K. L. Kreiton, and S. W. Beckman. c1993, 7p* EPA/600/J-93/324
Pub. in Jnl. of the Air and Waste Management Association, v43 n3 p367-370 Mar 93. Prepared in cooperation with Science Applications International Corp., Hackensack, NJ.

The formed-in-place membrane filtration system offered by SBP Technologies, Inc. of Stone Mountain, GA was evaluated by the USEPA SITE Program. The SITE Program Demonstration was accomplished at the American Creosote Works site in Pensacola, FL in October 1991. The system effectively performed an 82% volume reduction, and removed greater than 95% of higher molecular weight PAHs and 92% of total PAHs from the permeate stream. The permeate stream SVOC concentration averaged 22.8 mg/L over the six-day period. This stream was determined to be acceptable for discharge to the local POTW. The membrane system tested was not very effective at removing lower molecular weight compounds (ca. 18%) such as phenolics. Of the total SVOCs present, ca. 75% removals were achieved. For each 2000 gallons treated, ca. 200 gallons of wash water were utilized; ca. 8% of contaminants were distributed to the washwater. Estimates of capital and operating costs are between $202 and $675 per 1000 gallons treated (not including costs of final disposal).

Keywords: *Superfund, *Membranes, *Filtration, *Water pollution control, Waste water, Creosotes, Polycyclic aromatic hydrocarbons, Phenols, Hazardous materials, Remediation, Technology assessment, Reprints, *SITE(Superfund Innovative Technology Evaluation), Pretreatment, Semivolatile organic compounds.

**PB93-228575/REB** PC **A03/MF A01**
Robert S. Kerr Environmental Research Lab., Ada, OK.
**Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.** Journal article.
ManTech Environmental Technology, Inc., Ada, OK.
R. W. Puls, C. J. Paul, and D. A. Clark. c1993, 16p EPA/600/J-93/351
Pub. in Colloids and Surfaces: A Physicochemical and Engineering Aspects, v73 p267-300 1993. Sponsored by Robert S. Kerr Environmental Research Lab., Ada, OK.

Surface chemical effects on colloidal stability and transport through porous media were investigated using laboratory column techniques. Approximately 100nm diameter, spherical, iron oxide particles were synthesized as the mobile colloidal phase. The column packing material was retrieved from sand and gravel aquifer on Cape Cod, MA. Previous studies have indicated enhanced stability and transport of iron oxide particles due to specific adsorption of some inorganic anions on the iron oxide surface. This phenomenon was further evaluated with an anionic surfactant, sodium dodecyl sulfate. Surfactants constitute a significant mass of the contaminant loading at the Cape Cod site and their presence may contribute to colloidal transport as a significant transport mechanism at the site. Photon correlation spectroscopy, micro-electrophoretic mobility, and scanning electron microscopy were used to evaluate particle stability, mobility, and size. Adsorption of negatively charged organic and inorganic species onto the surface of the iron oxide particles was shown to significantly enhance particle stability and transport through alterations of the electrokinetic properties of the particle surface. Particle breakthrough was primarily dependent upon colloidal stability and surface charge.

Keywords: *Porous media, *Surface chemistry, *Colloids, *Environmental transport, *Land pollution, *Aquifer systems, Subsurface investigations, Particle size, Water pollution, Ground water, Electrodynamics, Scanning electron microscopy, Surfactants, Adsorption, Iron phosphates, Electrophoresis, Aqueous solutions, Experimental design, Reprints.

**PB93-228583/REB** PC **A02/MF A01**
Robert S. Kerr Environmental Research Lab., Ada, OK.
**Molecular Size Exclusion by Soil Organic Materials Estimated from Their Swelling in Organic Solvents.** Journal article.
ManTech Environmental Technology, Inc., Ada, OK.
W. G. Lyon, and D. E. Rhodes. c1993, 8p EPA/600/J-93/352
Contract EPA-68-C8-0025
Pub. in Environmental Toxicology and Chemistry, v12 p1405-1412 Jul 93. Sponsored by Robert S. Kerr Environmental Research Lab., Ada, OK.

A published method previously developed to measure the swelling characteristics of powdered coal samples has been adapted for swelling measurements on various peat, pollen, chitin, and cellulose samples. The swelling of these macromolecular materials is the volumetric manifestation of absorption, that is, sorption by dissolution (or partitioning) of the sorbed liquids into cross-linked macromolecular solid phases. Direct evidence for the existence of this additional category of sorbed materials has been obtained for soil organic materials by the present research; however, it seems to be limited by molecular size-exclusion effects to fairly small molecules. Liquids with molar volumes greater than about 93 cu m/mol appeared to be strongly excluded from sorption inside most cross-linked soil organic materials studied in this work. Cellulose excluded liquids with molar volumes greater than about 88 cu m/mol. (Copyright (c) 1993 SETAC).

Keywords: *Organic materials, *Swelling, *Land pollution control, Organic solvents, Organic soils, Humic acids, Peat, Cellulose, Pollen, Chitins, Sorption, Separation, Soil contamination, Reprints.

**PB93-228591/REB** PC **A02/MF A01**
**Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Neurotoxicology Div.
S. Padilla, E. B. Freeman, P. Tandon, and V. Z. Wilson. c1993, 8p EPA/600/J-93/353
Pub. in Jnl. of Neurochemistry 60, n5 p1900-1905 May 93. Prepared in cooperation with ManTech Environmental Technology, Inc., Research Triangle Park, NC., and North Carolina Univ. at Chapel Hill. Center for Environmental Medicine and Lung Biology.

Retrograde axonal transport of phosphatidylcholine in the sciatic nerve has been demonstrated only after injection of lipid precursors into the cell body region. After microinjection (1 microliters) of (methyl-(3)H)choline chloride into the rat sciatic nerve (35-40 mm distal to the L4 and L5 dorsal root ganglia), time-dependent accumulation of (3)H-labeled material occurred in dorsal root ganglia ipsilateral, but not contralateral, to the injection site. The level of radioactivity in the ipsilateral dorsal root ganglia was minimal at 2 h after isotope injection but was significantly increased at 7, 24, 48, and 72 h after intraneural isotope injection (n = 3-8 per time point); at these time points, all of the radiolabel in the chloroform/methanol extract of the ipsilateral dorsal root ganglia was present in phosphatidylcholine. The radioactivity in the water-soluble fraction did not show a time-dependent accumulation in the ipsilateral dorsal root ganglia as compared with the contralateral DRGs, ruling out transport or diffusion of precursor molecules. In addition, colchicine injection into the sciatic nerve proximal to the isotope injection site prevented the accumulation of radiolabel in the ipsilateral dorsal root ganglia. Therefore, this time-dependent accumulation of radiolabeled phosphatidylcholine in the ipsilateral dorsal root ganglia is most likely due to retrograde axonal transport of locally synthesized phospholipid material. (Copyright (c) 1993 International Society for Neurochemistry.)

Keywords: *Phosphatidylcholines, *Axon, *Sciatic nerve, *Proteins, *Biological transport, Rats, Spinal ganglia, Choline, Colchicine, Reprints.

**PB93-228609/REB** PC **A03/MF A01**
**Strain Comparisons of DFP Neurotoxicity in Rats.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Neurotoxicology Div.
C. J. Gordon, and R. C. MacPhail. c1993, 15p EPA/600/J-93/354
Pub. in Jnl. of Toxicology and Environmental Health 38, p257-271 Mar 93.

The purpose of the study was to assess intraspecies differences in behavioral and autonomic function in three strains of rat following administration of diisopropyl fluorophosphate (DFP), an irreversible inhibitor of acetylcholinesterase activity. Male rats of the Long-Evans (LE), Fischer 344 (F344), and Sprague-Dawley (SD) strains were administered DFP at doses of 0 to 1.5 mg/kg (s.c.). The animals were placed 60 min later into one of two motor activity chambers and tested for 30 min. Motor activity was measured using either a Doppler-based system or a commercial photocell device. Following measurement of motor activity in the

Doppler system, body temperature was measured and blood was then withdrawn by cardiac puncture and analyzed for serum cholinesterase activity. The remaining rats were retested 24 hr after DFP administration in the photocell device. The results showed a significant influence of strain on the effects of DFP. Motor activity of LE rats was reduced by DFP at doses of 1.0 and 1.5 mg/kg, whereas the activity of F344 rats was reduced only at 1.5 mg/kg.

Keywords: *Isoflurophate, *Toxicity, *Nervous system, *Cholinesterase inhibitors, Species diversity, Rats, Cholinesterase, Body temperature, Motor activity, Pesticides, Dose-response relationships, Graphs(Charts), Reprints.

**PB93-228815/REB** PC **A02/MF A01**
Rockwell International Corp., Chapel Hill, NC.
**Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
E. Seal, W. F. McDonnell, D. E. House, S. A. Salaam, and P. J. DeWitt. c1993, 9p EPA/600/J-93/355
Pub. in American Review of Respiratory Disease, v147 n4 p804-810 Apr 93. Prepared in cooperation with Environmental Monitoring and Services, Inc., Chapel Hill, NC. Sponsored by Rockwell International Corp., Chapel Hill, NC.

The purpose of the study was to determine whether gender or race differences in ozone (O3) response exist among white and black, males and females, and to develop concentration-response curves for each of the gender-race groups. Three hundred seventy-two subjects (n>90 in each gender-race group), ages 18 to 35 yr, were exposed once for 2.33 h to 0.0 (purified air), 0.12, 0.18, 0.24, 0.30, or 0.40 ppm O3. Lung function and symptom responses were expressed as percent change from baseline and analyzed using a nonparametric two factor analysis of variance. Three primary variables were analyzed: FEV sub 1, specific airway resistance (SRaw), and cough. Statistical analysis demonstrated no significant differences in response to O3 among the individual gender-race groups.

Keywords: *Ozone, *Air pollution effects(Humans), *Respiratory airflow, Blacks, Whites, Males, Females, Adults, Health effects, Dose-response relationships, Exposure, Reprints, Gender differences, Racial differences.

**PB93-228823/REB** PC **A03/MF A01**
**Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
M. E. Andersen, J. J. Mills, M. L. Gargas, L. Kedderis, and L. S. Birnbaum. c1993, 14p EPA/600/J-93/356
Pub. in Risk Analysis, v13 n1 p25-36 Jan 93. Prepared in cooperation with Chemical Industry Inst. of Toxicology, Research Triangle Park, NC., North Carolina Univ. at Chapel Hill. Center for Environmental Medicine and Lung Biology, Purdue Univ., Lafayette, IN. Dept. of Pharmacology and Toxicology, and Freie Univ. Berlin (Germany, F.R.). Inst. fuer Toxikologie und Embryonalpharmakologie.

Dioxin (2,3,7,8-tetrachlorodibenzo-p-dioxin; TCDD), a widespread polychlorinated aromatic hydrocarbon, caused tumors in the liver and other sites when administered chronically to rats at doses as low as 0.01 microgram/kg/day. It functions in combination with a cellular protein, the Ah receptor, to alter gene regulation, and this resulting modulation of gene expression is believed to be obligatory for both dioxin toxicity and carcinogenicity. The paper describes a receptor-mediated physiologically based pharmacokinetic model for the tissue distribution and enzyme-inducing properties of dioxin and discusses the potential role of these models in a biologically motivated risk assessment. In the model, ternary interactions between the Ah receptor, dioxin, and specific DNA binding sites lead to enhanced production of specific hepatic proteins. The model was used to examine the tissue disposition of dioxin and the induction of both a dioxin-binding protein (presumably cytochrome P4501A2), and cytochrome P4501A1.

Keywords: *Tetrachlorodibenzodioxin, *Pharmacokinetics, *Risk assessment, *Carcinogens, Enzyme induction, Chemical models, Tissue distribution, Liver, Adipose tissue, Dose-response relationships, Carcinogenesis, Proteins, Binding sites, Reprints, *Aryl hydrocarbon receptor.

**PB93-228831/REB** PC **A03/MF A01**
**Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Office of Health Research.
J. Lewtas, J. Mumford, R. B. Everson, B. Hulka, and T. Wilcosky. c1993, 11p EPA/600/J-93/357
Pub. in Environmental Health Perspectives, v99 p89-97 Mar 93. Prepared in cooperation with North Carolina Univ. at Chapel Hill, National Inst. of Environmental Health Sciences, Research Triangle Park, NC., Environmental Health Research and Testing, Inc., Research Triangle Park, NC., and Institute of Environmental Health and Engineering, Beijing (China).

DNA adducts derived from complex mixtures of polycyclic aromatic compounds emitted from tobacco smoke are compared to industrial pollution sources (e.g., coke ovens and aluminum smelters), smoky coal burning, and urban air pollution. Exposures to coke oven emissions and smoky coal, both potent rodent skin tumor initiators and lung carcinogens in humans, result in high levels of DNA adducts compared to tobacco smoke in the in vitro calf thymus DNA model system, in cultured lymphocytes, and in the mouse skin assay. Using tobacco smoke as a model in human studies, we have compared relative DNA adduct levels detected in blood lymphocytes, placental tissue, bronchoalveolar lung lavage cells, sperm, and autopsy tissues of smokers and nonsmokers. Adduct levels in DNA isolated from smokers were highest in human heart and lung tissue with smaller but detectable differences in placental tissue and lung lavage cells. Comparison of the DNA adduct levels resulting from human exposure to different complex mixtures shows that emissions from coke ovens, aluminum smelters, and smoky coal result in higher DNA adduct levels than tobacco smoke exposure. These studies suggest that humans exposed to complex combustion mixtures will have higher DNA adduct levels in target cells (e.g., lung) as compared to nontarget cells (e.g., lymphocytes) and that the adduct levels will be dependent on the genotoxic and DNA adduct-forming potency of the mixture.

Keywords: *DNA adducts, *Tissues(Biology), *Mixtures, *Toxicity, Humans, Comparison, Environmental pollutants, Aromatic polycyclic hydrocarbons, Smoke, Tobacco, Lymphocytes, Bronchoalveolar lavage fluid, Mice, Carcinogens, Reprints.

**PB93-228849/REB** PC **A02/MF A01**
**Predictors of Individual Differences in Acute Response to Ozone Exposure.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Clinical Research Branch.
W. F. McDonnell, K. E. Muller, P. A. Bromberg, and C. M. Shy. c1993, 10p EPA/600/J-93/358
Pub. in American Review of Respiratory Disease, v147 n4 p818-825 1993. Prepared in cooperation with North Carolina Univ. at Chapel Hill.

The purpose of the study was to identify personal characteristics that predict individual differences in acute FEV sub 1 response to ozone exposure. Response and predictor data were collected on 290 white male volunteers 18 to 32 yr of age who were each exposed to one of six concentrations of ozone between 0.0 and 0.40 part per million. The sample was divided into an exploratory sample of 96 and a confirmatory sample of 194 subjects. Exploratory analysis indicated that ozone, age, and several other variables explained a significant proportion of the variance in response. In the confirmatory sample, only age and ozone concentration predicted FEV sub 1 decrement. The authors concluded that for white male subjects age was significant predictor of response, with older subjects being less responsive to ozone. Furthermore, the authors demonstrated that exploratory analysis without control of type I statistical error rates may result in apparent findings that cannot be replicated.

Keywords: *Ozone, *Exposure, *Respiratory airflow, Age factors, Individuality, Variability, Health effects, Dose-response relationships, Air pollution effects(Humans), Reprints.

**PB93-228856/REB** PC **A02/MF A01**
**Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Genetic Toxicology Div.
J. Gallagher, M. George, M. Kohan, C. Thompson, and T. Shank. c1993, 6p EPA/600/J-93/359
Pub. in Environmental Health Perspectives, v99 p225-228 Mar 93. Prepared in cooperation with National Inst. of Environmental Health Sciences, Research Triangle Park, NC., and Environmental Health Research and Testing, Inc., Research Triangle Park, NC.

Development of methodologies to evaluate certain classes of polycyclic aromatic compounds (PAC) detected in complex mixtures to which humans are exposed would greatly improve the diagnostic potential of (32)P-postlabeling analysis. Identification of DNA adduct patterns of specific exposure-related marker adducts would strengthen associations between observed DNA adducts and exposures to different environmental pollutants (e.g., kerosene, cigarette smoke, coke oven, and diesel). Diesel-modified DNA adduct patterns were compared in various in vitro and in vivo rodent model systems and then compared to DNA reactive oxidative and reductive metabolites of 1-nitropyrene. The formation of nitrated-polycyclic aromatic hydrocarbon (nitrated-PAH) DNA adducts, derived from the metabolism of diesel extract constituents, was enhanced relative to other PAH-derived DNA adducts via xanthine oxidase-catalyzed nitroreduction. These adducts were detectable only by the butanol extraction version of the postlabeling analysis. Marker adducts detected in the various test systems presented here will assist in characterizing nuclease-P1-sensitive nitrated PAH adducts in humans.

Keywords: *DNA adducts, *Exhaust gases, *Diesel fuels, *Aromatic polycyclic hydrocarbons, *Environmental pollutants, In vivo analysis, In vitro analysis, Xanthine oxidase, Comparison, Rodents, Humans, Reprints.

**PB93-228864/REB** PC **A02/MF A01**
Health Effects Research Lab., Research Triangle Park, NC. Clinical Research Branch.
**Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.** Journal article.
North Carolina Univ. at Chapel Hill. Center for Environmental Medicine and Lung Biology.
W. D. Bennett, W. F. Chapman, J. C. Lay, and T. R. Gerrity. c10 Jul 91, 10p EPA/600/J-93/360
Pub. in Jnl. of Aerosol Medicine, v6 n1 p53-62 Mar 93. Sponsored by Health Effects Research Lab., Research Triangle Park, NC. Clinical Research Branch.

Recent studies have suggested considerable particle retention in the bronchial ciliated airways 24 hours after depositing in the lung. A significant presence of particles in the ciliated airways at 24 hours post deposition may be indicated if beta-adrenergic treatment between 24 and 48 hours is shown to enhance particle clearance during this same period. The hypothesis was tested in ten young, normal subjects who inhaled Tc99m-iron oxide particles (5 micrometers MMAD) on three separate occasions. Following the first aerosol exposure, each subject inhaled a dose of albuterol sufficient to decrease specific airway resistance by 63% and clearance was measured by gamma camera over a 3 hour period. For the subsequent two aerosol exposures, baseline mucociliary clearance was measured, again over the initial 3 hour period, and then retention of particles was monitored with a six crystal gamma detector between 24 and 48 hours. During this 24-48 hour period, each subject inhaled 2 doses of either albuterol (a similar dose to that described above) or saline (double-blinded design). Albuterol significantly enhanced clearance at one hour post deposition.

Keywords: *Lung, *Beta adrenergic receptors, *Respiration, *Air pollutants, *Aerosols, Airway resistance, Detectors, Albuterol, Organotechnetium compounds, Reprints.

**PB93-228872/REB** PC **A03/MF A01**
**Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Neurotoxicology Div.

K. M. Crofton, D. B. Peele, and M. E. Staton. c1993, 15p EPA/600/J-93/361
Pub. in Neurotoxicology and Teratology, v15 n2 p117-129 Mar/Apr 93. Prepared in cooperation with ManTech Environmental Technology, Inc., Research Triangle Park, NC.

Adult exposure to the neurotoxicant 3,3'-iminodipropionitrile (IDPN), induces a hyperkinetic syndrome consisting of spontaneous head movements, abnormal circling, backward locomotion, and sensory disruption. The behavioral effects of developmental exposure to IDPN in the rat are reported. Animals were exposed (IP) to either saline, 75, 150, or 300 mg/kg/day on postnatal days (PND) 5-7. Animals were tested for: Figure-8 maze activity (PND 13-60); olfactory discrimination learning (PND 18 & 24); T-maze alternation and position discrimination learning (PND 25 & 26); acoustic startle response (PND 23, 61, & 62); passive avoidance (PND 70). To better define the dose response, a separate group of animals was exposed to either saline or 225 mg/kg/day (PND 5-7) and tested in the activity, T-maze, and startle paradigms. Animals exposed to 225 mg/kg/day and 300 mg/kg/day had decreased weight gain and lethality was 25% in the latter group. Signs of the IDPN syndrome, evident in the 225 and 300 mg/kg/day groups, persisted throughout the course of the study. IDPN exposed animals (300 mg/kg/day) were hyperactive on PND 17-60, failing to develop habituation in the Figure-eight maze until PND 60. The acoustic startle response was depressed for the 225 and 300 mg/kg/day groups on PND 23 only. Auditory thresholds were elevated for a high-frequency (40 kHz) but not a low-frequency tone (5 kHz) for the 225 and 300 mg/kg/day groups, indicating a hearing loss. IDPN treatment also disrupted performance of olfactory discrimination learning and produced cognitive deficits in T-maze learning in infants (300 mg/kg/day). (Copyright (c) 1993 Pergamon Press Ltd.)

Keywords: *Toxicity, *Nervous system, *Teratogenic compounds, Dose-response relationships, Rats, Animal behavior, Motor activity, Graphs(Charts), Smell, Avoidance learning, Reflexes, Sensory thresholds, Reprints, *Iminodipropionitriles.

**PB93-228880/REB** PC **A03**/MF **A01**
**Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
P. R. Solomon, M. Groccia-Ellison, D. Flynn, J. Mirak, and K. R. Edwards. c1993, 11p EPA/600/J-93/362
Pub. in Behavioral Neuroscience, v107 n2 p271-279 Apr 93.

Human volunteers (N = 72) received saline, a low dose of oral scopolamine (0.6 mg), a high dose of oral scopolamine (1.2 mg), or a peripheral analogue (glycopyrrolate). They then underwent classical conditioning of the eyeblink response to a tone conditioned stimulus (CS) and a corneal airpuff unconditioned stimulus (UCS) in a delay conditioning paradigm. There was a dose-related decline in acquisition of the conditioned response. These drug-induced conditioning deficits were similar to those previously reported in rabbit eyeblink conditioning and could not be attributed to such nonassociative factors as changes in auditory thresholds to the tone CS, magnitude of reflexive blinks to the airpuff UCS, or to changes in spontaneous blink rates. (Copyright (c) 1993 by the American Psychological Association, Inc.)

Keywords: *Scopolamine, *Cholinergic receptors, *Eyelid conditioning, *Pharmacology, Humans, Auditory threshold, Cognition, Reprints.

**PB93-228898/REB** PC **A03**/MF **A01**
Health Effects Research Lab., Research Triangle Park, NC.
**Rapid Efficient Production of Baculovirus Expression Vectors.** Journal article.
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
P. C. Hartig, and M. C. Cardon. c1992, 12p EPA/600/J-93/363
Pub. in Jnl. of Virological Methods, v38 n1 p61-70 Jul 92. Sponsored by Health Effects Research Lab., Research Triangle Park, NC.

Recombinant baculoviruses have been used to produce foreign proteins and have the potential to be safe, efficacious insecticides. Isolation of recombinant virus is usually by plaque phenotype. Typical recombination rates are less than 1%, thus requiring time consuming inspection of hundreds of individual plaques. A method of generating recombinants is described which requires less time than current protocols and frequently produces recombinants at rates exceeding 30%. This protocol employs liposome-mediated transfection, reduced post-transfection incubation times, linearized parental virus which produces occlusion positive plaques in clones of the parental genotype, and colorimetric detection of recombinants. This protocol allows the initial, and frequently the final, isolation of recombinants in 7 days. (Copyright (c) 1992 Elsevier Scienoe Publishers B.V.)

Keywords: *Baculoviridae, *Genetic vectors, *Molecular cloning, Phenotype, Plaque assay, Transfection, Liposomes, Genetic recombination, Plasmids, Viral DNA, Genotype, Reprints.

**PB93-228906/REB** PC **A01**/MF **A01**
Health Effects Research Lab., Research Triangle Park, NC.
**Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.** Journal article.
Kentucky Univ., Lexington.
C. G. Gairola, H. Wu, R. C. Gupta, and J. N. Diana. c1993, 5p EPA/600/J-93/364
Grant EPA-CR816185
Pub. in Environmental Health Perspectives, v99 p253-255 Apr 93. Sponsored by Health Effects Research Lab., Research Triangle Park, NC.

Exposure to environmental tobacco smoke (ETS), which is largely composed of the sidestream cigarette smoke, has been implicated in increased incidence of cancer among nonsmokers. The present study was conducted to compare the potential of mainstream and sidestream cigarette smoke to induce DNA adducts in mice. Groups of female C57Bl and DBA mice were exposed twice daily for 65-70 weeks to mainstream or sidestream smoke from the University of Kentucky reference cigarettes (2R1) in a nose-only exposure system. Animals received a total particulate matter dose of about 16 and 6 mg/kg body weight/exposure and exhibited blood carboxyhemoglobin levels of about 16 and 34%, for mainstream and sidestream smoke-exposed groups, respectively. Pulmonary aryl hydrocarbon hydroxylase (AHH) activity was induced by about 2- to 3-fold in both mainstream and sidestream groups of C57Bl and in mainstream smoke-exposed group of DBA mice, but not in sidestream smoke-exposed DBA mice. An analysis of total DNA adduct levels by the (32) P-postlabeling assay showed a significant (12- to 25-fold) increase in the magnitude of preexisting lung DNA adducts in both mainstream and sidestream smoke-exposed C57Bl and DBA mice. Smoke exposures did not affect the total preexisting DNA adducts in liver of either strain. It is concluded that both mainstream and sidestream smoke are capable of enhancing preexisting DNA adducts in the lungs of chronically smoke-exposed mice.

Keywords: *DNA adducts, *Smoke, *Tobacco, *C57BL inbred mice, *DBA inbred mice, Aryl hydrocarbon hydroxylases, Carboxyhemoglobin, Enzyme induction, Lung, Reprints.

**PB93-228914/REB** PC **A03**/MF **A01**
National Institutes of Health, Bethesda, MD.
**Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.** Journal article.
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
S. Brimijoin, V. Moser, P. Hamond, N. Oka, and V. A. Lennon. c1993, 25p
Contract EPA-68-02-4450, Grant NIH-NS-18170
Sponsored in part by grant NIH-NS-23537. Pub. in Neuroscience, v54 n1 p201-223 1993. Prepared in cooperation with Mayo Clinic, Rochester, MN. Sponsored by National Institutes of Health, Bethesda, MD., and Health Effects Research Lab., Research Triangle Park, NC.

Systemically injected anti-acetylcholinesterase antibodies in rats cause selective lesions of preganglionic sympathetic neurons. Adult rats were examined up to four months after a single i.v. injection of murine monoclonal acetylcholinesterase antibodies or normal immunoglobulin G (1.5 mg). Within 4 h, antibody-treated rats developed ptosis, a sign of sympathetic dysfunction that was never reversed. Persistent pupillary constriction reflected preserved and unopposed parasympathetic function. Weight gain was depressed, but locomotor activity, excitability, and sensorimotor responses were normal, and gross neuromuscular performance was near normal. These findings were supported by biochemical evidence for selective sympathetic damage. Acetylcholinesterase activity was reduced for the whole period of observation in sympathetic ganglia and adrenal glands but fell only transiently in muscle and serum. At all times, choline acetyltransferase activity (a marker of presynaptic terminals) was unaffected in muscle but grossly depleted in ganglia. Light and electron microscopy showed that preganglionic sympathetic terminals of superior cervical ganglia were severely damaged while parasympathetic ganglia were less affected and motor endplates of skeletal muscle were apparently spared. Immunocytochemistry revealed punctate deposits of murine immunoglobulin G and complement component C3 in ganglionic neuropil 12 h after antibody injection. (Copyright (c) 1993 IBRO.)

Keywords: *Nerve cells, *Spinal cord, *Monoclonal antibodies, *Acetylcholinesterase, *Sympathetic nervous system, *Complement, Ganglia, Biochemistry, Apoptosis, Electron microscopy, Reprints.

**PB93-228922/REB** PC **A02**/MF **A01**
**EPA's Reassessment of Dioxin Risk: Directed Health Research.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
L. S. Birnbaum. c1993, 9p EPA/600/J-93/366
Pub. in Chemosphere, v27 n1-3 p469-475 1993.

The United States Environmental Protection Agency initiated a reassessment of the risk of exposure to dioxin because of the evolution of scientific thinking as well as the publication of several key experimental studies. This involves a literature reevaluation as well as laboratory studies in both health and ecological risks. One of the major goals is development of a biologically based dose response model. Directed health research involves comparison of sensitive responses in rats and mice, following both acute and chronic exposure, such as enzyme induction in multiple tissues, phosphorylaton responses, tissue dosimetry, and effects on the immune system. The relative potency of 16 dioxin-like chemicals is being compared following chronic exposure in mice for a number of responses in several tissues to better estimate TEFs following low-level, repeated exposures. In addition, the levels of mRNA for induced enzymes is being correlated with the total TEQ in human livers from the general population.

Keywords: *Dioxin, *Risk assessment, *Biological effects, Exposure, Public health, Rats, Mice, Dose-response relationships, Health hazards, Sensitivity, Reprints, Immunotoxicity.

**PB93-228930/REB** PC **A02**/MF **A01**
**Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
R. J. Bull, R. B. Conolly, D. M. DeMarini, R. C. MacPhail, and E. V. Ohanian. cMar 93, 7p EPA/600/J-93/367
Pub. in Jnl. of the American Water Works Association, v85 n3 p49-52 Mar 93.

The general approach to assessment of risk from chemical contaminants in drinking water involves three steps: hazard identification, exposure assessment, and dose-response assessment. Traditionally, the risks to humans associated with different levels of a chemical have been derived from the toxic responses observed in animals. It is becoming increasingly clear, however, that further information is needed if risks to humans are to be assessed accurately. Biologically based models help clarify the dose-response relationship and reduce uncertainty.

Keywords: *Risk assessment, *Chemical compounds, *Drinking water, Hazardous materials, Dose-response relationships, Public health, Exposure, Health Hazards, Maximum permissible level, Toxicity, Statistical analysis, Reprints, *Biologically based models.

**PB93-228948/REB** PC **A03**/MF **A01**
**Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
G. C. Becking, W. K. Boyes, T. Damstra, and R. C. MacPhail. c1993, 14p EPA/600/J-93/368
Pub. in Environmental Research, v61 n1 p164-175 Apr 93. Presented at the International Symposium on Neurobehavioral Methods and Effects in Occupational and Environmental Health (4th), Tokyo, Japan, July 8-11, 1991. Prepared in cooperation with National Inst. of Environmental Health Sciences, Research Triangle Park, NC.

Since 1981, the development of methodology to assess the neurotoxic potential of chemicals has been a high priority within the International Programme on Chemical Safety (IPCS). Following the completion of an in-depth review of the scientific principles and methods for the assessment of neurotoxicity associated with chemical exposures, IPCS started to develop a multidisciplinary and comprehensive approach for neurotoxicity testing of chemicals. In view of the complexity of the nervous system and the variety of effects caused by chemicals, no single test or approach will be appropriate. Initially, IPCS evaluated neurobehavioral tests as well as in vitro procedures as screening tests, and an international collaborative study of neurobehavioral tests appropriate for screening chemicals for neurotoxicity is now in progress. Possible integration of higher level neurobehavioral tests with neurophysiological, biochemical, and pathological procedures in future testing strategies are discussed. (Copyright (c) 1993 Academic Press, Inc.).

Keywords: *Nervous system, *Toxicity, *Chemical compounds, Risk assessment, Exposure, Biological effects, Health hazards, Public health, Testing, Screening, Standards, Reprints.

**PB93-228955/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC.
**Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.** Journal article.
Environmental Health Research and Testing, Inc., Research Triangle Park, NC.
R. Williams, D. Walsh, J. White, M. Jackson, and J. Mumford. c1992, 9p EPA/600/J-93/369
Contract EPA-68-02-4456
Pub. in Indoor Environment, v1 n5 p272-278 Oct 92. Sponsored by Environmental Protection Agency, Research Triangle Park, NC.

Carbon monoxide (CO) emission levels were continuously monitored in 8 mobile trailer homes less than 10 years old. These homes were monitored in an US EPA study on indoor air quality as affected by unvented portable kerosene heaters. Respondents were asked to operate their heaters in a normal fashion. CO, air exchange and temperature values were measured during the study in each home. Results indicate that consumers using unvented kerosene heaters may be unknowingly exposed to high CO levels without taking proper precautions.

Keywords: *Carbon monoxide, *Indoor air pollution, *Kerosene, *Space heaters, *Mobile homes, Portable equipment, Emissions, Stationary sources, Ventilation, Reprints, *Foreign technology.

**PB93-228963/REB** PC **A03**/MF **A01**
**Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
V. S. Houk, S. Goto, O. Endo, L. D. Claxton, and J. Lewtas. c1992, 12p EPA/600/J-93/370
Pub. in Environmental and Molecular Mutagenesis, v20 p19-28 Jul 92. Prepared in cooperation with National Inst. of Public Health, Tokyo (Japan).

Ambient air has been shown to contain numerous hazardous pollutants, many of which are known or suspected carcinogens and mutagens. Bioassays play a prominent role in the characterization of these genotoxic pollutants, and as new test methods are developed, it is incumbent upon researchers to evaluate assay performance and report relative merits. In the study, two Salmonella test methods (the spiral and preincubation assays) were assessed to determine their usefulness as screening methods for monitoring direct-acting mutagens in ambient air. (Copyright (c) 1992 Wiley-Liss, Inc.).

Keywords: *Mutagens, *Environments, *Carcinogens, *Assaying, *Air pollution, Particulate sampling, Salmonella, Genetics, Bioassay, Urban areas, Reprints, *Foreign technology, Tokyo(Japan).

**PB93-228971/REB** PC **A03**/MF **A01**
**Acute and Delayed Effects of Diisopropyl Fluorophosphate on Body Temperature, Heart Rate and Motor Activity in the Awake, Unrestrained Rat.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Neurotoxicology Div.
C. J. Gordon. c1993, 14p EPA/600/J-93/371
Pub. in Jnl. of Toxicology and Environmental Health, v39 n2 p247-260 Jun 93.

Acute exposure to diisopropyl fluorophosphate (DFP) causes irreversible inhibition of acetylcholinesterase activity, leading to various behavioral and autonomic sequelae including hypothermia, reduced motor activity, and other neurological dysfunctions. To characterize the acute response and recovery of autonomic and behavioral processes to DFP exposure, rats of the Long-Evans strain were implanted with radiotransmitters that allowed the monitoring of core temperature, heart rate, and motor activity in unrestrained animals 24 h/d. These parameters were monitored for 96 h following subcutaneous injection of DFP at a dose of 0, 0.1, or 1.0 mg/kg. Rats given 0 and 0.1 mg/kg DFP displayed an increase in core temperature and motor activity during the first 24 h postinjection. Core temperature decreased a maximum of 1.9 C by 5 h after DFP and then started to recover, reaching control levels by 17 h after DFP treatment. Motor activity was also depressed during the first 24-h period in the 1.0 mg/kg group. Heart rate was initially elevated above basal levels in all treatment groups for several hours after treatment, but the 1.0 mg/kg group showed a decrease in heart rate at the time when core temperature began its recovery from hypothermia. Core temperature was the only parameter significantly affected by DFP during the 24-96 h recovery phase.

Keywords: *Isoflurophate, *Body temperature, *Heart rate, *Motor activity, *Toxicity, Rats, Dose-response relationships, Hypothermia, Graphs(Charts), Reprints.

**PB93-228989/REB** PC **A02**/MF **A01**
Health Effects Research Lab., Research Triangle Park, NC. Developmental Toxicology Div.
**Dithicarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.** Journal article.
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
T. E. Stoker, J. M. Goldman, and R. L. Cooper. c1993, 10p EPA/600/J-93/372
Contract EPA-68D20056
Pub. in Reproductive Toxicology, v7 n3 p211-218 May 93. Sponsored by Health Effects Research Lab., Research Triangle Park, NC. Developmental Toxicology Div.

Thiram has been reported to inhibit dopamine-beta-hydroxylase and norepinephrine (NE) synthesis. NE is a neurotransmitter important to the control of pituitary function. In the study, the acute effects of thiram on the hormonal control of ovulation (luteinizing hormone (LH) surge) in the rat were investigated. Ovariectomized, estrogen-primed female rats received a single injection of thiram (0, 6, 12, 25, 50, and 100 mg/kg, i.p.) at 1100 h and serum LH was measured by serial bleeding. Thiram at 50 and 100 mg/kg completely blocked the LH surge in all rats, while 12 and 25 mg/kg blocked the surge in 40 and 75%, respectively. Six mg/kg had no effect. Ovulation was assessed in intact rats after dosing with 0, 12, 25, or 50 mg/kg thiram at 0900, 1100, 1300, or 1800 h on vaginal proestrus. 25 and 50 mg/kg at 1300 h blocked ovulation in all rats, but when injected at 1100 h, only 50 mg/kg was effective. Ovulation was unaltered by 50 mg/kg injections at 0900 or 1800 h. To determine the effects of thiram on the LH surge in intact rats, additional females were dosed at 1300 h on proestrus and blood collected over the same day. Thiram at 50 mg/kg blocked the LH surge in all rats, while 25 mg/kg blocked the surge in 60% of the females tested; 12 mg/kg had no effect. These data indicate that a sensitive period exists on the day of vaginal proestrus during which the hormonal control of ovulation can be disrupted by thiram.

Keywords: *Fungicides, *Thiram, *Ovulation, *Hormones, Rats, Females, LH, Estrus, Dose-response relationships, Norepinephrine, Ovariectomy, Estradiol, Hypothalamus, Reprints, Dopamine beta-hydroxylase.

**PB93-228997/REB** PC **A02**/MF **A01**
**Developmental Toxicity of Bromohydroquinone (BHQ) and BHQ-Glutathione Conjugates in vivo and in Whole Embryo Culture.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Developmental Toxicology Div.
J. E. Andrews, J. M. Rogers, M. Ebron-McCoy, T. R. Logsdon, and T. J. Monks. c1993, 9p EPA/600/J-93/373
Pub. in Toxicology and Applied Pharmacology 120, n1 p1-7 May 93. Prepared in cooperation with ManTech Environmental Technology, Inc., Research Triangle Park, NC., and Texas Univ. at Austin. Coll. of Pharmacy.

Glutathione conjugates of 2-bromohydroquinone (GSyl-BHQ) cause renal proximal tubular necrosis that is dependent upon the activity of gamma-glutamyl transferase (GGT). GGT is present in embryonic yolk sac and its activity increases with gestational age, suggesting that the developing embryo might be at risk from maternal exposure to glutathione conjugates or compounds which are shown to form glutathione conjugates. Studies in pregnant rats exposed on Day 9 of gestation to 400 or 800 micromol/kg BHQ or 20 micromol/kg 2-Br-(di-GSyl)HQ and examined on Day 11 of gestation suggested that the parent compound (BHQ) or a metabolite was nephrotoxic in the adult and dysmorphogenic in the embryo and that 2-Br-(di-GSyl)HQ was nephrotoxic but not dysmorphogenic at the dose tested (20 micromol/kg). Day 9 rat embryos were exposed to BHQ, 2-Br-6-(GSyl)HQ, or 2-Br-(di-GSyl)HQ in vitro for 48 hr to determine the relative dysmorphogenic activity of the parent compound and the two conjugates. In vitro exposure to BHQ (0-40 microM) resulted in dose-related decreases in somite number (SN), total protein, and developmental score (DEVSC), with no effect on yolk sac diameter (YSD), crown rump length (CR), head length (HL), or percentage abnormal embryos (%AE); 60 microM BHQ was embryolethal. Embryos exposed to 2-Br-6-(GSyl)HQ (0-120 microM) were not affected at concentrations below 120 microM, at which dose there were significant effects on protein, YSD, CR, HL, DEVSC, SN, and %AE. Embryos exposed to 2-Br-(di-GSyl)HQ had a significantly lower DEVSC at the 80 microM concentration and significantly lower YSD, protein, and DEVSC and significantly higher %AE at the 10, 25, and 120 microM concentrations. CR, HL, and SN were not affected at any exposure level with this compound. (Copyright (c) 1993 by Academic Press, Inc.)

Keywords: *Embryos, *Toxicity, *Teratogenic compounds, *Glutathione, Cultured cells, Proximal kidney tubules, In vitro analysis, In vivo analysis, Gamma-glutamyltransferase, Rats, Reprints, *Bromohydroquinone.

**PB93-229003/REB** PC **A02**/MF **A01**
**Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Neurotoxicology Div.
W. R. Mundy, T. R. Ward, V. F. Dulchinos, and H. A. Tilson. c1993, 8p EPA/600/J-93/374
Pub. in Pharmacology Biochemistry and Behavior, v45 n2 p309-314 Jun 93.

The effects of repeated exposure to two organophosphates on the turnover of phosphoinositides, the second messenger system coupled to the M1 and M3 subtypes of muscarinic receptors, were examined in the rat hippocampus. Repeated diisopropylfluorophosphate (DFP) exposure (0.2-0.8 mg/kg, SC) decreased brain acetylcholinesterase activity and muscarinic receptor density. The incorporation of (3H)myoinositol into brain slices was also decreased. Phosphoinositide turnover was measured as the accumulation of (3H)inositol phosphates (IP) in the presence of lithium. DFP did not affect basal IP accumulation, but decreased carbachol-stimulated IP accumulation in the hippocampus after 0.4 and 0.8 mg/kg. The effects of repeated disulfoton administration (2.0 mg/kg, IP) were also examined in the hippocampus. Similar to DFP, repeated disulfoton exposure decreased acetylcholinesterase activity, receptor density, and carbachol-stimulated IP accumulation. The incorporation of

myoinositol, however, was increased in disulfoton-treated rats. These data indicate that repeated organophosphate exposure results in a functional decrease in muscarinic receptor activity, as well as changes in myoinositol incorporation into phospholipids.

Keywords: *Organophosphorus compounds, *Carbachol, *Phosphoinositides, *Isoflurophate, Hydrolysis, Inositol phosphates, Muscarinic receptors, Hippocampus, Second messenger system, Disulfoton, Myoinositol, Lithium, Dose-response relationships, Reprints.

**PB93-229011/REB** PC **A05/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Watts Nickel and Rinse Water Recovery via an Advanced Reverse Osmosis System.**
Science Applications International Corp., Santa Ana, CA.
C. Schmidt, I. E. White, and R. Ludwig. Aug 93, 78p EPA/600/R-93/150
Contract EPA-68-C8-0062
See also PB-266 919. Prepared in cooperation with California Environmental Protection Agency, Sacramento. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The report summarizes the results of an eight month test program conducted at the Hewlett Packard Printed Circuit Board Production Plant, Sunnyvale, CA (H.P.) to assess the effectiveness of an advanced reverse osmosis system (AROS). The AROS unit, manufactured by Water Technologies, Inc. (WTI) of Minneapolis, MN, incorporates membrane materials and system components designed to treat metal plating rinse water and produce two product streams; (1) a concentrated metal solution suitable for the plating bath, and (2) rinse water suitable for reuse as final rinse. Waste water discharge can be virtually eliminated and significant reductions realized in the need for new plating bath solution and rinse water.

Keywords: *Water pollution control, *Reverse osmosis, *Waste water, Electroplating, Industrial wastes, Waste recycling, Operating costs, Cost analysis, Technology transfer, Performance evaluation, Treatment technology, Nickel plating, Printed circuit board manufacturing.

**PB93-229128/REB** PC **A05/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Replacement of Hazardous Material in Wide Web Flexographic Printing Process.** Project rept.
Erie County Dept. of Environment and Planning, Buffalo, NY.
P. B. Kranz, T. R. Williamson, and P. M. Randall. Aug 93, 78p EPA/600/R-93/149
Contract EPA-R-816762
See also PB91-110023. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The report describes the technical and economic evaluation of the substitution of nonhazardous materials for the manufacture of flexible packaging in a wide web flexographic printing process. The objective of the study was to evaluate, on a technical and economic basis, the impact of the substitution of water-based inks for solvent-based inks in a flexographic printing process. The ink substitution resulted in a reduction in the emissions generated from the printing process. For each percent increase in water-based ink utilization, a reduction in VOC emissions of 14 pounds was calculated. This was based on a usage rate of about 2250 pounds of ink per week which caused a VOC emission of about 1570 pounds. The substitution, typically, did not adversely affect product quality or nonhazardous scrap waste generation. An average reduction of 95% of liquid F003 waste from waste ink and cleaning solvents was recorded during the study period, but was ascertained to be due to operational practice changes. Additional benefits resulting from the reduction of VOC emissions and liquid hazardous waste have been an improved working environment from reduced indoor air pollutants, reduced handling of hazardous solvents by employees, and the appreciation by company employees of the need to make a conscious effort to further reduce waste generation.

Keywords: *Hazardous materials, *Pollution abatement, *Printing, Solvents, Inks, Scrap, Emissions, Economic analysis, Substitutes, Volatile organic compounds, Waste reduction.

**PB93-229136/REB** PC **A07/MF A02**
Corvallis Environmental Research Lab., OR.
**Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.**
ManTech Environmental Technology, Inc., Corvallis, OR.
G. R. Holdren, T. C. Strickland, B. Rosenbaum, R. S. Turner, and P. F. Ryan. Feb 93, 138p EPA/600/R-93/074
Contracts EPA-68-C8-0006, DE-AC05-84OR21400
See also PB92-119015. Prepared in cooperation with Oak Ridge National Lab., TN., and Science and Policy Associates, Inc., Washington, DC. Sponsored by Corvallis Environmental Research Lab., OR., and Department of Energy, Washington, DC.

Recent international agreements for controlling atmospheric pollutant emissions have been based on the use of target loads that, require countries to develop national estimates of critical loads for the highest deposition of acidifying compounds that will not cause chemical changes leading to long-term harmful effects on ecosystem structure. The United States has proposed a uniform generic framework that allows critical loads to be developed using a variety of methods for different geographic scales. That framework is used here to qualitatively compare the critical loads estimates obtained by different modeling and mapping methodologies designed to predict the effect of acidic sulfate deposition on lake chemistry. The objective of the report is not to provide recommendations of critical or target loads that should be adopted, but to show the relative effects of using different methodologies to estimate critical sulfate loads.

Keywords: *Sulfates, *Lakes, *Water pollution effects, *Acidification, Mathematical models, Ecosystems, Regions, Maps, Sulfur dioxide, Deposition, Emissions, Atmospheric chemistry, Study estimates, Methodology, pH, Water chemistry, Northeast Region(United States), Critical loads.

**PB93-229144/REB** PC **A03/MF A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.** Rept. for Apr 90-Jan 93.
Brookhaven National Lab., Upton, NY.
R. H. Borgwardt, M. Steinberg, and Y. Dong. 1993, 28p EPA/600/A-93/198
Contract EPA-68-D1-0146
Presented at AIChE Summer National Meeting, Seattle, Washington, 1993. See also DE91011971, PB90-225806, PB91-104901 and PB93-155976. Prepared in cooperation with Hydrocarb Corp., New York. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The paper discusses process options for utilizing biomass to obtain greatest reduction of carbon dioxide (CO2) emissions from motor vehicles at least cost. (NOTE: The Energy Policy Act of 1992 seeks to displace 30% of the U.S. petroleum requirement by the year 2010 with an alternative that, among other things, has greatest impact on reduction of greenhouse gas emissions. An alternative fuel derived from biomass is probably the most practicable method of achieving that objective.) The paper emphasizes the Hydrocarb process, currently under evaluation by EPA for production of methanol from short-rotation woody crops using natural gas as cofeedstock. It is compared with other process options in terms of feedstock availability, cost of conversion to liquid fuel, amount of petroleum that can be displaced, and competitiveness with gasoline price. The analysis indicates that, for a given supply of biomass, more petroleum can be displaced through methanol production processes than through those for ethanol.

Keywords: *Fossil fuels, *Carbon dioxide, *Biomass, *Air pollution abatement, Methane, Greenhouse gases, Natural gas, Carbinols, Wood, Motor vehicles, Gasoline, Reduction, Petroleum industry, Cost analysis, Pyrolysis, Reaction kinetics, Hydrocarb process.

**PB93-229151/REB** PC **A03/MF A01**
Environmental Protection Agency, Research Triangle Park, NC.
**Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.** Symposium paper.
Southwest Research Inst., San Antonio, TX.
D. E. Camann, H. J. Harding, S. R. Agrawal, and R. G. Lewis. 1993, 13p EPA/600/A-93/199
Contract EPA-68-D0-0007
Sponsored by Environmental Protection Agency, Research Triangle Park, NC.

Dermal contact with residues of pesticides applied to carpets and subsequent skin absorption or ingestion through hand-to-mouth activity are routes of human exposure which need better evaluation, especially for young children. The Dow drag sled, the California cloth roller, and the Southwest Research Institute (SwRI) polyurethane foam roller (SwRI invention disclosure no. 2061, patent pending) are dislodgeable residue sampling methods which have recently been developed to estimate the transfer of a chemical from a contaminated surface to the skin. The paper reports three experiments conducted to determine which of the three methods deployed as currently used by the developer provides the more reproducible and facile transfer of chlorpyrifos residues from carpet.

Keywords: *Pesticide residues, *Carpets, *Collecting methods, Dursban, Sampling, Environmental monitoring, Tests, *Chlorpyrifos, Wet methods, Dry methods.

**PB93-229177/REB** PC **A03/MF A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.**
Technion - Israel Inst. of Tech., Haifa.
Y. Mamane, R. D. Willis, R. K. Stevens, and J. L. Miller. 1993, 17p EPA/600/A-93/201
Contracts EPA-68-D9-0131, EPA-68-D0-0106
Prepared in cooperation with ManTech Environmental Technology, Inc., Research Triangle Park, NC. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

Scanning electron microscopy (SEM) and laboratory X-ray fluorescence (XRF) were used to characterize post-abatement dust collected with a HEPA filtered vacuum. Three size fractions of resuspended dust (0-30 micrometers, 2.5-15 micrometers, and <2.5 micrometers were collected on teflon filters and analyzed by energy-dispersiveXRF. Automated SEM was used to determine the size, morphology, and chemistry ofindividual particles from 0.2 micrometers to greater than 250 micrometers. Minerals associated with constructionmaterials, paint fillers, and soil were the dominant species in all size fractions. Lead-rich particles were found in all sizes and could be grouped into three categories: lead-only (including lead oxide and lead carbonate), mixed lead/minerals, and automotive lead. Isolated lead oxide or lead carbonate particles derived from paint pigments were the dominant form of the lead-bearing particles in the size fraction <15 micrometers.

Keywords: *Dust, *Lead(Metal), *Chemical analysis, Electron microscopy, X ray fluorescence, Sampling, Paints, Particles, Air pollution abatement, Post-abatement analyses, Cleanup.

**PB93-229185/REB** PC **A02/MF A01**
**Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
Y. Q. Zhang, A. H. Huber, S. P. S. Arya, and W. H. Snyder. 1992, 8p EPA/600/A-93/202
Proceedings: International Symposium on Computational Wind Engineering (1st), Tokyo, Japan (University of Tokyo), August 21-23, 1992. Pub. in Jnl. of Wind Engineering, n52 Aug 92. Prepared in cooperation with North Carolina State Univ. at Raleigh. Dept. of Marine, Earth and Atmospheric Sciences, and National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences

The effects of incident shear and turbulence on flow around a cubical building are being investigated by a

turbulent kinetic energy/dissipation model (TEMPEST). The numerical simulations demonstrate significant effects due to the differences in the incident flow. The addition of upstream turbulence and shear results in a reduced size of the cavity directly behind the building. The accuracy of numerical simulations is verified by comparing the predicted mean flow fields with the available wind-tunnel measurements of Castro and Robins (1977). Comparing the results with experimental data, the authors show that the TEMPEST model can reasonably simulate the mean flow.

Keywords: *Buildings, *Wind loads, *Aerodynamics, Shear flow, Turbulence, Circulation, Numerical analysis, Computerized simulation, Reprints.

**PB93-229193/REB** PC **A02/MF A01**
**Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
R. L. Harless, R. G. Lewis, D. D. McDaniel, J. F. Gibson, and A. E. Dupuy. 1992, 8p EPA/600/A-93/203
Pub. in CHEMOSPHERE, v25 n7-10 p1317-1322 Oct/Nov 92. Prepared in cooperation with National Aeronautics and Space Administration, Bay Saint Louis, MS. John C. Stennis Space Center.

General Metals Works PS-1 PUF air samplers and an analytical method based on high resolution gas chromatography - high resolution mass spectrometry (HRGC-HRMS) were evaluated for determination of polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDDs/PCDFs), polybrominated dibenz-p-dioxins and dibenzofurans (PBDDs/PBDFs) and bromo/chloro dibenzo-p-dioxins and dibenzofurans (BCDDs/BCDFs) in ambient air. Dilute solutions of these compounds and (13)C-1,2,3,4-TCDD were used to spike the filters of PS-1 air samplers which were then operated 24 hrs to sample 350-400 cubic meter ambient air. After sampling, each quartz-fiber filter and polyurethane foam (PUF) were spiked with (13)C-12-labeled PCDD, PCDF, PBDD, and PBDF internal standards before separate Soxhlet extractions with benzene. The extracts were subjected to an acid/base clean-up procedure followed by clean-up on microcolumns of silica gel, alumina, and carbon and then analyzed by HRGC-HRMS. Results derived from the study indicated the PS-1 ambient air samplers and the analytical procedures were very efficient and that pg/cubic meter and sub-pg/cubic meter levels of total PCDDs/PCDFs, PBDDs/PBDFs, BCDDs/BCDFs, and 2,3,7,8-substituted congeners could be accurately measured.

Keywords: *Dioxin, *Benzofurans, *Air pollution sampling, Air samplers, Combustion production, Oxygen heterocyclic compounds, Chemical analysis, Incinerators, Waste recycling centers, Reprints, Volatile organic compounds.

**PB93-229201/REB** PC **A01/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Sequence Similarities in the Genes Encoding Polychlorinated Biphenyl Degradation by 'Pseudomonas' Strain LB400 and 'Alcaligenes eutrophus' H850.** Journal article.
General Electric Co., Schenectady, NY. Research and Development Center.
J. R. Yates, and F. J. Mondello. c1989, 5p EPA/600/J-93/275
Pub. in Jnl. of Bacteriology, v171 n3 p1733-1735 Mar 89. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

DNA-DNA hybridization was used to compare the Pseudomonas strain LB400 genes for polychlorinated biphenyl (PCB) degradation with those from seven other PCB-degrading strains. Significant hybridization was detected to the genome of Alcaligenes eutrophus H850, a strain similar to LB400 in PCB-degrading capability. These two organisms showed a strong conservation of restriction sites in the region of DNA encoding PCB metabolism. No other sequence similarities were detected in the two genomes. DNA from the other PCB-degrading strains showed no hybridization to the probe, which demonstrated the existence of at least two distinct classes of genes encoding PCB degradation. (Copyright (c) 1989, American Society for Microbiology.)

Keywords: *Bacteria, *Biodegradation, *Polychlorinated biphenyls, Bacterial genes, DNA hybridization, Oxidation, Cell constitutents, Genetic engineering, Genetics, Microbiology, Biochemistry, Reprints, Pseudomonas strain LB400, Alcaligenes eutrophus H850, Congeners, Strains(Biology), Gene sequences.

**PB93-229219/REB** PC **A12/MF A03**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Protocol for Equipment Leak Emission Estimates.**
Radian Corp., Research Triangle Park, NC.
K. J. Hausle. Jun 93, 256p DCN-93-239-026-85-02, EPA/453/R-93/026
Contract EPA-68-D1-0117
See also PB89-138689. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The report presents standard protocols for estimating mass emissions from equipment leaks. Different approaches for estimating equipment leak emissions are described and several topics relevant to estimating equipment leak emissions (such as speciating emissions) are addressed. Information on how to perform a screening survey at a process unit is presented. Information on how a process unit can collect equipment leak rate data by enclosing individual equipment pieces and measuring mass emissions is provided. Also, information is provided which can be used to estimate the control efficiency of equipment leak control techniques. The document will help facilities generate accurate plant-specific equipment leak emissions estimates.

Keywords: *Air pollution detection, *Emission factors, *Leakage, Equipment, Chemical industry, Petroleum refining, Natural gas industry, Air pollution monitoring, Screenings, *Fugitive emissions, Volatile organic compounds.

**PB93-229227/REB** PC **A02/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Cloning and Expression in 'Escherichia coli' of Pseudomonas Strain LB400 Genes Encoding Polychlorinated Biphenyl Degradation.** Journal article.
General Electric Co., Schenectady, NY. Biological Sciences Lab.
F. J. Mondello. c1989, 10p EPA/600/J-93/300
Grant EPA-R-812727
Pub. in Jnl. of Bacteriology, v171 n3 p1725-1732 Mar 89. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Pseudomonas strain LB400 is able to degrade an unusually wide variety of polychlorinated biphenyls (PCBs). A genomic library of LB400 was constructed by using the broad-host-range cosmid pMMB34 and introduced into Escherichia coli. Approximately 1,600 recombinant clones were tested, and 5 that expressed 2,3-dihydroxybiphenyl dioxygenase activity were found. The enzyme is encoded by the bphC gene of the 2,3-dioxygenase pathway for PCB-biphenyl metabolism. Two recombinant plasmids encoding the ability to transform PCBs to chlorobenzoic acids were identified, and one of these, pGEM410, was chosen for further study. The PCB-degrading genes (bphA, -B, -C, and -D) were localized by subcloning experiments to a 12.4-kilobase region of pGEM410. The ability of recombinant strains to degrade PCBs was compared with that of the wild type. In resting-cell assays, PCB degradation by E. coli strain FM4560 (containing a pGEM410 derivative) approached that of LB400 and was significantly greater than degradation by the original recombinant strain. High levels of PCB metabolism by FM4560 did not depend on the growth of the organism on biphenyl, as it did for PCB metabolism by LB400. When cells were grown with succinate as the carbon source, PCB degradation by FM4560 was markedly superior to that by LB400. (Copyright (c) 1989, American Society for Microbiology.)

Keywords: *Biodegradation, *Polychlorinated biphenyls, *Bacteria, Cloning, Genetics, Recombinant DNA, Genetic recombination, Molecular biology, Biochemistry, Microbiology, Chemical reactions, Bioassay, Biological pathways, Reprints, Escherichia coli, Strains(Biology), Pseudomonas.

**PB93-229235/REB** PC **A02/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Proteins from Eight Eukaryotic Cytochrome P-450 Families Share a Segmented Region of Sequence Similarity.** Journal article.
Cincinnati Univ., OH. Dept. of Microbiological and Molecular Genetics.
V. F. Kalb, and J. C. Loper. c1993, 7p EPA/600/J-93/301
Pub. in Proceedings for the National Academy of Science, v85 p7221-7225 Oct 88. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Proteins from eight eukaryotic families in the cytochrome P-450 superfamily share one region of sequence similarity. This region begins 275-310 amino acids from the amino terminus of each P-450, continues for about 170 residues, and ends 35-50 amino acids before the carboxyl terminus. The region can be divided into four domains of sequence similarity, each possessing its own pattern of invariant, conserved, and variable amino acids. The four domains are 56, 20, 59, and 28 residues long and are connected by three shorter segments of limited sequence similarity. The number of residues in these short segments varies with the P-450 protein but ranges from 0 to 20 residues. Consensus sequences based on these similarities can be used to determine whether the sequence of an unidentified peptide resembles that expected for a P-450. Sequence similarities between proteins sometimes reflect constraints imposed by the requirements of a common function. The fourth domain of the P-450s, for example, contains an invariant cysteine that provides the axial thiolate ligand to the heme iron. Other relationships between the four domains and P-450 function can be examined by in vitro mutagenic procedures that alter the conserved amino acids or modify the distance between domains.

Keywords: *Cytochrome P-450, *Amino acid sequence homology, *Eukaryotic cells, Reiterated genes, Sequence alignment, Evolution, Cattle, Rats, Saccharomyces cerevisiae, Pseudomonas putida, Conserved sequence, Reprints.

**PB93-229243/REB** PC **A03/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.** Journal article.
Cincinnati Univ., OH. Dept. of Microbiological and Molecular Genetics.
V. F. Kalb, C. W. Woods, T. G. Turi, C. R. Dey, and T. S. Sutter. c1993, 11p EPA/600/J-93/302
Grant EPA-R-810605
Pub. in DNA, v6 n6 p529-537 1987. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The structural gene and flanking regions for lanosterol 14alpha-demethylase (14DM) from Saccharomyces cerevisiae has been sequenced. An open reading frame of 530 codons encodes a 60.7-kDa protein. When this gene is disrupted by integrative transformation, the resulting strain requires ergosterol and, as expected, grows only in the absence of oxygen. The deduced amino acid sequence of 14DM includes a hydrophobic segment near the amino terminus which may be a transmembrane domain. The deduced sequence has been compared with those of eight other eukaryotic P450s, each from a different family within the P450 superfamily. These comparisons indicate that this yeast P450 and several mammalian P450s have equivalent alignment scores when each is compared with the bovine P450scc. Matrix comparisons of the amino acid sequence of this P450 with those of mammalian P450s reveal three conserved regions. The DNA region 5' to the structural 14DM gene includes poly(dA:dT) sequences and a repeating hexamer sequence.

Keywords: *Cytochrome P-450, *Saccharomyces cerevisiae, *Fungal structural genes, Fungal DNA, Molecular sequence data, Open reading frames, Plasmids, Restriction mapping, Genetic transcription, Amino acid sequence homology, Reiterated genes, Reprints.

**PB93-229250/REB** PC **A02/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

**Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.** Journal article.
Cincinnati Univ. Medical Center, OH. Dept. of Microbiology and Molecular Genetics.
C. Chen, T. G. Turi, D. Sanglard, and J. C. Loper.
c1987, 9p EPA/600/J-93/303
Grants EPA-CR-810605, EPA-CR-813366
Pub. in Biochemical and Biophysical Research Communications, v146 n3 p1311-1317 Aug 87. See also PB93-229264. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The gene for cytochrome P450 lanosterol 14alpha-demethylase (14DM) from the yeast Candida tropicalis has been isolated. This was accomplished by screening genomic libraries of strain ATCC750 in E. coli using a DNA fragment containing the yeast Saccharomyces cerevisiae 14DM gene. Identity of this gene was confirmed by (a) observing a heme binding region common to all P450s after sequencing the 3' portion of the gene, and (b) based upon tests of its expression in strains of Saccharomyces cerevisiae. (Copyright (c) 1987 Academic Press, Inc.)

Keywords: *Cytochrome P-450, *Saccharomyces cerevisiae, *Fungal genes, *Gene expression, Escherichia coli, Fungal DNA, Heme, Drug resistance, Ketoconazole, Molecular sequence data, Reprints, *Candida tropicalis.

**PB93-229268/REB** PC **A03/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Characterization of the Alkane-Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis': Identification of a New P450 Gene Family.** Journal article.
Cincinnati Univ. Medical Center, OH. Dept. of Microbiology and Molecular Genetics.
D. Sanglard, and J. C. Loper. c1989, 18p EPA/600/J-93/304
Grant EPA-CR-813366
Pub. in Gene, v76 p121-136, 1989. See also PB93-229250 and PB93-229264. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The P450alk gene, which is inducible by the assimilation of alkane in Candida tropicalis, was sequenced and characterized. Structural features described in promoter and terminator regions of Saccharomyces yeast genes are present in the P450alk gene and some particular structures are discussed for their possible role in the inducibility of this gene. Expression of the P450alk gene was achieved in Saccharomyces cerevisiae using the yeast alcohol dehydrogenase expression system after removal of the P450alk gene flanking regions. The resultant expressed protein had a molecular mass slightly greater than that of P450alk from C. tropicalis. This alteration did not prevent the function and localization of P450alk expressed in S. cerevisiae, as this organism showed an acquired microsome-bound activity for the terminal hydroxylation of lauric acid. The deduced P450alk amino acid sequence was compared with members of the nine known P450 gene families. These comparisons indicated that P450alk had a low relationship with these members and was therefore the first member (A1) of a new P450 gene family (LII). (Copyright (c) 1989 Elsevier Science Publishers B.V. (Biomedical Division).)

Keywords: *Cytochrome P-450, *Reiterated genes, *Alkanes, Enzyme induction, Gene expression, Alcohol dehydrogenase, Microsomes, Hydroxylation, Amino acid sequence homology, Saccharomyces cerevisiae, Promotor regions(Genetics), Terminator regions(Genetics), Reprints, *Candida tropicalis.

**PB93-229276/REB** PC **A03/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Disruption of the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.** Journal article.
Cincinnati Univ., OH. Coll. of Medicine.
T. R. Sutter, and J. C. Loper. c1989, 12p EPA/600/J-93/305
Grant EPA-CR-813366
Pub. in Biochemical and Biophysical Research Communications, v160 n3 p1257-1266 May 89. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Strains of Saccharomyces cerevisiae deleted in the NADPH-cytochrome P450 reductase gene by transplacement are 200-fold more sensitive to ketoconazole, an inhibitor of the cytochrome P450 lanosterol 14alpha-demethylase. Resistance is restored through complementation by the plasmid-borne wild type gene from either S. cerevisiae or Candida tropicalis. Neither Southern hybridization nor Western immunoblot techniques provided evidence for a second NADPH-cytochrome P450 reductase gene, suggesting that an alternate pathway may provide for the functions of this reductase in S. cerevisiae. (Copyright (c) 1989 Academic Press, Inc.)

Keywords: *Fungal genes, *NADH dehydrogenase, *Saccharomyces cerevisiae, *Ketoconazole, *Microbial sensitivity tests, Plasmids, Genetic complementation tests, Southern blotting, Western blotting, Reprints, Phenotype, Candida tropicalis.

**PB93-229284/REB** PC **A02/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Isolation of the Alkane Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis'.** Journal article.
Cincinnati Univ. Medical Center, OH. Dept. of Microbiology and Molecular Genetics.
D. Sanglard, C. Chen, and J. C. Loper. c1987, 9p EPA/600/J-93/306
Grant EPA-CR-810605
Pub. in Biochemical and Biophysical Research Communications, v144 n1 p251-257 Apr 87. See also PB93-229268 and PB93-229250. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The gene for the alkane-inducible cytochrome P450, P450alk, has been isolated from the yeast Candida tropicalis by immunoscreening a lambda gt11 library. Isolation of the gene has been identified on the basis of its inducibility and partial DNA sequence. Transcripts of this gene were induced by alkane to levels 500 to 1000 fold over those detected in glucose-grown cells. The nucleotide sequence of the 3' portion of this gene revealed a coding sequence for the heme binding segment characteristic of the P450 gene family. (Copyright (c) 1987 Academic Press, Inc.)

Keywords: *Cytochrome P-450, *Alkanes, Enzyme induction, Saccharomyces cerevisiae, Fungal DNA, Genetic transcription, Molecular sequence data, Messenger RNA, Reprints, *Candida tropicalis.

**PB93-229292/REB** PC **A03/MF A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.** Journal article.
Cincinnati Univ. Medical Center, OH.
J. C. Loper, C. Chen, and C. R. Dey. c1993, 13p EPA/600/J-93/307
Grant EPA-R-810605
Pub. in Hazardous Waste and Hazardous Materials, v2 n2 p131-141 1985. See also PB88-182597. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Yeasts are eukaryotic microorganisms whose cytochrome P-450 monooxygenase systems may be amenable to genetic engineering for the hydroxylation and detoxication of polychlorinated aromatic hydrocarbons. The molecular genetic properties of strains of bakers yeast, Saccharomyces cerevisiae, and an n-alkane utilizing yeast, Candida tropicalis ATCC750 are examined. Standard methods were used to purify cytochrome P-450 and NADPH-cytochrome c (P-450) reductase proteins from cells cultured by semi-anaerobic glucose fermentation (S. cerevisiae, C. tropicalis) and by growth on tetradecane (C. tropicalis). Polyvalent antisera prepared in rabbits to some of these proteins were used in tests of immunological relatedness among the purified proteins using sodium dodecyl sulfate-polyacrylamide gel electrophoresis and nitrocellulose filter immunoblots. The results provide evidence for gene relationships which should prove useful in gene isolation and subsequent engineering of P-450 enzyme systems in yeast.

Keywords: *Genetic engineering, *Biodeterioration, *Cross reactions, *Cytochrome P-450, *Saccharomyces cerevisiae, Hazardous wastes, Immune sera, Aromatic polycyclic hydrocarbons, Polyacrylamide gel electrophoresis, Reprints, *Candida tropicalis.

**PB93-229300/REB** PC **A03/MF A01**
**Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.** Journal article.
Environmental Research Lab., Narragansett, RI.
G. Zaroogian, S. Anderson, and R. A. Voyer. c1991, 13p EPA/600/J-93/308, ERLN-1340
Pub. in Ecotoxicology and Environmental Safety 24, p328-337, 1992. See also PB91-117515 and PB93-204949.

An assay based on the lysosomal incorporation of neutral red dye by brown cells of Mercenaria mercenaria (Bivalvia) was used to measure the cytotoxicity of Cd(sup 2+), Cu(sup 2+), and Ni(sup 2+) singly and in combination. Cytotoxicity was a linear function of Cd(sup 2+) concentration 0.1-1.5 mM and Cu(sup 2+) concentration between 10 and 100 microM. Nickel was not cytotoxic at concentrations as high as 10 mM. The presence of Cu(sup 2+) lessened the cytotoxic effect of Cd(sup 2+). Ni(sup 2+) did not affect cytotoxicity in combination with either Cu(sup 2+) or Cd(sup 2+). Ni(sup 2+) inflated estimates of cell survival by the neutral red assay in this study. Cells exposed to Ni(sup 2+) yielded measured quantities of neutral red dye in excess of those measured in cells from control treatments. (Copyright (c) 1992 Academic Press, Inc.)

Keywords: *Water pollution effects(Animals), *Toxicity, *Cadmium, *Copper, *Nickel, Cells(Biology), Cell survival, Divalent cations, In vitro analysis, Lysosomes, Reprints, *Mercenaria mercenaria, *Brown cells.

**PB93-229318/REB** PC **A03/MF A01**
**Review of the Current Status of Marine Algal Toxicity Testing in the United States.** Journal article.
Environmental Research Lab.-Narragansett, Newport, OR. Mark O. Hatfield Marine Science Center.
G. B. Thursby, B. S. Anderson, G. E. Walsh, and R. L. Steele. c1993, 18p EPA/600/J-93/309, CONTRIB-1272
Pub. in Environmental Toxicology and Risk Assessment, ASTM STP 1179, p362-377 1993. See also PB85-227049 and PB89-220503. Prepared in cooperation with Science Applications International Corp., Narragansett, RI. Environmental Testing Center, California Univ., Santa Cruz. Inst. of Marine Sciences, and National Park Service, Fort Collins, CO. Water Resources Div.

Algal toxicity testing is not new, but only within the past few years have data from such testing been used to help set standards for allowable contamination. Early toxicity testing with marine algae used a few planktonic species with inhibition of growth as the primary endpoint. Work with vegetative growth of marine seaweeds from intertidal areas led to conclusions of insensitivity to toxicants. Within the past five years, tests with different species of microalgae and reproductive tests with marine macroalgae have come into wider use. These new species and test method endpoints have shown that plants can be more sensitive to toxicants than some of the most sensitive marine animals. It has been proposed recently that the saltwater 'Criterion Continuous Concentration' for water quality criteria documents for thallium and acenaphthene be set with reproductive data from the kelp, Laminaria saccharina; which was the most chronically sensitive species tested for both chemicals. (Copyright (c) 1993 American Society for Testing and Materials).

Keywords: *United States, *Algae, *Water pollution effects(Plants), *Toxicity, Aquatic plants, Marine environments, Bioassay, Sensitivity, Biological effects, Estuaries, Reproduction(Biology), Tests, Reprints, Champia, Laminaria, Macrocystis.

**PB93-229326/REB** PC **A02/MF A01**
**Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.** Journal article.
Environmental Research Lab., Narragansett, RI.
G. R. Gardner, R. J. Pruell, and A. R. Malcolm. c1992, 7p EPA/600/J-93/310, ERLN-1281

Pub. in Marine Environmental Research 34, p59-63, 1992.

Tumors were induced in eastern oysters (Crassostrea virginica) by a mixture of aromatic hydrocarbons, an aromatic amine, polychlorinated biphenyls, chlorinated hydrocarbons, a nitrosoamine and heavy metals. Kidney and enteric tumors developed in oysters following exposure to a mixture containing 3,4-benzopyrene, 1,2-benzanthracene, 2-aminofluorene, N-nitrosodiethylamine, technical chlordane, Aroclors 1242 and 1254, p,p'-DDE, cadmium (CdCl2), chromium (K2CrO4) and lead (Pb(NO3)2). 2-Aminofluorene and N-nitrosodiethylamine, not measured in Black Rock Harbor sediment, were both added at 0.6 and 6.0 micrograms/g dry sediment. A 3% prevalence of low-grade renal and gastrointestinal tumors developed after 30 days in oysters fed water-column suspended sediment particulate spiked with the mixture of chemicals. Disease progression was most advanced in enteric adenomas. Both types are comparable to those produced after 30 days in the same organs by chemically contaminated Black Rock Harbor sediment.

Keywords: *Oysters, *Neoplasms, *Water pollution effects(Animals), *Chemical water pollutants, *Carcinogens, Chlorinated hydrocarbons, Aromatic hydrocarbons, Amines, Metals, Gastrointestinal neoplasms, Kidney neoplasms, Sediments, Prevalence, Reprints, Crassostrea virginica.

**PB93-229334/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Narragansett, RI.
**Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.** Journal article.
Science Applications International Corp., Narragansett, RI.
R. M. Burgess, R. Comeleo, M. D. Tagliabue, K. V. Sheehan, and A. Kuhn. c1993, 19p EPA/600/J-93/311, , ERLN-1191
Contracts EPA-68-C1-0005, EPA-68-03-3529
Pub. in Environmental Toxicology and Risk Assessment, ASTM STP 1179, p303-319 1993. Also pub. as Environmental Protection Agency, Narragansett, RI. rept. no. CONTRIB-1191. See also PB93-181162. Sponsored by Environmental Protection Agency, Narragansett, RI.

Water quality monitoring programs often include toxicity testing of ambient waters with the assumption that observed toxicity is due to existing anthropogenic discharges. These assessments rarely consider the potential that water column toxicity may originate from contaminated sediments. The objectives of the study were to (1) demonstrate that contaminated sediments can cause measurable water column toxicity and (2) illustrate the utility of short-term marine toxicity tests in these assessments. The approach used in the study demonstrates that contaminated sediments do have the potential to cause water column toxicity and that marine water column toxicity tests are sufficiently sensitive to detect this toxicity. In order to determine the contribution of the various sources of contamination to total water column toxicity, the data generated using the approach and other pertinent site information (hydrodynamic models, effluent and receiving water toxicity) can be integrated into a water column toxicity model. (Copyright (c) 1993 American Society for Testing and Materials.)

Keywords: *Toxicity, *Water pollution effects, *Marine biology, Planktonic sediments, Sediment-water interfaces, Algae, Echinodermata, Crustacea, Growth, Reproduction(Biology), Fertility, Fecundity, Reprints, Water columns, Champia parvula, Arbacia punctulata, Mysidopsis bahia.

**PB93-229342/REB** PC **A03**/MF **A01**
**Global Environmental Change Issues in the Western Indian Ocean Region.** Journal article.
Environmental Research Lab., Narragansett, RI.
F. J. Gable, D. G. Aubrey, and J. H. Gentile. c1991, 21p EPA/600/J-93/312, ERLN-1214
Pub. in Geoforum, v22 n4 p401-419 1991. See also PB91-116939. Prepared in cooperation with Woods Hole Oceanographic Institution, MA. Coastal Research Center.

Global climate change caused by increased atmospheric trace gas loadingis expected to cause a variety of direct and indirect impacts. These impacts include rising sea levels, changes in storm climates, changes in precipitation patterns, and alterations of ocean circulation patterns. The purpose of the paper is to place into a regional context for the WesternIndian Ocean region the problems arising from changes in global climate. Specifically, the paper will focus on the potential for impacts in the coastal zone, where the indirect pressures of climate change and anthropogenic forcings (e.g. pollution, dredging, coral mining) and policy (land use, coastal zone) collide.

Keywords: *Greenhouse effect, *Ocean temperature, *Climate change, Oceanic circulation, General circulation models, Marine ecosystems, Climatology, Weather, Storms, Coastal regions, Land use, Reprints, Western Region(Indian Ocean), Sea level rise.

**PB93-229359/REB** PC **A02**/MF **A01**
**Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.** Journal article.
Environmental Research Lab., Narragansett, RI.
G. Zaroogian, and P. Yevich. c1991, 9p EPA/600/J-93/313, ERLN-1274
Pub. in Environmental Pollution 79, p191-197 1993.

The study examined brown cells of oysters, Crassostrea virginica, as potential indicators of pollution related stress. Regardless of collection station brown cells increased in connective tissue when it was inflamed. Significantly fewer brown cells were observed in connective tissue of oysters from the clean versus the contaminated station; no significant differences in size were apparent in brown cells or vesicles between the two stations. Brown cell vesicles in connective tissue of oysters from the clean station were a translucent light-brown color with inclusions in the larger vesicles, whereas in oysters from the contaminated station they were blackish-brown with 2-3 inclusions in all vesicles regardless of size. Auricles in oysters at the clean station had significantly more brown cells which were larger and contained more vesicles than those at the contaminated station. Studies indicate that vesicles of oyster brown cells are lysosomes and these cells possess the requisites for detoxification and have the potential for use as a biomarker of exposure to contaminants and stress.

Keywords: *Oysters, *Biochemistry, *Environmental monitoring, Chemical water pollutants, Biological markers, Tissues(Biology), Acid phosphatase, Muramidase, Glutathione reductase, Pathology, Reprints, *Crassostrea virginica, *Brown cells.

**PB93-229367/REB** PC **A02**/MF **A01**
Environmental Research Lab., Narragansett, RI.
**Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.** Journal article.
Northeastern Univ., Boston, MA. Barnett Inst. of Chemical Analysis and Materials Science.
S. M. Wolf, R. Vouros, C. Norwood, and E. Jackim.
c1992, 7p PUB-509, EPA/600/J-93/314, , ERLN-1416
Pub. in Jnl. of the American Society for Mass Spectrometry 3, p757-761 1992. Sponsored by Environmental Research Lab., Narragansett, RI., National Institutes of Health, Bethesda, MD., Arthur D. Little Foundation, Cambridge, MA., and Society of Analytical Chemists of Pittsburgh, PA.

Capillary zone electrophoresis coupled to continuous flow-fast atom bombardment mass spectrometry is shown to have utility for the detection and characterization of adducts formed by the covalent attachment of four polyaromatic hydrocarbon (PAH) and amino-PAH compounds to deoxyguanosine. Normal scanning provided structural information for a 1.3 ng injection of a model adduct, while 1.3 ng of each of a mixture of adducts was sufficient to determine their molecular weights by monitoring the constant neutral loss of deoxyribose. Exploitation of this loss in the multiple reaction monitoring mode resulted in the detection of low picogram amounts of target adducts in mixtures. (Copyright (c) 1992 American Society for Mass Spectrometry.)

Keywords: *Deoxyguanosine, *Aromatic polycyclic hydrocarbons, *Electrophoresis, *Fast atom bombardment mass spectrometry, *Mutagens, Molecular weight, DNA damage, Reprints.

**PB93-229375/REB** PC **A03**/MF **A01**
Environmental Research Lab., Narragansett, RI.
**Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.** Journal article.
California State Univ., Long Beach.
B. M. Sanders, L. S. Martin, W. G. Nelson, D. K. Phelps, and W. Welch. c1991, 19p EPA/600/J-93/315, , ERLN-1150
Pub. in Marine Environmental Research 31, p81-97 1991. Prepared in cooperation with California Univ., San Francisco. Lung Biology Center. Sponsored by Environmental Research Lab., Narragansett, RI.

Blue mussels, Mytilus edulis, were exposed in the laboratory for 7 days to a range of Cu concentrations (0 to 100 micrograms/liter) to test the feasibility of using the accumulation of a 60kDa stress protein, also referred to as heat shock protein 60 (hsp60), as a molecular indicator of contaminant exposure and ecological status. At the end of the experiment, scope-for-growth (SFG) measurements were completed to assess whole organism physiological condition. In addition, antibodies raised against hsp60 were employed as probes for Western blot analysis and immunobinding assays of mantle tissue. Physiological measurements revealed a significant ($p<0.05$) decrease in the SFG index for organisms at 32 and 100 micrograms/liter Cu. Western blot analysis indicated that the abundance of hsp60 was greater in tissues exposed to elevated Cu concentrations than in controls. Quantitation of hsp60 accumulation as determined by a dot immunobinding assay demonstrated a significant correlation between hsp60 accumulation and nominal Cu concentration in the seawater. (Copyright (c) 1991 Elsevier Science Publishers Ltd., England.)

Keywords: *Heat-shock proteins, *Copper, *Mussels, Growth, Dose-response relationships, Western blotting, Electrophoresis, Reprints, *Mytilus edulis.

**PB93-229383/REB** PC **A03**/MF **A01**
**Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.** Journal article.
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
D. R. Scott. c1992, 12p EPA/600/J-93/317
Pub. in Chemometrics and Intelligent Laboratory Systems 16, p193-202 1992. See also PB91-242990.

An improved method of estimating molecular weights of volatile organic compounds from their mass spectra has been developed and evaluated for accuracy. This technique can be implemented with a user friendly expert system on a personal computer. The method is based on a pattern recognition based classifier and empirically derived rules from a set of toxic and related organic compounds. The set of compounds consists of six classes: nonhalobenzenes; chlorobenzenes; bromo- and bromochloroalkanes/alkenes; mono- and dichloroalkanes/alkenes; tri, tetra- and pentachloroalkanes/alkenes; and unknowns. In the present study improvements for the unknown class, which is the largest class in actual samples, were made. For this latter class new rules were derived using a new feature of the mass spectrum. Extensive testing of the system was conducted with reference and field data. The probable errors in the estimated molecular weights were 0.5 daltons for training reference spectra and 5.0 and 1.3 daltons for randomly selected and field spectra, respectively. These errors are about one-half those of previous versions of the system. The test results show that the domain of validity of this present system greatly exceeds the original training domain.

Keywords: *Molecular weight, *Volatile organic compounds, *Spectrum analysis, *Pattern recognition, *Expert systems, *Air pollution detection, Computer aided analysis, Mass spectroscopy, Toxic substances, Classification, Chemical analysis, Performance evaluation, Halogen organic compounds, Benzenes.

**PB93-229391/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Stochastic Methodology for Regional Wind-Field Modeling.** Journal article Sep 89-Oct 91.
Computer Sciences Corp., Research Triangle Park, NC.
K. L. Schere, and C. J. Coats. c1992, 21p EPA/600/J-93/318

Contract EPA-68-01-7365
Pub. in Jnl. of Applied Meteorology, v31 n12 Dec 92. See also PB89-200828. Prepared in cooperation with National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

Three-dimensional regional scale (approximately 1000 km) air quality simulation models require hourly inputs of U and V wind components for each vertical layer of the model and for each grid cell in the horizontal. The standard North American meteorological observation network is used to derive the wind field inputs for the U.S. EPA's Regional Oxidant Model (ROM) and other regional models. While a fairly dense surface network with hourly observations exists, upper-air data are obtained only twice per day at monitoring sites typically separated by distances of 300-500 km. Using these data to derive the more spatially and temporally resolved gridded wind fields needed by the ROM introduces uncertainties and errors into the model. The authors present a method of developing gridded wind fields for the ROM that accounts for these non-deterministic features. The method produces a family of potential gridded wind fields that allows for the stochastic nature of the interpolation process. Examples of the derived wind fields are given for the Northeast United States. Potential differences between wind fields, in terms of their effects on air quality modeling, are inferred from following multi-day flow trajectories using various members of the wind field family. The sensitivity of results to the density of surface observational data is also presented.

Keywords: *Stochastic processes, *Wind(Meteorology), *Air quality, *Computerized simulation, *Mesoscale phenomena, Three-dimensional calculations, Regional analysis, Air pollution, Error analysis, Environmental transport, Meteorology, Interpolation, Reprints, Regional Oxidant Model, Northeast Region(United States).

**PB93-229409/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Optical Remote Measurement of Toxic Gases.** Journal article.
National Aeronautics and Space Administration, Hampton, VA. Langley Research Center.
W. B. Grant, R. H. Kagann, and W. A. McClenny.
c1992, 15p EPA/600/J-93/319
Pub. in Jnl. of the Air and Waste Management Association, v42 n1 p18-27 Jan 92. See also PB90-186370. Prepared in cooperation with MDA Scientific, Inc., Norcross, GA. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

Enactment of the Clean Air Act Amendments (CAAA) of 1990 has resulted in increased ambient air monitoring needs for industry, some of which may be met efficiently using open-path optical remote sensing techniques. These techniques include Fourier transform spectroscopy, differential optical absorption spectroscopy, laser long-path absorption, differential absorption lidar, and gas cell correlation spectroscopy. With this regulatory impetus, it is an opportune time to consider applying these technologies to the remote and/or path-averaged measurement and monitoring of toxic gases covered by the CAAA. The article reviews the optical remote sensing technology and literature for that application. (Copyright (c) 1992 Air and Waste Management Association.)

Keywords: *Air pollution monitoring, *Toxic substances, *Remote sensing, Optical measurement, Laser spectroscopy, Absorption spectroscopy, Optical emission spectroscopy, Gas spectroscopy, Technology assessment, Reprints, Clean Air Act Amendments of 1990.

**PB93-229417/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmosphe
**Tagged Species Engineering Model (TSEM).** Journal article.
Computer Sciences Corp., Research Triangle Park, NC.
J. N. McHenry, F. S. Binkowski, R. L. Dennis, J. S. Chang, and D. Hopkins. c1992, 19p EPA/600/J-93/321
Contract EPA-68-01-7365
Pub. in Atmospheric Environment, v26A n8 p1427-1443 1992. Prepared in cooperation with National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div., State Univ. of New York at Albany. Atmospheric Sciences Research Center, and National Center for Atmospheric Research, Boulder, CO. Acid Deposition Modeling Project. Sponsored by Environmental Prote

A three-dimensional Eulerian model with simplified sulfur chemistry (TSEM) has been developed to examine source-receptor relationships and the response of sulfate deposition to hypothetical control strategies for sulfur dioxide source emissions. Archived output files from a comprehensive Eulerian model (the Regional Acid Deposition Model) are used to provide necessary chemical inputs. Results from comparisons of the simplified model with the comprehensive model show that TSEM represents sulfate deposition very well both for base case emissions and for a hypothetical 50% reduction in all sulfur-emitting sources. Source-receptor relationships are exhibited by means of taggedsulfur emissions, as illustrated in two examples.

Keywords: *Air pollution dispersion, *Mathematical models, *Emissions, Sulfur dioxide, Ozone, Sulfates, Acid rain, Acidification, Hydrogen peroxide, Photochemical reactions, Air pollution sources, Maps, Reprints, RADM(Regional Acid Deposition Model), TSEM(Tagged Species Engineering Model), Eastern Region(United States).

**PB93-229425/REB** PC **A03**/MF **A01**
**Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.** Journal article.
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
D. R. Scott. c1992, 14p EPA/600/J-93/322
Pub. in Analytica Chimica Acta 265, p43-54, 1992. See also PB92-227362.

A system based on principles of pattern recognition has been developed for identifying toxic and other volatile organic pollutants in complex environmental samples. It interprets the most commonly used monitoring data, mass spectral data, and produces a class designation, an estimate of the molecular weight and, if possible, a target pollutant identity. The system was developed and implemented with a very user friendly expert system which operates by asking questions of the user. The system was designed for samples with low concentrations of pollutants, e.g. ambient air samples. The mass spectra of 74 target and 31 other compounds were used to establish the five target and the one unknown classes. The target classes were nonhalobenzenes; chlorobenzenes; bromo- and bromochloro-alkanes/alkenes; mono- and dichloroalkanes/alkenes; and tri-, tetra- and pentachloro-alkanes/alkenes. The molecular weight is very important in eliminating possible identities for unknown pollutants. This system was extensively tested with mass spectra of potential air pollutants, randomly selected compounds, field gas chromatography/mass spectral air pollutant data and with 54,000 other spectra. Classification and identification accuracies from these tests were 90-100% and 96-100%, respectively. The resulting system runs on a personal computer and is very fast.

Keywords: *Air pollution detection, *Pattern recognition, *Expert systems, *Toxic substances, *Volatile organic compounds, *Environmental monitoring, Computer aided analysis, Concentration(Composition), Mass spectroscopy, Chemical analysis, Performance evaluation, Classification, Design criteria, Quality assurance, Molecular weight, Reprints.

**PB93-229433/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Aromatic Hydrocarbon Degradation: A Molecular Approach.** Journal article.
Cook Coll., New Brunswick, NJ. Center for Agricultural Molecular Biology.
G. J. Zylstra, and D. T. Gibson. c1991, 23p EPA/600/J-93/325
Grants PHS-GM29909, AFOSR-88-6225
Pub. in Genetic Engineering, v13 p183-203 1991. Prepared in cooperation with Iowa Univ., Iowa City. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab., National Inst. of General Medical Sciences, Bethesda, MD., and Air Force Office of Scientific Research, Bolling AFB, DC.

Aromatic hydrocarbons have a ubiquitous distribution in nature. The majority of these compounds are formed through the pyrolysis of organic matter. Pyrolysis at high temperatures leads to the formation of unsubstituted polycyclic aromatic hydrocarbons. Pyrolysis at low temperatures, such as those at which crude petroleum is formed, leads to the formation of alkyl-substituted aromatic hydrocarbons. Many of these compounds are suspected carcinogens. Increased use of petrochemicals by modern society has increased the amount of aromatic hydrocarbons found in air and soil samples. It is not surprising then that due to the ubiquitous nature and increasing concentrations of aromatic hydrocarbons microorganisms can be found that have the ability to degrade these compounds. The varied mechanisms by which microorganisms utilize aromatic hydrocarbons as carbon and energy sources have been the focus of several reviews.

Keywords: *Biodegradation, *Aromatic hydrocarbons, *Molecular biology, *Bacteria, Pyrolysis, Combustion products, Chemical reactions, Toluene, Genetics, Cloning, Biochemistry, Microbiology, Biological pathways, Reprints.

**PB93-229441/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.** Journal article.
Cincinnati Univ., OH. Coll. of Medicine.
C. Chen, V. F. Kalb, T. G. Turi, and J. C. Loper. c1988, 13p EPA/600/J-93/326
Grants EPA-R-810605, EPA-R-813366
Pub. in DNA, v7 n9 1988. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The nucleotide sequence of the gene and flanking DNA for the cytochrome P450 lanosterol 14 alpha-demethylase (14DM) from the yeast Candida tropicalis ATCC750 is reported. An open reading frame (ORF) of 528 codons encoding a 60.9-kD protein is identified. This ORF includes a characteristic heme-binding domain, HR2, common to all P450 proteins. This protein and the 14DM from Saccharomyces cerevisiae share 66.5% identical and 23.1% conservatively replaced amino acids in a 516-amino-acid alignment, and thus are orthologous forms of the P450LIA1 gene. Conversely, C. tropicalis 14DM shares relatively little sequence similarity with P450alk, the predominant P450 protein present when this organism is grown on n-alkanes. Sequence information of these three yeast P450s will be useful for structure-function analyses in the future.

Keywords: *Amino acid sequence, *Fungal genes, Saccharomyces cerevisiae, Amino acid sequence homology, Deoxyribonucleic acids, Open reading frames, Reprints, *Candida tropicalis, *Cytochrome P450 lanosterol 14 alpha-demethylase.

**PB93-229458/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.** Journal article.
Cincinnati Univ., OH. Coll. of Medicine.
T. R. Sutter, D. Sanglard, and J. C. Loper. c1990, 12p EPA/600/J-93/327
Pub. in Jnl. of Biological Chemistry, v265 n27, p16428-16436, 25 Sep 90. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The gene coding for the Candida tropicalis NADPH-cytochrome P-450 oxidoreductase was isolated by immunoscreening of a C. tropicalis (lambda)gt11 expression library and colony hybridization of a C. tropicalis genomic library. The C. tropicalis CPR gene produces a 2.35-kilobase mRNA transcript, levels of which were shown to be increased 16-fold in cells grown on tetradecane relative to cells grown on glucose as the sole carbon source. A 3-kilobase DNA fragment was sequenced, including 554 and 397 base pairs of 5'- and 3'-noncoding sequence, respectively. A single open reading frame of 2040 base pairs was identified and predicts a 76,683-Da polypeptide of 680 amino acid

residues. The deduced C. tropicalis CPR amino acid sequence was compared with each of the CPR sequences reported from other organisms and invariant residues were identified. (Copyright (c) 1990 by The American Society for Biochemistry and Molecular Biology, Inc.)

Keywords: *Enzyme induction, *NADPH cytochrome reductase, *Alkanes, *Flavoproteins, Messenger RNA, Amino acid sequence, Sequence alignment, Reprints, *Candida tropicalis.

**PB93-229466/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Hazardous Waste Engineering Research Lab.
**Oxidation of Biphenyl by a Multicomponent Enzyme System from 'Pseudomonas' sp. Strain LB400.** Journal article.
Iowa Univ., Iowa City.
J. D. Haddock, L. M. Nadim, and D. T. Gibson. c1993, 9p EPA/600/J-93/328
Grant EPA-CR-816352
Pub. in Jnl. of Bacteriology, v175 n2 p395-400 Jan 93. See also PB93-229474 and PB93-222909. Sponsored by Environmental Protection Agency, Cincinnati, OH. Hazardous Waste Engineering Research Lab.

Pseudomonas sp. strain LB400 grows on biphenyl as the sole carbon and energy source. The organism also cooxidizes several chlorinated biphenyl congeners. Biphenyl dioxygenase activity in cell extract required addition of NAD(P)H as an electron donor for the conversion of biphenyl to cis-2,3-dihydroxy-2,3-dihydrobiphenyl. Incorporation of both atoms of molecular oxygen into the substrate was shown with (18)O2. The nonlinear relationship between enzyme activity and protein concentration suggested that the enzyme is composed of multiple protein components. Ion-exchange chromatography of the cell extract gave three protein fractions that were required together to restore enzymatic activity. Similarities with other multicomponent aromatic hydrocarbon dioxygenases indicated that biphenyl dioxygenase may consist of a flavoprotein and iron-sulfur proteins that constitute a short electron transport chain involved in catalyzing the incorporation of both atoms of molecular oxygen into the aromatic ring. (Copyright (c) 1993, American Society for Microbiology.)

Keywords: *Oxidation, *Polychlorinated biphenyls, *Enzyme activity, Biodegradation, Chemical reactions, Microbiology, Bacteria, Biochemistry, Genetics, Microbiology, Reprints, Pseudomonas sp. Strain LB400, Strains(Biology), Congeners.

**PB93-229474/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.** Journal article.
Iowa Univ., Iowa City.
D. T. Gibson, D. L. Cruden, J. D. Haddock, G. J. Zylstra, and J. M. Brand. c1993, 7p EPA/600/J-93/329
Grant EPA-CR-816352
Pub. in Jnl. of Bacteriology, v175 n14 p4561-4564 Jul 93. See also PB93-229466. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Biphenyl-grown cells and cell extracts prepared from biphenyl-grown cells of Pseudomonas sp. strain LB400 oxidize a much wider range of chlorinated biphenyls that do analogous preparations from Pseudomonas pseudoalcaligenes KF707. These results are attributed to differences in the substrate specificity of the biphenyl 2,3-dioxygenases from both organisms. (Copyright (c) 1993, American Society for Microbiology.)

Keywords: *Oxidation, *Polychlorinated biphenyls, *Bacteria, Biodegradation, Chemical reactions, Cell extracts, Biochemistry, Microbiology, Genetics, Reprints, Pseudomonas pseudoalcaligenes, Pseudomonas sp. Strain LB400, Strains(Biology), Congeners.

**PB93-229482/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.** Journal article.
Cincinnati Univ., OH. Coll. of Medicine.
V. F. Kalb, J. C. Loper, C. R. Dey, C. W. Woods, and T. R. Sutter. c1986, 11p EPA/600/J-93/330
Grant EPA-R-810605
Pub. in Gene, v45 p237-245 1986. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

A Saccharomyces cerevisiae host with an S. cerevisiae genomic library contained in the shuttle vector YEp24 was transformed and the resultant transformants were screened for resistance to ketoconazole (Kc), an inhibitor of the cytochrome P-450 (P-450) enzyme lanosterol 14 alpha-demethylase. Two plasmids were isolated which transformed yeast to both increased resistance to Kc and increased levels of total P-450. Hybrid-selection and immunoprecipitation experiments showed that these plasmids, pVK1 and pVK2, contained the structural gene for an S. cerevisiae P-450. This conclusion was confirmed by the nucleotide sequence of a portion of pVK2, which revealed an open reading frame encoding a characteristic P-450 heme-binding region.

Keywords: *Cytochrome P450, *Structural genes, *Saccharomyces cerevisiae, Drug resistance, Ketoconazole, Genetic vectors, Plasmids, Open reading frames, Heme, Molecular cloning, Antibodies, Recombinant DNA, Genetic translation, Genetic transformation, Molecular sequence data, Reprints.

**PB93-229490/REB** PC **A02**/MF **A01**
**Maturational Changes in Dermal Absorption of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Fischer 344 Rats.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
Y. B. Anderson, J. A. Jackson, and L. S. Birnbaum. c1993, 9p EPA/600/J-93/331
Pub. in Toxicology and Applied Pharmacology, v119 n2 p214-220 Apr 93. Presented at the Annual Society of Toxicology Meeting, Miami Beach, FL., February 12-16, 1990. Prepared in cooperation with ManTech Environmental Technology, Inc., Research Triangle Park, NC.

Maturational changes in potential for systemic exposure to TCDD following dermal application of a low dose (200 pmol) of this chemical were examined in male Fischer 344 rats. Absorption, tissue distribution, and elimination of TCDD, measured as TCDD-derived radioactivity, were examined 72 hr after dermal application of 200 pmol ((3)H)TCDD (111 pmol/sq cm applied over 1.8 sq cm) to the interscapular region of 3-, 5-, 8-, 10-, and 36-week-old rats. Dermal absorption was greatest in 3-week-old rats, decreasing to approximately 80 pmol (approximately 40%) in 5-, 8-, and 10-week-old rats and to 45 pmol (approximately 22%) in 36-week-old rats. In each age group, 70 to 80% of the radioactivity remaining at the application site 72 hr after dosing could be removed with acetone swabs. Major tissue depots of radioactivity were liver and fat; skin and muscle were minor depots. Adipose tissue content (Y) increased linearly with body weight. (X),Y = 0.03X + 2.1 (R squared = 0.95). Results indicate that TCDD is absorbed to a greater degree through skin of very young animals and that a significant decrease in potential for systemic exposure may occur during maturation and again during aging.

Keywords: *Skin absorption, *Toxicity, *Tetrachlorodibenzodioxin, Rats, Tissue distribution, Feces, Body composition, Dose-response relationships, Reprints.

**PB93-229508/REB** PC **A02**/MF **A01**
**Using Neuroblastoma Cell Lines to Examine Organophosphate Neurotoxicity.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
B. Veronesi, and M. Ehrich. c1993, 10p EPA/600/J-93/332
Pub. in In vitro Toxicology: A Jnl. of Molecular and Cellular Toxicology, v6 n1 p57-65 1993. Prepared in cooperation with Virginia-Maryland Regional Coll. of Veterinary Medicine, Blacksburg, VA.

The paper describes the initial characterization of neuroblastoma cell lines to address several aspects of organophosphate neurotoxicity. Several commercially available human and mouse cell lines (i.e., SY5Y, IMR-32, SK-N-MC, NB41A3) were evaluated for their target esterase activities (i.e., cholinesterase, neurotoxic esterase, carboxylesterase), and of these cells, a human (SY5Y) and mouse (NB41A3) neuroblastoma cell line clone were used to establish an IC50 cytoxicity profile for a variety of organophosphates insecticides (e.g., parathion, paraoxon, diisopropylphosphorofluoridate and mipafox). The human neuroblastoma cell line clone (SY5Y) was further used to distinguish between neuropathy-causing OPs and cholinesterase inhibitors. These initial data support the use of neuroblastoma cell lines as effective test models for organophosphate neurotoxicity.

Keywords: *Toxicity, *Nervous system, *Neuroblastoma, *Organophosphate insecticides, Cultured tumor cells, In vitro analysis, Esterases, Cholinesterase inhibitors, Reprints.

**PB93-229516/REB** PC **A03**/MF **A01**
Health Effects Research Lab., Research Triangle Park, NC. Environmental Toxicology Div.
**Ammonia Abatement System for Whole-Body Small Animal Inhalation Exposures to Acid Aerosols.** Journal article.
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
M. A. Higuchi, and D. W. Davies. c1993, 13p EPA/600/J-93/333
Contract EPA-68-02-4450
Pub. in Inhalation Toxicology, v5 n3 p323-333 Apr 93. Sponsored by Health Effects Research Lab., Research Triangle Park, NC. Environmental Toxicology Div.

Conducting whole-body acid aerosol inhalation exposures of laboratory animals is complicated by ammonia arising from the excrement of the test animals which is sufficient to completely neutralize much of the acid aerosol. The development of a small animal whole-body ammonia reduction system (SAWBARS) for inhalation exposures was desirable for long-term rodent exposure studies. The removal of ammonia was accomplished by designing and fabricating stainless steel excreta pan manifolds to exhaust ammonia from the pans as it was generated. In addition, all chamber air influent was conditioned by a wet scrubber to remove ambient ammonia, minimizing background levels of the vapor. Total chamber air effluent was exhausted through the excreta pan manifolds. The modification effectively removed up to 99% of the ammonia from the chamber atmosphere when incorporated with daily animal bedding changes during non-exposure periods. (Copyright (c) 1993 Taylor and Francis.)

Keywords: *Laboratory animals, *Excretion, *Ammonia, Acidity, Aerosols, Exposure chambers, Inhalation, Clinical trials, Body fluids, Feces, Reprints, Small animal whole-body ammonia reduction system.

**PB93-229524/REB** PC **A02**/MF **A01**
Health Effects Research Lab., Research Triangle Park, NC. Developmental Toxicology Div.
**Extraction of Phenol and Its Metabolites from Aqueous Solution.** Journal article.
North Carolina State Univ. at Raleigh. Dept. of Chemistry.
L. A. Jones, J. B. Prabel, J. J. Glennon, M. F. Copeland, and R. J. Kavlock. c1993, 9p EPA/600/J-93/334
Pub. in Jnl. of Agriculture and Food Chemistry, v41 n5 p735-741 May 93. Sponsored by Health Effects Research Lab., Research Triangle Park, NC. Developmental Toxicology Div.

As part of an ongoing pharmacokinetic investigation of the teratogenicity of phenol and its metabolites (1,2-, 1,3-, and 1,4-dihydroxybenzene) in pregnant Sprague-Dawley rats, there was need of an analytical procedure sufficiently sensitive to provide quantitative data to the parts-per-billion level or better in urine, plasma, and fetal tissue. In the development of an extraction method utilizing the 'salting out' technique, the extraction efficiencies of phenol, catechol, resorcinol, and hydroquinone from aqueous solutions were determined for tetrahydrofuran (THF), acetonitrile (ACN), dimethylformamide (DMF), ethyl acetate (EtOAc), and diethyl ether (Et2O). The inorganic salts of potassium fluoride (anhydrous), sodium chloride, lithium chloride, ammonium acetate, and sodium bicarbonate were used to saturate the solvent/water combinations. Phase separations were not observed for THF/LiCl, NaHCO3; ACN/NaHCO3; and DMF/NaCl, LiCl, NH4OAc, NaHCO3, whereas ACN/KF produced quinone while DMF/KF yielded no hydroquinone in non-acidified solutions. Essentially all other solvent/salt combinations gave quantitative recoveries, while KF was found to be an efficient drying agent.

Keywords: *Phenols, *Extraction, *Aqueous solutions, *Biological effects, *Analytic techniques, Pharmacokinetics, Salting-out agents, Laboratory animals, Chemical analysis, Toxicology, Environmental effects, Tetrahydrofuran, Acetonitrile, Metabolism, Biochemistry, Reprints, Formamide/dimethyl, Acetic acid/(ethyl-ester), Ether/diethyl.

**PB93-229532/REB** PC **A02/MF A01**
**Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Environmental Toxicology Div.
M. A. Medinsky, J. S. Kimbell, J. B. Morris, P. Gerde, and J. H. Overton. c1993, 10p EPA/600/J-93/335
Pub. in Fundamental and Applied Toxicology, v20 n3 p265-272 1993. Symposium: Annual Meeting of the Society of Toxicology (31st), Seattle, WA. Prepared in cooperation with Chemical Industry Inst. of Toxicology, Research Triangle Park, NC., Connecticut Univ., Storrs. Dept. of Renewable Natural Resources, and National Inst. of Occupational Health, Solna (Sweden).

Physiologically based pharmacokinetic models for volatile organic chemicals typically describe the respiratory tract as a single compartment in which chemicals in the alveolar air space and the arterial blood are in instantaneous equilibrium. A functional role for the upper respiratory tract in the uptake of volatile chemicals has been largely ignored. Airflow patterns in the respiratory tract, regional metabolism, diffusion-dependent uptake, and the cyclic nature of respiration are now being incorporated into current models. Use of dosimetric models that incorporate relevant biology for inhaled chemicals will ultimately result in more meaningful human risk assessments. (Copyright (c) 1993 Society of Toxicology.)

Keywords: *Dose-response relationships, *Respiratory tract, Pharmacokinetics, Respiratory airflow, Biochemistry, Metabolism, Absorption, Risk assessment, Toxicity, Models, Reprints, *Volatile organic compounds.

**PB93-229540/REB** PC **A02/MF A01**
**Framework for Validation and Implementation of in vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.** Journal article.
Environmental Protection Agency, Washington, DC.
A. M. Goldberg, J. M. Frazier, D. Brusick, S. T. Gettings, and R. N. Hill. c1993, 10p EPA/600/J-93/336
Pub. in Jnl. of the American College of Toxicology, v12 n1 1993. Prepared in cooperation with Johns Hopkins Univ., Baltimore, MD. School of Hygiene and Public Health, Hazleton Labs. America, Inc., Vienna, VA., Cosmetic, Toiletry and Fragrance Association, Inc., Washington, DC., and Food and Drug Administration, Washington, DC.

The development and application of in vitro alternatives designed to reduce or replace the use of animals, or to lessen the distress and discomfort of laboratory animals, is a rapidly developing trend in toxicology. The proliferation of new methods is stimulated by continuing advancements in both cellular and molecular biology, and bioanalytical and computer techniques. For the foreseeable future, the rate of development of new methods can be expected to increase. The document represents a formal administrative process to organize, coordinate and evaluate validation activities.

Keywords: *Animal testing alternatives, *Toxicity, *Technology transfer, Proving, In vitro analysis, Laboratory animals, Reprints.

**PB93-229557/REB** PC **A02/MF A01**
Health Effects Research Lab., Research Triangle Park, NC.
**Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.** Journal article.
Kentucky Univ., Lexington.
A. C. Beach, S. A. Agarwall, G. R. Lambert, S. Nesnow, and R. C. Gupta. c1993, 7p EPA/600/J-93/337
Contract EPA-68-D1-0148
Pub. in Jnl. of Carcinogenesis, v14 n4 p767-771 Apr 93. Prepared in cooperation with Environmental Health Research and Testing, Inc., Research Triangle Park, NC. Sponsored by Health Effects Research Lab., Research Triangle Park, NC.

Cyclopenta(c,d)pyrene (CPP) is a ubiquitous polycyclic aromatic hydrocarbon with potent mutagenic and carcinogenic activity. The trans isomer of 3,4-dihydro-3,4-dihydroxy-cyclopenta(c,d)pyrene has been shown to be the major metabolic product of CPP in rat, mouse, or human microsomal systems as well as in peroxyl radical-generating systems indicating the preferential formation of its obligatory precursor, CPP-3,4-epoxide. The direct mutagenicity of CPP-3,4-epoxide, the inactivity of 3,4-dihydro-CPP, and the DNA adduct forming capacity of CPP in vivo has prompted analysis of the DNA adduct forming capacity of CPP-3,4-epoxide to provide information pertaining to: (1) the role this postulated major ultimate mutagenic metabolite may plan in the formation of DNA adducts in vivo; (2) the base selectivity of CPP-3,4-epoxide DNA adducts; and (3) the role of CPP-3,4-epoxide in the mutagenicity/carcinogenicity of CPP. CPP-3,4-epoxide was reacted with calf thymus DNA, dGp, dAp, dTp, dCp, poly dB-dC, poly dA-dT, and poly dG. Adducts were analyzed by the butanol-enhanced version of (32)P-postlabeling. Four major and at least three minor adducts formed with DNA in vitro, which were further analyzed for their base-selectivity. A similar spectra of adducts was exhibited by dGp, poly dG-dC and poly dG. dCp, dTp, and dAp formed one, two, and four adducts, respectively. Adducts derived from either dGp, poly dG-dC, or poly dG comigrated with the DNA adducts in 3 solvent systems indicating that CPP-3,4-epoxide forms DNA adducts almost exclusively with deoxyguanosine.

Keywords: *Deoxyribonucleic acids, *Mutagens, *Carcinogens, *Nucleotides, Microsomes, DNA damage, Reprints, *Epoxide/cyclopentapyrene.

**PB93-229565/REB** PC **A02/MF A01**
**Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Environmental Toxicology Div.
W. H. Glaze, J. B. Andelman, R. J. Bull, R. B. Conolly, and C. D. Hertz. c1993, 6p EPA/600/J-93/338
Pub. in American Water Works Association Jnl., v85 n3 p53-56 Mar 93. See also PB93-112290.

In order to minimize the levels of potentially toxic disinfectants and disinfection by-products in treated water while maintaining adequate protection against microbiological contamination, the total risks associated with disinfection have to be measured and compared with the risks from microbial agents. Because much work has already been carried out on chlorination and its by-products, it is recommended that research focus on major disinfection alternatives, i.e., ozonation, chloramination, carbon dioxidation, and the most practical combinations of these options. The primary research needs are (1) assessment of the relative toxicological hazards of the disinfectants and their by-products and (2) development of biologically based models for the dose-response relationships of these chemicals.

Keywords: *Disinfectants, *Health hazards, *Risk assessment, Chemical removal(Water treatment), Chlorination, Chemical reactions, By-products, Potable water, Public health, Dose-response relationships, Reprints.

**PB93-229573/REB** PC **A03/MF A01**
Health Effects Research Lab., Research Triangle Park, NC.
**Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.** Journal article.
SRI International, Menlo Park, CA. Neuroscienc Dept.
C. S. Rebert, W. K. Boyes, G. T. Pryor, D. J. Svensgaard, and K. M. Kassay. c1993, 13p EPA/600/J-93/339
Pub. in Jnl. of Psychophysiology, v14 n2 p49-59 1993. Sponsored by Health Effects Research Lab., Research Triangle Park, NC.

Because exposures to toxic agents typically involve more than one substance, it is necessary to know if combined exposures pose different risks than those to single agents. Many solvents have been implicated in central nervous disorders and some of them are known to produce hearing loss, probably mediated by damage to cochlear hair cells. Hearing loss was studied by recording the brainstem auditory evoked response (BAER) in male Long Evans rats exposed 8 h/day for 5 days to mixtures of styrene (STY) and trichloroethylene (TCE). Dose groups included air or solvent pairs (STY/TCE) in the following concentrations (ppm): (0:3000), (250:2250), (500:1500), (750:750) and (1000:0). Decreased BAER amplitude, indicative of hearing loss, was correlated with blood levels of total solvent. The effects were as predicted by a linear dose-addition model, indicating neither synergistic nor antagonistic interactions at the concentrations studied. (Copyright (c) 1993 Elsevier Science Publishers B.V.)

Keywords: *Solvents, *Styrene, *Trichloroethylene, *Hearing loss, Dose-response relationships, Auditory evoked potentials, Rats, Hair cells, Cochlea, Statistical analysis, Blood chemical analysis, Reprints.

**PB93-229581/REB** PC **A02/MF A01**
Health Effects Research Lab., Research Triangle Park, NC. Genetic Toxicology Div.
**In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.** Journal article.
National Center for Toxicological Research, Jefferson, AR.
D. Herreno-Saenz, F. E. Evans, T. Heinze, J. Lewtas, and P. P. Fu. c1992, 9p EPA/600/J-93/340
Pub. in Toxicology, v5 n6 p863-869 Nov/Dec 92. Sponsored by Health Effects Research Lab., Research Triangle Park, NC. Genetic Toxicology Div.

The metabolism and DNA adduct formation by the mutagenic environmental contaminant 2-nitrofluoranthene (2-NFA) was studied. Incubation under aerobic conditions with liver microsomes of rats pretreated with 3-methylcholanthrene yielded trans-7,8-dihydroxy-7,8-dihydro-2-nitrofluoranthene, trans-9,10-dihydroxy-9,10-dihydro-2-nitrofluoranthene, and 7-, 8-, and 9-phenolic metabolites. When the epoxide hydrolase inhibitor, 3,3,3-trichloropropylene was present in the incubation, only phenolic metabolites were detected. Under hypoxic conditions, 2-aminofluoranthene was obtained, together with a trace of the ring-oxidized metabolites. The activated metabolite, N-hydroxy-2-aminofluoranthene, was prepared in situ and reacted with calf thymus DNA. Upon enzymatic hydrolysis of the DNA and purification by HPLC, a C8-substituted deoxyguanosine adduct, N-(deoxyguanosin-8-yl)-2-aminofluoranthene, was identified by mass and proton NMR spectral analysis. This adduct was also formed at a level of 10 pmol/mg of DNA when 2-NFA was metabolized by xanthine oxidase, 6 pmol/mg of DNA from incubation with liver microsomes of rats pretreated with 3-methylcholanthrene, and 3 pmol/mg of DNA from metabolism by liver microsomes of rats pretreated with phenobarbital.

Keywords: *Metabolic activation, *DNA damage, *Mutagens, *Environmental pollutants, Liquid chromatography, Rats, In vitro analysis, Liver microsomes, Nuclear magnetic resonance, Enzyme inhibitors, Epoxide hydrolases, Carcinogens, Mass spectroscopy, pH, Reprints, *2-Nitrofluoranthene.

**PB93-229599/REB** PC **A03/MF A01**
Health Effects Research Lab., Research Triangle Park, NC.
**Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.** Journal article.
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
K. L. McDaniel, and V. C. Moser. c1993, 14p EPA/600/J-93/341
Contract EPA-68-02-4450
Pub. in Neurotoxicology and Teratology, v15 n2 p71-83 Mar/Apr 93. See also PB91-117101. Sponsored by Health Effects Research Lab., Research Triangle Park, NC.

The ability of a neurobehavioral screening battery to differentiate the effects of two pyrethroids, permethrin and cypermethrin, was assessed in this experiment. Although the structures of these pesticides differ only in the alpha-cyano group, the behavioral syndromes associated with the Type I and II pyrethroids are quite different. The tests included a functional observational battery which is a series of subjective and quantitative measures of neurological function and behavior, and an automated measure of motor activity. Our results verified previous reports in the literature describing these different syndromes, i.e., aggressive sparring behavior, fine to whole-body tremor, hyperthermia, and decreased motor activity for the Type I pyrethroid permethrin, and pawing, burrowing, salivation, whole body

tremor to choreoathetosis, hypothermia, and lowered motor activity for the Type II pyrethroid cypermethrin. In addition, we report that permethrin produced decreased grip strengths, increased resistance to capture, increased reactivity to a click stimulus, and induced head and forelimb shaking and agitated behaviors, whereas cypermethrin produced pronounced neuromuscular weakness and equilibrium changes, retropulsion, lateral head movements, alterations in responses to various stimuli, and increased urination. Although there were similarities in some effects (e.g., decreased motor activity), the pesticides differed sufficiently in their overall behavioral profiles, and severity and time course of effects, to discriminate these two compounds. Thus, this type of screening approach is sensitive enough to differentiate these pyrethroids for hazard identification purposes. (Copyright (c) 1993 Pergamon Press Ltd.)

Keywords: *Toxicology, *Pyrethrins, *Nervous system, Motor activity, Rats, Physiology, Animal behavior, Reprints, *Permethrin, *Cypermethrin, *Neurobehavioral tests.

**PB93-229607/REB** PC **A02**/MF **A01**
Health Effects Research Lab., Research Triangle Park, NC. Environmental Toxicology Div.
**Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.** Journal article.
M.D. Anderson Cancer Center, Houston, TX.
A. Jeevan, R. Evans, E. L. Brown, and M. L. Kripke. c1992, 8p EPA/600/J-93/342
Pub. in Jnl. of Investigative Dermatology, v99 n1 p59-64 Jul 92. Sponsored by Health Effects Research Lab., Research Triangle Park, NC. Environmental Toxicology Div.

In the study, it was investigated whether mice given ultraviolet (UV)-B (280-320 nm) radiation in doses sufficient to alter cutaneous immune cells and impair the induction of contact hypersensitivity would also have impaired resistance to infectious agents administered at the site of UV irradiation. C3H mice were exposed to 400 J/sq m UVR from FS40 sunlamps on four consecutive days. Immediately after the last UV treatment, groups of mice were injected subcutaneously with Candida albicans, injected intradermally (ID) with Mycobacterium bovis bacillus Calmette-Guerin (BCG), or infected percutaneously with Schistosoma mansoni in UV-irradiated skin. The induction of the delayed hypersensitivity response to C. albicans and BCG, as assessed by footpad swelling, was unaffected by UV irradiation. However, the number of viable mycobacteria recovered from the lymphoid organs of BCG-infected mice was increased significantly in the UV-irradiated animals for a period of more than 2 months. The ability of UV radiation to impair the development of cell-mediated immunity to antigens introduced in a UV-irradiated site is not universal and depends on the particular antigen administered.

Keywords: *Ultraviolet rays, *Candida albicans, *Mycobacterium bovis, *Schistosoma mansoni, Mice, Infections, Cellular immunity, Delayed hypersensitivity, Lymphoid tissue, Reprints.

**PB93-229615/REB** PC **A02**/MF **A01**
Health Effects Research Lab., Research Triangle Park, NC.
**Short Communication: Improved Thin-Layer Chromatographic Separation of 32P-Postlabeled DNA Adducts.** Journal article.
Kentucky Univ., Lexington.
G. G. Spencer, A. C. Beach, and R. C. Gupta. c1993, 9p EPA/600/J-93/343
Grants EPA-R-816185, NIEHS-ES-07266-02
Pub. in Jnl. of Chromatography, Biomedical Applications, v612 n2 p295-301 Mar 93. Sponsored by Health Effects Research Lab., Research Triangle Park, NC., and National Inst. of Environmental Health Sciences, Research Triangle Park, NC.

DNA adducts represent the putative initiating event in the chemical carcinogenesis process. (32)P-Postlabeling is one of several assays which have been developed for the sensitive detection of DNA adducts. An integral part of the (32)P-postlabeling assay is the separation of adducted nucleotides by multidirectional, multisolvent, anion-exchange polyethyleneimine-cellulose thin-layer chromatography. In the study the use of a dilute ammonium hydroxide solvent for D4 chromatography is introduced and compared to other standard solvents such as lithium chloride-Tris/HCl-urea, sodium phosphate--Tris/HCl-urea, and isopropanol-4 M ammonium hydroxide for adduct separation, resolution, recovery, retention of background noise, and chromatography development time. 0.2 M ammonium hydroxide worked well for the recovery, separation, and resolution of a wide array of adducts derived from highly lipophilic polycyclic aromatic hydrocarbons and aromatic amines. In addition, this solvent required much less time ($< 1/4$) as compared to the other solvents and more importantly allowed the separation of adducts which otherwise comigrated and were not visible when using the other three D4 solvents. Background radioactivity per sq cm of the thin layers was also reduced two- to three-fold with the ammonia solvent versus the urea-based solvents. Thus, the use of this dilute ammonia system provides powerful resolution in a time-efficient manner.

Keywords: *DNA damage, *Deoxyribonucleic acids, *Thin layer chromatography, Phosphorus radioisotopes, Reagents, Solvents, Reprints.

**PB93-229623/REB** PC **A03**/MF **A01**
**Biotransformation and Mineralization of Alkylbenzenes under Denitrifying Conditions.** Journal article.
Robert S. Kerr Environmental Research Lab., Ada, OK.
S. R. Hutchins. c1993, 14p EPA/600/J-93/344
Pub. in Environmental Toxicology and Chemistry: An International Jnl., v12 n8 p1413-1423 Aug 93. See also PB87-168084 and PB91-171892.

Previous laboratory studies have shown that alkylbenzenes could be degraded under denitrifying conditions by indigenous subsurface microbial populations in a shallow water table aquifer at Traverse City (MI) that was contaminated with JP-4 jet fuel. The objective of these tests, was to evaluate the extent of BTEX biodegradation by acclimated and nonacclimated aquifer microorganisms under denitrifying conditions, using radiolabeled compounds either as sole source substrates or in mixtures.

Keywords: *Water pollution control, *Biodegradation, *Ground water, Denitrification, Microorganisms, Aquifers, Biological treatment, Oil pollution, Land pollution, Anaerobic conditions, Underground storage, Storage tanks, Mineralization, Reprints, Traverse City(Michigan), BTEX(Benzene Toluene Ethylbenzene Xylene), Alkylbenzenes, Microcosms.

**PB93-229631/REB** PC **A02**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Dissolved Organic Carbon and Sulfate Sorption by Spodosol Mineral Horizons.** Journal article.
Wyoming Univ., Laramie.
G. F. Vance, and M. B. David. c1992, 10p EPA/600/J-93/345
Pub. in Soil Science, v154 n2 p136-144 1992. See also PB90-140740 and PB91-116798. Prepared in cooperation with Illinois Univ. at Urbana-Champaign. Sponsored by Corvallis Environmental Research Lab., OR.

Carbon cycling in soils is an important process that involves the movement of large amounts of dissolved organic carbon (DOC) within the soil profile. Recent work in a variety of soils has indicated that DOC sorption properties of mineral horizons play an important role in the retention of DOC. As part of the Watershed Manipulation Project at Bear Brook Watershed in Maine (BBWM), the solubilization and movement of carbon in terrestrial and aquatic ecosystems were evaluated. For the study, the objectives were to: (1) determine the sorption properties of mineral horizons present on the BBWM watersheds for SO4 and DOC; (2) evaluate the effect of solution pH and temperature on soil DOC sprotion; and (3) examine competitive sorption effects between DOC and SO4.

Keywords: *Carbon, *Dissolved organic matter, *Soil chemistry, Bear Brook, Maine, Soil profiles, Soil horizons, Sulfates, Environmental transport, Sorption, pH, Temperature, Reprints, Spodosols.

**PB93-229649/REB** PC **A03**/MF **A01**
**Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.** Journal article.
Corvallis Environmental Research Lab., OR.
D. L. Phillips, D. White, and C. B. Johnson. c1993, 14p EPA/600/J-93/346
Pub. in Land Degradation and Rehabilitation, v4 p61-72 1993. Prepared in cooperation with ManTech Environmental Technology, Inc., Corvallis, OR.

Atmospheric general circulation models (GCMs) project that increasing atmospheric concentrations of CO2 and other greenhouse gases may result in global changes in temperature and precipitation over the next 40-100 years. Equilibrium climate scenarios from four GCMs run under doubled CO2 conditions were examined for their effect on the climatic potential for sheet and rill erosion in the conterminous USA. Changes in the mean annual rainfall factor (R) in the Universal Soil Loss Equation (USLE) were calculated for each cropland, pastureland and rangeland sample point in the 1987 National Resources Inventory. With all other USLE factors held constant these changes in R translated to changes in the sheet and rill erosion national average of $+2$ to $+16$ per cent in croplands, -2 to $+10$ per cent in pasturelands and -5 to $+22$ per cent in rangelands under the eight scenarios. Land with erosion rates above the soil loss tolerance (T) level and land classified as highly erodible (erodibility index $> 8$) also increased slightly. (Copyright (c) 1993 John Wiley and Sons, Ltd.)

Keywords: *Soil erosion, *Climate change, *General circulation models, *Atmospheric effects, Climate models, Greenhouse gases, Rainfall, Precipitation(Meteorology), Soil mechanics, Erosion rates, Surface runoff, Maps, Reprints, Universal soil loss equation.

**PB93-229656/REB** PC **A03**/MF **A01**
**Conservation and Sequestration of Carbon: The Potential of Forest and Agroforest Management Practices.** Journal article.
Corvallis Environmental Research Lab., OR.
R. K. Dixon, J. K. Winjum, and P. E. Schroeder. c1993, 17p EPA/600/J-93/347
Pub. in Global Environmental Change, v40 p159-173 1993. See also PB92-122787. Prepared in cooperation with ManTech Environmental Technology International, Inc., Corvallis, OR.

Forests play a major role in the Earth's carbon cycle through assimilation, storage, and emission of CO2. Establishment and management of boreal, temperate, and tropical forest and agroforest systems could potentially enhance sequestration of carbon in the terrestrial biosphere. A biologic and economic analysis of forest establishment and management options from 94 nations revealed that forestation, agroforestry, and silviculture could be employed to conserve and sequester one gigaton (Gt) of carbon annually over a 50 year period. The marginal cost of implementing these options to sequester 55 Gt of carbon would be approximately $10/ton.

Keywords: *Conservation, *Forest management, *Carbon dioxide, Economic analysis, Biomass, Cost analysis, Silviculture, Weight(Mass), Carbon cycle, Global, Biomes, Ecosystems, Air pollution effects, Plant growth, Species diversity, Foreign countries, Reprints, Terrestrial biosphere, Reforestation.

**PB93-229664/REB** PC **A02**/MF **A01**
**Forest Fires in Russia: Carbon Dioxide Emissions to the Atmosphere.** Journal article.
Corvallis Environmental Research Lab., OR.
R. K. Dixon, and O. N. Krankina. c1993, 8p EPA/600/J-93/348
Pub. in Canadian Jnl. of Forest Research, v23 n4 p700-705 1993. Prepared in cooperation with Saint Petersburg Forestry Academy (Russia).

The objectives of the study are to (1) assess the areal extent and frequency of forest fires in Russia from 1971 to 1991, (2) estimate present and future contributions of forest fires to atmospheric CO2-C emissions, and (3) discuss the role of Russian forest wildfire in the current global carbon cycle and possible changes in the future.

Keywords: *Russia, *Forest fires, *Carbon dioxide, Greenhouse gases, Forest management, Burning, Emissions, Fire prevention, Carbon cycle, Biomass, Greenhouse effect, Reprints.

**PB93-229672/REB** PC **A02**/MF **A01**
Corvallis Environmental Research Lab., OR.

**Reactions That Modify Chemistry in Lakes of the National Surface Water Survey.** Journal article.
Iowa Univ., Iowa City. Dept. of Civil and Environmental Engineering.
S. Lee, and J. L. Schnoor. c1988, 8p EPA/600/J-93/349
Pub. in Environmental Science Technology, v22 n2 p190-195 Feb 88. See also PB87-110383. Sponsored by Corvallis Environmental Research Lab., OR.

A simple mass balance equation was used to determine the important reactions that occur in selected lake watersheds of the Adirondack Park, the Southern Blue Ridge Province of the Appalachian Mountains, and a portion of northern Flordia. The mass balance requires only three input parameters: precipitation ion concentration, lake ion concentration, and an evapoconcentration factor appliable to the watershed. It was determined that the most important alkalizing reaction in all three study areas was the production of base cations (Ca2+, Mg2+, and Na1+) by ion exchange and chemical weathering, followed by sulfate adsorption in the Southern Blue Ridge watersheds and nitrate assimilation/reduction in the Adirondack Park. (Copyright (c) 1988 American Chemical Society.)

Keywords: *Lakes, *Water chemistry, *Acidification, Chemical reactions, Mass balance, Ion exchange, Chlorides, Acid rain, Runoff, Watersheds, Acid neutralizing capacity, Reprints, Eastern Region(United States), National Surface Water Survey.

**PB93-229680/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.** Journal article.
Woods Hole Research Center, MA.
R. A. Houghton, J. D. Unruh, and P. A. Lefebvre.
c1993, 18p EPA/600/J-93/350
Pub. in Global Biogeochemical Cycles, v7 n2 p305-320 Jun 93. Sponsored by Corvallis Environmental Research Lab., OR.

The authors used published ground studies together with global vegetation index data from the NOAA7 satellite to estimate current land cover in tropical regions. Superimposing this map of current land cover over maps depicting the distribution of vegetation cover prior to human disturbance, obtained an estimate of about 3200 x 10 to the sixth power ha in the tropics (almost 60% of the total land area considered) where woody biomass had been decreased and carbon might again be sequestered. They then calculated the amount of carbon that could be withdrawn from the atmosphere and stored in woods biomass if several management options were implemented.

Keywords: *Tropical regions, *Carbon sinks, *Forests, *Vegetation, Carbon dioxide, Greenhouse gases, Forest management, Land development, Ecosystems, Land use, Biomass, Reforestation, Grasslands, Reprints, Land cover.

**PB93-229698/REB** PC **A02**/MF **A01**
**Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.**
Environmental Research Lab., Narragansett, RI.
D. J. Keith, V. Capone, G. S. Cook, D. A. Casey, and D. N. Wiley. c1992, 7p EPA/600/A-93/204, ERLN-1420
Also pub. as Environmental Research Lab., Narragansett, RI. rept. no. CONTRIB-1405. Proceedings of Oceans 1992, Mastering the Oceans through Technology, Volume 1, Newport, RI., October 26-29, 1992. See also PB85-170066. Prepared in cooperation with Science Applications International Corp., Newport, RI., Marine Search and Survey, Princeton, NJ., International Wildlife Coalition, North Falmouth, MA

The oceans have frequently been used for disposal for a variety of industrial, chemical, and low-level radioactive wastes. In Massachusetts Bay, several areas have been used for the permitted and possible non-permitted disposal of waste containers with environmentally sensitive materials. During the Summer and Fall of 1991, the Industrial Waste Site (IWS) and the Boston Lightship Dumping Ground (BLDG) in Massachusetts Bay were the subject of intensive surveys to determine the areal extent, distribution and location of waste containers.

Keywords: *Massachusetts Bay, *Hazardous materials, *Marine disposal, Water pollution detection, Maine Gulf, Environmental surveys, Industrial wastes, Debris, Mapping, Side looking sonar, Reprints, Waste containers, Dump piles.

**PB93-229706/REB** PC **A02**/MF **A01**
Environmental Research Lab., Narragansett, RI.
**Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.**
Science Applications International Corp., Newport, RI.
D. A. Carey, D. Keith, J. Schoenherr, and P. Matthias.
1992, 8p EPA/600/A-93/205, , ERLN-1421
Contract EPA-68-C1-0005
Pub. in Proceedings of Oceans '92 of the Institute of Electrical and Electronic Engineers, October 26-29, 1992, p207-212. Sponsored by Environmental Research Lab., Narragansett, RI.

Within Massachusetts Bay, a number of areas have been used as disposal sites for permitted and possibly non-permitted dumping of radioactive and hazardous wastes. The human and environmental risks associated with these disposal practices are directly related to the location, contents and condition of discrete waste containers. The resource management problem is being addressed with Geographic Information System (GIS) techniques that allow the integration of a variety of data from several sources into a single, integrated relational database/GIS. The relational database will then be used as a tool for the comprehensive evaluation of source characterization and extent of contamination during public health and ecological risk assessments.

Keywords: *Massachusetts Bay, *Marine disposal, *Environmental surveys, Geographic information systems, Hazardous materials, Low-level radioactive wastes, Environmental impact assessment, Risk assessment, Public health, Debris, Reprints, Boston Lighthouse Dumping Ground, Waste containers.

**PB93-229714/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Narragansett, RI.
**Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.**
Florida Atlantic Univ., Boca Raton. Dept. of Ocean Engineering.
S. G. Schock, D. J. Keith, D. L. Debruin, E. Dettmann, and G. Tracey. c1992, 7p EPA/600/A-93/206
Contract EPA-68-C1-0005
Proceedings of OCEANS 92 of the Institute of Electrical and Electronics Engineers, Volume 1, Newport, RI., October 26-29, 1992. Prepared in cooperation with Science Applications International Corp., Narragansett, RI. Sponsored by Environmental Protection Agency, Narragansett, RI.

The distribution of dredged sediments is measured at the Calcasieu Ocean Dredged Material Disposal Site (ODMDS) using a chirp sonar immediately after disposal and two months later. Subbottom reflection data, generated by a chirp sonar transmitting a 4 to 20 kHz FM sweep, is processed to increase the vertical resolution of subbottom images from 4 cm to 1 cm. The distance between the sediment-water interface reflection and that generated by the underlying sediments is measured to generate contour maps of dredge material thickness. The strength of the sediment-water interface reflection is used to predict the mean grain size and bulk density of the surficial sediment layer. Contour maps of mean grain size, bulk density and sediment thickness provide the spatial and temporal movement of the dredged material.

Keywords: *Louisiana, *Marine disposal, *Dredged materials, Sediments, Sediment-water interfaces, Environmental surveys, Sonar, Mapping, Bulk density, Grain size, Thickness, Reprints, Calcasieu Bar Channel.

**PB93-229722/REB** PC **A02**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Longterm Response of Lakes to Acidic Deposition.** Symposium paper.
Iowa Univ., Iowa City. Dept. of Civil and Environmental Engineering.
J. L. Schnoor, S. Lee, and K. P. Georgakakos. 1989, 10p EPA/600/A-93/207
Pub. in Environmental Engineering Proceedings of Specialty Conference/EE Div./ASCE, Austin, TX., July 10-12, 1989 p584-594. See also PB90-106204. Prepared in cooperation with Kyonggi Univ., Suwon (Republic of Korea). Dept. of Environmental Engineering. Sponsored by Corvallis Environmental Research Lab., OR.

The longterm response of lakes in the northeastern United States to different levels of acidic deposition was predicted by using a lumped parameter hydrologic/biogeochemical model, the Enhanced Trickle-Down Model. Eighty-one lake watersheds were simulated for a 50-year period with constant levels of acid deposition and a 30 percent decreasing ramp function of acid deposition. Results indicated little response under constant loading, but seven percent of the lakes recovered from acidification when acid deposition was decreased. Uncertainty of the results was estimatE via a first order second moment analysis.

Keywords: *Lakes, *Acidification, *Water chemistry, Air pollution effects, Acid rain, Air water interactions, Acid neutralizing capacity, Sampling, Chemical composition, Watersheds, Mathematical models, Reprints, Northeastern Region(United States), Long-term response.

**PB93-229730/REB** PC **A03**/MF **A01**
**Total Volatile Organic Concentrations in 2700 Personal, Indoor, and Outdoor Air Samples Collected in the US EPA Team Studies.** Symposium paper.
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
L. Wallace, E. Pellizzari, and C. Wendel. c1991, 15p EPA/600/A-93/208
Pub. in Indoor Air, v4 p465-477 1991. See also PB88-100060 and PB91-182857. Prepared in cooperation with Research Triangle Inst., Research Triangle Park, NC., and Karch and Associates, Inc., Washington, DC.

Total volatile organic compounds have been implicated in the Sick Building Syndrome. Very few measurements of TVOC have been made in homes and buildings in the United States. However, stored gas chromatography-mass spectrometry (GC-MS) data on 12-hour average values of individual VOCs from 750 homes and 10 buildings were available from EPA's Total Exposure Assessment Methodology (TEAM) Studies (1981-88). An initial study to determine the feasibility of obtaining a TVOC value from stored GC/MS data showed that TVOC estimates could be obtained with adequate precision. Therefore TVOC values were calculated for about 2700 personal, indoor, and outdoor air samples collected in the TEAM Studies. (Copyright (c) 1991 Munksgaard.)

Keywords: *Air pollution sampling, *Environmental surveys, Ambient air quality, Indoor air pollution, Seasonal variations, Public health, Buildings, Exposure, Statistical analysis, Reprints, *Volatile organic compounds, Sick building syndrome, Personal monitors, TEAM(Total Exposure Assessment Methodology).

**PB93-229748/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Genetic and Cell-Free Studies of PCB Biodegradation in 'Pseudomonas putida' LB400.** Book chapter.
General Electric Corporate Research and Development, Schenectady, NY.
F. J. Mondello, and L. H. Bopp. 1987, 13p EPA/600/A-93/209
Grant EPA-CR-812727
Pub. in Biotech USA, p171-181, 1987. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

An investigation into the ability of strains defective in biphenyl metabolism to degrade PCBs, strongly suggests that the same enzymes are used for both substrates. The genes encoding these enzymes have been isolated and are being characterized. The ability of cell-free extracts of P. putida LB400 to degrade PCBs has been examined. Results indicate that the enzymes for PCB metabolism are present in the soluble portion of the extract.

Keywords: *Biodegradation, *Polychlorinated biphenyls, *Bacteria, *Enzyme activity, Genetics, Metabolic activation, Microbiology, Biochemistry, Molecular biology, Biological pathways, Chemical reactions, Mutants, Reprints, Pseudomonas putida, Strains(Biology).

**PB93-229755/REB** PC **A03**/MF **A01**
**Field Applications of Robotic Systems in Hazardous Environments, p1-29 1993. See also PB86-176344 and PB92-166743.** Book chapter.
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
C. R. Esposito, U. Frank, D. Sullivan, and R. Cibulskis. c1993, 34p

The chapter addresses field applications of robotic systems at hazardous waste sites and in handling hazardous materials. Included are an overview of EPA's current programs, as they relate to robotic technology at hazardous waste sites; potential application of robotics at those waste sites; examples of EPA's robotics projects; and the benefits of robotics to EPA.

Keywords: *Robots, *Hazardous materials, *Occupational safety and health, Superfund, Waste management, Safety engineering, Sites, Air pollution sampling, Water pollution sampling, Occupational exposure, Field tests.

**PB93-229763/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Biological Approaches for Polychlorinated Biphenyl Degradation.** Book chapter.
General Electric Corporate Research and Development, Schenectady, NY.
R. Unterman, D. L. Bedard, M. J. Brennan, L. H. Bopp, and F. J. Mondello. 1993, 19p EPA/600/A-93/211
Grant EPA-CR-812727
Pub. in Environmental Biotechnology: Reducing Risks from Environmental Chemicals through Biotechnology, p253-269. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

It will be important in the future to evaluate genetically engineered PCB-degradative strains for their ability to degrade PCBs as actually found in the environment. The integration of genetic and soil studies is a logical and practical extension of important and promising research on PCB biodegradation. Thus, the authors are now in a position to exploit the potential of modern biotechnology for destroying environmental contaminants such as PCBs.

Keywords: *Polychlorinated biphenyls, *Biodegradation, *Bacteria, *Soil contamination, Genetic engineering, Biotechnology, Genetics, Microbiology, Metabolic activation, Biological pathways, Biological activity, Remediation, Tests, Reprints, Congeners, Strains(Biology).

**PB93-229771/REB** PC **A07**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Investigation of Possible Uses of Surplus CFC/Halon Chemicals.** Final rept. Sep 91-Aug 92.
Radian Corp., Austin, TX.
J. Sherwell. Aug 93, 131p EPA/600/R-93/158
Contract EPA-68-01-0031
See also PB89-181275 and PB90-116955. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The object of the project was to investigate the possibility of alternate uses for surplus CFC/halon chemicals as these are replaced in their traditional service roles. These uses may be beneficial new products or substances that are nonhazardous to the environment. The CFC/halons investigated in the study were: CFC-11; CFC-12; HCFC-22; CFC-113; CFC-114; CFC-115; R-500; R-502; Halon-1211; Halon-1301; Halon-2402. The emphasis of the study was on the U.S. market; however, where data were available, global estimates were sought. The study had three major components: (1) Identification of potential transformation technologies; (2) Identification of potential U.S. markets for transformation; (3) Engineering evaluation of the transformation technologies.

Keywords: *Chlorofluorocarbons, *Utilization, Chemical reactions, Market, Economic analysis, Air pollution abatement, *Halons, Vinylidene fluoride, Transformation technology.

**PB93-229789/REB** PC **A14**/MF **A03**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Weatherability of Enhanced-Degradable Plastics.**
Research Triangle Inst., Research Triangle Park, NC.
A. L. Andrady. Aug 93, 313p EPA/600/R-93/162
Contract EPA-68-02-4544
See also AD-A217 180. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The main objective of the study was to assess the performance and the associated variability of several selected enhanced degradable plastic materials under a variety of different exposure conditions. Several commercially available materials, including both photodegradable and biodeteriorable plastics were chosen for inclusion in the study. Exposure scenarios consisted of outdoor direct exposure, soil burial, and marine and freshwater exposure. Laboratory exposure scenarios consisted of accelerated weathering by Xenon Arc Weather-Ometer and lab accelerated soil burial. Results of the study showed the elongation at break and the energy to break to be the test parameters most sensitive to weathering-induced changes.

Keywords: *Biodeterioration, *Degradation, *Plastics, *Starches, *Weathering, Photochemical reactions, Polyethylene, Marine disposal, Ocean environments, Accelerated tests.

**PB93-229813/REB** PC **A13**/MF **A03**
**Assessment and Control of Bioconcentratable Contaminants in Surface Waters.** Draft rept.
Environmental Protection Agency, Washington, DC. Office of Water.
Mar 91, 292p

The guidance document provides guidance to state and regional regulatory agencies in developing reference ambient criteria and determining necessary controls to protect against human health impacts due to consumption of contaminated fish and shellfish.

Keywords: *Toxicity, *Fishes, *Public health, *Water pollution control, *Surface waters, *Waste disposal, Guidelines, Water pollution effects, Bioaccumulation, Tissues(Biology), Shellfish, Food consumption, Contamination, Exposure, State agencies, Regions, Concentration(Composition), Chemical compounds, Risk assessment, Tables(Data), US EPA.

**PB93-229847/REB** PC **A03**/MF **A01**
**Guidance on Evaluation, Resolution, and Documentation of Analytical Problems Associated with Compliance Monitoring.**
Environmental Protection Agency, Washington, DC. Office of Water.
Jun 93, 50p EPA/821/B-93/001

The document addresses issues related to the analysis of organic compounds regulated under the Organic Chemicals, Plastics, and Synthetic Fibers Effluent Guideline Limitations promulgated by the EPA in 1987. However, much of the approach described herein can be applied to the analysis of other organics as well as to metals.

Keywords: *Water pollution monitoring, *Standards compliance, *Pollution regulations, Plastics industry, Chemical industry, Synthetic fibers, Industrial wastes, Waste water, Organic materials, Chemical effluents, Water pollution sampling, Administrative procedures, Requirements, Chemical analysis, Clean Water Act.

**PB93-229854/REB** PC **A11**/MF **A03**
**Virginian Province Demonstration Report. EMAP-Estuaries, 1990.**
Environmental Protection Agency, Washington, DC. Environmental Monitoring and Assessment Program.
Jun 93, 241p EPA/620/R-93/006
See also PB92-102656 and PB93-202851.

The document, the 1990 Virginian Province Demonstration Project, in the estuaries of the mid-Atlantic states was the first such demonstration of the Environmental Monitoring and Assessment Program (EMAP). The 1990 project involved 500 sampling visits to 217 estuarine and near shore sites from Cape Cod to the mouth of Chesapeake Bay. The preliminary assessment of the environmental condition of the Virginian Province identified differences in the extent of environmental degradation among specific habitats and classes of estuaries that should be of great interest to resource managers. In addition, the methodology. EMAP is also developing Reports covering other Demonstration Projects for other resource groups and will produce Annual Statistical Summaries from each Resource Group as the program is implemented.

Keywords: *Environmental monitoring, *Water pollution effects, *Estuaries, *Habitats, Sites, Cape Cod, Chesapeake Bay, Bioindicators, Toxicity, Natural resource management, Water pollution sampling, Biodeterioration, Risk assessment, Benthos, Sediments, Concentration(Composition), Dissolved oxygen, Time series analysis, Chemical compounds, Tables(Data), Graphs(Charts), *Middle Atlantic Region(United States).

**PB93-229862/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Control Technology Center.
**Initial Assessment of Emissions from Heat Setting Carpet Yarn.** Final rept.
TRC Environmental Corp., Chapel Hill, NC.
B. McMinn, and D. Ocamb. Aug 93, 53p CH-93-27, EPA/600/R-93/161
Contract EPA-68-D2-0181
See also PB-284 804, PB83-153015 and PB90-230426. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Control Technology Center.

The report presents the results of an initial assessment of emissions generated during the processing and heat setting of carpet yarn. One step in the manufacture of carpet is the heat setting of the carpet yarns. Air emissions from some heat setting machines have resulted in reported opacities in the range of 40 to 60 percent. These emissions are believed to be attributed to the volalization of some of the lubricants, sizes, and finishes which have been applied to the carpet fibers. Chapter 2 characterizes the carpet yarn manufacturing industry and provides a general description of the raw materials these facilities use, the products manufactured, and the markets served. Chapter 2 also provides a description of the carpet yarn processing steps, including heat setting operations, and the equipment associated with each step. The heat setting emissions and potential control opportunities are identifed and characterized in Chapter 3. The report also includes an appendix which contains copies of the trip reports for the two carpet yarn facilities visited during the course of the Work Assignment.

Keywords: *Air pollution detection, *Carpets, Manufacturing, Textile industry, Synthetic fibers, Wool, Heating, Volatilization, Opacity, Raw materials, Air pollution control, *Heat set emissions.

**PB93-229870/REB** PC **A25**/MF **A06**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.**
Rutgers - The State Univ., Piscataway, NJ. Dept. of Chemical and Biochemical Engineering.
D. S. Kosson, T. T. Kosson, and H. van der Sloot. Aug 93, 578p EPA/600/R-93/167
Grant EPA-CR813198-01
See also PB92-121177. Prepared in cooperation with Army Engineer Waterways Experiment Station, Vicksburg, MS., and Netherlands Energy Research Foundation ECN, Petten. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The document provides results of evaluations conducted to determine the effectiveness of several solidification/stabilization (S/S) processes to treat air pollution control (APC) residues, combined ash and bottom ash from the combustion of municipal solid waste. Five different S/S technologies were evaluated. The untreated and treated residues, sampled from a modern state-of-art waste-to-energy plant, were subjected to a series of physical durability and chemical leaching tests. Results were used to provide a side-by-side comparison of the treatment processes and of the treated residue with untreatedresidues. The S/S processes as formulated and tested, generally did not physically decrease the potential for release of contaminants. One process, however, did significally reduce the potential for Pb release as a result of chemical treatment. The report provides information useful in designing and evaluating S/S processes for treating municipal waste combustion (MWC) residue.

Keywords: *Stabilization, *Solidification, *Combustion products, *Incineration, Waste treatment, Municipal wastes, Ashes, Ash content, Fly ash, Chemical composition, Residues, Air pollution control.

**PB93-230027/REB** PC **A04**/MF **A01**
**Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Health and Environmental Assessment.
V. J. Cogliano, A. M. Koppikar, J. M. Conis, S. C. Gibson, and J. S. Gift. Jun 88, 59p EPA/600/8-89/053, OHEA-C-073
See also PB89-181366.

The Agency's Human Health Assessment Group (HHAG) has developed a methodology for ranking CERCLA hazardous substances for the purpose of establishing reportable quantities (RQs) based on the primary criteria of potential carcinogenicity. The methodology combines the weight of evidence and potency factor to determine a hazard ranking of high, medium, or low which corresponds to an RQ of 1, 10, or 100 pounds, respectively. An appendix is included which lists 194 compounds that were evaluated for potential carcinogenicity along with their respective weight-of-evidence categories, potency factors, and hazard rankings. Profiles for each of these 194 chemicals are available as separate documents.

Keywords: *Superfund, *Hazardous materials, *Health hazards, *Risk assessment, Carcinogens, Physical properties, Chemical properties, Toxicity, Public health, Tests, Carcinogenicity, Reportable quantity, Hazard ranking.

**PB93-230629/REB** PC **A17**/MF **A03**
**Status of Pesticides in Reregistration and Special Review (Rainbow Report), June 1993.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
Jun 93, 380p EPA/738/R-93/009
See also report dated May 92, PB92-227636.

The Review lists those pesticides that are undergoing or have completed EPA's Special Review Process, or the reregistration process mandated by FIFRA '88. It summarizes the current status of each pesticide.

Keywords: *Pesticides, *Listings, *Chemical compounds, Toxicity, Reviewing, Tables(Data), *Rainbow Report, Reregistration, Special review process.

**PB93-231066/REB** PC **A11**/MF **A03**
**RCRA Public Involvement Manual.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Sep 93, 235p EPA/530/R-93/006
See also PB91-139665.

The manual provides instructions on how to plan and carry out successful public involvement in RCRA permitting and corrective action programs, which may be implemented through either permits or enforcement orders. It is intended for use by RCRA technical staff in EPA and RCRA-authorized state programs. It may also be useful to staff of RCRA-regulated facilities to which some public involvement activities are delegated. For simplicity, the term 'regulatory agency' refers to either EPA or a state agency running an EPA-authorized RCRA program and staff from those programs. The manual provides suggestions on how to implement public involvement activities, not just for the limited regulatory requirements, but efforts beyond these requirements. These additional suggested techniques represent EPA policy only. If the reader is a staff member of a state permitting agency or a facility, his or her responsibilities will vary according to what EPA has delegated, and the reader may be subject to additional policies.

Keywords: *Program management, *Solid waste disposal, *Licenses, *Citizen participation, *Pollution control, Manuals, Coordination, State programs, Government policies, US EPA, Law enforcement, Facilities, Hazardous materials, Public health, Waste treatment, Regulations, Flow charts, Requirements, Proposals, Resource Conservation and Recovery Act and 1984 Amendments, Solid Waste Disposal Act of 1976.

**PB93-231140/REB** PC **A03**/MF **A01**
**Municipal Water Pollution Prevention Program, National MWPP Conference. Held in Washington, DC. on April 27-28, 1993.**
Environmental Protection Agency, Washington, DC. Office of Water.
Jun 93, 39p EPA/832/R-93/001
Errata sheet inserted.

On April 27 and 28, 1993, EPA's Office of Wastewater Enforcement and Compliance (OWEC) hosted a meeting of State and EPA Regional and Headquarters participants in the Municipal Water Pollution Prevention (MWPP) program. The Conference included presentations and discussions of the following subjects: the status of State MWPP programs; MWPP programs in Region 6; enforcement as an MWPP tool; Wisconsin's MWPP program; the EPA Pollution Prevention Program; source reduction activities at POTWs; current EPA initiatives in water and energy conservation; pollution prevention in the Stormwater Program; measures of MWPP program success; the future of the MWPP program; and issues for EPA Headquarters to consider.

Keywords: *Water pollution, *Municipalities, *Meetings, States(United States), Waste water, Sewage treatment effluents, Licenses, POTW(Publicly Owned Treatment Works), MWPP(Municipal Water Pollution Prevention).

**PB93-231165/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Emerging Technology Report: Metals Treatment at Superfund Sites by Absorptive Filtration.** Final rept.
Washington Univ., Seattle.
M. M. Benjamin, and R. S. Sletten. Jun 93, 52p* EPA/540/R-93/515
Contract EPA-R-815784
Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The project evaluated an innovative approach for removing inorganic contaminants from the liquid phase at Superfund Sites. In the adsorptive filtration process metals are collected by attachment to a thin layer of ferrihydrite (Iron Oxide) that has been immobilized on the surface of sand grains. The modification of the sand surface allows the grains to simultaneously adsorb soluable heavy metals and remove particulate metals by filtration from a wastewater. The metals studied were Cd, Cu, and Pb present at 0.5 or 5 mg/L each, in synthetic solutions.

Keywords: *Superfund, *Metals, *Water pollution control, Hazardous materials, Waste disposal, Waste water, Liquid wastes, Sorption properties, Technology assessment, Performance evaluation, SITE(Superfund Innovative Technology Evaluation), Absorptive filtration.

**PB93-231835/REB** PC **A02**/MF **A01**
**Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
J. C. Chuang, S. A. Wise, S. Cao, and J. L. Mumford.
c1992, 8p EPA/600/J-93/379
Pub. in Environmental Science and Technology, v26 n5 p999-1004 May 92. Prepared in cooperation with Battelle, Columbus, OH. Atmospheric Science and Applied Technology, National Inst. of Standards and Technology (CSTL), Gaithersburg, MD. Organic Analytical Research Div., and Institute of Environmental Health and Engineering, Beijing (China).

In the rural Xuan Wei County, Yunnan Province, lung cancer mortality rates for women are among the highest in China. Most of these women are nonsmokers, and studies have shown that lung cancer in Xuan Wei is associated with domestic use of smoky coal under unvented conditions. The objective of the study is to determine the chemical constituents that may be linked to the high lung cancer rates in Xuan Wei using the bioassay-directed fractionation method. The results indicated that the presence of three to four-ring alkylated PAHs in the sample extract is a significant factor that may be linked to the high incidence of lung cancer in Xuan Wei, China. (Copyright (c) 1992 The American Chemical Society).

Keywords: *Indoor air pollution, *Air pollution effects(Humans), *Chemical analysis, Lung neoplasms, Bioassay, Combustion products, Particulates, Polycyclic aromatic hydrocarbons, Toxicity, Reprints, Xuan Wei(China), Yunnan(China), Coal burning, Semivolatile organic compounds.

**PB93-231843/REB** PC **A03**/MF **A01**
**Human Health Effects of Air Pollution.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Human Studies Div.
L. J. Folinsbee. c1992, 13p EPA/600/J-93/378
Pub. in Environmental Health Perspectives, v100 p45-56 1992.

Over the past three or four decades, advances have been made in understanding the actions, exposure-response characteristics, and mechanisms of action of many common air pollutants. A multidisciplinary approach using epidemiology, animal toxicology, and controlled human exposure studies has contributed to the data base. The review will emphasize studies of humans but will also draw on findings from the other disciplines.

Keywords: *Air pollution, *Health, *Epidemiology, Exposure, Respiration, Pulmonary functions, Toxicology, Sulfur dioxide, Nitrogen oxides, Carbon monoxide, Lead, Reprints.

**PB93-231850/REB** PC **A03**/MF **A01**
**Evaluation of the Effects of Methanol during Early Pregnancy in the Rat.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Developmental Toxicology Div.
A. M. Cummings. c1993, 12p EPA/600/J-93/377
Pub. in Toxicology 79, p205-214 May 93.

Recent attention to methanol (MeOH) as a potential alternative fuel prompted an evaluation of the chemical's effects during very early pregnancy. Rats were dosed by gavage during Days 1-8 of pregnancy at 0, 1.6, 2.4 or 3.2 g MeOH/kg/day. Groups of animals were killed on Days 9, 11 or 20 of pregnancy, and maternal, embryonic, or fetal parameters were assessed, depending on the stage of pregnancy. The decidual cell response (DCR) technique was also applied to rats treated with MeOH during pseudopregnancy. (Copyright (c) 1993 Elsevier Scientific Publishers Ireland Ltd.).

Keywords: *Methanol, *Exposure, *Health, Alternative fuels, Pregnancy, Rats, Implantation, Reprints.

**PB93-231868/REB** PC **A02**/MF **A01**
**Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Immunotoxicology Branch.
M. I. Gilmour, P. Park, and M. K. Selgrade. c1993, 9p EPA/600/J-93/376
Pub. in American Review of Respiratory Disease, v147 n4 p753-760 Apr 93. Prepared in cooperation with North Carolina Univ. at Chapel Hill. Center for Environmental Medicine and Lung Biology.

Ozone exposure has been shown to increase the susceptibility of mice to pulmonary bacterial infection. The differences in susceptibility of two strains of mice (C3H/HeJ and C57Bl/6) to pulmonary challenge with Streptococcus zooepidemicus are reported, and an association between O3 exposure, reduced alveolar macrophage (AM) function, and increased mortality to infection is demonstrated. After a 3-h exposure to air or to 0.4 or 0.8 ppm O3, mice received an infection of bacteria by aerosol. Subsequent mortality observed over a 20-day period for any given exposure concentration was greater in the C3H/HeJ mice than in the C57Bl/6 mice. Phagocytosis assays identified the AM from O3-exposed lungs as having an impaired ability to engulf the bacteria. Baseline phagocytic activity in C3H/HeJ mice was lower than that in C57Bl/6 mice. Microbiologic assessment of the lungs at various times after infection revealed that the streptococci proliferated rapidly in the lungs of O3-exposed mice, grew more quickly upon isolation, and displayed a mucoid colony appearance indicative of increased encapsulation. In vitro assays confirmed that the encapsulated isolates prevented binding of the bacteria to AM, and reinfec-

tion of nonexposed mice with the encapsulated isolate resulted in increased mortality compared with infection with similar numbers of the original unencapsulated bacteria.

Keywords: *Ozone, *Respiratory tract infections, *Alveolar marophages, *Virulence, *Toxicity, Microbial colony count, Mice, In vitro analysis, Phagocytosis, Graphs(Charts), Mortality, In vivo analysis, Reprints, *Streptococcus zooepidemicus.

**PB93-231876/REB** PC **A01**/MF **A01**
**Effects of 5-Fluorouracil on Embryonic Rat Palate in vitro: Fusion in the Absence of Proliferation.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Developmental Toxicology Div.
B. D. Abbott, C. Lau, A. R. Buckalew, T. R. Logsdon, and W. Setzer. c1993, 2p EPA/600/J-93/375
Pub. in Teratology 47, p541-554 May 93. Prepared in cooperation with ManTech Environmental Technology, Inc., Research Triangle Park, NC.

5-Fluorouracil (5-FU) inhibits the enzyme thymidylate synthetase (TS) which results in inhibition of DNA synthesis. 5-FU is teratogenic in many species, inducing cleft palate, limb, and tail defects. In the study, GD 14 embryonic rat palates were exposed to 5-FU in organ culture with increasing concentrations and durations of exposure. Palates exposed to 5-FU were morphologically abnormal and craniofacial shape, size, and palatal fusion pattern were affected with the severity of effects dependent on concentration and duration of exposure. Cleft palate was induced in vitro as opposing palates overlapped in a narrowed oral cavity. Palates exposed to higher levels of 5-FU were growth inhibited, but fused even though proliferation ceased and few cells were available to participate in elevation and fusion. This was demonstrated as a biphasic concentration-response profile for palatal fusion in which 0.05 to 0.15 micrograms 5-FU/ml produced decreasing rates of palatal fusion, while exposure to 0.15 to 3.0 micrograms/ml resulted in progressively increasing rates of fusion. The effects of 5-FU were detected biochemically as a reduction in TS activity which was concentration and time dependent during the first 12 hours. However, TS activity returned to control levels by 24 hours. During the first day, 5-FU did not alter protein levels, but DNA levels significantly decreased at 2.0 micrograms/ml. After 5 days in culture, DNA and protein both decreased with increasing 5-FU concentration and duration of exposure. There were no effects on cell cycle detectable by flow cytometric analysis, however 3H-TdR incorporation decreased in a concentration dependent manner. The study demonstrates that elevation and fusion can occur in the absence of growth and proliferation and that severe inhibition of growth or proliferation would not necessarily be sufficient to induce cleft palate.

Keywords: *Fluorouracil, *Embryos, *Palate, *Teratogenic compounds, *Cell division, Cell fusion, In vivo analysis, Deoxyribonucleic acids, Cleft palate, Rats, In vitro analysis, Thymidylate synthetase, Thymidine, Cell cycle, Reprints.

**PB93-232114/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Measurement of the Surface Permeability of Basement Concretes.** Final rept. Jul 91-Mar 93.
Scott (Arthur) and Associates, Mississauga (Ontario).
A. Scott. Sep 93, 47p EPA/600/R-93/169
Contract EPA-68-D0-0097
Prepared in cooperation with Cohen (S.) and Associates, Inc., McLean, VA. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.

The performance of seals between concrete sections is determined by the surface permeability of the concrete. A portable surface permeameter suitable for field use was developed, tested and used to make surface permeability measurements on concrete in new houses. The operating principle is based on measurement of the air-flow induced by a pressure difference across a temporary test seal applied to a surface. As seal performance depends on surface permeability, sealing will be a practical passive radon-exclusion measure only if there are low-cost surface preparation methods, and only if sealing details and procedures can produce high resistance seals even in the presence of surface defects.

Keywords: *Radon, *Concretes, *Permeability, *Houses, Sealing, Surface properties, Air, Bubbles, Basements.

**PB93-232122/REB** PC **A07**/MF **A02**
**Supplemental for Pretreatment to the Interim Final Development Document for the Secondary Aluminum Segment of the Nonferrous Metals Manufacturing. Point Source Category.**
Environmental Protection Agency, Washington, DC. Office of Water.
Dec 76, 148p EPA/440/1-76/081C
See also PB93-167757.

The report deals with that portion of the secondary aluminum smelting subcategory which introduces pollutants to publicly owned treatment works (hereafter referred to as POTW dischargers). Secondary aluminum smelting may be considered a single subcategory for the purpose of establishing pretreatment standards. The consideration of other factors such as age and size of the plant, processes employed, geographical location, wastes generated, and wastewater treatment and control techniques employed support the conclusion.

Keywords: *Aluminum industry, *Pretreatment(Water), *Water pollution, *Smelting, Secondary materials recovery, Standards, Costs, Economic analysis, POTW(Publicly Owned Treatment Works).

**PB93-232692/REB** PC **A03**/MF **A01**
**Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.**
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
A. L. Aspelin, A. H. Grube, and R. Torla. 1992, 41p EPA/733/K-92/001

The report provides an overview of the pesticide industry for 1990 and 1991. It contains a series of tables with estimates of U.S. and world pesticide markets for those two years. The tables contain information on quantities used and user expenditures (by economic sector and pesticide class), imports, exports, numbers of firms/individuals involved in production/use of pesticides, number of pesticides, certified applicators and on a number of other topics. Most of the tabular information is for the years 1990 and 1991, but some historical data are also presented. Graphic versions of the data are included along with a number of the tables.

Keywords: *International trade, *Pesticides, *Economic forecasting, *United States, Sales, Markets, Global, Tables(Data), Expenses, Weight(Mass), Farms, Prices, Exports, Economic sector, Graphs(Charts), *Pesticide industry.

**PB93-232890/REB** PC **A08**/MF **A02**
**Pilot Project for Vehicle Scrapping in Illinois.**
Illinois State Environmental Protection Agency, Springfield.
May 93, 165p

Accelerated vehicle scrappage programs have been suggested as a possible means to clean the air in urban areas by allowing sponsoring entities to generate emissions credits through the purchase and scrapping of older, high-emitting vehicles. Although two previous car scrapping projects had been executed, the Illinois Environmental Protection Agency (IEPA) decided that doing another project would be productive. The authors wanted to further explore certain aspects of vehicle scrappage and concentrate on specific characteristics of the local vehicle fleet to determine how such programs should be considered for credit generation in Illinois. The IEPA, in conjunction with two contractual consultants and a combined team from General Motors and the Environmental Defense Fund, designed a pilot project that would investigate the feasibility of a large scale vehicle scrappage program in the Chicago area. The Illinois 'Cash for Clunkers' project introduced several attributes that had not been part of previous scrappage efforts. The project purchased 207 vehicles from southern Chicago and the southern suburbs. All vehicles were tested using an IM 240 test procedure with a purge and pressure analysis of evaporative emissions. The total average emissions per car in grams per mile for testable cars were found to be: Hydrocarbons (HC), 16.09; Oxides of Nitrogen (NOx), 4.81; Carbon Monoxide (CO), 62.42; and Carbon Dioxide (CO2), 496.3.

Keywords: *Illinois, *Air pollution control, *Automobiles, *Purchasing, Cash basis, Exhaust emissions, Scrap, Surveys, Clean Air Act, Cash for clunkers, Harvey(Illinois), Chicago(Illinois).

**PB93-232908/REB** PC **A02**/MF **A01**
**RED Facts: 10, 10'-Oxybisphenoxarsine (OBPA).** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
Jun 93, 7p EPA/738/F-93/003
See also PB82-172271.

The fact sheet summarizes the information in the RED for 10, 10'-Oxybisphenoxarsine (OBPA). OBPA is a bacteriostat, disinfectant (bacteriocide/germicide) and fungicide. It is registered to prevent the growth of microorganisms in plastics which are fabricated into shower curtains, floor coverings, wall coverings, coated fabrics, marine upholstery, automotive vinyl trim, vinyl molding, tarpulins, awnings, gaskets, weather stripping, caulking, ditch liners and swimming pool liners. OBPA also is used as a preservative in adhesives, coatings and specialty products, in paper and paper and plastic products, in textiles, fibers and cordage, in carpets, and in other pesticides.

Keywords: *Pesticides, *Toxicity, Risk assessment, Health effects, Exposure, Humans, Animals, Path of pollutants, Labels, Administrative procedures, Pollution regulations, *Oxybisphenoarsine, Reregistration, Use patterns, CAS 58-36-6.

**PB93-232916/REB** PC **A02**/MF **A01**
**RED Facts: Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Pesticide Programs.
Mar 93, 7p EPA/738/F-93/001
See also PB89-138556.

Oxytetracycline is an antibiotic drug produced by a micro-organism. Two related compounds, hydroxytetracycline monohydrochloride and oxytetracycline calcium, are registered as pesticides, for use in preventing the growth of or killing bacteria, fungi and mycoplasma-like organisms. These pesticides are used primarily to control fire blight of pears, pear decline, bacterial spot on peaches and nectarines, lethal yellowing of coconut palm, and lethal decline of pritchardia palm; and as an artifoulant added to marine paints to prevent the growth of barnacles.

Keywords: *Tetracyclines, *Pesticides, *Toxicity, Risk assessment, Health effects, Exposure, Humans, Animals, Path of pollutants, Labels, Administrative procedures, Pollution regulations, Reregistration, Tetracycline/hydroxy, Oxytetracycline calcium, Monohydrochloride, CAS 32075-29-9, CAS 7179-50-2.

**PB93-232924/REB** PC **A02**/MF **A01**
**RED Facts: Silver.** Fact sheet.
Environmental Protection Agency, Arlington, VA. Special Review and Reregistration Div.
Jun 93, 8p EPA/738/F-93/005
See also PB93-232973.

Silver, a naturally-occurring element, is registered for use in water filters to inhibit the growth of bacteria within the filter unit of water filter systems designed to remove objectionable taste, odors, and color from municipally treated tap water; these bacteriostatic water filters account for over 90% of its pesticidal use. Silver also is used to control several types of algae in swimming pool water systems; this algicide use accounts for only about 3% of silver's use as a pesticide. Silver manufacturing use products are granular formulations, the bacteriostatic water filters are impregnated with silver, and the swimming pool algicides are formulated as soluble liquid concentrates.

Keywords: *Silver, *Pesticides, *Toxicity, Risk assessment, Health effects, Exposure, Humans, Animals, Path of pollutants, Labels, Administrative procedures, Pollution regulations, Reregistration, Use patterns, CAS 7440-22-4.

**PB93-232932/REB** PC **A03**/MF **A01**
**Development of Conversion Factors for Heavy-Duty Bus Engines G/BHP-HR to G/Mile.** Technical rept.
Environmental Protection Agency, Ann Arbor, MI. Engine and Vehicle Regulation Branch.
M. Kitchen, and W. Damico. 27 Jul 92, 25p EPA/AA/EVRB-92/01

The report calculates conversion factors to convert emission results from EPA's heavy-duty truck transient test (expressed in g/bhp-hr), to equivalent levels for various in-use bus applications (expressed in gram/mile). Conversion factors are calculated by comparing emission results from a bus engine operated on the EPA heavy-duty truck transient test cycle and various bus specific chassis test cycles. Pollutant specific conversion factors are developed for inter-city, urban, and heavy urban bus applications.

Keywords: *Buses(Vehicles), *Air pollution, *Internal combustion engines, Exhaust emissions, Road tests, Mobile sources, Conversion tables, Dynamometers, Engine tests.

**PB93-232973/REB** PC **A05**/MF **A02**
**Reregistration Eligibility Document (RED): Silver.**
Environmental Protection Agency, Arlington, VA. Special Review and Reregistration Div.
Jun 93, 100p EPA/738/R-93/005
See also PB93-232924.

The Reregistration Eligibility Document (RED) addresses the eligibility for reregistration of products containing silver for currently registered uses. Pesticide products containing silver are used as an algicide in swimming pool water systems and to inhibit the growth of bacteria within the filter unit of water filter systems designed to remove objectionable taste, odor and color from municipally treated tap water. The Agency has determined that the use of silver as currently registered will not cause unreasonable risk to humans or the environment. The Agency is requiring a special ecological effects study as confirmatory data and for purposes of labeling to complete the generic data base.

Keywords: *Silver, *Pesticides, *Toxicity, Risk assessment, Health effects, Exposure, Humans, Animals, Path of pollutants, Labels, Standards compliance, Administrative procedures, Pollution regulations, Reregistration, Use patterns, CAS 7440-22-4.

**PB93-233740/REB** PC **A05**/MF **A01**
**Instruction Manual for the Biennial Reporting System (BRS) NTIS Data Tape.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste.
29 Sep 93, 88p
For system on magnetic tape, see PB93-507044.

The manual explains the technical characteristics of the IBM Standard Labeled tapes containing Environmental Protection Agency (EPA) Biennial Reporting System (BRS) data. The manual also illustrates the attributes of the data contained on the tapes and provides helpful hints on correctly using BRS data. The BRS is a national system that collects data on the generation and management of hazardous waste.

Keywords: *Hazardous materials, *Waste management, Sites, Waste treatment, Waste disposal, States(United States), Facilities, Instructions, Manuals, Forms(Paper), Documentation, Environmental Protection Agency.

**PB93-233757/REB** PC **A08**/MF **A02**
**Hazardous Waste Report, 1991: Instructions and Forms.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste.
29 Sep 93, 165p
For system on magnetic tape, see PB93-507044.

The U.S. Environmental Protection Agency (EPA) prepared the booklet for generators and treatment, storage, and disposal facilities to report their hazardous waste activities for 1991.

Keywords: *Hazardous materials, *Waste management, Sites, Waste disposal, Waste treatment, States(United States), Facilities, Forms(Paper), Instructions, Documentation, Environmental Protection Agency.

**PB93-233815/REB** PC **A13**/MF **A03**
Environmental Protection Agency, Washington, DC.
**Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEB, Engine: B5254S EGR.**
Volvo of America Corp., Rockleigh, NJ.
1993, 277p
See also PB93-233906 and PB93-233880.Portions of this document are not fully legible. Sponsored by Environmental Protection Agency, Washington, DC.

The application contains information concerning 1994 MY vehicle variants manufactured by Volvo Car Corporation (VCC) and offered for sale in the U.S. These vehicles are applying for certification on the basis that they comply with US Federal and/or California certification requirements. Information in the application should not be construed to apply to vehicles offered for sale in other markets.

Keywords: *Internal combustion engines, *Light duty vehicles, *Emission control, *Certification, Air pollution control, Compliance, Exhaust emission control devices, Evaporative emission control devices, Motor vehicles(1994 models), Volvo Car Corporation.

**PB93-233823/REB** PC **A10**/MF **A03**
Environmental Protection Agency, Washington, DC.
**Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEB, Engine: B230FT.**
Volvo of America Corp., Rockleigh, NJ.
1993, 215p
See also PB93-233831 and PB93-233864.Portions of this document are not fully legible. Sponsored by Environmental Protection Agency, Washington, DC.

The application contains information concerning 1994 MY vehicle variants manufactured by Volvo Car Corporation (VCC) and offered for sale in the U.S. These vehicles are applying for certification on the basis that they comply with US Federal and/or California certification requirements. Information in the application should not be construed to apply to vehicles offered for sale in other markets.

Keywords: *Internal combustion engines, *Light duty vehicles, *Emission control, *Certification, Air pollution control, Compliance, Exhaust emission control devices, Evaporative emission control devices, Motor vehicles(1994 models), Volvo Car Corporation.

**PB93-233831/REB** PC **A09**/MF **A02**
Environmental Protection Agency, Washington, DC.
**Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEA, Engine: B230F.**
Volvo of America Corp., Rockleigh, NJ.
1993, 180p
See also PB93-233880 and PB93-233823.Portions of this document are not fully legible. Sponsored by Environmental Protection Agency, Washington, DC.

The application contains information concerning 1994 MY vehicle variants manufactured by Volvo Car Corporation (VCC) and offered for sale in the U.S. These vehicles are applying for certification on the basis that they comply with US Federal and/or California certification requirements. Information in the application should not be construed to apply to vehicles offered for sale in other markets.

Keywords: *Internal combustion engines, *Light duty vehicles, *Emission control, *Certification, Air pollution control, Compliance, Exhaust emission control devices, Evaporative emission control devices, Motor vehicles(1994 models), Volvo Car Corporation.

**PB93-233849/REB** PC **A11**/MF **A03**
Environmental Protection Agency, Washington, DC.
**Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAFA, Engine: B230FS4.**
Volvo of America Corp., Rockleigh, NJ.
1993, 250p
See also PB93-233856 and PB93-233906.Portions of this document are not fully legible. Sponsored by Environmental Protection Agency, Washington, DC.

The application contains information concerning 1994 MY vehicle variants manufactured by Volvo Car Corporation (VCC) and offered for sale in the U.S. These vehicles are applying for certification on the basis that they comply with US Federal and/or California certification requirements. Information in the application should not be construed to apply to vehicles offered for sale in other markets.

Keywords: *Internal combustion engines, *Light duty vehicles, *Emission control, *Certification, Air pollution control, Compliance, Exhaust emission control devices, Evaporative emission control devices, Motor vehicles(1994 models), Volvo Car Corporation.

**PB93-233856/REB** PC **A13**/MF **A03**
Environmental Protection Agency, Washington, DC.
**Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEA, Engine: B6304S EGR.**
Volvo of America Corp., Rockleigh, NJ.
1993, 292p
See also PB93-233872 and PB93-233849.Portions of this document are not fully legible. Sponsored by Environmental Protection Agency, Washington, DC.

The application contains information concerning 1994 MY vehicle variants manufactured by Volvo Car Corporation (VCC) and offered for sale in the U.S. These vehicles are applying for certification on the basis that they comply with US Federal and/or California certification requirements. Information in the application should not be construed to apply to vehicles offered for sale in other markets.

Keywords: *Internal combustion engines, *Light duty vehicles, *Emission control, *Certification, Air pollution control, Compliance, Exhaust emission control devices, Evaporative emission control devices, Motor vehicles(1994 models), Volvo Car Corporation.

**PB93-233864/REB** PC **A09**/MF **A02**
Environmental Protection Agency, Washington, DC.
**Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEA, Engine: B5254S.**
Volvo of America Corp., Rockleigh, NJ.
1993, 187p
See also PB93-233823 and PB93-233898.Portions of this document are not fully legible. Sponsored by Environmental Protection Agency, Washington, DC.

The application contains information concerning 1994 MY vehicle variants manufactured by Volvo Car Corporation (VCC) and offered for sale in the U.S. These vehicles are applying for certification on the basis that they comply with US Federal and/or California certification requirements. Information in the application should not be construed to apply to vehicles offered for sale in other markets.

Keywords: *Internal combustion engines, *Light duty vehicles, *Emission control, *Certification, Air pollution control, Compliance, Exhaust emission control devices, Evaporative emission control devices, Motor vehicles(1994 models).

**PB93-233872/REB** PC **A17**/MF **A03**
Environmental Protection Agency, Washington, DC.
**Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3VHGFEK, Engine: B5234T.**
Volvo of America Corp., Rockleigh, NJ.
1993, 383p
Portions of this document are not fully legible. Sponsored by Environmental Protection Agency, Washington, DC.
See also PB93-233856, PB92-122472 and PB92-128107.

The application contains information concerning 1994 MY vehicle variants manufactured by Volvo Car Corporation (VCC) and offered for sale in the U.S. These vehicles are applying for certification on the basis that they comply with US Federal and/or California certification requirements. Information in the application should not be construed to apply to vehicles offered for sale in other markets.

Keywords: *Internal combustion engines, *Light duty vehicles, *Emission control, *Certification, Air pollution control, Compliance, Exhaust emission control devices, Evaporative emission control devices, Motor vehicles(1994 models), Volvo Car Corporation.

**PB93-233880/REB** PC **A15**/MF **A03**
Environmental Protection Agency, Washington, DC.

**Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGFEA, Engine: B5254S AIR.**
Volvo of America Corp., Rockleigh, NJ.
1993, 336p
See also PB93-233815 and PB93-233831.Portions of this document are not fully legible. Sponsored by Environmental Protection Agency, Washington, DC.

The application contains information concerning 1994 MY vehicle variants manufactured by Volvo Car Corporation (VCC) and offered for sale in the U.S. These vehicles are applying for certification on the basis that they comply with US Federal and/or California certification requirements. Information in the application should not be construed to apply to vehicles offered for sale in other markets.

Keywords: *Internal combustion engines, *Light duty vehicles, *Emission control, *Certification, Air pollution control, Compliance, Exhaust emission control devices, Evaporative emission control devices, Motor vehicles(1994 models), Volvo Car Corporation.

**PB93-233898/REB** PC **A11**/MF **A03**
Environmental Protection Agency, Washington, DC.
**Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEB, Engine: B6304S.**
Volvo of America Corp., Rockleigh, NJ.
1993, 241p
See also PB93-233864.Portions of this document are not fully legible. Sponsored by Environmental Protection Agency, Washington, DC.

The application contains information concerning 1994 MY vehicle variants manufactured by Volvo Car Corporation (VCC) and offered for sale in the U.S. These vehicles are applying for certification on the basis that they comply with US Federal and/or California certification requirements. Information in the application should not be construed to apply to vehicles offered for sale in other markets.

Keywords: *Internal combustion engines, *Light duty vehicles, *Emission control, *Certification, Air pollution control, Compliance, Exhaust emission control devices, Evaporative emission control devices, Motor vehicles(1994 models), Volvo Car Corporation.

**PB93-233906/REB** PC **A13**/MF **A03**
Environmental Protection Agency, Washington, DC.
**Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GEEA, Engine: B230FT4.**
Volvo of America Corp., Rockleigh, NJ.
1993, 298p
See also PB93-233849 and PB93-233815.Portions of this document are not fully legible. Sponsored by Environmental Protection Agency, Washington, DC.

The application contains information concerning 1994 MY vehicle variants manufactured by Volvo Car Corporation (VCC) and offered for sale in the U.S. These vehicles are applying for certification on the basis that they comply with US Federal and/or California certification requirements. Information in the application should not be construed to apply to vehicles offered for sale in other markets.

Keywords: *Internal combustion engines, *Light duty vehicles, *Emission control, *Certification, Air pollution control, Compliance, Exhaust emission control devices, Evaporative emission control devices, Motor vehicles(1994 models), Volvo Car Corporation.

**PB93-233914/REB** PC **A12**/MF **A03**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Handbook for Constructed Wetlands Receiving Acid Mine Drainage.**
Colorado School of Mines, Golden.
T. Wildeman, J. Dietz, J. Gusek, and S. Morea. Sep 93, 252p EPA/540/R-93/523
See also PB93-190734. Prepared in cooperation with Knight Piesold and Co., Denver, CO., and Camp, Dresser and McKee, Inc., Denver, CO. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

In the summer of 1987, a pilot constructed wetland was built at the Big Five Tunnel in Idaho Springs, Colorado. The report details the theory, design and construction of wetlands receiving acid mine drainages, based on the second and third year of operation of this wetland, which was funded by the U.S. Environmental Protection Agency under the SITE Emerging Technologies Program. The text is divided into two broad sections: Part A - Theoretical Development, and Part B - Design Consideration. In the latter sections of Part A and through all of Part B the focus is on removal of metals by precipitation of sulfides through the activity of sulfate reducing bacteria.

Keywords: *Acid mine drainage, *Wetlands, *Water pollution control, Big Five Tunnel, Handbooks, Superfund, Design criteria, Sulfate reducing bacteria, Metals, Precipitation(Chemistry), *Created wetlands, Idaho Springs(Colorado).

**PB93-234128/REB** PC **A03**/MF **A01**
Illinois State Environmental Protection Agency, Springfield. Div. of Water Pollution Control.
**Volunteer Lake Monitoring Program, 1992. Volume 6. Southwestern Illinois Region.**
Southwestern Illinois Metropolitan and Regional Planning Commission, Collinsville.
Apr 93, 50p IEPA/WPC-93/061F
See also PB93-234128. Sponsored by Illinois State Environmental Protection Agency, Springfield. Div. of Water Pollution Control.

The Regional Report volume is a compilation of lake monitoring data for lakes in the Southwestern Illinois region. A regional lake location map is shown and a ranking of lakes by average transparency is shown of the section. Section II contains lake data and individual lake summaries for those VLMP lakes that were monitored during six or more semi-monthly sampling periods in the 1992 season. Section III includes lake data for those VLMP lakes that were monitored by IEPA. Data collected under IEPA's Ambient Lake Monitoring Program in 1992 are also included where available.

Keywords: *Lakes, *Water quality data, *Water pollution monitoring, Sampling, Transparence, Suspended sediments, Water chemistry, Biomass, Color, Nitrates, State programs, Tables(Data), Southwestern Region(Illinois), VLMP(Volunteer Lake Monitoring Program).

**PB93-234292/REB** PC **A07**/MF **A02**
**Guide to Nonpoint Source Pollution Control. Controlling Nonpoint Source Pollution: A Guide.**
Environmental Protection Agency, Washington, DC. Office of Water.
1987, 128p

The document is designed as a user's guide to the techniques now available for controlling nonpoint source pollution. The reader will find first a general evaluation of nonpoint source modeling and other techniques, followed by a chapter assessing models now in use, and a third chapter summarizing best management practices. Sources of information used are listed at the conclusion of the text. In the third chapter, end notes are used to substantiate studies referred to in the discussion of best management practices.

Keywords: *Water pollution control, *Nonpoint sources, Runoff, Path of pollutants, Models, Pollution regulations, Agriculture, Mining, Construction, Forestry, Economic analysis, Guides, Urban areas, Clean Water Act.

**PB93-234375/REB** PC **A11**/MF **A03**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone. Volume 2. Emission Inventory Requirements for Photochemical Air Quality Simulation Models (Revised).**
Systems Applications International, San Rafael, CA.
L. Gardner. Dec 92, 238p EPA/454/R-92/026
Contract EPA-68-D0-0102
See also PB91-216176. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The document is the second volume of a two volume series designed to provide assistance to air pollution control agencies in preparing and maintaining emission inventories for carbon monoxide (CO) and precursors of ozone (O3). Emission inventories provide the foundation for most air quality control programs. The second volume offers technical assistance to those engaged in the planning and development of detailed inventories of VOC, NOx, and CO for use in photochemical air quality simulation models. Such inventories must be resolved both spatially and temporally and must also be speciated into several classes of VOC, NO, and NO2. These inventories are required of the more serious O3 and CO nonattainment areas only.

Keywords: *Ozone, *Carbon monoxide, *Photochemical reactions, *Mathematical models, Air pollution sources, Point sources, Mobile pollutant sources, Natural emissions, Combustion products, Nitrogen oxides, Hydrocarbons, Chemical analysis, Temporal distribution, Spatial distribution, Emission inventory, Volatile organic compounds, Urban Airshed Model.

**PB93-234490/REB** PC **A03**/MF **A01**
Environmental Research Lab., Gulf Breeze, FL.
**Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.**
Texas A and M Univ., College Station. Dept. of Oceanography.
R. B. Coffin, and L. A. Cifuentes. c1993, 16p EPA/600/A-93/221
Pub. in Handbook of Methods in Aquatic Microbial Ecology, Chapter 77, p663-675. Sponsored by Environmental Research Lab., Gulf Breeze, FL.

Stable isotopes have been used successfully over the past three decades to trace geochemical cycles and pathways of elemental transfer through aquatic food chains. This technique, however, has only recently been used to examine aquatic microbial roles in elemental cycling. The major obstacle to measuring stable isotope compositions in bacteria has been the concentration of enough bacteria and separation of bacteria from other microorganisms and bacterial-sized particles. The paper describes direct and indirect approaches developed to measure stable carbon and nitrogen isotope compositions and sources of bacterial carbon and nitrogen. (Copyright (c) 1993 by Lewis Publishers.)

Keywords: *Carbon, *Nitrogen, *Isotopes, *Aquatic microbiology, *Chemical analysis, Bioassay, Nucleic acids, Biological markers, Oligonucleotide probes, Carbon dioxide, Reprints.

**PB93-234508/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.**
Stanford Univ., CA.
W. Ott, P. Switzer, N. Willits, L. Hildemann, and L. Yu.
1993, 18p EPA/600/A-93/220
Prepared in cooperation with California Univ., Davis. Intercollege Div. of Statistics. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

In 1980-81, carbon monoxide (CO) exposures were measured inside a motor vehicle during 88 standardized drives on a California urban arterial highway, El Camino Real (traffic volume of 30,500-45,000 vehicles per day), over a 13-1/2 month period, yielding the first known data set of vehicular exposures over an entire year. Because of the highly standardized nature of the approach, it was possible to repeat the entire experiment in 1991, more than a decade later. Similar driving patterns were maintained, and data were collected on the Surrounding Vehicle Count, a measure of traffic congestion at intersections along the way. Over the 11-year period, the exposures have decreased by 53%. A vehicular emissions model developed for the highway predicted a decline in emissions of approximately 52%, which agrees well with the change in exposures. In contrast, total emissions for the region, which takes into account increases in vehicle-miles due to additional highways, declined only 33%. Ambient concentrations decreased approximately 34% over the 11-year period. The results suggest that CO exposures measured on highways are a sensitive indicator of the effectiveness of vehicular emission control systems.

Keywords: *Carbon monoxide, *Air pollution monitoring, *Automobiles, Vehicle air pollution, Exhaust gases, Exposure, Exhaust emission measurement, Air pollution control devices, Air pollution research, Arterial highways, Reprints.

**PB93-234516/REB** PC **A03**/MF **A01**
**Adding a Landscape Ecology Perspective to Conservation and Management Planning.** Symposium paper.
Corvallis Environmental Research Lab., OR.
K. E. Freemark, J. R. Probst, J. B. Dunning, and S. J. Heji. Apr 93, 28p EPA/600/A-93/219
Presented at the Partners-in-Flight Workshop, Estes Park, CO., 1992. Prepared in cooperation with North Central Forest Experiment Station, Rhinelander, WI. Forestry Sciences Lab., and Georgia Univ., Athens. Inst. of Ecology.

The authors briefly review concepts in landscape ecology and discuss their relevance to the conservation and management of neotropical migrant landbirds. The authors then integrate a landscape perspective into a spatially-hierarchical framework for conservation and management planning for neotropical migrant landbirds (and other biota). The framework outlines a comprehensive approach by which managers can develop plans based on (1) assessing the composition and interspersion of habitats important to species of current or future concern at a variety of spatial and temporal scales by generating and using data which different levels of resolution, and (2) assessing and modeling population dynamics and related ecological processes. The authors reference their paper throughout with selected studies of birds on temperature breeding areas, and to a more limited extent, on migration and neotropical wintering areas.

Keywords: *Birds, *Ecology, *Landscaping, Wildlife management, Wildlife conservation, Biological surveys, Species diversity, Animal migrations, Animal behavior, Habitability, Populations, Abundance, Reprints.

**PB93-234524/REB** PC **A03**/MF **A01**
**Role of Ecological Sample Surveys in the Implementation of Biocriteria.** Book chapter.
Corvallis Environmental Research Lab., OR.
D. P. Larsen. 1993, 37p EPA/600/A-93/218
Pub. in Biological Risk Assessment: Tools for Risk Based Planning and Decision Making, 1993.

Relatively few statistical sample surveys have been caried out on lakes and streams but these can play an important role in characterizing the biological conditions of lakes and streams. Some of these are described to illustrate how the concepts of sample surveys have been implemented for a variety of purposes and the nature of the conclusions that can be drawn from sample surveys. Specifically, sample surveys can be used to characterize the range of biological conditions found in lakes and streams statewide, or in specific parts of a state, without monitoring each lake or stream. These kinds of surveys can be used as a foundation for establishing numeric biological criteria.

Keywords: *Environmental surveys, *Sampling, *Aquatic ecosystems, Environmental monitoring, Natural resources management, Lakes, Streams, Population(Statistics), Numerical analysis, Statistical analysis, Criteria, Case studies, Reprints, Biocriteria.

**PB93-234532/REB** PC **A03**/MF **A01**
**Engineered Plants in the Environment.** Book chapter.
Corvallis Environmental Research Lab., OR.
L. S. Watrud, S. G. Metz, and D. A. Fischhoff. 1993, 49p EPA/600/A-93/217
Pub. in Engineered Organisms, 1993. Prepared in cooperation with Hybritech Seed International, St. Louis, MO. Wheat Div., and Monsanto Co., St. Louis, MO. Plant Sciences Div.

Most of the world's major staple food crops - barley, corn, potatoes, rice, soybeans and wheat - have been intentionally and successfully introduced into geographies, climates and habitats diverse from their centers of origin. Despite wide-scale geographic introductions and subsequent breeding to increase productivity, disease resistance, insect resistance and other desired trait, only a few agronomic introductions of food or feed crops have resulted in localized ecological disturbances. Explanations offered for the limited natural spread of introduced crops per se, include: requirements for high inputs of fertilizer and water, poor competition with weeds and native vegetation, or absence of weedy relatives in the areas in which the crops are grown. The report investigates the efficacy of the technology.

Keywords: *Agrobacterium, *Farm crops, *Genetic engineering, *Plant ecology, Hybridization, Improvement, Tolerances(Physiology), Weeds, Fungi, Insecticides, Fertilizers, Bacteria, Disturbances, Biotechnology, Coatings, Deoxyribanucleic acids, Risk assessment, Particle gun technology.

**PB93-234540/REB** PC **A04**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.** Final rept.
Agricultural Research Service, Tifton, GA. Southeast Watershed Research Lab.
R. Lowrance, and G. Vellidis. Sep 93, 53p EPA/600/R-93/186
See also PB93-102192. Prepared in cooperation with Georgia Coastal Plain Experiment Station, Tifton. Dept. of Biological and Agricultural Engineering. Sponsored by Corvallis Environmental Research Lab., OR.

The report documents the development of a conceptual model for assessing the ecological risk to the water quality function (WQF) of bottomland hardwood riparian ecosystems (BHRE) in the Tifton-Vidalia upland (TVU) ecoregion of Georgia. Previous research has demonstrated that mature BHRE are essential to maintaining water quality in this portion of the coastal plain. The WQF of these ecosystems is considered an assessment endpoint, an ecosystem function or set of functions that society chooses to value as evidenced by laws, regulations, or common usage. The water quality function of BHRE is at risk because of the ecological and environmental quality effects of a suite of chemical, physical, and biological stressors related to nonpoint source pollution from adjacent land uses, agriculture; the conversion of BHRE to other land uses.

Keywords: *Risk assessment, *Ecology, *Man environment interactions, *Water pollution effects, *Coasts, Mathematical models, Populations, Chemical compounds, Farms, Stream flow, Channels(Waterways), Environmental impacts, Exposure, Land use, Evaluation, Lumbering, Watersheds, Georgia.

**PB93-234557/REB** PC **A03**/MF **A01**
**Contribution to Indoor Ozone Levels of an Ozone Generator.** Final rept. Apr 90-Dec 92.
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
R. S. Steiber. Sep 93, 24p EPA/600/R-92/177

The report gives results of a study of a commonly used commercially available ozone generator, undertaken to determine its impact on indoor ozone levels. Experiments were conducted in a typical mechanically ventilated office and in a test house. The generated ozone and the in-room ozone concentrations were measured. The results showed that, when the unit was operated at the manufacturer's recommended setting, it generated little if any ozone. The indoor concentrations in the case were not significantly above natural background. When operated at the maximum setting, the generator produced large amounts of ozone: over 100 ppb in well ventilated spaces, and nearly 1 ppm in poorly ventilated spaces. When the ozone generator was turned off, ozone levels quickly returned to background. No measurements were made to determine the effect of the device on other aspects of indoor air quality, such as the elimination of volatile organic compounds.

Keywords: *Ozone, *Indoor air pollution, *Air pollution monitoring, Air cleaning systems, Ventilation, Stationary pollutant sources, Air pollution control devices, Rooms.

**PB93-234565/REB** PC **A03**/MF **A01**
Robert S. Kerr Environmental Research Lab., Ada, OK.
**In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.**
*Utah State Univ.*, Logan.
J. L. Sims, R. C. Sims, R. R. Dupont, J. E. Matthews, and H. H. Russell. May 93, 18p EPA/540/S-93/501
Sponsored by Robert S. Kerr Environmental Research Lab., Ada, OK.

An emerging technology for the remediation of unsaturated subsurface soils involves the use of microorganisms to degrade contaminants which are present in such soils. Understanding the processes which drive in situ bioremediation, as well as the effectiveness and efficiency of the utilization of these systems, are issues which have been identified by the Regional Superfund Engineering Forum as concerns of Superfund decision makers. Although in situ bioremediation has been used for a number of years in the restoration of ground water contaminated by petroleum hydrocarbons, it has only been in recent years that in situ systems have been directed toward contaminants in unsaturated subsurface soils. Research has contributed greatly to understanding the biotic, chemical, and hydrologic parameters which contribute to or restrict the application of in-situ bioremediation and has been successful at a number of locations in demonstrating its effectiveness at field scale.

Keywords: *Superfund, *Soil chemistry, *Microorganisms control(Water), *Water pollution control, Petroleum products, Ground water, Biodeterioration, Subsurface investigations, Soil properties, Flushing, Organic compounds, Hydrocarbons, Moisture content, Clay soils, pH, Anaerobic conditions, Aerobic processes, Metabolism, Venting, Recommendations, Unsaturated soils, *Bioremediation.

**PB93-234672/REB** PC **A99**/MF **E08**
**Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters.**
Environmental Protection Agency, Washington, DC. Office of Water.
Jan 93, 828p EPA/840/B-92/002
See also PB86-246295 and PB92-137504.

The manual provides definitions and descriptions of management measures for agriculture, forestry, urban areas, marinas and recreational boating, channel modification and erosion control, wetlands, and vegetated treatment systems. It also provides techniques to monitor water quality.

Keywords: *Coastal regions, *Nonpoint sources, *Water pollution abatement, Coastal zone management, Water pollution sources, Waste water, Runoff, Urban areas, Sectoral analysis, Land use, Erosion control, Land management, Manuals, Coastal Zone Management Reauthorization Amendments of 1990.

**PB93-234755/REB** PC **A07**/MF **A02**
**Reregistration Eligibility Document (RED) 10, 10'-Oxybisphenoxarsine (OBPA).**
Environmental Protection Agency, Arlington, VA. Special Review and Reregistration Div.
Jun 93, 150p EPA/738/R-93/007
See also PB93-232908.

The Reregistration Eligibility Document (RED) will address the eligibility for reregistration of products containing 10, 10'-Oxybisphenoxarsine (OBPA). OBPA is a bacteriostat, disinfectant (bacteriocide/germicide) and fungicide pesticide. Its use category is: indoor nonfood. The arsenic-containing heterocyclic compound is incorporated into flexible vinyl sheeting and extrusions, silicone caulking compounds, thermoplastic adhesives, polyurethane, and latex emulsions (not including paints, ink bases and textiles) to prevent the growth of microorganisms. Although flexible vinyls and silicones in themselves are resistant to microbiological deterioration, the use of OBPA formulations in products made from these materials is necessary due to microbial susceptibility of plasticizers, lubricants, and fillers which are added to obtain desirable physical and chemical properties.

Keywords: *Pesticides, *Pollution regulations, *Administrative procedures, Requirements, Risk assessment, Arsenic oxides, Toxicity, Humans, Animals, Exposure, Chemical compounds, Labels, *OBPA(Oxybisphenoxarsine), Reregistration, CAS 58-36-6.

**PB93-234763/REB** PC **A07**/MF **A02**
**Reregistration Eligibility Document (RED) Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.**
Environmental Protection Agency, Arlington, VA. Special Review and Reregistration Div.
Mar 93, 149p EPA/738/R-93/002
See also PB93-232916.

The Reregistration Eligibility Document (RED) will address the eligibility for reregistration of products containing hydroxytetracycline monohydrochloride and

oxytetracycline calcium. Oxytetracycline is an antibiotic drug produced by the actinomycete Streptomyces rimosus. It is also registered to prevent the growth of, or control bacterial and fungi diseases and mycoplasma-like organisms in nectarines, peaches, pears, coconut and pritchardia palms and as an antifoulant added to paint to prevent the growth of barnacles. There are registered products containing hydroxytetracycline monohydrochloride and oxytetracycline calcium, but none with oxytetracycline, per se. Therefore, the Reregistration Eligibility Document (RED) addresses only oxytetracycline calcium and hydroxytetracycline monohydrochloride, even though some of the studies supporting the RED decision were conducted with the oxytetracycline base.

Keywords: *Pesticides, *Pollution regulations, *Administrative procedures, Requirements, Risk assessment, Tetracylines, Toxicity, Humans, Animals, Exposure, Chemical compounds, Labels, *Hydroxytetracycline monohydrochloride, *Oxytetracycline calcium, CAS 2058-46-0, CAS 15251-48-6.

**PB93-234771/REB** PC **A99**/MF **E08**
**Proceedings of Annual Analytical Symposium (10th). U.S. Environmental Protection Agency, Office of Water, Industrial Technology Division. Held in Norfolk, Virginia on May 13-14, 1987.**
Environmental Protection Agency, Washington, DC. Industrial Technology Div.
1993, 794p

The Industrial Technology Division (ITD) of the EPA's Office of Water sponsors an annual symposium on the analysis of pollutants in the environment so that chemists, biologists, engineers and other members of the scientific community may gather to exchange new ideas and discuss advances in analytical methodologies. These proceedings document the presentations and discussions from the Tenth Annual Analytical Symposium. Topics at the Tenth Symposium ranged from methods for determination of pollutants in adipose tissue to drilling fluid toxicity tests. The ITD supports the symposium with the aspiration that it will augment knowledge of methods for the determination of environmental pollutants and spark new interest in the field of analytical chemistry.

Keywords: *Pollution standards, *Waste treatment, *Chemical analysis, *Meetings, Environment pollution, Waste disposal, Pollution monitoring, Sampling, Detection, Pollution regulations, EPA methods.

**PB93-234789/REB** PC **A02**/MF **A01**
**Opportunities and Challenges for Local Emergency Planning Committees: Bestseller in EPCRA.**
Technical assistance bulletin.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Jul 93, 8p EPA/550/B-93/002
See also DE91010632 and PB92-169523.

The second edition of the 'Opportunities and Challenges' series contains a list of documents, computer data bases, and programs to help implement SARA Title III, also known as the Emergency Planning and Community Right-To-Know Act (EPCRA). The bibliography may be used to identify resources that can enhance knowledge of key planning and preparedness issues, improve relations with facilities and the public, and help get a head start on planning for the future.

Keywords: *Public information, *Bibliographies, *Emergency plans, *Hazardous materials, *Waste management, Community relations, Compliance, Superfund, Chemical compounds, Emergency preparedness, State government, Local government, Risk assessment, Programs, Data bases, *Emergency Planning and Community Right-To-Know Act, Hotlines, Superfund Amendments and Reauthorization Act.

**PB93-234797/REB** PC **A02**/MF **A01**
**Chemical Emergency Preparedness and Prevention Advisory: Hydrogen Fluoride, Series 8, No. 3.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Jul 93, 7p EPA/550/K-93/001
See also PB86-155264.

The advisory recommends ways Local Emergency Planning Committees (LEPCs) and chemical facilities can reduce risks posed by the presence of hydrogen fluoride (HF) in their communities. Hydrogen fluoride, a strong inorganic acid, is produced and used as a gas or liquid without water (i.e., in anhydrous form), or in a water (aqueous) solution. Inhalation of hydrogen fluoride vapor, either in anhydrous form or from water solutions, can cause irritation if the exposure is mild (i.e., low concentration in air for a short time), or severe damage to the respiratory system or death in the case of exposure to high concentrations. Contact with the liquid or vapor can severely burn the skin, eyes, and other tissue. The largest use of hydrogen fluoride is in the manufacture of fluorine-containing chemicals, particularly chlorofluorocarbons (CFCs). Hydrogen fluoride may be used in some petroleum refinery operations, aluminum production, nuclear applications, glass etching and polishing, and metal treating and cleaning. Hydrogen fluoride's acute toxicity prompted EPA to list it as an extremely hazardous substance (EHS), with a threshold planning quantity (TPQ) of 100 pounds, under Section 302 of the Emergency Planning and Community Right-to-Know Act (commonly known as SARA Title III).

Keywords: *Hydrogen fluoride, *Toxic substances, *Air pollution, *Emergency planning, Toxicity, Clean Air Act, Occupational safety and health, Public health, Exposure, Risk assessment, Hazardous materials, Chemical industry, *Emergency Planning and Community Right-To-Know Act, Superfund Amendments and Reauthorization Act.

**PB93-236008/REB** PC **A05**/MF **A01**
**Report to Congress on Implementation of Section 112 of the Clean Air Act Amendments of 1990.**
Final rept.
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
M. H. Keating, and C. L. Jones. Aug 93, 78p EPA/453/R-93/024

The document is a status report, covering the period from November 15, 1990 to August 1993, on the measures taken by the EPA and the States to implement the provisions of Section 112 of the Clean Air Act Amendments of 1990. The report is the first report to Congress required by Section 112(s) and will be submitted every 3 years. As required by Section 112(s), the document includes a summary of standards-setting activities under sections 112(d) and (f), information with respect to costs and compliance with such standards, and discussions of the national urban air toxics program and the accidental release program. Future reports will include information from a database on pollutants and sources subject to the provisions of section 112, as well as recommendations of the Chemical Safety and Hazard Investigation Board with respect to the prevention and mitigation of accidental releases.

Keywords: *Air pollution control, *Hazardous materials, Air pollution standards, Pollution regulations, Implementation, State government, Local government, Law enforcement, Compliance, Requirements, Emissions, Research projects, *Clean Air Act Amendments of 1990, Section 112.

**PB93-236024/REB** PC **A12**/MF **A03**
**Analytical Methods for the National Sewage Sludge Survey.**
Environmental Protection Agency, Washington, DC. Office of Water.
Sep 90, 266p
See also PB93-156974 and PB93-500403.

The document is a compilation of the analytical methods that the USEPA Office of Water Regulations and Standards (OWRS) used in the National Sewage Sludge Survey, as well as methods proposed for monitoring under 40 CFR Parts 257 and 503, Standards for the Disposal of Sewage Sludge. These methods are taken from OWRS Industrial Technology Division (ITD) methods and from 'Methods for Chemical Analysis of Water and Wastes' (MCAWW). Contents discuss: organic compounds using GCMS and GC techniques; metals using ICP, GFAA, CVAA, and ICP/Semiquantitative screen techniques; and classicals using gravimetric, spectrophotometric, electrode, potentiometric, Cd reduction, and ascorbic acid reduction techniques.

Keywords: *Analytical techniques, *Sewage sludge, *Surveys, *Chemical analysis, Sludge disposal, Gas chromatography, Mass spectroscopy, Reduction(Chemistry), Gravimetric analysis, Spectrophotometry, Electrodes, Potentiometric analysis, Atomic spectroscopy, Absorption spectra, Inductively coupled plasma atomic emission spectroscopy.

**PB93-236057/REB** PC **A03**/MF **A01**
**Guidelines for Deriving Ambient Aquatic Life Advisory Concentrations.**
Environmental Protection Agency, Washington, DC. Office of Water Regulations and Standards.
1993, 11p

Aquatic life advisory concentrations are intended to be used mostly for evaluating the aquatic toxicity of concentrations of pollutants in effluents and ambient waters. The report gives guidelines for deriving these concentrations.

Keywords: *Water pollution standards, *Aquatic biology, *Bioaccumulation, Water pollution effects, Chemical effluents, Organic compounds, Toxicity, Aquatic ecosystems, Guidelines, SMAV(Species Mean Acute Value), GMAV(Genus Mean Acute Value), AAV(Advisory Acute Value).

**PB93-236107/REB** PC **A07**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Regional Interim Emission Inventories (1987-1991). Volume 1. Development Methodologies.**
Pechan (E.H.) and Associates, Inc., Durham, NC.
May 93, 142p EPA/454/R-93/021A
Contract EPA-68-D0-0120
See also PB89-198816 and Volume 2, PB93-236115. Prepared in cooperation with EC/R, Inc., Chapel Hill, NC. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The report documents the methodologies used to develop a National 'top-down' emission inventory for VOC, NOx and CO for the years 1987 - 1991 by source category for every county. It is intended for use by EPA Regional offices, by State and local agencies, and by industry and its consultants. It also provides detailed information on the assumptions made in developing a national level inventory.

Keywords: *Air pollution, *Regional analysis, Clean Air Act, Mathematical models, Air pollution standards, US EPA, Volatile organic compounds, Nitrogen oxides, Emission factors, Flue gases, Exhaust emissions, Carbon monoxide, Ozone, State government, Study estimates, Point sources, Mobile pollutant sources, *Emission inventories, Urban Airshed Modeling, Regional Oxidant Models, Area sources.

**PB93-236115/REB** PC **A06**/MF **A02**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
**Regional Interim Emission Inventories (1987-1991). Volume 2. Emission Summaries.**
Pechan (E.H.) and Associates, Inc., Durham, NC.
May 93, 107p EPA/454/R-93/021B
Contract EPA-68-D0-0120
See also PB89-198816 and Volume 1, PB93-236107. Prepared in cooperation with EC/R, Inc., Chapel Hill, NC. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

The report documents detailed emission summaries based on the Tier Categories for the National inventory developed for VOC, NOx and CO for the years 1987 - 1991. It is intended for use by EPA Regional offices, by State and local agencies, and by industry and its consultants. The summaries are for each year by Nation, State and specific ozone non-attainment areas.

Keywords: *Air pollution, *Regional analysis, Study estimates, Tables(Data), Concentration(Composition), Carbon monoxide, Nitrogen oxides, Volatile organic compounds, Mobile pollutant sources, Point sources, Flue gases, Exhaust emissions, US EPA, State government, Ozone, Clean Air Act, National government, Pollution sources, *Emission inventories, Urban Airshed Modeling, Regional Oxidant Models, Area sources.

**PB93-236164/REB** PC **A05**/MF **A01**
**Heavy-Duty Engine Testing Report Non-Road Engine Configurations Injection Timing Effects Test Results, 1992.** Technical rept.
Environmental Protection Agency, Ann Arbor, MI. Technology Evaluation and Testing Support Branch.
M. Doorlag. Aug 93, 84p EPA/AA/TETSB-93/01

One provision of the 1990 Clean Air Act is to regulate non-road engines if they are found to be significant contributors to urban air pollution. Of particular interest was the ability of injection timing retardation to lower oxides of nitrogen emission levels and, its effect on the carbon monoxide, hydrocarbon, emission levels. The program also studied the relationship between on-highway heavy-duty federal test procedure and eight-mode steady-state emission data on current and potential future non-road engines. Test results for five engine configurations are presented in the report.

Keywords: *Tractor engines, *Construction equipment, *Air pollution, Tests, Exhaust emissions, Carbon monoxide, Nitrogen oxides, Hydrocarbons, Clean Air Act.

**PB93-236172/REB** PC **A03**/MF **A01**
**Heavy-Duty Engine Testing Report Cummins/EPA/Taiwan Correlation Test Results, 1993.** Technical rept.
Environmental Protection Agency, Ann Arbor, MI. Technology Evaluation and Testing Support Branch.
M. Doorlag. Aug 93, 24p EPA/AA/TETSB-93/02

The Taiwanese Government is in the process of adopting US mobile source emission regulations. As part of their program, they have been developing the appropriate heavy-duty engine emission testing capabilities, with aid from Cummins Engine Company and the Environmental Protection Agency (EPA). It is important for them to evaluate their lab and procedures by participating in a round robin program. A Cummins diesel engine was tested at Cummins Engine Company, Inc., EPA National Vehicle and Fuel Emissions Laboratory (NVFEL), and will be tested at the Taiwanese government laboratory. The report summarizes the emission results produced from the testing of a Cummins 6C engine at the EPA NVFEL and Cummins' lab.

Keywords: *Taiwan, *Air pollution, *Mobile pollutant sources, *Exhaust emissions, Tests, Motor vehicles, Diesel engines, Regulations, Hydrocarbons, Carbon monoxide, Nitrogen oxides, Carbon dioxide, Particulates, Fuel consumption, Fuel oils.

**PB93-236206/REB** PC **A04**/MF **A01**
**International Trade in Environmental Protection Equipment: An Assessment of Existing Data.**
Environmental Protection Agency, Washington, DC. Office of Policy, Planning and Evaluation.
Jul 93, 70p EPA/230/R-93/006

The study estimates total U.S. imports, exports, and trade balances for environmental protection (EP) equipment between 1980-1991. The levels of trade in EP equipment are disaggregated by environmental medium (i.e., air, water, and other). Bilateral trade flows between the United States and selected U.S. trading partners also are presented for 1980-1991. The study describes trade in pollution abatement equipment from the perspective of selected U.S. trading partners. Data on their imports, exports, and trade balances for 1988-1991 are reported. The data compiled in the report show that the United States is a major exporter of EP equipment in general and air pollution control equipment in particular. The United States enjoyed a surplus of trade in environmental protection equipment of $1.1 billion in 1991, and the surplus has been increasing steadily since 1989. Between 1989 and 1991, U.S. exports increased approximately 70 percent, while imports increased approximately 45 percent.

Keywords: *International trade, *Environmental protection, *Air pollution control equipment, *Pollution control, *United States, Water pollution control, Imports, Exports, Balance of trade, Surpluses, Economic development, Canada, France, Germany, Bilateral agreements, Comparison, Japan, Incinerators, Electrostatic precipitators, Ion exchange resins.

**PB93-236214/REB** PC **A02**/MF **A01**
**Roles of Monitoring and Research in Polar Environments: A Perspective.** *Journal article.*
Environmental Research Lab., Gulf Breeze, FL.
M. A. Champ, D. A. Flemer, D. H. Landers, C. Ribic, and T. DeLaca. c1992, 10p EPA/600/J-93/382
Pub. in Marine Pollution Bulletin, v25 (9-12) p220-226 1992. Prepared in cooperation with Texas A and M Univ., College Station. Geochemical and Environmental Research Group, and Alaska Univ., Fairbanks.

Environmental monitoring coupled with research provides a mutually beneficial synergism which allows scientists to: (1) efficiently monitor the environment using sensitive, relevant environmental signals to detect and quantify change, (2) determine when change is ecologically significant, and (3) determine the cause of change. From the perspective of potentially large-scale ecosystem impacts where causality is an objective, the authors believe that environmental monitoring (i.e., research-focused monitoring) is essential and serious decoupling of monitoring and research in the context is a weak strategy and a questionable environmental policy.

Keywords: *Polar regions, *Environmental monitoring, *Research programs, Man environment interactions, Environmental effects, Natural resources management, Terrestrial ecosystems, Marine ecosystems, Antarctic regions, Arctic regions, Information needs, Recommendations, Reprints.

**PB93-236222/REB** PC **A03**/MF **A01**
**Cholinesterases of Aquatic Animals.** Journal article.
Environmental Research Lab., Gulf Breeze, FL.
V. I. Kozlovskaya, F. L. Mayer, O. V. Menzikova, and G. M. Chuyko. c1993, 28p EPA/600/J-93/383
Pub. in Reviews of Environmental Contamination and Toxicology, v132. Prepared in cooperation with Akademiya Nauk SSSR, Borok. Inst. Biologii Vnutrennykh Vod.

Due to increased organophosphate (OP) pesticide applications, it has become necessary to evaluate their hazards and develop biological indicators of aquatic contamination. It has been hypothesized that suppression of ChE activity could be used as an indicator of contaminant stress and exposure. It also has been shown that selective toxicity of OPs could be due to variability among structure and properties of AChEs of different animals, as well as reactivation of the enzyme. One possible way to create highly selective chemicals is synthesis based on similarity in structure-activity relationships derived from biochemical data. The review summarizes published data on ChEs in aquatic organisms.

Keywords: *Cholinesterase, *Aquatic biology, *Marine biology, Invertebrates, Vertebrates, Blood, Fishes, Mollusca, Arthropods, Annelida, Lampreys, Reprints.

**PB93-236230/REB** PC **A02**/MF **A01**
National Science Foundation, Washington, DC.
**Long-Term Survival and Plasmid Maintenance of 'Escherichia coli' in Marine Microcosms.** Journal article.
Saint Mary's Coll. of Maryland, St. Mary's City.
J. J. Byrd, and R. R. Colwell. c1993, 8p EPA/600/J-93/384
Grant NSF-BSR-8806509
Pub. in FEMS Microbiology Ecology, v12 p9-14 1993. See also PB93-121176. Prepared in cooperation with Center of Marine Biotechnology, Baltimore, MD. Sponsored by National Science Foundation, Washington, DC., and Environmental Research Lab., Gulf Breeze, FL.

The survival pattern and plasmid maintenance of Escherichia coli was examined in an artificial seawater microcosm. It was found that the three strains of E. coli (EK3C, H10407, and 34309) included in the study were able to maintain a portion of cells in the culturable phase for at least 3 years in artificial seawater. Along with retaining culturability, that portion of the cell population also maintained their indigenous plasmids over the 3-year period. It is concluded that cells of E. coli maintaining culturability in seawater are selectively adapted to the salinity of seawater, remaining in a culturable state. The results of the study are significant in that it has been assumed by many public health authorities that E. coli cannot survive, without nutrient addition, in seawater for long periods of time, i.e., years of exposure to seawater. (Copyright (c) 1993 Federation of European Microbiological Societies.)

Keywords: *Escherichia coli, *Plasmids, *Marine biology, *Aquatic microbiology, Survival, Cultures(Biology), Sea water, Microbial colony count, Reprints.

**PB93-236248/REB** PC **A03**/MF **A01**
Environmental Research Lab., Gulf Breeze, FL.
**Microbial Trophic Interactions in Aquatic Microcosms Designed for Testing Genetically Engineered Microorganisms: A Field Comparison.** Journal article.
National Environmental Research Inst., Roskilde (Denmark). Dept. of Marine Ecology and Microbiology.
N. Kroer, and R. B. Coffin. c1992, 16p EPA/600/J-93/385
Pub. in Microbial Ecology, v23 p143-157 1992. Prepared in cooperation with Technical Resources, Inc., Gulf Breeze, FL. Sponsored by Environmental Research Lab., Gulf Breeze, FL.

Microcosms may potentially be used as tools for evaluating the fate and effects of genetically engineered microorganisms released into the environment. Extrapolation of data to the field, however, requires that the correspondence between microcosm and field is known. Microbial trophic interactions within the microbial loop were compared quantitatively and qualitatively between field and microcosms containing estuarine water with and without intact sediment cores. The comparison showed that whereas proportions between trophic levels in microcosms were qualitatively similar to those in the field, rates of microbial processes were from 25 to 40% lower in microcosms. Nitrogen cycling was disrupted in microcosms incubated in the dark to eliminate primary production. Examination of the microbial parameters further suggests that sediment in microcosms may be an important factor regulating the bacterial trophic level. These results demonstrate that analysis of microbial trophic interactions is a sensitive method for the field comparison of aquatic microcosms and a potentially useful tool in the risk assessment of genetically engineered microorganisms. (Copyright (c) Springer-Verlag New York Inc. 1992.)

Keywords: *Aquatic ecosystems, *Aquatic microbiology, *Genetic engineering, *Estuaries, Comparison, Field tests, Nitrogen, Sediments, Ecology, Phytoplankton, Graphs(Charts), Reprints.

**PB93-236255/REB** PC **A02**/MF **A01**
**Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.** Journal article.
Environmental Research Lab., Gulf Breeze, FL.
C. L. McKenney, and D. M. Celestial. c1993, 9p EPA/600/J-93/287, CONTRIB-803
Pub. in Comparative Biochemistry and Physiology, v105C n2 p239-245 1993. See also PB90-264706. Prepared in cooperation with Technical Resources, Inc., Gulf Breeze, FL.

The report presents the following conclusions: (1) Exposure of the estuarine shrimp, Palaemonetes pugio, to a juvenile hormone analogue (> or = 8 microgram methoprene/l) throughout larval development inhibited successful completion of metamorphosis; (2) Methoprene exposure retarded growth in early larval stages and postlarvae, but enhanced growth in premetamorphic larvae; (3) Respiration rates of early larvae were elevated by methoprene exposure, but not so older larvae or postlarvae; (4) Lower net growth efficiency (K2 values) in methoprene-exposed early larvae suggests that increased metabolic demands reduced assimilated energy available for growth; and (5) Modifications in O:N ratios of premetamorphic larvae and postlarvae suggest that methoprene altered substrate utilization patterns during metamorphosis.

Keywords: *Shrimp, *Insects, *Growth regulators, *Toxicity, *Water pollution effects(Animals), Larvae, Estuaries, Growth, Metabolism, Oxygen, Analysis of variance, Reprints, Methoprene, Palaemonetes pugio.

**PB93-236263/REB** PC **A03**/MF **A01**
**Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.** Journal article.
Environmental Research Lab., Gulf Breeze, FL.

A. G. Heath, B. J. Turner, and W. P. Davis. c1993, 11p EPA/600/J-93/388, CONTRIB-372
Pub. in Hydrobiologia, v259 p47-55 1993. Prepared in cooperation with Virginia Polytechnic Inst. and State Univ., Blacksburg. Dept. of Biology.

The fish species Cyprinidon artifrons, Floridichthys carpio, and Gambusia yucatana inhabit shallow mangrove ponds off the coast of Belize. Portions of these ponds experience a diurnal temperature change from 26 C at night to 40 C and above during midday. Repeated field observations indicate Cyprinidon prefer the warmer (and much larger) portions of the ponds whereas the other two species stay in the cooler areas. The hypothesis that temperature is serving as a cue for partitioning within the ponds was supported by laboratory thermal gradient tests in which Cyprinidon preferred temperatures clearly higher than the other two species. The critical thermal maximum (CTM) was determined for the three species using members that had been acclimated to either a daily cycling temperature similar to that for the ponds, or to the mean of the 24-hour cycle (30 C). Cyprinidon acclimated to the cycling temperature had a CTM of 45.5 C, which apparently sets a new record for fish CTM. Acclimation to a constant 30 C lowered the CTM to 43.7 C. Floridichthys and Gambusia acclimated to the cycled temperature had CTMs of 43.9 and 43.3 C respectively, and 42.5 and 42.6 C for those acclimated to 30 C. All three species appear to have the ability to tolerate the high temperatures throughout the ponds but only Cyprinidon utilize the whole pond during the day. (Copyright (c) 1993 Kluwer Academic Publishers.)

Keywords: *Marine fishes, *Temperature, *Tolerances(Physiology), *Ponds, Species diversity, Animal behavior, Field tests, Reprints, Cyprinidon artifrons, Floridichthys carpio, Gambusia yucatana.

**PB93-236271/REB** PC **A02**/MF **A01**
**Chronic Toxicity of Pydraul 50E to Lake Trout.** Journal article.
Environmental Research Lab., Gulf Breeze, FL.
F. L. Mayer, D. F. Woodward, and W. J. Adams. c1993, 8p EPA/600/J-93/389, CONTRIB-763
Pub. in Bulletin of Environmental Contamination and Toxicology, v51 p289-295 1993. Prepared in cooperation with Fish and Wildlife Service, Jackson, MS., and ABC Labs., Inc., Columbia, MO.

Industrial phosphate esters have been widely used for the past 30 years as plasticizers, hydraulic fluids, and gasoline additives because of their fire resistance and performance. A study by the U.S. Environmental Protection Agency indicated that a significant portion of the annual production of all hydraulic fluid was discharged into the environment as a result of leakage. The purpose of the study was to determine the chronic toxicity of Pydraul 50E, an alkyl-aryl phosphate ester hydraulic fluid, to lake trout (Salvelinus namaycush). Fry (24-days-old) were continuously exposed to 0, 2.6, 5.3, and 16 micrograms/L of Pydraul 50E for 120 days. All fish died in the 16 micrograms/L exposure, and growth was significantly less in the 5.3 micrograms/L exposure. A high incidence of light skin coloration (66%) and cataracts in one or both eyes (92%) also occurred in the 5.3 micrograms/L exposure. Bioconcentration factors for Pydraul 50E ranged from 462 to 5,500. Improved management of hydraulic fluid use is recommended to reduce environmental contamination.

Keywords: *Trout, *Toxicity, *Water pollution effects(Animals), *Hydraulic fluids, Plasticizers, Dose-response relationships, Growth, Survival, Reprints, *Pydraul 50E.

**PB93-236289/REB** PC **A03**/MF **A01**
**Recent Developments in Cleanup Technologies.** Journal article.
Environmental Research Lab., Gulf Breeze, FL.
J. G. Mueller, J. E. Lin, S. E. Lantz, and P. H. Pritchard. c1993, 14p EPA/600/J-93/390
Pub. in Jnl. of Remediation Summer, 1993. Prepared in cooperation with SBP Technologies, Inc., Gulf Breeze, FL, and Technical Resources, Inc., Gulf Breeze, FL.

The article summarizes existing biotreatment approaches, presents some of the inherent benefits and disadvantages associated with each technology, and describes some of the more recent advances in the bioremediation industry. Last, the authors describe their own use of innovative inoculation procedures that may enhance the effectiveness and expand the applicability of various bioremediation technologies, thereby providing cost-efficient, effective tools for full-scale remediation of soil and water impacted by compounds notoriously difficult to treat biologically.

Keywords: *Hazardous materials, *Waste disposal, *Biological treatment, Remediation, Microorganisms, Biological activity, Bioreactors, Biodegradation, In-situ processing, Environmental persistence, Technology assessment, Reprints, Bioremediation, Treatment technology, Solid phase treatment, Cell encapsulation.

**PB93-236297/REB** PC **A02**/MF **A01**
**Spawning Periodicity of the Inland Silverside, 'Menidia beryllina' (Pisces: Atherinidae) in the Laboratory: Relationship to Lunar Cycles.** Journal article.
Environmental Research Lab., Gulf Breeze, FL.
M. T. Sherrill, and D. P. Middaugh. 1993, 9p EPA/600/J-93/391
Pub. in Copeia, n2 p522-528 1993.

The reproductive periodicity of the inland silverside, Menidia beryllina, was determined in laboratory experiments with two independent populations of fish. These populations were maintained in a non-tidal environment for 85 days and the daily number of eggs produced was enumerated. Egg production data were plotted in relationship to the equatorial tidal cycle (period 13.66 days) and the semilunar cycle (period 14.77 days). Numbers of eggs spawned were greatest on the day of occurrence of new and full moons during each semilunar cycle. These data indicate an endogenous reproductive cycle that can be maintained in the laboratory in the absence of tidal periodicity.

Keywords: *Marine fishes, *Reproduction(Biology), *Ocean tides, Non-mammalian embryo, Eggs, Laboratories, Reprints, Menidia beryllina.

**PB93-236305/REB** PC **A03**/MF **A01**
**Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
C. F. Blackman, S. G. Benane, D. E. House, and M. M. Pollock. 1993, 16p EPA/600/J-93/392
Pub. in Bioelectromagnetics, v14 n3 p273-286 June 1993. See also PB91-145052.

The study tests the capacity of 50-Hz magnetic and electric fields to stimulate neurite outgrowth in PC-12D cells. The cells were plated on collagen-coated plastic petri dishes and exposed to sinusoidal 50-Hz magnetic fields for 22 hours in a 5% CO2 incubator at 37 C. Two 1,000-turn coils, 20 cm in diameter, were assembled in a Helmholtz configuration to generate a magnetic field in a vertical orientation, thereby including a companion electric field in the dish with intensity proportional to radius. A co-netic metal magnetic-field shield housed the control samples in the same incubator. Total cells and number of cells with neurites at least as long as one cell diameter or having a growth cone were counted within a radius of 0.3 cm of the dish center and within an annulus of 1.7 to 1.8 cm radii in 60-mm dishes, at 3.6 mm radius in 100-mm dishes, and between 1.9 and 2.1 cm radii in the outer well of organ culture dishes, which are physically separated into two concentric wells. Sham exposure demonstrated no difference in percentage of cells with neurites between the exposed and control locations in the incubator. Exposures were done at 4.0, 8.9, 22, 29, 40, 120, 236 and 400 milliGauss (mG). At dish radii of 1.7 - 1.8 cm in the 60-mm dishes these magnetic flux densities induced electric fields of 1.1, 2.5, 5.9, 8.1, 11, 33, 65 and 110 microV/m, respectively, while within a radius of 0.3 cm, the induced electric fields were less than 0.2, 0.4, 1.0, 1.5, 1.9, 6.0, 11 and 19 microV/m, respectively. For other dishes, the larger radii produced proportionally larger induced electric fields. At each field strength, there were two control dishes and four to nine exposed dishes; 100 or more cells were counted at each dish location. (Copyright (c) 1993 Wiley-Liss, Inc.)

Keywords: *Neurites, *Pheochromocytoma, *Magnetic fields, Growth, Electric fields, Exposure, Analysis of variance, Reprints.

**PB93-236313/REB** PC **A02**/MF **A01**
**DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
J. L. Mumford, X. Lee, J. Lewtas, T. L. Young, and R. M. Santella. Mar 93, 7p EPA/600/J-93/394
Pub. in Environmental Health Perspectives, v99 p83-87 Mar 93. See also PB88-104179. Prepared in cooperation with Institute of Environmental Health and Engineering, Beijing (China), and Columbia Univ., New York.

The high lung cancer rate in Xuan Wei, China, is associated with smoky coal use in unvented homes. Smoky coal combustion emits higher levels of polycyclic aromatic hydrocarbons (PAH) than wood combustion. The study used DNA adducts as a biomarker for human exposure to PAH from combustion emissions. DNA adducts were determined by enzyme-linked immunosorbent assays (ELISA) in placentas and peripheral and cord white blood cells from Xuan Wei women burning smoky coal or wood and from Beijing women using natural gas. Color ELISA gave positive results in 58%, 47%, and 5% of the placentas from Xuan Wei women burning smoky coal without and with chimneys, and from Beijing women, respectively. Fluorescence ELISA indicated that 46%, 65%, 56%, and 25% of placentas were positive from Xuan Wei women without and with chimneys, Xuan Wei women burning wood, and Beijing controls, respectively. PAH-DNA adducts were detected in a higher percentage of placentas from Xuan Wei women exposed to smoky coal or wood emissions than those of the Beijing controls. The results suggest that DNA adducts can be used as a qualitative biomarker to assess human exposure to combustion emissions.

Keywords: *DNA adducts, *Indoor air pollution, *Biological markers, *Air pollution effects(Humans), Females, Tissues(Biology), Coal, Enzyme-linked immunosorbent assay, Natural gas, Fluorescence, Reprints, Xuan Wei(China).

**PB93-236321/REB** PC **A03**/MF **A01**
Health Effects Research Lab., Research Triangle Park, NC.
**Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.** Journal article.
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
R. H. Jaskot, E. C. Grose, J. H. Richards, and D. L. Doerfler. 1991, 11p EPA/600/J-93/395
Contract EPA-68-02-4450
Pub. in Fundamental and Applied Toxicology, v17 n6 p666-674 Nov 91. See also PB86-217478. Sponsored by Health Effects Research Lab., Research Triangle Park, NC.

A concentration-response and concentration x time (CxT) study were undertaken to determine the effect of phosgene (COCl2) inhalation on pulmonary antioxidant processes as determined by changes in endogenous glutathione (GSH) and antioxidant-associated enzymes (GSH peroxidase, GSH reductase, glucose-6-phosphate dehydrogenase, and superoxide dismutase). Rats were exposed to 0.0, 0.1, 0.25, 0.5, and 1.0 ppm phosgene for 4 hr and 0.25 ppm phosgene for 8 hr. The endpoints were assayed at 0, 1, 2, 3 and 7 days after exposure cessation. The lowest effective concentration was 0.1 ppm phosgene (increases in measured variables from 8 to 35% above control values). At all concentrations, major effects were observed 1 to 2 days after exposure (12 to 159% above control), peaking at 2 to 3 days postexposure (11 to 253% above control), and in some cases were still evident 7 days (10 to 65% above control) after exposure. The CxT study using the same dose (120 ppm-min), but different times and concentration (0.25 ppm for 8 hr and 0.5 ppm for 4 hr), showed a concentration dependence. The peak antioxidant enzyme changes observed for the higher concentration (0.5 ppm) were at least double those observed for the lower concentration (0.25 ppm). (Copyright (c) 1991 Society of Toxicology.)

Keywords: *Antioxidants, *Lung, *Phosgene, *Air pollution effects(Animals), Glucosephosphate dehydrogenase, Rats, Glutathione peroxidase, Glutathione reductase, Superoxide dismutase, Dose-response relationships, Graphs(Charts), Reprints.

**PB93-236339/REB** PC **A03/MF A01**
**Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
T. V. Reddy, L. W. Chang, A. B. DeAngelo, M. A. Pereira, and F. B. Daniel. 1993, 13p EPA/600/J-93/396
Pub. in Environmental Sciences, v1 n4 p179-189 Oct 92. Prepared in cooperation with Environmental Health Research and Testing, Inc., Cincinnati, OH.

The effects of certain reputedly non-genotoxic agents on cholesterol and DNA synthesis were investigated in cultured primary rat hepatocytes and in liver slices. Hepatocytes in culture were incubated for 48, 60, and 72 hours with one of the following chemicals: chloroform (CHCl3); 1,1,2-trichloroethane (TCE); trichloroacetic acid (TCA); dichloroacetic acid (DCA); monochloroacetic acid (MCA); di(2-ethylhexyl)phthalate (DEHP); mono(ethylhexyl)phthalate (MEHP); phenobarbital (PB); epidermal growth factor (EGF); dimethylsulfoxide (DMSO). All test chemicals stimulated cholesterol and DNA synthesis in the cultures. However, the induction of DNA synthesis in hepatocytes treated with DCA became apparent by sixty hours.

Keywords: *Liver, *Environmental pollutants, *Cholesterol, *DNA replication, Rats, Cultured cells, Biological models, Cell division, Biosynthesis, Chlorinated hydrocarbons, Dimethyl sulfoxide, Epidermal growth factor-urogastrone, Phenobarbital, Reprints.

**PB93-236347/REB** PC **A02/MF A01**
Health Effects Research Lab., Research Triangle Park, NC. Developmental Toxicology Div.
**Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.** Journal article.
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
L. E. Gray, J. Ostby, R. Marshall, and J. Andrews. 1993, 6p EPA/600/J-93/397
Pub. in Fundamental and Applied Toxicology, v20 n3 p286-294 Apr 93. See also PB90-146085. Sponsored by Health Effects Research Lab., Research Triangle Park, NC. Developmental Toxicology Div.

The current study was conducted to evaluate the effects of subchronic administration of Aroclor 1254 on testicular gamete production and endocrine function. The thyroid hormone thyroxine (T4), which is critical for reproduction and development, was also measured because of the well-documented effects of PCBs on this hormone. Weanling (31-day-old) male Fischer rats were administered 0, 0.1, 1, 10, or 25 mg/kg/day Aroclor 1254 by gavage for 5, 10, or 15 weeks and necropsied. In the high-dose group, body, seminal vesicle, cauda epididymal, and pituitary weights were depressed at 10 and 15 weeks and cauda epididymal sperm numbers were reduced after 15 weeks of dosing. In contrast, testes weights, testicular sperm numbers, sperm motility, and serum and testicular testosterone levels were unaffected, even in the highest dose group (25 mg/kg/day). Aroclor 1254 administration produced histological alterations in the liver and kidney at doses of 1.0 mg/kg/day and above. These results indicate that the testis of the rat is not a specific target organ for Aroclor 1254.

Keywords: *Reproduction(Biology), *Aroclors, *Thyroid gland, Thyroid hormones, Rats, Testis, Sperm motility, Organ weight, Testosterone, Body weight, Reprints.

**PB93-236354/REB** PC **A03/MF A01**
**Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
M. I. Gilmour, P. Park, D. Doerfler, and M. J. K. Selgrade. 1993, 18p EPA/600/J-93/398
Pub. in Experimental Lung Research, v19 n2 p299-314 May 93. See also PB84-101757. Prepared in cooperation with North Carolina Univ. at Chapel Hill. Center for Environmental Medicine and Lung Biology.

Exposure to ozone (O3) has been shown to increase susceptibility of mice to bacterial infection; however, the underlying mechanism has not been well elucidated. The study investigated the effect of O3 exposure on the ability of mice to combat an infectious challenge of Streptococcus zooepidemicus. Following a 3-h exposure to either air, 0.4 ppm O3, or 0.8 ppm O3, 5- and 9-week-old mice received an aerosol infection of bacteria. Intrapulmonary killing of the bacteria was impaired in the O3-exposed mice. The effect was most severe at the higher dose of O3 in the younger mice, and showed good correlation to subsequent mortality assessed over a 20-day period. Alveolar macrophages (AM) from O3-exposed mice had an impaired ability to phagocytose the bacteria. Additionally, prostaglandin E2 (PGE2) levels, which are known to depress AM function, were increased in the bronchoalveolar lavage fluid of the younger mice following exposure to O3, while pretreatment with indomethacin in the drinking water blunted the increased of PGE2 and reduced O3 enhanced mortality from 53 to 33%. The data show that O3 inhalation can reduce the defensive capability of the murine lung and that this is associated with a reduction in AM phagocytosis. (Copyright (c) 1993 Taylor & Francis.)

Keywords: *Ozone, *Anti-infective agents, *Air pollution effects(Animals), *Immunosuppression, Mice, Phagocytosis, Alveolar macrophages, Prostaglandins, Bronchoalveolar lavage fluid, Microbial colony count, Mortality, Reprints.

**PB93-236362/REB** PC **A04/MF A01**
Department of Energy, Washington, DC.
**Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
D. J. Brusick, J. Ashby, F. J. de Serres, P. H. M. Lohman, and T. Matsushima. c1992, 63p EPA/600/J-93/399
Pub. in Mutation Research, v266 n1 p7-25 Mar 92. See also PB89-109680. Prepared in cooperation with Leiden Rijksuniversiteit (Netherlands), Lawrence Livermore National Lab., CA., and Hazleton Labs. America, Inc., Vienna, VA. Sponsored by Department of Energy, Washington, DC.

Short-term testing methods, encompassing a wide variety of species and genetic mechanisms, have been developed to detect genetic effects produced by chemicals. The use of multiplicity of tests has created a difficult and controversial challenge in the interpretation of mixed test results. The driving principle of this report and the International Commission for Protection against Environmental Mutagens and Carcinogens (ICPEMC) Committee 1 was to combine the major parameters of testing (dose, metabolic activation, sign of response, and the replication of test data) into a single score which could be pooled by entry, by test (e.g., Salmonella reverse mutation), by test class (e.g., bacterial mutation), and by family (in vitro or in vivo), into a composite score for a chemical. The system is designed: (i) to cope with redundant data, disagreement, and sporadically filled matrices; (ii) to supply statistical properties by chemical and by test; and (iii) to have features of self-learning to improve predictive performance and internal consistency for any one of several types of genetic hazard.

Keywords: *Mutagenicity tests, *Mutagens, Comparison, Chromosome aberrations, Neoplastic cell transformation, Drosophila, DNA repair, Dose-response relationships, Statistical analysis, Reprints.

**PB93-236370/REB** PC **A02/MF A01**
**Bitertanol, a Triazole Fungicide, Increases Operant Responding but Not Motor Activity.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Neurotoxicology Div.
A. R. Allen, and R. C. MacPhail. 1993, 8p EPA/600/J-93/400
Pub. in Neurotoxicology and Teratology, v15 n4 p237-242 Jul 93. See also PB90-146234. Prepared in cooperation with North Carolina Univ. at Chapel Hill. Dept. of Psychology.

Several recent reports indicate that triadimefon, a triazole fungicide, has effects on behavior that are similar to those of psychomotor stimulants. For example, triadimefon increases overall fixed-interval (FI) response rate, disrupts FI response patterning, increases motor activity, and produces stereotypies at high doses. The study was designed to determine whether similar behavioral effects on FI performance and motor activity could be produced by another triazole fungicide, bitertanol. The effects of bitertanol (10-300 mg/kg, IP) were determined in rats on performance maintained under a multiple FI 1-min FI 5-min schedule of reinforcement. Intermediate doses of bitertanol increased response rates and disrupted response patterning in both FI components. A second experiment determined the effects of the same doses of bitertanol on motor activity. In contrast to its effects on operant responding, bitertanol did not increase motor activity at any of the doses tested. These findings indicate that the behavioral similarities between bitertanol and triadimefon are limited and that a dissociation exists between bitertanol's effects on operant performance and motor activity. (Copyright (c) 1993 Pergamon Press Ltd.)

Keywords: *Fungicides, *Motor activity, *Operant conditioning, Rats, Graphs(Charts), Dose-response relationships, Reprints, *Bitertanol, Triadimefon.

**PB93-236388/REB** PC **A03/MF A01**
**Deposition of Sulfate Acid Aerosols in the Developing Human Lung.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Environmental Toxicology Div.
T. B. Martonen, Z. Zhang, and J. Hester. 1993, 25p EPA/600/J-93/401
Pub. in Inhalation Toxicology 5, n1 p165-187 Feb 93. See also PB86-163383. Prepared in cooperation with ManTech Environmental Technology, Inc., Research Triangle Park, NC., and Rhode Island Univ., Kingston. Dept. of Mechanical Engineering.

Computations of aerosol deposition as affected by (1) aerosol hygroscopicity, (2) human age, and (3) respiratory intensity are accomplished using a validated mathematical model. The interactive effects are very complicated but systematic. Few general observations can be made; rather, the findings presented within should be addressed on a case-by-case basis. The behavior of inhaled H2SO4 particles subsequent to water vapor uptake significantly influences their total deposition values and relative spatial distribution patterns within tracheobronchial and pulmonary airways. These results must be accounted for in risk assessment protocols, since compartments of the lung have different clearance processes and sensitivities to toxic materials. There is a critical size in the 0.2-0.4 micrometer range: For larger particles the influence of hygroscopicity is to increase total deposition, whereas for smaller particles the opposite occurs. The dosimetric model was developed to provide a scientific basis for extrapolation modeling of factors (1), (2), and (3) in the hazard evaluation of airborne contaminants.

Keywords: *Air pollution effects(Humans), *Lung, Growth, Respiratory function tests, Deposition, Trachea, Bronchi, Moisture, Reprints, *Sulfate acid aerosols, Hygroscopicity.

**PB93-236396/REB** PC **A02/MF A01**
**Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Human Studies Div.
T. R. Gerrity, W. D. Bennett, H. Kehrl, and P. J. DeWitt. 25 Sep 91, 8p EPA/600/J-93/402
Pub. in Jnl. of Applied Physiology, v74 n6 p2984-2989 Jun 93. See also PB89-110548. Prepared in cooperation with North Carolina Univ. at Chapel Hill. Center for Environmental Medicine and Lung Biology.

Acute exposure of humans to ozone is known to acutely cause pulmonary function decrements, inflammation, and increased permeability of pulmonary epithelium. Fifteen healthy male and female nonsmoking subjects were exposed, on different occasions, to clean air and 0.4 ppm ozone for 1 hour while they exercised continuously. Pulmonary function was measured immediately before and after exposure and 90 min and 24 hours after exposure. Each subject returned the next day for a final particle retention measurement. Despite significant changes in pulmonary function, there was no difference in mean whole lung retention time of particles between clean air and ozone exposures, indicating that mucociliary transport is unaffected by ozone exposure when it is measured 2 hours after exposure.

Keywords: *Ozone, *Air pollution effects(Humans), *Toxicity, *Lung, Respiratory function tests, Mucus, Air, Comparison, Biological transport, Reprints.

**PB93-236404/REB** PC **A03**/MF **A01**
**Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
A. D. Kligerman, J. W. Allen, M. F. Bryant, J. A. Campbell, and B. W. Collins. 1992, 11p EPA/600/J-93/403
Pub. in Mutation Research 280, n1 p35-43 Jul 92. Prepared in cooperation with Environmental Health Research and Testing, Inc., Research Triangle Park, NC., and National Inst. of Environmental Health Sciences, Research Triangle Park, NC.

The data for the in vivo genotoxicity of styrene (STY) are equivocal. To evaluate the clastogenicity and sister-chromatid exchange (SCE)-inducing potential of STY in vivo under carefully controlled conditions, B6C3F1 female mice were exposed by inhalation for 6 h/day for 14 consecutive days to either 0, 125, 250 or 500 ppm STY. One day after the final exposure, peripheral blood, spleen, and lungs were removed and cells were cultured for the analysis of micronucleus (MN) induction using the cytochalasin B-block method, chromosome breakage, and SCE induction. Peripheral blood smears were also made for scoring MN in erythrocytes. There was a significant concentration-related elevation of SCE frequency in lymphocytes from the spleen and the peripheral blood as well as in cells from the lung. However, no statistically significant concentration-related increases were found in the frequency of chromosome aberrations in the cultured splenocytes or lung cells, and no significant increases in MN frequencies were observed in binucleated splenocytes or normochromatic erythrocytes in peripheral blood smears. (Copyright (c) 1992 Elsevier Science Publishers B.V.)

Keywords: *Chromosome aberrations, *Styrene, *Mutagens, Mice, Respiration, Sister chromatid exchange, Spleen, Lung, Micronucleus tests, Graphs(Charts), Reprints.

**PB93-236412/REB** PC **A03**/MF **A01**
**Effects of Dopaminergic Drugs on Working and Reference Memory in Rats.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC. Neurotoxicology Div.
P. J. Bushnell, and E. D. Levin. Aug 93, 14p EPA/600/J-93/404
Pub. in Pharmacology Biochemistry and Behavior, v45 n4 p765-776 Aug 93. Prepared in cooperation with Duke Univ. Medical Center, Durham, NC. Dept. of Psychiatry.

Occupational exposure to styrene monomer has been associated with cognitive dysfunction in humans, and changes in dopaminergic function have been suggested to underly effects of repeated exposure to styrene monomer in animals. The study was designed to determine whether styrene and/or dopaminergic drugs affect working and reference memory in animals. Male Long-Evans rats were administered styrene by gavage at 4.5 - 6.5 months of age, and subsequently trained to perform an appetitive operant task which allowed daily quantification of working memory (accuracy of spatial delayed nonmatching-to-position), reference memory (accuracy of visual discrimination), perseverative responding (position bias) and motor function (choice lever press latencies and nosepoke inter-response times during delay). Styrene alone did not affect acquisition or any measure of performance on this task. The effects of the dopamine reuptake inhibitor d-amphetamine (0.3 - 1.0 mg/kg), the D1 agonist SKF 38393 (1.0 - 3.0 mg/kg), the D1 antagonist SCH 23390 (0.01 - 0.03 mg/kg), the D2 agonist quinpirole (0.01 - 0.056 mg/kg), and the D2 antagonist raclopride (0.056 - 0.177 mg/kg) were then assessed in control and styrene-treated rats.

Keywords: *Dopaminergic agents, *Memory, Rats, Motor activity, Amphetamines, Cognition, Animal behavior, Reprints.

**PB93-236420/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Testing for Trends When There Are Changes in Methods.** Journal article.
ManTech Environmental Technology, Inc., Corvallis, OR.
A. D. Newell, D. J. Blick, and R. C. Hjort. c1993, 14p EPA/600/J-93/405
Pub. in Water, Air, and Soil Pollution, v67 p457-468 1993. See also PB93-236461 and PB88-215009. Sponsored by Corvallis Environmental Research Lab., OR.

Data from monitoring projects often include sampling or analytical changes that preclude trend analysis on the entire period of record. A modification of the nonparametric Kendall's test for monotonic trends, which accounts for such changes in the period of record, is described here. This approach blocks the data so that only data collected or analyzed under similar circumstances are compared. Alternatively, when appropriate data exist, data collected using the old method may be calibrated to values expected from the new method. Traditional trend tests may then be applied to resulting data sets. Results from simulations assessing both the power of the blocked test and the standard test performed on calibrated data are presented. The power of the blocked test exceeded the power of the calibration approach only when the calibration error was extremely large. Both the blocking and calibration approaches were applied to and compared for chemical data from Vermont lakes. (Copyright (c) 1993 Kluwer Academic Publishers.)

Keywords: *Water quality data, *Water pollution sampling, *Data collection, *Standards, *Environmental monitoring, Trends, Concentration(Composition), Calibrating, Revisions, Mathematical models, Surveys, Graphs(Charts), Statistical analysis, Long term effects, Reprints, *Kendall tau test.

**PB93-236438/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.** Journal article.
ManTech Environmental Technology, Inc., Corvallis, OR.
J. L. Stoddard, and J. H. Kellogg. c1993, 18p EPA/600/J-93/406
Pub. in Water, Air, and Soil Pollution, v67 p301-317 1993. See also PB93-236420 and PB91-218016. Prepared in cooperation with Vermont Dept. of Environmental Conservation, Waterbury. Sponsored by Corvallis Environmental Research Lab., OR.

Twenty-four low acid neutralizing capacity (ANC) lakes in Vermont have been monitored since 1980 to characterize their chemical variability and to determine if they exhibit temporal trends in acid/base chemistry. Many of the lakes exhibit significant decreasing trends in SO4(2-) and base cation (C(sub B)) concentrations, but few exhibit significant changes in pH or ANC. An examination of all trend results suggests a tendency for ANC and pH values in these lakes to be increasing, but either the changes are too small, or the number of observations too small, for these trends to be significant. Data from these lakes suggest that the primary responses of surface waters in this region to declining rates of SO4(2-) deposition are decreases in SO4(2-) concentrations and rates of cation leaching from watershed soils. Decreasing rates of C(sub B) deposition may combine with lower rates of cation leaching to produce declines in C(sub B) that are very similar to measured declines in SO4(2-) concentration. Vermont lakes exhibit their lowest ANC values in spring, attributable, for the most part, to dilution of C(sub B) concentrations during spring snow melt. (Copyright (c) 1993 Kluwer Academic Publishers.)

Keywords: *Acidification, *Vermont, *Water pollution sampling, *Environmental monitoring, *Lakes, Water quality data, Trends, Long term effects, pH, Acid neutralizing capacity, Site surveys, Ions, Sulfates, Surface waters, Concentration(Composition), Reprints.

**PB93-236446/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.** Journal article.
ManTech Environmental Technology, Inc., Corvallis, OR.
A. D. Newell, and M. L. Morrison. c1993, 24p EPA/600/J-93/407
Pub. in Water, Air and Soil Pollution, v67 p433-456 1993. See also PB93-236438. Sponsored by Corvallis Environmental Research Lab., OR.

Long-term monitoring projects are usually plagued with method changes that occur in the midst of the monitoring record. Such changes can affect the data, resulting in observations of long-term trends that reflect the change in methods rather than the monitored system. The article describes two statistical approaches to evaluate the effect of method changes, illustrated by several examples from the U.S. Environmental Protection Agency's Long-Term Monitoring Project, a study of the effects of acidic deposition on surface water chemistry. Structural regression models or paired t-tests were applied to various overlapping data sets to determine whether statistically significant differences existed between methods. Statistically significant differences between method changes were seen for some variables. The characteristics under which each statistical approach was applied are discussed, as are considerations regarding calibration of the older portions of the data.

Keywords: *Water chemistry, *Water pollution sampling, *Environmental monitoring, *Water quality data, Long term effects, Trends, Statistical analysis, Calibrating, Water pollution detection, Water analysis, Filtration, Ions, Graphs(Charts), Reprints, *Protocols, Kendall tau test.

**PB93-236453/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Inter-Regional Comparison of Patterns and Trends in Surface Water Acidification Across the United States.** Journal article.
ManTech Environmental Technology, Inc., Corvallis, OR.
A. D. Newell. c1993, 26p EPA/600/J-93/408
Pub. in Water, Air, and Soil Pollution, v67 p257-280 1993. See also PB93-236446. Sponsored by Corvallis Environmental Research Lab., OR.

Temporal trends in acid-base chemistry are reported for surface waters in 6 regions of the United States. The lakes and streams are low acid neutralizing capacity (ANC), dilute systems, selected to represent acid-sensitive aquatic resources in the 6 regions. The predominant trends observed were decreases in lake and stream SO4(2-) concentrations in sites east of the Mississippi River, and increases in NO3(-) in the Adirondack lake and Catskill stream sites (both located in eastern New York State). Correlations of trend results from all sites with other factors indicated that trends in precipitation volume were highly correlated with the observed trend patterns. From the surface water trend results, three distinct clusters were identified that corresponded to three trend patterns: 'dilution', recovery', and 'acidification', which were distributed across the Long-Term Monitoring (LTM) regions with no particular geographic patterns. (Copyright (c) 1993 Kluwer Academic Publishers.)

Keywords: *Surface waters, *Acidification, *Water pollution sampling, *Environmental monitoring, Long term effects, Air water interactions, Water quality data, Trends, Regional analysis, United States, pH, Air pollution, Comparison, Acid neutralizing capacity, Lakes, Streams, Precipitation(Meteorology), Concentration(Composition), Reprints.

**PB93-236461/REB** PC **A02**/MF **A01**
**Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.** Journal article.
Corvallis Environmental Research Lab., OR.
J. Ford, J. L. Stoddard, and C. F. Powers. c1993, 9p EPA/600/J-93/409
Pub. in Water, Air and Soil Pollution, v67 p247-255 1993. See also PB93-236453. Prepared in cooperation with ManTech Environmental Technology, Inc., Corvallis, OR.

The U.S. Environmental Protection Agency's Long-Term Monitoring (LTM) Project is a network implemented to study long-term changes in the chemistry of acid-sensitive surface waters in six regions of the U.S. The project was implemented in 1983 and has, not surprisingly, undergone various types of challenges and changes in each of the six regions. The paper describes five basic principles of monitoring network design that the authors believe are necessary (although not necessarily sufficient) for implementation and operation of a useful and professionally reputable network. The results of the first 9 years of the LTM Project are discussed here in the context of these 5 principles. (Copyright (c) 1993 Kluwer Academic Publishers.)

Keywords: *Water pollution sampling, *Long term effects, *Environmental monitoring, *Water chemistry, *Acidification, *Surface waters, US EPA, Regional

analysis, Implementation, Trends, pH, Ecology, Water quality data, Data collection, Networks, Reprints.

**PB93-236479/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.** Journal article.
California Univ., Santa Barbara.
D. Leckband, Y. L. Chen, J. Israelachvili, H. H. Wickman, and M. Fletcher. c1993, 13p EPA/600/J-93/410
Pub. in Biotechnology and Bioengineering, v42 n2 p167-177 1993. Prepared in cooperation with Maryland Univ., Baltimore. Center for Biotechnology, and National Science Foundation, Washington, DC. Sponsored by Corvallis Environmental Research Lab., OR.

The adhesion forces between various surfaces were measured using the 'surface forces apparatus' technique. This technique allows for the thickness of surface layers and the adhesion force between them to be directly measured in controlled vapor or liquid environments. Three types of biological surfaces were prepared by depositing various lipid-protein monolayers (with thicknesses ranging from 1 to 4 nm) on the inert, molecularly smooth mica surface: (i) hydrophobic lipid monolayers; (ii) amphiphilic polyelectrolyte surfaces of adsorbed polylysine; and (iii) deposited bacterial S-layer proteins. The adhesion, swelling, and wetting properties of these surfaces was measured as a function of relative humidity and time. (Copyright (c) 1993 John Wiley & Sons, Inc.)

Keywords: *Surface properties, *Lipids, *Proteins, *Lysine, *Molecular conformation, Bacillus, Solutions, Reprints, Hydrophobic interactions.

**PB93-236487/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.** Journal article.
National Board of Waters and the Environment, Helsinki (Finland).
P. Kortelainen, M. B. David, T. Rolla, and I. Maekinen. c1992, 11p EPA/600/J-93/411
Pub. in Environmental International, v18 p621-629 1992. See also PB93-141166. Sponsored by Corvallis Environmental Research Lab., OR.

Over the past two decades, acidification has been one of the central issues in environmental research. The subproject of the Humic Lake Acidification Experiment (HUMEX), begun in 1988, was designed to determine the contribution of organic acids to the acidity of Lake Skjervatjern (the HUMEX Lake) and the impacts of the acidification on the characteristics of organic carbon. In order to get an empirical measure for organic acidity, dissolved organic carbon (DOC) was fractionated, isolated, and base-titrated from each half of Lake Skjervatjern. Hydrophobic acids were the dominant organic carbon fraction; the total organic acid content was generally greater than 80% of the DOC. The reliability of the fractionation procedures was tested with synthetic acids and the Nordic Fulvic acid. The DOC fractions did not show high variation over the 1.5-yr acidification period. Hydrophilic acids had consistently greater exchange acidities compared to hydrophobic acids. The dissociation of organic acids during acid-base titrations clearly increased with increasing pH. The high organic anion contribution to the ion balances indicates that humic matter is an important acidity source in Lake Skjervatjern.

Keywords: *Lake Skjervatjern, *Acidification, *Humus, *Organic acids, *Water pollution, pH, Distillation, Anions, Pollution sources, Water chemistry, Norway, Surface waters, Aquatic ecosystems, Reprints, *Foreign technology, *Humic Lake Acidification Experiment, *Dissolved organic carbon.

**PB93-236495/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.** Journal article.
ManTech Environmental Technology, Inc., Corvallis, OR.
G. R. Holdren, T. C. Strickland, P. W. Shaffer, P. F. Ryan, and P. L. Ringold. c1992, 13p EPA/600/J-93/412
Contracts EPA-68-C-0006, DE-AC-0584OR21400
Pub. in Jnl. of Environmental Quality, v22 n2 p279-289 Apr-Jun 93. Also pub. as Oak Ridge National Lab., TN. Environmental Sciences Div. rept. no. ORNL/PUB-3914. See also PB93-212660. Prepared in cooperation with Oak Ridge National Lab., TN. Environmental Sciences Div., and Oak Ridge National Lab., Grand Junction, CO. Environmental Sciences Div. Sponsored by Corvallis Environmental Research Lab.,

A critical load is the amount of atmospheric pollutant that can be deposited on a sensitive ecosystem without causing measurable, long-term degradation in ecosystem form or function. The authors compare several methods for making critical load estimates of SO4 deposition to lakes. The models were originally developed to address surface water acidification issues. Critical loads are computed here as the levels of deposition required to reduce surface water acid neutralizing capacities (ANC) from present values to either 25 microeq/L or 0 microeq/L. These end points were selected to provide a common basis for comparing critical load values obtained from the various models and are not intended to provide definitive critical load estimates. Differences in results are observed not only between models, but within models when slightly different approaches are used for estimating certain parameters. The interpretation of model results depends strongly on how systems are grouped regionally.

Keywords: *Air pollution, *Air water interactions, *Water pollution, *Surface waters, *Mathematical models, *Acidification, Deposition, Study estimates, Ecosystems, Regional analysis, Sulfates, Acid neutralizing capacity, Comparison, Performance evaluation, Reprints, *Critical loads.

**PB93-236503/REB** PC **A17**/MF **A03**
Environmental Protection Agency, Washington, DC.
**Manual of Federal Geographic Data Products.** Final rept.
VIGYAN, Inc., Falls Church, VA.
Jan 93, 376p
Contract EPA-68-W90065
Prepared in cooperation with Geological Survey, Reston, VA. Sponsored by Environmental Protection Agency, Washington, DC.

The 'Manual of Federal Geographic Data Products' describes over 150 Federal geographic data products that are national in scope and are commonly distributed to the public by 21 Federal agencies. Geographic data products include maps, computer-compatible (digital) data, aerial photography and multi-spectral imagery, and other geographically-referenced data sets. Data products are described in a standardized format and grouped by producing agency. The descriptions include information on the content of the product, available coverage, and ordering. A cross-reference is provided to help readers find products that contain information about different data categories.

Keywords: *Catalogs(Publications), *Geography, *Information systems, Maps, Data bases, Computer products, Agriculture, Land use, Navigation aids, Oceanography, Natural resources, Economic factors, Aerial photography, Remote sensing, Satellite data.

**PB93-236511/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
**Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.** Symposium paper.
National Inst. of Standards and Technology, Gaithersburg, MD.
G. A. Klouda, J. E. Norris, L. A. Currie, G. C. Rhoderick, and R. L. Sams. 1993, 21p EPA/600/A-93/222
Pub. in Proceedings of the AWMA/EPA Symposium, 'Measurement of Air Toxic and Related Air Pollutants', Durham, NC., May 3-7, 1993. See also PB86-120664. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.

Atmospheric non-methane volatile organic compounds (VOCs) are known to play an important role in urban ozone formation during the summer. To respond to the need for a direct measure of VOC source contributions from biogenic ((14)C/(12)C=10 to the -12 power) and fossil fuel ((14)C/(12)C=0) emissions, a system and protocol are being developed to separate the total VOC fraction from 0.1 cu m of ambient air for accelerator mass spectrometry (AMS) (14)C. The gas separation system developed at NIST allows for the simultaneous separation of low vapor pressure (LVP) VOCs and H2O, high vapor pressure (HVP) VOCs and CO2, CO and CH4 through sequential cryogenic separation and selective oxidation techniques. Preliminary results of this system and procedure for isolating these fractions show a LVP-VOC blank of 2 + or - microgram C, which represents the effect of the separation system plus CO2 cross-contamination. Hydrocarbons having vapor pressures greater than n-decane are not retained at a level of more than a few percent in the LVP-VOC fraction. The recovery of C5-C8 hydrocarbons in the combined HVP-VOC and CO2 fraction ranges from 27% to 78%.

Keywords: *Volatile organic compounds, *Ozone, *Precursors, *Air pollution, *Separation, Cryogenics, Air sampling, Oxidation, Mass spectroscopy, Carbon 12, Carbon 14, Hydrocarbons, Reprints.

**PB93-236529/REB** PC **A03**/MF **A01**
**New Mathematical Model of Pollutant Dispersion Near a Building.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
E. L. Genikhovich, and W. H. Snyder. 1993, 17p EPA/600/A-93/223
See also PB92-232461. Prepared in cooperation with National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div.

A new mathematical model of pollutant dispersion near a building has been developed. The main physical features of this Gaussian-type model include rapid mixing of pollutants inside cavities, distortion of streamlines, increased level of turbulence outside cavities, and changing dispersion regimes as a consequence of low-frequency oscillations of wind direction. The model can be used for calculation of pollution concentrations at arbitrary receptor points, including inside the cavity and on the walls and top of the building. Adjustable parameters include wind speed, wind direction and stability category as well as stack, effluent and building parameters. The model has been validated using the results of systematic studies of air pollution near buildings, which have been carried out in the EPA Meteorological Wind Tunnel. These studies have tested the effects of building aspect ratio and orientation relative to the wind flow, source height and location relative to the building, as well as effluent gas parameters (velocity and overheating). Comparison of calculated and measured vertical profiles of concentration at a distance of 15 building heights from the source have shown that the mathematical model reproduces reasonably well the simulation results (80 to 90% of calculations differ from measurements by less than a factor of two), and works better in the presence of the building than in its absence.

Keywords: *Air pollution, *Diffusion modeling, *Pollution transport, *Mathematical models, Wind(Meteorology), Wind tunnels, Simulation, Buildings, Emission factors, Air flow, Reprints.

**PB93-236537/REB** PC **A02**/MF **A01**
**Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
H. H. Tabak, J. R. Haines, A. D. Venosa, J. A. Glaser, and S. Desai. 1993, 10p EPA/600/A-93/224
Pub. in International Oil Spill Conference Proceedings in San Diego, CA., March 4-7, 1991, p583-590. See also PB93-236545 and PB90-264011. Prepared in cooperation with Cincinnati Univ., OH. Dept. of Chemical and Nuclear Engineering.

Bench-scale biodegradability studies of the Alaskan weathered crude oil were undertaken as part of the bioremediation project for the shorelines of Prince William Sound, Alaska, contaminated by the Exxon Valdez oil spill. The purpose of the studies was to evaluate the capability of the indigenous microbial consortium of the sea water and island beach areas, to biodegrade the weathered crude oil's alkane hydrocarbon and polynuclear aromatic (PAH) constituents in batch-type respirometric reactors and shaker flask systems.

Keywords: *Biodeterioration, *Oil pollution, *Prince William Sound, *Land pollution control, *Water pollution control, Alaska, Bench-scale experiments, Weathering, Aromatic polycyclic hydrocarbons, Alkanes, Beaches, Microorganisms, Oil spills, Shores, Crude oil, Reprints, *Exxon Valdez oil spill.

**PB93-236545/REB** PC **A02**/MF **A01**
**Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
J. A. Glaser, A. D. Venosa, and E. J. Opatken. 1993, 6p EPA/600/A-93/225
Pub. in International Oil Spill Conference, San Diego, CA., March 4-7, 1991, p559-562. See also PB93-236537.

The application of nutrients to assist and accelerate naturally occurring biodegradation processes was studied at field scale on contaminated shoreline in Prince William Sound as part of the effort to recover from the Exxon Valdez oil spill. Selection of fertilizer forms and means to apply the nutrients comprised a major part of the evaluation project. Liquid and solid forms of nutrients were tested. New and innovative application technology was investigated for use under field conditions. Ease of application and cost-effective technology were important selection criteria. Worker protection and environmental-effect concerns served to modify the selection of application technology. Details of application technology selection are presented, difficulties with application and areas for potential research are discussed. Projections for development of application technology to subsurface deposits of stranded oil are made.

Keywords: *Prince William Sound, *Oil pollution, *Nutrients, *Biodeterioration, *Water pollution control, *Land pollution control, Alaska, Fertilizers, Crude oil, Beaches, Shores, Microorganisms, *Exxon Valdez oil spill.

**PB93-236552/REB** PC **A03**/MF **A01**
**EPANET Water Quality Model.**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
L. A. Rossman. 1993, 17p EPA/600/A-93/226
Pub. in Integrated Computer Applications in Water Supply, Applications and Implementations for Systems Operation and Management, v2 p79-93.

EPANET represents a third generation of water quality modeling software developed by the U.S. EPA's Drinking Water Research Division, offering significant advances in the state of the art for network water quality analysis. EPANET performs extended period simulation of hydraulic and water quality behavior within water distribution systems. In addition to substance concentration, water age and source tracing can also be simulated. EPANET includes a full featured hydraulic simulation model that can handle various types of pumps, valves, and their control rules. The water quality module is equipped to handle constituent reactions within the bulk pipe flow and at the pipe wall. It also features an efficient computational scheme that automatically determines optimal time steps and pipe segmentation for accurate tracking of material transport over time. EPANET is currently being used in the US to study such issues as loss of chlorine residual, source blending and trihalomethane (THM) formation, how altered tank operation affects water age, and total dissolved solids (TDS) control for an irrigation network.

Keywords: *Water quality, *Computerized simulation, *Distribution systems, *Potable water, *Chemical compounds, State of the art, Pipes, Hydraulics, Concentration(Composition), Water pollution, Environmental transport, Aging(Materials), Tracer techniques, Halomethanes, Chlorine, Reprints, *EPANET model, Total dissolved solids, Chemical reaction mechanisms.

**PB93-236560/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Foam Scrubbing (Chapter 9).** Book chapter.
Foster Wheeler Enviresponse, Inc., Livingston, NJ.
P. M. Brown, and J. E. Brugger. 15 Sep 93, 22p EPA/600/A-93/227
Contract EPA-68-C9-0033
Pub. in Prevention and Control of Accidental Releases of Hazardous Gases, p232-252 Jun 93. See also PB82-227117. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Aqueous foam is a mixture of air (or other gas), surfactant and water. Foam can be used in at least two ways for emission control: foam blanketing and foam scrubbing. Foam scrubbing differs from blanketing in that the foam (usually high-expansion) is blown using the contaminated air that is to be treated. Thus, in foam scrubbing the contaminant is inside the foam bubbles. While the release is contained in this manner, a scrubbing process can take place. The foam solution can be formulated to include an appropriate reagent that can 'neutralize' the absorbed gases, if necessary (for example, an acidic additive to neutralize ammonia). Potential applications of foam scrubbing for emergency control are many: the chemical industry (ammonia, hydrogen chloride, sulfuric acid, etc.), municipalities (chlorine tanks at water treatment facilities), and emergency responders (chemical spills, tank truck accidents, etc.) Foam scrubbing could also be used at Superfund sites during excavation to safeguard workers and surrounding communities from releases of volatile toxic materials. The chapter summarizes the available information on foam scrubbing, including results of an EPA research program on the subject. Although largely still in the research stage, the information available to date is encouraging.

Keywords: *Air pollution control, *Foam, *Fugitive emissions, Scrubbing, Blowing agents, Emergency planning, Chemical spills, Superfund, Waste management, Neutralizing, Performance evaluation, Reprints, *Foam scrubbing.

**PB93-236578/REB** PC **A04**/MF **A01**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.**
Science Applications International Corp., San Diego, CA.
J. R. Clayton, J. R. Payne, J. S. Farlow, and C. Sarwar. c14 Sep 93, 65p EPA/600/A-93/228
Contract EPA-68-C8-0062
See also PB92-222207. Prepared in cooperation with Sound Environmental Services, Inc., Carlsbad, CA. Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

The purpose of the report is to summarize the most current information from the available literature for the mechanism of action of chemical dispersants (or how they work) for oil spills, variables that affect dispersant performance, evaluations of a variety of laboratory tests designed to assess the performance of dispersant agents, and a brief consideration of relationships between laboratory methods and field situations. In part, the book updates information on the preceding topics from earlier documents. Considerations are given to strengths and limitations of specific laboratory tests, including brief discussions of the applicability of their results for estimating dispersant performance in field trials or conditions encountered during real spill events. Finally, a modest attempt is made at providing recommendations for improvements in future laboratory testing.

Keywords: *Oil spills, *Water pollution control, *Dispersants, Oil pollution removal, Bench-scale experiments, Oil-water interfaces, Surface tension, Chemical compounds, Tests, Performance evaluation, Reprints.

**PB93-236586/REB** PC **A03**/MF **A01**
**Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
R. S. Thompson. Aug 93, 23p EPA/600/A-93/229
Presented at the American Meteorlogy Society's Joint Conference on the Applications of Air Pollution Meteorology with the Air and Waste Management Association (8th), Nashville, TN., January 23-28, 1994. See also PB85-185411.

The 1990 Clean Air Act Amendments direct the U.S. Environmental Protection Agency to evaluate and modify, as required, existing dispersion models for the prediction of dispersion of dust from surface coal mines. The application of mathematical air pollution dispersion models to the dispersion of dust from surface coal mines requires knowledge of not only the amount of dust generated in the mine, but the fraction of that generated that actually escapes from the mine. The escape fraction can be related to the residence time that released material will remain, on average, within the mine. The concentration in the mine was found to follow an exponential decay function from which an exponential decay time constant (or residence time) was computed for each case. A semi-empirical formula was found that related the residence time to the mine geometry and wind direction quite well. This formula can be used to estimate escape fraction in determining the source strength for the application of mathematical dispersion models.

Keywords: *Coal mines, *Atmospheric diffusion, *Dust, *Emission factors, *Air pollution, Surface mining, Wind direction, Environmental transport, Wind tunnels, Mathematical models, *Residence time.

**PB93-236594/REB** PC **A03**/MF **A01**
**Wind-Tunnel Measurements of Flow Fields in the Vicinity of Buildings.**
Environmental Protection Agency, Research Triangle Park, NC. Atmospheric Research and Exposure Assessment Lab.
W. H. Snyder, and R. E. Lawson. 17 Aug 93, 15p EPA/600/A-93/230
Reprint of Joint Conference on Application of Air Pollution Meteor (8th), Nashville, TN., January 1994. See also PB80-135346.

Pulsed-wire anemometer measurements have been made in the vicinity of rectangular shaped model buildings immersed in the simulated atmospheric boundary layer of a wind tunnel. The primary purpose of the measurements was to delineate the size and shape of the 'cavity' as a function of the building dimensions. The crosswind width, the height and the along-wind length of the building were systematically varied, and the longitudinal and vertical components of the velocity fields were measured in the plane of symmetry (centerplane). For one case, all three velocity components were measured in the full three-dimensional space surrounding the building. These measurements were used to deduce the streamline patterns and, hence, the height and downwind extent of the recirculation zones or cavities and other important features of the flow fields.

Keywords: *Wind tunnels, *Air pollution, *Buildings, Air flow, Boundary layer flow, Atmospheric diffusion, Turbulent flow.

**PB93-236602/REB** PC **A01**/MF **A01**
**Status of Restoration Science: Wetlands Ecosystems.** Symposium paper.
Corvallis Environmental Research Lab., OR.
M. E. Kentula. Mar 93, 5p EPA/600/J-93/231
Pub. in Proceedings of Symposium on Ecological Restoration, Chicago, IL., March 1993. See also PB90-149758 and PB90-149766.

Information on wetland creation and restoration is increasing. Last fall the U.S. National Oceanic and Atmospheric Administration published the next version of the status report on creation and restoration. In looking at projects, the reason they were established in a particular location is not generally obvious. Siting of projects is an emerging issue. The collection of papers reports on the restoration and creation of tidal wetlands. As the authors learn more, the scientific questions are becoming more complex. The authors find that green does not automatically mean success. Plants growing on a wet site do not necessarily indicate a fully functioning system. Work with tidal systems is suggesting that once hydrology and plants are established, the next critical factor is soil processes. Some evidence suggests that without soil microbes, there are ramifications throughout the food chain.

Keywords: *Ecosystems, *Tidewater, *Marshes, *Swamps, *Coasts, *Meetings, Soil properties, Microorganisms, Soil microbiology, Hydrology, Food chains, Plant growth, Decision making, Environmental monitoring, Connecticut, Florida, Oregon, Reprints, *Wetlands, Restoration, *Spartina alternaflora, Cordgrass.

**PB93-236610/REB** PC **A01**/MF **A01**
**Establishing Quantitative Performance Criteria for Wetland Restoration.** Symposium paper.
Corvallis Environmental Research Lab., OR.
M. E. Kentula. Mar 93, 5p EPA/600/A-93/232
Pub. in Proceedings of Symposium on Ecological Restoration, Chicago, IL., March 1993. See also PB93-236602.

The report for the Wetland Research Program called 'Wetland Restoration and Creation' is a synthesis of five years of research. The object is to use existing information to guide future decisionmaking. In wetland restoration, the evaluation of data can be used to develop performance criteria and improve design guidelines. Evaluation revolves around 'Performance curves' which involves looking at projects relative to natural wetlands. The report describes the techniques used to arrive at a method to be used to set quantitative performance criteria.

Keywords: *Ecosystems, *Marshes, *Swamps, *Coasts, *Meetings, Books, Soil properties, Microorganisms, Soil microbiology, Hydrology, Species diversity, Aquatic plants, Performance evaluation, Organic matter, Decision making, Environmental monitoring, United States, *Wetlands, Restoration, Natural wetlands, Exotic plants.

**PB93-236628/REB** PC **A03**/MF **A01**
Corvallis Environmental Research Lab., OR.
**Landscape-Scale Effects of Toxic Events for Ecological Risk Assessment.** Book chapter.
Carleton Univ., Ottawa (Ontario). Dept. of Biology.
L. Fahrig, and K. Freemark. 1993, 26p EPA/600/A-93/233
Pub. in Toxicity Testing at Different Levels of Biological Organization, 1993. Prepared in cooperation with Canadian Wildlife Service, Ottawa (Ontario). Sponsored by Corvallis Environmental Research Lab., OR.

The effect of spatial heterogeneity on response of organisms has rarely been considered in ecological risk assessment or in ecotoxicological studies. The authors argue that ecological risk assessments for toxicants must go beyond the current practice of only assessing effects at the spatial and temporal scales of direct impact. The objectives are: (1) to extend results of the effects of landscape pattern and variability on population survival to landscape-scale effects of toxic events, (2) to develop a conceptual model of landscape-scale effects of toxic events on species, and (3) to propose a practical approach for predicting when landscape-scale effects of toxic events are likely to occur.

Keywords: *Risk assessment, *Terrestrial ecosystems, *Plant ecology, *Animal ecology, Environmental pollution, Pesticide toxicity, Mathematical models, Populations, Toxic substances, Landscapes.

**PB93-236636/REB** PC **A02**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC.
**Fractional Aerosol Filtration Efficiency of Air Cleaners.** Rept. for Jan 91-Dec 92.
Research Triangle Inst., Research Triangle Park, NC.
J. T. Hanley, D. D. Smith, D. S. Ensor, and L. E. Sparks. 1993, 8p EPA/600/A-93/234
Presented at Indoor Air Quality (IAQ) 1993, Helsinki, Finland, July 4-8, 1993. See also PB93-107019. Sponsored by Environmental Protection Agency, Research Triangle Park, NC.

The paper gives results of an evaluation of the fractional filtration efficiency of air cleaners. The test duct accepts air cleaners up to 610 x 610 mm in size and provides test flow rates up to 470 L/s. Filtration efficiency is computed from upstream and downstream aerosol concentration measurements performed with a differential mobility analyzer, a laser aerosol spectrometer, and a white-light optical particle counter. The measurements cover the particle diameter size range from 0.01 to 3 micrometer in 16 sizing channels. Air cleaners tested include furnace filters, pleated filters, and statically charged panel filters. The efficiency of the air cleaners was often found to be highly dependent on particle size and dust load. A minimum in efficiency was frequently observed in the 0.1 to 0.5 micrometer range. The presence of a dust load on the air cleaners frequently increased their efficiency. However, for some air cleaners, little change or a decrease in efficiency accompanied the dust loading. The common furnace filter was seen to have a fractional efficiency of less than 10% over much of the 0.01 to 1 micrometer size range.

Keywords: *Air cleaners, *Filtration, *Air pollution control, *Aerosols, *Buildings, Environmental engineering, Performance evaluation, Measuring instruments, Furnaces, Residential buildings, Office buildings, Indoor air pollution, *Fractional aerosol filtration efficiency.

**PB93-236644/REB** PC **A03**/MF **A01**
Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engineering Research Lab.
**Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.** Rept. for Nov 88-Apr 93.
ABB/Combusion Engineering, Inc., Windsor, CT.
R. C. LaFlesh, R. D. Lewis, R. E. Hall, V. R. Kotler, and Y. M. Mospan. 1993, 21p EPA/600/J-93/235
Contract EPA-68-02-4280
Presented at Environmental Protection Agency/Electric Power Research Institute Symposium on Stationary NOx Control, Miami, FL., May 23-27, 1993 and AFRC Meeting, Tulsa, OK., October 18-20, 1993. Prepared in cooperation with All-Russian Heat Engineering Inst., Moscow, and Ladyzhin Power Station (Ukraine). Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Air and Energy Engi

The paper gives results of a program to design, install, and test a natural-gas three-stage combustion (reburn) system on a 300-MWe, opposed-wall, wet-bottom (slagging) coal-fired utility boiler operating in the Ukraine. The U.S. EPA sponsored this program in support of a working group initially involving the EPA and (the former) Soviet Union, and now consisting of representatives from the EPA, Russia, and the Ukraine. The host boiler fires a high volatile Ukrainian bituminous coal, a Siberian brown (lignite) coal, or various blends. An opposed-wall, natural-gas reburn system was designed and installed in the summer of 1992. Parametric testing was carried out during the remainder of 1992. Initial parametric test results from this boiler show average nitrogen oxide (NOx) reductions of about 50% from a baseline pre-retrofit level of 600 ppm, corrected to 3% oxygen (0.82 lb NOx/million Btu). During this testing, variations in boiler operation and conditions resulted in a range of NOx reductions of 40-60%. Additional testing and analysis is currently in progress to define the results further and to optimize system performance.

Keywords: *Afterburning, *Air pollution abatement, *Boilers, *Staged combustion, United States, Russia, Ukraine, Nitrogen oxides, Performance evaluation, Design criteria, Coal-fired power plants, Reprints, Foreign technology.

**PB93-236651/REB** PC **A03**/MF **A01**
**Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
K. H. Elstein, R. M. Zucker, D. L. Shuey, C. Lau, and N. Chernoff. 1993, 15p EPA/600/J-93/386
Pub. in Teratology, v48 n1 p75-87 Jul 93. See also PB92-206283. Prepared in cooperation with ManTech Environmental Technology, Inc., Research Triangle Park, NC.

Murine erythroleukemic cells (MELC) exposed to 2'-deoxy-5-azacytidine (D-AZA) or to the active cyclophosphamide (CP) metabolites phosphoramide mustard (PAM) and 4-hydroxycyclophosphamide (OHCP) exhibit cell-cycle perturbations similar to those seen in limb bud nuclei of gestational day (GD) 10 CD-1 mouse embryos exposed in utero to D-AZA or CP, respectively. The similarities in response suggest MELC may be a useful model for determining mechanisms of action of DNA-active developmental toxicants. (Copyright (c) 1993 Wiley-Liss, Inc.)

Keywords: *Erythroleukemia, *Fluorouracil, *Toxicology, *Deoxyribonucleic acids, *Teratogenic compounds, Mice, S phase, Antineoplastic agents, Thymidylate synthetase, Flow cytometry, Reprints.

**PB93-236669/REB** PC **A02**/MF **A01**
**Evidence for Direct Effect of Magnetic Fields on Neurite Outgrowth.** Journal article.
Health Effects Research Lab., Research Triangle Park, NC.
C. F. Blackman, S. G. Benane, and D. E. House. Jun 93, 8p EPA/600/J-93/413
Pub. in FASEB Jnl., v7 n9 p801-806 Jun 93. See also PB86-175403.

Electric fields can cause changes in cell responses both in vitro and in vivo. Alternating magnetic fields have been proposed to act through the electric fields induced in the conducting medium surrounding the cells. The authors have used a simple exposure system to test the relative contribution of magnetic fields compared to induced electric fields in a standard PC-12 cell culture assay, in which cells respond to nerve growth factor by producing neurites. This response to stimulation by nerve growth factor is inhibited by sinusoidal, 50-Hz magnetic fields at field strengths below 10 microT (100 mG). A standard procedure to distinguish magnetic- versus electric-field effects demonstrates that the induced electric field is not involved. Additional work is necessary to identify the critical reaction site(s), and to establish the molecular mechanisms responsible for these results.

Keywords: *Neurites, *Magnetic fields, In vitro analysis, In vivo analysis, Electric fields, Nerve growth factors, Growth, PC12 cells, Reprints.

**PB93-236677/REB** PC **A03**/MF **A01**
Health Effects Research Lab., Research Triangle Park, NC.
**Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.** Journal article.
North Carolina Univ. at Chapel Hill.
R. W. Chadwick, S. E. George, M. J. Kohan, R. W. Williams, and J. C. Allison. 1993, 21p EPA/600/J-93/414
Contract EPA-68-02-4456
Pub. in Toxicology 80, n2,3 p153-171 Jun 93. See also PB91-191544. Prepared in cooperation with Environmental Health Research and Testing, Inc., Research Triangle Park, NC. Sponsored by Health Effects Research Lab., Research Triangle Park, NC., and Air Force Office of Scientific Research, Bolling AFB, DC.

Pretreatment of Fischer 344 rats for 5 weeks with Aroclor 1254, a commercial mixture of polychlorinated biphenyls, potentiated the genotoxicity of 2,6-dinitrotoluene (DNT), a componenet of an industrial chemical used in the production of polyurethane foams. This interaction resulted from Aroclor 1254-mediated bioactivation of DNT to markedly greater levels of the genotoxic metabolites, that were excreted in urine and formed DNA adducts in the liver. A significant increase in the excretion of mutagenic urinary DNT metabolites was observed after the first week of Aroclor 1254 treatment, peaked at week 2 and then declined by nearly 25% at week 4. Nevertheless, by week 5, there was almost a 4-fold increase in the formation of hepatic DNA adducts. Significantly elevated hepatic metabolism and increased beta-glucuronidase in the small intestine and cecum, at 4 weeks, may account for the increased adducts and decreased urinary mutagens. Altered nitroreductase activity, reduced pH, and changes in the microfloral population may also play a role in the effect of Aroclor 1254 on the bioactivation of DNT. Such chemical interactions could be important to predictive risk assessment because the overall cancer risk of the mixture would exceed that determined by the current guidelines for chemical mixtures.

Keywords: *Aroclors, *Toxicology, *Drug synergism, Rats, DNA adducts, Metabolic activation, Salmonella, Enzymes, Gastrointestinal system, Body weight, Organ weight, Microbiology, Reprints, *Dinitrotoluenes.

**PB93-236693/REB** PC **A03**/MF **A01**
**EPA Evaluation of the Fuelon Power Gasoline Fuel Additive under Section 511 of the Motor Vehicle Information and Cost Savings Act.**
Environmental Protection Agency, Ann Arbor, MI. Emission Control Technology Div.
Sep 93, 11p EPA/AA/TEB-511/92/01
See also PB93-236701.

The report announces the conclusions of the Environmental Protection Agency's (EPA) testing of the

Fuelon Power as part of its evaluation under Section 511 of the Motor Vehicle Information and Cost Savings Act. This evaluation was conducted at the request of the Federal Trade Commission (FTC). Fuelon Power is an aftermarket gasoline fuel additive that is added to the vehicle tank by the operator when refueling the vehicle. The product consists of a proprietary blend of hydrocarbons products which are claimed to substantially reduce vehicle exhaust emissions and improve fuel economy. Two typical vehicles were tested at EPA's Motor Vehicle Emission Laboratory. The basic test sequence included 1,000 miles of mileage accumulation, duplicate Federal Test Procedures (FTP) and duplicate Highway Fuel Economy Tests (HFET). This test sequence was conducted both without and with the Fuelon Power additive. The overall conclusion from these tests is that the Fuelon Power gasoline fuel additive did not significantly reduce vehicle emissions or improve fuel economy for either the FTP or HFET. The additive clearly did not reduce vehicle exhaust emissions nor produce the large--greater than 15 percent--fuel economy benefits claimed by the manufacturer.

Keywords: *Fuel additives, *Gasoline, *Air pollution abatement, *Fuel consumption, US EPA, Exhaust emissions, Performance evaluation, Federal test procedure, Automobiles, Motor vehicles, *Fuelon power additive, Federal Trade Commission, Highway Fuel Economy Test, Motor Vehicle Information and Cost Savings Act.

**PB93-236701/REB** PC **A03**/MF **A01**
**Emissions and Fuel Economy Effects of the Fuelon Power Gasoline Fuel Additive.** Technical rept.
Environmental Protection Agency, Ann Arbor, MI. Emission Control Technology Div.
Sep 93, 15p EPA/AA/TEB-92/01
See also PB93-236693.

The report describes the Environmental Protection Agency's (EPA) testing of the 'Fuelon Power' gasoline fuel additive as part of its evaluation under Section 511 of the Motor Vehicle Information and Cost Savings Act (MVICSA). The evaluation was conducted at the request of the Federal Trade Commission (FTC) to verify the claims for substantial exhaust emission reductions and for large -- greater than 15 percent -- fuel economy benefits. The additive is claimed to substantially reduce exhaust emissions, improve fuel economy, raise the octane of gasoline, improve vehicle performance, reduce engine maintenance, and extend engine life. Only the emission and fuel economy claims for the additive were evaluated in this test program. The overall conclusion from these tests is that the Fuelon Power gasoline fuel additive did not significantly reduce vehicle emissions or improve fuel economy for either the FTP or HFET.

Keywords: *Fuel additives, *Gasoline, *Air pollution abatement, *Fuel consumption, US EPA, Performance evaluation, Federal test procedure, Exhaust emissions, *Fuelon power additive, Federal Trade Commission, Highway Fuel Economy Test, Motor Vehicle Information and Cost Saving Act.

**PB93-237493/REB** PC **A04**/MF **A01**
**Radon Measurement in Schools: Revised Edition.**
Environmental Protection Agency, Washington, DC. Office of Radiation and Indoor Air.
Jul 93, 51p EPA/402/R-92/014

The report provides school administrators and facilities managers with instructions on how to test for the presence of radon. The findings from EPA's comprehensive studies of radon measurements in schools have been incorporated into these recommendations. The report supersedes Radon Measurements in Schools-An Interim Report (EPA 520/1-89-010). However, it does not invalidate tests in the process of being conducted under the interim report.

Keywords: *Radon, *School buildings, Natural radioactivity, Tests, Exposure, Space HVAC systems, Air infiltration, Lung cancer.

**PB93-237519/REB** PC **A99**/MF **A06**
**Proceedings of Annual Analytical Symposium (7th). Held in Norfolk, Virginia on March 28-29, 1984.**
Environmental Protection Agency, Washington, DC. Effluent Guidelines Div.
1984, 624p EPA/440/1-84/040

The Effluent Guidelines Division of the EPA Office of Water Regulations and Standards has the considerable responsibility of promulgating industrial effluent regulations. In this effort, each year the Division sponsors a symposium in order that scientists and other interested parties may gather to freely exchange ideas and enhance their knowledge of state of the art methods for the analysis of Priority Pollutants. These proceedings from the Seventh Annual Analytical Symposium provide a written record of the presentations and discussions on topics ranging from methods for testing biochemical oxygen demand to part per quadrillion analysis of dioxin.

Keywords: *Meetings, *Analytical techniques, *Water pollution detection, *Water analysis, Chemical analysis, US EPA, Quality assurance, Quality control, Tables(Data), Graphs(Charts), Laboratory equipment, Waste water, Guidelines, Water pollution effects, Biological effects, Aquatic ecology, *EPA methods.

**PB93-237535/REB** PC **A16**/MF **A03**
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
**Technical Resource Document: Solidification/Stabilization and Its Application to Waste Materials.**
Battelle, Columbus, OH.
Jun 93, 369p EPA/530/R-93/012
Contract EPA-68-C0-0003
Sponsored by Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.

Stabilization/solidification (S/S) processes are effective in treating a variety of difficult to manage waste materials for reuse or disposal. S/S has been identified as the Best Demonstrated Available Technology for treating a wide range of Resource Conservation and Recovery Act (RCRA) non-wastewater hazardous waste subcategories. S/S has been selected as the treatment technology of choice for 26% of the remedial actions complete at Superfund sites through fiscal year 1992. The standard bulk material handling and mixing equipment used in many S/S processes make the technology appear simple. The morphology and chemistry of S/S-treated waste are complex. Selection of the binder requires an understanding of the chemistry of the bulk material, the contaminants, and the binder. Battelle, under the direction of the U.S. Environmental Protection Agency, has prepared the Technical Resources Document (TRD) as a resource for the S/S user community and a guide to promote the best future application of S/S processes.

Keywords: *Hazardous materials, *Waste management, *Waste treatment, Toxicity, Remedial action, Waste water reuse, Chemical stabilization, Solidification, Best available technology, Morphology, Land disposal, Morphology, Chemical analysis, Mixtures, Performance evaluation, Technology transfer, Binders, Regulations, Additives, pH, Tests, RCRA(Resource Conservation and Recovery Act), TSCA(Toxic Substance Control Act).

**PB93-237899/REB** PC **A16**/MF **A03**
**Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1. Fish Sampling and Analysis.**
Environmental Protection Agency, Washington, DC. Office of Water.
Aug 93, 353p EPA/823/R-93/002

The purpose of the manual is to provide overall guidance to States on methods for sampling and analyzing contaminants in fish and shellfish tissue that will promote consistency in the data States use to determine the need for fish consumption advisories. The manual provides guidance only and does not constitute a regulatory requirement for the States. It is intended to describe what the EPA Office of Water believes to be scientifically sound methods for sample collection, chemical analyses, and statistical analyses of fish and shellfish tissue contaminant data for use in fish contaminant monitoring programs that have as their objective the protection of public health. This nonregulatory, technical guidance manual is intended for use as a handbook by State and local agencies that are responsible for sampling and analyzing fish and shellfish tissue. Adherence to this guidance will enhance the comparability of fish and shellfish contaminant data, especially in interstate waters, and thus provide more standardized information on fish contamination problems.

Keywords: *Water pollution effects, *Chemical compounds, *Fishes, *Shellfish, *Bioassay, *Public health, Guidelines, Manuals, State government, Sampling, Chemical analysis, Chlorine organic compounds, Quality control, Quality assurance, Tissues(Biology), Statistical analysis, Pesticides, Metals.

**PB93-237907/REB** PC **A08**/MF **A02**
Corvallis Environmental Research Lab., OR.
**Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.**
ManTech Environmental Technology, Inc., Corvallis, OR.
M. Morrison, D. Coffey, and C. Burgeson. Sep 93, 155p EPA/600/R-93/178
See also PB91-148395. Sponsored by Corvallis Environmental Research Lab., OR.

The purpose of quality assurance/quality control (QA/QC) is to ensure that data from research and monitoring studies are of known and documented quality to satisfy project objectives. QA/QC was an integral and important part for all of the U.S. EPA Aquatic Effects Research Program (AERP) projects. The Watershed Manipulation Project (WMP) was designed to test specific hypotheses relating various watershed process responses to acidic deposition at a variety of temporal and spatial scales through an interdisciplinary research approach. To ensure that data from the various laboratory, plot, hillslope and catchment studies satisfied the WMP objectives, a QA Plan was required that integrated QA/QC activities across all studies. The document describes the integrated approach to the QA program for the WMP and was used to provide QA/QC guidance for all personnel associated with the WMP. It is intended to supplement the Watershed Manipulation Project: Field Implementation Plan for 1990-1992.

Keywords: *Watersheds, *Quality assurance, *Quality control, *Water quality, *Acidification, Implementations, pH, Deposition, Air water interactions, Performance evaluation, Data processing, Water pollution sampling, Water pollution control, Hydrology, Field tests, Soils, Project planning, *Watershed Manipulation Project, Protocols, Direct/Delayed Response Project.

**PB93-505345/REB** CP **D02**
**Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 4) (for Microcomputers).** Software.
Environmental Protection Agency, Washington, DC. Hazardous Site Evaluation Div.
Apr 93, 1 diskette* EPA/SW/DK-93/046
System: IBM AT / PS2 or compatible; MS DOS Version 3.3 operating system. Language: Base SAS. Supersedes PB93-500270. See also PB92-501535 and PB92-502202.
The software is on one 5 1/4 inch diskette, 1.2M high density. File format: Executable Code. Documentation included; may be ordered separately as PB92-169564.

OCCSS software is a version of a mainframe-based application developed for the U.S. Environmental Protection Agency's National Contract Laboratory Program (CLP). OCCSS is designed to automate the determination of contractual compliance and completeness of data submitted to the EPA under the Routine Analytical Services (RAS) programs of CERCLA (Comprehensive Emergency Response Clean-up and Liability Act). In order to remain consistent with the mainframe system, the PC version of OCCSS is written in SAS, and requires that SAS/PC be installed on the host PC. It will load analytical data from diskettes into SAS file format, perform technical edits on data, produce technical defect and summary reports, and reproduce forms which contain defects. In addition, OCCSS includes software to assist in identifying these critical structural defects in the data format, to assist in identifying these for correction prior to performing technical edits.

Keywords: *Software, *Superfund, *Solid waste management, Hazardous materials, Organic compounds, Waste disposal, Analytical chemistry, Contract administration, Diskettes, *OCCSS(Organic Contract Compliance Screening System).

**PB93-505352/REB** CP **D02**
**Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 3) (for Microcomputers).** Software.
Environmental Protection Agency, Washington, DC. Hazardous Site Evaluation Div.
Apr 93, 1 diskette* EPA/SW/DK-93/047
System: IBM compatible; MS DOS operating system. Language: Base SAS. Supersedes PB93-500288. See also PB92-501519 and PB90-591700.
The software is on one 5 1/4 inch diskette, 360K double density. File Format: Executable Code. Documentation included; may be ordered separately as PB92-145598.

ICCSS software is a version of a mainframe-based application developed for the U.S. Environmental Protection Agency's National Contract Laboratory Program (CLP). ICCSS is designed to automate the determination of contractural compliance and completeness of data submitted to the EPA under the Routine Analytical Services (RAS) programs of CERCLA (Comprehensive Emergency Response Clean-up and Liability Act). In order to remain consistent with the mainframe system, the PC version of ICCSS is written in SAS, and requires that SAS/PC be installed on the host PC. It will load analytical data from diskettes into SAS file format, perform technical edits on data, produce technical defect and summary reports, and reproduce forms which contain defects. In addition, ICCSS includes software to assist in identifying these critical structural defects in the data format, to assist in identifying these for correction prior to performing technical edits.

Keywords: *Software, *Waste management, *Inorganic compounds, *Analytical chemistry, *Environmental surveys, Diskettes, Data base management, Hazardous materials, US EPA, Data compilation, Superfund, Information transfer, *Inorganic Contract Compliance Screening System, Comprehensive Environmental Response Compensation and Liability Act, National Contract Laboratory Program.

**PB93-505386/REB** CP **D02**
**Regulatory Impact Analysis (RIA) for the Proposed Great Lakes Water Quality Guidance (for Microcomputers).** Data file.
Environmental Protection Agency, Washington, DC.
Jun 93, 1 diskette EPA/DF/DK-93/063
System: IBM compatible; MS DOS operating system. Language: Word Perfect. See also PB92-502137, PB93-505394, and PB93-505402.
The datafile is on one 3 1/2 inch diskette, 1.44M high density.

The Regulatory Impact Analysis provides direction to the Great Lakes states and Tribes on minimum water quality standards and contains numerical water quality criteria for 32 pollutants as well as methodologies for the development of water quality criteria for additional pollutants discharged to these waters. It also provides guidance to the Great Lakes States and Tribes on antidegradation policies and standards and implementation procedures.

Keywords: *Software, *Great Lakes, *Water pollution standards, *Datafile, Pollution regulations, Compliance, Implementation, Water quality, Surface waters, Regulatory guidance, Diskettes, Great Lakes Water Quality Guidance, Regulatory impact analysis.

**PB93-505394/REB** CP **D02**
**Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Initiative Guidance (for Microcomputers).** Data file.
Environmental Protection Agency, Washington, DC.
Jun 93, 2 diskettes EPA/DF/DK-93/064
System: IBM compatible; MS DOS operating system. Language: Word Perfect. See also PB92-502137, PB93-505386, and PB93-505402.
The datafile is on two 3 1/2 inch diskettes, 1.44M high density.

The study develops an estimate of the incremental cost to direct dischargers resulting from the implementation of the proposed Great Lakes Water Quality guidance. This estimate reflects the incremental cost of complying with permit requirements developed using the implementation procedures and water quality criteria proposed in the guidance versus permit requirements based on existing state water quality standards.

Keywords: *Datafile, *Software, *Great Lakes, *Water pollution standards, Water pollution economics, Cost analysis, Pollution regulations, Water quality, Surface waters, Pollution sources, Permits, Economic impact, Diskettes, Great Lakes Water Quality Guidance, Regulatory impact analysis.

**PB93-505402/REB** CP **D04**
**Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study Technical Background Document (for Microcomputers).** Data file.
Environmental Protection Agency, Washington, DC.
10 Jun 93, 5 diskettes EPA/DF/DK-93/065
System: IBM compatible; MS DOS operating system. Language: Word Perfect 5.1. See also PB92-502137, PB93-505386 and PB93-505394.
The datafile is on five 3 1/2 inch diskettes, 1.44M high density.

The electronic document presents the detailed results of the evaluations performed to estimate the compliance costs related to the proposed Great Lakes Water Quality Guidance. Specifically, the document provides the results of the individual evaluations performed on the 59 sample facilities selected to represent the universe of direct dischargers to the Great Lakes System.

Keywords: *Datafile, *Software, *Great Lakes, *Water pollution standards, Water pollution economics, Cost analysis, Economic impact, Pollution regulations, Water quality, Surface waters, Pollution sources, Permits, Diskettes, Great Lakes Water Quality Guidance, Regulatory impact analysis.

**PB93-505469/REB** CP **D18**
**Economic Growth Analysis System (E-GAS) for all EPA Regions (I through X) (for Microcomputers).** Model-Simulation.
Environmental Protection Agency, Research Triangle Park, NC. Office of Research and Development.
16 Apr 93, 39 diskettes EPA/SW/DK-93/052
System: IBM 80386 or 100 percent compatible PC; DOS 5.0 or higher operating system, 640K. System requires math coprocessor, 40 Megabytes of available fixed disk storage, and VGA graphics capability. Individual regions are available. Call NTIS for specific regions and order numbers.
The software is on 39 3 1/2 inch diskettes, 1.44M high density. Documentation included; may be ordered separately as PB93-184408 and PB93-183416.

The E-GAS modeling system is a forecast model used to predict national and regional economic activity in order to estimate attainment of ozone and photochemical air quality standards. The report contains the E-GAS modeling system for EPA regions 1-10. Since growth in source emissions largely depends on the amount of economic activity growth in an area, a consistent set of growth factors requires forecasts using consistent Gross National Product (GNP) forecasts and a consistent methodology for estimating economic activity in Urban Airshed Model (UAM) and Regional Oxidant Model (ROM) modeling regions. The need for consistent economic growth facts, however, must be satisfied in a way that allows States to use their own estimates of national and regional economic activity. The Economic Growth Analysis System (E-GAS) is an economic activity forecast model which satisfies both of these standards.

Keywords: *Models-Simulation, *Software, *Air pollution economics, *Economic development, *Economic models, Diskettes, Economic forecasting, Study estimates, Regional analysis, National government, Computerized simulation, State government, Ozone, Air pollution standards, Photochemical reactions, Fuel consumption, *EPA regions 1-10, *Economic Growth Analysis System, Urban Airshed Model, Regional Oxidant Model.

**PB93-505477/REB** CP **D03**
**Economic Growth Analysis System (E-GAS) for EPA Region I - New England States (for Microcomputers).** Software.
Environmental Protection Agency, Research Triangle Park, NC. Office of Research and Development.
16 Apr 93, 5 diskettes EPA/SW/DK-93/053
System: IBM 80386 or 100 percent compatible PC; DOS 5.0 or higher operating system, 640K. System requires math coprocessor, 40 Megabytes of available fixed disk storage, and VGA graphics capability. Complete set of regions available (order number PB93-505469).
The software is on five 3 1/2 inch diskettes, 1.44M high density. Documentation included; may be ordered separately as PB93-183408 and PB93-183416.

The E-GAS modeling system is a forecast model used to predict national and regional economic activity in order to estimate attainment of ozone and photochemical air quality standards. The report contains the E-GAS modeling system for EPA region 1. Since growth in source emissions largely depends on the amount of economic activity growth in an area, a consistent set of growth factors requires forecasts using consistent Gross National Product (GNP) forecasts and a consistent methodology for estimating economic activity in Urban Airshed Model (UAM) and Regional Oxidant Model (ROM) modeling regions. The need for consistent economic growth facts, however, must be satisfied in a way that allows States to use their own estimates of national and regional economic activity. The Economic Growth Analysis System (E-GAS) is an economic activity forecast model which satisfies both of these standards.

Keywords: *Software, *Air pollution economics, *Economic development, *Economic models, Diskettes, Economic forecasting, Study estimates, Regional analysis, National government, Computerized simulation, State government, Ozone, Air pollution standards, Photochemical reactions, Fuel consumption, *EPA region 1, *New England, *Economic Growth Analysis System, Urban Airshed Model, Regional Oxidant Model.

**PB93-505485/REB** CP **D03**
**Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).** Software.
Environmental Protection Agency, Research Triangle Park, NC. Office of Research and Development.
16 Apr 93, 5 diskettes EPA/SW/DK-93/054
System: IBM 80386 or 100 percent compatible PC; DOS 5.0 or higher operating system, 640K. System requires math coprocessor, 40 Megabytes of available fixed disk storage, and VGA graphics capability. Complete set of regions available (order number PB93-505469).
The software is on five 3 1/2 inch diskettes, 1.44M high density. Documentation included; may be ordered separately as PB93-183408 and PB93-183416.

The E-GAS modeling system is a forecast model used to predict national and regional economic activity in order to estimate attainment of ozone and photochemical air quality standards. The report contains the E-GAS modeling system for EPA regions 2 and 3. Since growth in source emissions largely depends on the amount of economic activity growth in an area, a consistent set of growth factors requires forecasts using consistent Gross National Product (GNP) forecasts and a consistent methodology for estimating economic activity in Urban Airshed Model (UAM) and Regional Oxidant Model (ROM) modeling regions. The need for consistent economic growth facts, however, must be satisfied in a way that allows States to use their own estimates of national and regional economic activity. The Economic Growth Analysis System (E-GAS) is an economic activity forecast model which satisfies both of these standards.

Keywords: *Software, *Air pollution economics, *Economic development, *Economic models, Diskettes, Economic forecasting, Study estimates, Regional analysis, National government, Computerized simulation, State government, Ozone, Air pollution standards, Photochemical reactions, Fuel consumption, *EPA region 2, *EPA region 3, *Middle Atlantic Region(United States), *Economic Growth Analysis System, Urban Airshed Model, Regional Oxidant Model.

**PB93-505493/REB** CP **D03**
**Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).** Software.
Environmental Protection Agency, Research Triangle Park, NC. Office of Research and Development.
16 Apr 93, 5 diskettes EPA/SW/DK-93/055
System: IBM 80386 or 100 percent compatible PC; DOS 5.0 or higher operating system, 640K. System requires math coprocessor, 40 Megabytes of available fixed disk storage, and VGA graphics capability. Com-

plete set of regions available (order number PB93-505469).
The software is on five 3 1/2 inch diskettes, 1.44M high density. Documentation included; may be ordered separately as PB93-183408 and PB93-183416.

The E-GAS modeling system is a forecast model used to predict national and regional economic activity in order to estimate attainment of ozone and photochemical air quality standards. The report contains the E-GAS modeling system for EPA region 4. Since growth in source emissions largely depends on the amount of economic activity growth in an area, a consistent set of growth factors requires forecasts using consistent Gross National Product (GNP) forecasts and a consistent methodology for estimating economic activity in Urban Airshed Model (UAM) and Regional Oxidant Model (ROM) modeling regions. The need for consistent economic growth facts, however, must be satisfied in a way that allows States to use their own estimates of national and regional economic activity. The Economic Growth Analysis System (E-GAS) is an economic activity forecast model which satisfies both of these standards.

Keywords: *Software, *Air pollution economics, *Economic development, *Economic models, Diskettes, Economic forecasting, Study estimates, Regional analysis, National government, Computerized simulation, State government, Ozone, Air pollution standards, Photochemical reactions, Fuel consumption, *EPA region 4, *Southeast Region(United States), *Economic Growth Analysis System, Urban Airshed Model, Regional Oxidant Model.

**PB93-505501/REB** CP **D03**
**Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).** Software.
Environmental Protection Agency, Research Triangle Park, NC. Office of Research and Development.
16 Apr 93, 5 diskettes EPA/SW/DK-93/056
System: IBM 80386 or 100 percent compatible PC; DOS 5.0 or higher operating system, 640K. System requires math coprocessor, 40 Megabytes of available fixed disk storage, and VGA graphics capability. Complete set of regions available (order number PB93-505469).
The software is on five 3 1/2 inch diskettes, 1.44M high density. Documentation included; may be ordered separately as PB93-183408 and PB93-183416.

The E-GAS modeling system is a forecast model used to predict national and regional economic activity in order to estimate attainment of ozone and photochemical air quality standards. The report contains the E-GAS modeling system for EPA region 5. Since growth in source emissions largely depends on the amount of economic activity growth in an area, a consistent set of growth factors requires forecasts using consistent Gross National Product (GNP) forecasts and a consistent methodology for estimating economic activity in Urban Airshed Model (UAM) and Regional Oxidant Model (ROM) modeling regions. The need for consistent economic growth facts, however, must be satisfied in a way that allows States to use their own estimates of national and regional economic activity. The Economic Growth Analysis System (E-GAS) is an economic activity forecast model which satisfies both of these standards.

Keywords: *Software, *Air pollution economics, *Economic development, *Economic models, Diskettes, Economic forecasting, Study estimates, Regional analysis, National government, Computerized simulation, State government, Ozone, Air pollution standards, Photochemical reactions, Fuel consumption, *EPA region 5, *Great Lakes Region(United States), *Economic Growth Analysis System, Urban Airshed Model, Regional Oxidant Model.

**PB93-505519/REB** CP **D03**
**Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).** Software.
Environmental Protection Agency, Research Triangle Park, NC. Office of Research and Development.
16 Apr 93, 5 diskettes EPA/SW/DK-93/057
System: IBM 80386 or 100 percent compatible PC; DOS 5.0 or higher operating system, 640K. System requires math coprocessor, 40 Megabytes of available fixed disk storage, and VGA graphics capability. Complete set of regions available (order number PB93-505469).
The software is on five 3 1/2 inch diskettes, 1.44M high density. Documentation included; may be ordered separately as PB93-183408 and PB93-183416.

The E-GAS modeling system is a forecast model used to predict national and regional economic activity in order to estimate attainment of ozone and photochemical air quality standards. The report contains the E-GAS modeling system for EPA region 6. Since growth in source emissions largely depends on the amount of economic activity growth in an area, a consistent set of growth factors requires forecasts using consistent Gross National Product (GNP) forecasts and a consistent methodology for estimating economic activity in Urban Airshed Model (UAM) and Regional Oxidant Model (ROM) modeling regions. The need for consistent economic growth facts, however, must be satisfied in a way that allows States to use their own estimates of national and regional economic activity. The Economic Growth Analysis System (E-GAS) is an economic activity forecast model which satisfies both of these standards.

Keywords: *Software, *Air pollution economics, *Economic development, *Economic models, Diskettes, Economic forecasting, Study estimates, Regional analysis, National government, Computerized simulation, State government, Ozone, Air pollution standards, Photochemical reactions, Fuel consumption, *EPA region 6, *Southwest Region(United States), *Economic Growth Analysis System, Urban Airshed Model, Regional Oxidant Model.

**PB93-505527/REB** CP **D03**
**Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).** Software.
Environmental Protection Agency, Research Triangle Park, NC. Office of Research and Development.
16 Apr 93, 4 diskettes EPA/SW/DK-93/058
System: IBM 80386 or 100 percent compatible PC; DOS 5.0 or higher operating system, 640K. System required math coprocessor, 40 Megabytes of available fixed disk storage, and VGA graphics capability. Complete set of regions available (order number PB93-505469).
The software is on 4 3 1/2 inch diskettes, 1.44M high density. Documentation included; may be ordered separately as PB93-183416 and PB93-183408.

The E-GAS modeling system is a forecast model used to predict national and regional economic activity in order to estimate attainment of ozone and photochemical air quality standards. The report contains the E-GAS modeling system for EPA region 7. Since growth in source emissions largely depends on the amount of economic activity growth in an area, a consistent set of growth factors requires forecasts using consistent Gross National Product (GNP) forecasts and a consistent methodology for estimating economic activity in Urban Airshed Model (UAM) and Regional Oxidant Model (ROM) modeling regions. The need for consistent economic growth facts, however, must be satisfied in a way that allows States to use their own estimates of national and regional economic activity. The Economic Growth Analysis System (E-GAS) is an economic activity forecast model which satisfies both of these standards.

Keywords: *Software, *Air pollution economics, *Economic development, *Economic models, Diskettes, Economic forecasting, Study estimates, Regional analysis, National government, Computerized simulation, State government, Ozone, Air pollution standards, Photochemical reactions, Fuel consumption, *EPA region 7, *Great Plains Region(United States), *Economic Growth Analysis System, Urban Airshed Model, Regional Oxidant Model.

**PB93-505535/REB** CP **D03**
**Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).** Software.
Environmental Protection Agency, Research Triangle Park, NC. Office of Research and Development.
16 Apr 93, 5 diskettes EPA/SW/DK-93/059
System: IBM 80386 or 100 percent compatible PC; DOS 5.0 or higher operating system, 640K. System required math coprocessor, 40 Megabytes of available fixed disk storage, and VGA graphics capability. Complete set of regions available (order number PB93-505469).
The software is on 5 3 1/2 inch diskettes, 1.44M high density. Documentation included; may be ordered separately as PB93-183408 and PB93-183416.

The E-GAS modeling system is a forecast model used to predict national and regional economic activity in order to estimate attainment of ozone and photochemical air quality standards. The report contains the E-GAS modeling system for EPA regions 8 and 10. Since growth in source emissions largely depends on the amount of economic activity growth in an area, a consistent set of growth factors requires forecasts using consistent Gross National Product (GNP) forecasts and a consistent methodology for estimating economic activity in Urban Airshed Model (UAM) and Regional Oxidant Model (ROM) modeling regions. The need for consistent economic growth facts, however, must be satisfied in a way that allows States to use their own estimates of national and regional economic activity. The Economic Growth Analysis System (E-GAS) is an economic activity forecast model which satisfies both of these standards.

Keywords: *Software, *Air pollution economics, *Economic development, *Economic models, Diskettes, Economic forecasting, Study estimates, Regional analysis, National government, Computerized simulation, State government, Ozone, Air pollution standards, Photochemical reactions, Fuel consumption, *EPA region 8, *EPA region 10, *Rocky Mountain Region(United States), *Northwest Region(United States), *Economic Growth Analysis System, Urban Airshed Model, Regional Oxidant Model.

**PB93-505543/REB** CP **D03**
**Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).** Software.
Environmental Protection Agency, Research Triangle Park, NC. Office of Research and Development.
16 Apr 93, 5 diskettes EPA/SW/DK-93/060
System: IBM 80386 or 100 percent compatible PC; DOS 5.0 or higher operating system, 640K. System requires math coprocessor, 40 Megabytes of available fixed disk storage, and VGA graphics capability. Complete set of regions available (order number PB93-505469).
The software is on 5 3 1/2 inch diskettes, 1.44M high density. Documentation included; may be ordered separately as PB93-183408 and PB93-183416.

The E-GAS modeling system is a forecast model used to predict national and regional economic activity in order to estimate attainment of ozone and photochemical air quality standards. The report contains the E-GAS modeling system for EPA region 9. Since growth in source emissions largely depends on the amount of economic activity growth in an area, a consistent set of growth factors requires forecasts using consistent Gross National Product (GNP) forecasts and a consistent methodology for estimating economic activity in Urban Airshed Model (UAM) and Regional Oxidant Model (ROM) modeling regions. The need for consistent economic growth facts, however, must be satisfied in a way that allows States to use their own estimates of national and regional economic activity. The Economic Growth Analysis System (E-GAS) is an economic activity forecast model which satisfies both of these standards.

Keywords: *Software, *Air pollution economics, *Economic development, *Economic models, Diskettes, Economic forecasting, Study estimates, Regional analysis, National government, Computerized simulation, State government, Ozone, Air pollution standards, Photochemical reactions, Fuel consumption, *EPA region 9, *Western Region(United States), *Economic Growth Analysis System, Urban Airshed Model, Regional Oxidant Model.

**PB93-505725/REB** CP **T02**
**Aquatic Toxicity Information Retrieval Data Base (AQUIRE).** Data file.
Environmental Research Lab.-Duluth, MN.
31 Mar 93, mag tape EPA/DF/MT-93/050
System: DEC VAX 4500; VMS 5.4 operating system. Supersedes PB92-500453. Other formats available as PB93-505733 VAX VMS BACKUP with executable files.
Available in 9-track, ASCII character set tape, 1600 bpi, 6250 bpi, or 3480 cartridge. Documentation included; may be ordered separately as PB93-192631.

The purpose of AQUIRE is to provide scientists and managers quick access to a comprehensive, systematic, computerized compilation of aquatic toxicity data. Scientific papers published both nationally and internationally on the toxicity of chemicals to aquatic organisms and plants are collected and reviewed for AQUIRE. Independently compiled data files that meet AQUIRE parameter and quality assurance criteria are also included. Relevant toxicity test results and related test information for any individual chemicals analyzed using freshwater and marine organisms in laboratory and field conditions, are included in the database. During 1992 and early 1993, nine data updates were made to the AQUIRE system. AQUIRE now contains 109,338 individual aquatic toxicity test results for 5,159 chemicals, 2,429 organisms, and over 160 endpoints reviewed from 7,517 publications.

Keywords: *Toxicity, *Data bases, *Water pollution effects(Plants), *Water pollution effects(Animals), Aquatic plants, Aquatic animals, Hazardous materials, Fresh water biology, Marine biology, Magnetic tapes, *AQUIRE data base.

**PB93-505873/REB** CP **T14**
**Toxic Release Inventory, (TRI), 1991.** Data file.
Environmental Protection Agency, Washington, DC. Information Management Div.
1991, mag tape* EPA/DF/MT-93/061
System: MVS/XA operating system. Approximate bytes: 43,481,350. See also PB92-501816, PB91-507509, PB90-502030, and PB89-186068.
Available in 9-track ASCII character set tape, 1600 and 6250 bpi; or 3480 cartridge. Documentation included; may be ordered separately as PB93-183440.

Section 313 of the Emergency Planning and Community Right-to-Know Act (also known as Title III) of the Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) requires EPA to establish a national inventory of toxic chemical emissions from certain facilities. The final Toxic Chemical Release Form R and regulations for the 1987 reporting year were published in the Federal Register on February 16, 1988 (53 FR 4500-4554). The reporting requirement applies to owners and operators of facilities that have 10 or more full-time employees, that are in Standard Industrial Classification (SIC) codes 20 through 39 (i.e., manufacturing facilities) and that manufacture (including importing), process or otherwise use a listed toxic chemical in excess of specified threshold quantities. The law mandates that the data be made publicly available through a computer database. The online TRI file should appeal to a broad-based user audience including industry, state and local environmental agencies, emergency planning committees, the Federal Government and other regulatory groups.

Keywords: *Data file, *Superfund, *Hazardous materials, *Toxic substances, *Waste management, Magnetic tapes, Toxicity, Chemical compounds, Inventories, Emergency planning, Pollution regulations, Facilities, Public information, Environmental surveys, *Emergency Planning and Community Right to Know Act.

**PB93-505881/REB** CP **T02**
**Toxic Release Inventory, 1991 Reporting Facilities Names and Addresses.** Data file.
Environmental Protection Agency, Washington, DC. Office of Pollution, Prevention, and Toxics.
1991, mag tape* EPA/DF/MT-93/062
System: IBM 5090; MVS/XA operating system. Approximate bytes: 7,471,002. Supersedes PB91-506816 and PB89-186118.
Available in 9-track, ASCII character set tape, 1600 bpi, 6250 bpi, or 3480 cartridge.

The file is a subset of the larger TRI database for 1991. It is made available to provide mailing labels for each reporting facility. It contains a contact, business name, address, phone number, and type of business of more than 23,000 facilities that have reported for 1991. The reporting requirement applies to owners and operators of facilities that have 10 or more full-time employees, that are in Standard Industrial Classification (SIC) codes 20 through 39 (i.e., manufacturing facilities) and that manufacture (including importing), process or otherwise use a listed toxic chemical in excess of specified threshold quantities. The following information is required on Form R: the name, location and type of business; off-site locations to which the facility transfers toxic chemicals in waste; whether the chemical is manufactured (including importation), processed, or otherwise used and the general categories of use of the chemical; an estimate (in ranges) of the maximum amounts of the toxic chemical present at the facility at any time during the preceding year; quantity of the chemical entering each medium - air, land, and water - annually; waste treatment/disposal methods and efficiency of methods for each waste stream; optional information on waste minimization; and, a certfication by a senior facility official that the report is complete and accurate.

Keywords: *Datafile, *Hazardous materials, *Toxicity, Industrial plants, Standard Industrial Classification, Emergency planning, Pollution regulations, Waste treatment, Waste disposal, Waste management, Magnetic tapes, Reporting requirements, Chemical effluents, Chemical emissions.

**PB93-505915/REB** CP **D02**
**Preliminary Ranking Evaluation Score (PREscore) Version 2.0 (for Microcomputers).** Model-Simulation.
Environmental Protection Agency, Washington, DC. Hazardous Site Evaluation Div.
May 93, 1 diskette EPA/SW/DK-93/066
System: IBM-PC or compatible; MS DOS 3.1 operating system, 384K. Language: Compiled 'C'. Supersedes PB92-503507. See also PB90-591791, PB92-592291, PB92-501774, PB93-500742, and PB93-500353.
Both 3 1/2 inch and 5 1/4 inch high density diskettes are provided. Documentation included; may be ordered separately as PB93-192698.

The PREscore computer program has been developed to assist Superfund site assessment investigations in Hazard Ranking System (HRS) site scoring. The HRS is used to assess the relative threat associated with actual or potential releases of hazardous substances to ground water, surface water, soil, and air. PREscore is designed to be user-friendly, operating via hierarchically-dependent spreadsheets that allow data to be entered quickly and efficiently. Significant program features include: Instant score calculation and continuous score display; Multiple site-scenario testing capability; Extensive Help screens; Comprehensive documentation ability; PREscore fully automates the HRS, allowing for the entry and evaluation of all types of site-related information including sampling data, waste quantities and waste characteristics, physical parameters of the site, population data, and administrative information. In addition, PREscore contains HRS-related hazardous substance information derived from the Agency's Superfund Chemical Data Matrix (SCDM), which includes substance characteristics such as toxicity and persistence, and concentration benchmarks for the substances commonly encountered at Superfund sites. PREscore is accompanied by PREprint, a program that produces an extensive documentation record for sites evaluated by PREscore.

Keywords: *Software, *Models-simulation, *Superfund, Hazardous materials, Waste disposal, Remedial action, Site surveys, Environmental impact assessments, Land pollution, Water pollution, Air pollution, Diskettes, *PREscore computer model, HRS(Hazard Ranking System), NPL(National Priorities List), SCDM(Superfund Chemical Data Matrix).

**PB93-505980/REB** CP **D03**
**PRELIM, Version 4.0 (for Microcomputers).** Software.
Environmental Protection Agency, Washington, DC. Office of Science and Technology.
May 91, 2 diskettes* EPA/SW/DK-93/072
System: IBM compatible; MS DOS operating system. 640K RAM required.
The software is on two 5 1/4 inch diskettes, 360K double density. Documentation included; may be ordered separately as PB93-192748.

The PRELIM 4.0 program is designed to be used in concurrence with U.S. Environmental Protection Agency's (EPA's) 1987 'Guidance Manual on the Development and Implementation of Local Discharge Limitations Under the Pretreatment Program' (hereafter referred to as EPA's local limits guidance manual) in developing technically based local limits for Publicly Owned Treatment Works (POTWs). The program can be useful to POTWs or consultants for developing or revising local numeric limitations, and to States and EPA personnel for reviewing the proposed specific pollutant limits in POTW pretreatment program submissions or local limits submissions. PRELIM 4.0 is a tool that simulates the methodology and calculations found in EPA's local limits guidance manual. Users of PRELIM cannot replace sound judgement where interpretation of input or output data is needed. Moreover, the technical adequacy of the PRELIM output is primarily a function of the extent and quality of POTW-specific data input. Extensive reliance on PRELIM literature data will greatly diminish the validity of PRELIM-derived local limits.

Keywords: *Software, *Industrial waste treatment, *Water pollution standards, Pollution regulations, Water pollution control, Waste water, Permits, State government, Local government, Standards compliance, Diskettes, *PRELIM computer program, POTW(Publicly owned treatment works), Pretreatment.

**PB93-506004/REB** CP **T16**
**Toxic Release Inventory (TRI), 1987.** Data file.
Environmental Protection Agency, Washington, DC. Office of Pollution, Prevention, and Toxics.
1987, mag tape* EPA/DF/MT-93/068
System: IBM 3090; MVS/XA operating system. File format: Unlabeled. Approximate bytes: 43,481,350. IMPORTANT: Tapes must be read in sequence: B00261, B00265, B00268, and B00271. Supersedes PB89-186068. See also PB89-158653.
Available in 9-track, EBCDIC character set tape, 1600 bpi, 6250 bpi, or 3480 cartridge. Documentation included; may be ordered separately as PB93-192755.

Section 313 of the Emergency Planning and Community Right-to-Know Act (also known as Title III) requires EPA to establish a national inventory of toxic chemical emissions from certain facilities. There are over 300 chemicals and categories on these lists. The reporting requirement applies to owners and operators of facilities that have 10 or more full-time employees, that are in Standard Industrial Classification (SIC) codes 20 through 39 (i.e., manufacturing facilities) and that manufacture (including importing), process or otherwise use a listed toxic chemical in excess of specified threshold quantities. The following information is required on Form R: the name, location and type of business; off-site locations to which the facility transfers toxic chemicals in waste; whether the chemical is manufactured (including importation), processed, or otherwise used and the general categories of use of the chemical; an estimate (in ranges) of the maximum amounts of the toxic chemical present at the facility at any time during the preceding year; quantity of the chemical entering each medium - air, land, and water - annually; waste treatment/disposal methods and efficiency of methods for each waste stream; optional information on waste minimization; and a certification by a senior facility official that the report is complete and accurate.

Keywords: *Datafile, *Hazardous materials, *Toxicity, Industrial plants, Emergency planning, Pollution regulations, Waste treatment, Waste disposal, Waste management, Magnetic tapes, *Chemical effluents, *Emissions inventory, Emergency Planning and Community Right-to-Know Act, Reporting requirements, Chemical emissions.

**PB93-506012/REB** CP **T14**
**Toxic Release Inventory (TRI), 1988.** Data file.
Environmental Protection Agency, Washington, DC. Office of Pollution, Prevention, and Toxics.
1988, mag tape* EPA/DF/MT-93/069
System: IBM 3090; MVS/XA operating system. File format: Unlabeled. Approximate bytes: 47,436,400. IMPORTANT: Tapes must be read in sequence: B00220, B00244, B00249, B00259. Supersedes PB90-502030. See also PB89-158653.
Available in 9-track ASCII character set tape, 1600 bpi, 6250 bpi, or 3480 cartridge. Documentation included; may be ordered separately as PB93-192755.

Section 313 of the Emergency Planning and Community Right-to-Know Act (also known as Title III) requires EPA to establish a national inventory of toxic chemical emissions from certain facilities. There are over 300 chemicals and categories on these lists. The reporting requirement applies to owners and operators of facilities that have 10 or more full-time employees, that are in Standard Industrial Classification (SIC) codes 20 through 39 (i.e., manufacturing facilities) and that manufacture (including importing), process or otherwise use a listed toxic chemical in excess of specified threshold quantities. The following information is required on Form R: the name, location and type of busi-

ness; off-site locations to which the facility transfers toxic chemicals in waste; whether the chemical is manufactured (including importation), processed, or otherwise used and the general categories of use of the chemical; an estimate (in ranges) of the maximum amounts of the toxic chemical present at the facility at any time during the preceding year; quantity of the chemical entering each medium - air, land, and water - annually; waste treatment/disposal methods and efficiency of methods for each waste stream; optional information on waste minimization; and a certification by a senior facility official that the report is complete and accurate.

Keywords: *Datafile, *Hazardous materials, *Toxicity, Industrial plants, Emergency planning, Pollution regulations, Waste treatment, Waste disposal, Waste management, Magnetic tapes, *Chemical effluents, *Emission inventory, Emergency Planning and Community Right-to-Know Act, Reporting requirements, Chemical emissions.

**PB93-506020/REB** CP **T14**
**Toxic Release Inventory (TRI), 1989.** Data file.
Environmental Protection Agency, Washington, DC. Office of Pollution, Prevention, and Toxics.
1989, mag tape* EPA/DF/MT-93/070
System: IBM 3090; MVS/XA operating system. File format: Unlabeled. Approximate bytes: 43,481,350. Supersedes PB91-507509. See also PB93-506004(1987), PB93-506012(1988), and PB93-506038(1990). IMPORTANT: Tapes must be read in sequence: B00443, B00444, B00445, B00446.
Available in 9-track ASCII character set tape, 1600 bpi, 6250 bpi, or 3480 cartridge. Documentation included; may be ordered separately as PB93-192755.

Section 313 of the Emergency Planning and Community Right-to-Know Act (also known as Title III) requires EPA to establish a national inventory of toxic chemical emissions from certain facilities. There are over 300 chemicals and categories on these lists. The reporting requirement applies to owners and operators of facilities that have 10 or more full-time employees, that are in Standard Industrial Classification (SIC) codes 20 through 39 (i.e., manufacturing facilities) and that manufacture (including importing), process or otherwise use a listed toxic chemical in excess of specified threshold quantities. The following information is required on Form R: the name, location and type of business; off-site locations to which the facility transfers toxic chemicals in waste; whether the chemical is manufactured (including importation), processed, or otherwise used and the general categories of use of the chemical; an estimate (in ranges) of the maximum amounts of the toxic chemical present at the facility at any time during the preceding year; quantity of the chemical entering each medium - air, land, and water - annually; waste treatment/disposal methods and efficiency of methods for each waste stream; optional information on waste minimization; and a certification by a senior facility official that the report is complete and accurate.

Keywords: *Datafile, *Hazardous materials, *Toxicity, Industrial plants, Emergency planning, Pollution regulations, Waste treatment, Waste disposal, Waste management, Magnetic tapes, *Chemical effluents, *Emissions inventory, Emergency Planning and Community Right-to-Know Act, Reporting requirements, Chemical emissions.

**PB93-506038/REB** CP **T14**
**Toxic Release Inventory (TRI), 1990.** Data file.
Environmental Protection Agency, Washington, DC. Office of Pollution, Prevention, and Toxics.
1990, mag tape* EPA/DF/MT-93/071
System: IBM 3090; OS/MVS operating system. Approximate bytes: 43,481,350. IMPORTANT: Tapes must be used in sequence: B00435, B00436, B00437, B00438. Supersedes PB92-501816. See also PB93-506004, PB93-506012, and PB93-506020.
Available in 9-track ASCII character set tape, 1600 bpi, 6250 bpi, or 3480 cartridge. Documentation included; may be ordered separately as PB93-192755.

Section 313 of the Emergency Planning and Community Right-to-Know Act (also known as Title III) requires EPA to establish a national inventory of toxic chemical emissions from certain facilities. There are over 300 chemicals and categories on these lists. The reporting requirement applies to owners and operators of facilities that have 10 or more full-time employees, that are in Standard Industrial Classification (SIC) codes 20 through 39 (i.e., manufacturing facilities) and that manufacture (including importing), process or otherwise use a listed toxic chemical in excess of specified threshold quantities. The following information is required on Form R: the name, location and type of business; off-site locations to which the facility transfers toxic chemicals in waste; whether the chemical is manufactured (including importation), processed, or otherwise used and the general categories of use of the chemical; an estimate (in ranges) of the maximum amounts of the toxic chemical present at the facility at any time during the preceding year; quantity of the chemical entering each medium - air, land, and water - annually; waste treatment/disposal methods and efficiency of methods for each waste stream; optional information on waste minimization; and a certification by a senior facility official that the report is complete and accurate.

Keywords: *Datafile, *Hazardous materials, *Toxicity, Industrial plants, Emergency planning, Pollution regulations, Waste treatment, Waste disposal, Waste management, Magnetic tapes, *Chemical effluents, *Emissions inventory, Emergency Planning and Community Right-to-Know Act, Reporting requirements, Chemical emissions.

**PB93-506053/REB** CP **D02**
**Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 5) (for Microcomputers).** Software.
Environmental Protection Agency, Washington, DC. Hazardous Site Evaluation Div.
Jul 93, 1 diskette EPA/SW/DK-93/073
System: IBM AT/PS2 or compatible; MS DOS Version 3.3 operating system. Language: Base SAS. Supersedes PB93-505345. 2 megabytes of RAM with memory over 640K configured as expanded memory. Hard disk with at least 10 megabytes of available space. Printer with wide carriage or ability to compress print. This application requires a minimum of 585K of base memory.
The software is one 5 1/4 inch diskette, 1.2M high density. File format: Executable code. Documentation included; may be ordered separately as PB92-169564.

OCCSS software is a version of a mainframe-based application developed for the U.S. Environmental Protection Agency's National Contract Laboratory Program (CLP). OCCSS is designed to automate the determination of contractural compliance and completeness of data submitted to the EPA under the Routine Analytical Services (RAS) programs of CERCLA (Comprehensive Emergency Response Clean-up and Liability Act). In order to remain consistent with the mainframe system, the PC version of OCCSS is written in SAS, and requires that SAS/PC be installed on the host PC. It will load analytical data from diskettes into SAS file format, perform technical edits on data, produce technical defect and summary reports, and reproduce forms which contain defects. In addition, OCCSS includes software to assist in identifying these critical structural defects in the data format, to assist in identifying these for correction prior to performing technical edits.

Keywords: *Software, *Pollution standards, *Organic compounds, *Superfund, Pollution regulations, Compliance, Contract management, Analytical chemistry, Hazardous materials, Waste disposal, Contracts, Diskettes, OCCSS(Organic Contract Compliance Screening System).

**PB93-506061/REB** CP **D03**
**Protocol-A Computerized Solid Waste Quantity and Composition Estimation System (Version 1.02) (for Microcomputers).** Software.
Environmental Protection Agency, Cincinnati, OH. Risk Reduction Engineering Lab.
Mar 93, 1 diskette EPA/SW/DK-93/074
System: IBM compatible; MS DOS operating system. Language: FORTRAN. Supersedes PB91-507756. Documentation included in this package as PB91-201699. Documentation is not available separately.
The software is on one 3 1/2 inch diskette, 1.44M high density.

The computer program is concerned with the design of sampling protocols and the analysis of data for the estimation of solid waste quantity and composition. It will: (1) Construct and add to a quantity data file; (2) Construct and add to a composition data file; (3) Analyze set of raw solid waste quantity data and make estimates of means and totals; (4) Analyze a set of composition data and make estimates of component means and totals; (5) Determine the sample sizes necessary to determine waste composition. The modules in the program will trap data-entry errors and illogical data, and a full-screen editor is also provided so that errors so detected can be corrected by the user without leaving the program.

Keywords: *Software, *Solid waste management, Chemical composition, Quantitative analysis, Volume, Sampling, Diskettes, *PROTOCOL computer program.

**PB93-506079/REB** CP **D02**
**EPA Model Pretreatment Ordinance (for Microcomputers).** Software.
Environmental Protection Agency, Washington, DC. Office of Science and Technology.
Jun 92, 1 diskette* EPA/SW/DK-93/075
System: IBM compatible; MS DOS operating system. Language: Word Perfect 5.1. Other formats available as PB93-122414 (Paper copy).
The software is on one 5 1/4 inch diskette, 360K double density.

The model pretreatment ordinance is intended for use by municipalities operating publicly owned treatment works that are required to develop pretreatment programs to regulate industrial discharges to their systems.

Keywords: *Software, *Water pollution standards, *Pollution regulations, Industrial waste treatment, Sewage treatment, Waste water, Municipalities, Local government, Standards compliance, Diskettes, POTW(Publicly Owned Treatment Works), Pretreatment.

**PB93-506111/REB** CP **D03**
**Site Assessment Information Directory (SAID) Region 1 (for Microcomputers). Date of Coverage: October 1991.** Data file.
Environmental Protection Agency, Washington, DC.
Oct 91, 1 diskette* EPA/DF/DK-93/076
System: IBM compatible; MS DOS operating system. 480K RAM required (550+ recommended). See also Region 1 - PB93-506111, Region 2 - PB93-506129, Region 3 - PB93-506137, Region 4 - PB93-506145, Region 5 - PB93-506152, Region 6 - PB93-506160, Region 7 - PB93-506178, Region 8 - PB93-506186, Region 9 - PB93-506194, Region 10 - PB93-506202.
The datafile is on one 3 1/2 inch diskette, 1.44M high density. Documentation included; may be ordered separately as PB93-192797.

The Site Assessment Information Directory (SAID) is a database of information sources designed to support EPA Regional, state, and contractor staff in data collection efforts for site investigation activities. SAID is designed to assist data collection activities, especially during Preliminary Assessments (PAs) and Site Inspections (SIs), and to support Hazard Ranking system (HRS) package preparation. SAID entries are cross-referenced according to categories of information and geographical areas and may be accessed in a variety of ways. The SAID database system is supplemented by a User's Guide and EPA region specific 'Phone book' listing of information sources.

Keywords: *Superfund, *Data bases, *Software, Hazardous materials, Waste disposal, Remedial action, Environment pollution, Site surveys, Data collection, Data compilation, Diskettes, *SAID(Site Assessment Information Directory), EPA Region 1.

**PB93-506129/REB** CP **D03**
**Site Assessment Information Directory (SAID) Region 2 (for Microcomputers). Date of Coverage: October 1991.** Data file.
Environmental Protection Agency, Washington, DC.
Oct 91, 1 diskette* EPA/DF/DK-93/077
System: IBM compatible; MS DOS operating system. 480K RAM required (550+ recommended). See also Region 1 - PB93-506111, Region 2 - PB93-506129, Region 3 - PB93-506137, Region 4 - PB93-506145, Rgion 5 - PB93-506152, Region 6 - PB93-506160, Region 7 - PB93-506178, Region 8 - PB93-506186, Region 9 - PB93-506194, Region 10 - PB93-506202.
The datafile is on one 3 1/2 inch diskette, 1.44M high density. Documentation included; may be ordered separately as PB93-192805.

The Site Assessment Information Directory (SAID) is a database of information sources designed to support EPA Regional, state, and contractor staff in data collection efforts for site investigation activities. SAID is designed to assist data collection activities, especially during Preliminary Assessments (PAs) and Site Inspections (SIs), and to support Hazard Ranking system (HRS) package preparation. SAID entries are cross-referenced according to categories of information and geographical areas and may be accessed in a variety of ways. The SAID database system is supplemented by a User's Guide and EPA region specific 'Phone book' listing of information sources.

Keywords: *Superfund, *Data bases, *Software, Hazardous materials, Waste disposal, Remedial action, Environment pollution, Site surveys, Data collection, Data compilation, Diskettes, *SAID(Site Assessment Information Directory), EPA Region 2.

**PB93-506137/REB** CP **D03**
**Site Assessment Information Directory (SAID) Region 3 (for Microcomputers). Date of Coverage: October 1991.** Data file.
Environmental Protection Agency, Washington, DC.
Oct 91, 1 diskette* EPA/DF/DK-93/078
System: IBM compatible; MS DOS operating system. 480K RAM required (550+ recommended). See also Region 1 - PB93-506111, Region 2 - PB93-506129, Region 3 - PB93-506137, Region 4 - PB93-506145, Region 5 - PB93-506152, Region 6 - PB93-506160, Region 7 - PB93-506178, Region 8 - PB93-506186, Region 9 - PB93-506194, Region 10 - PB93-506202. The datafile is on one 3 1/2 inch diskette, 1.44M high density. Documentation included; may be ordered separately as PB93-192813.

The Site Assessment Information Directory (SAID) is a database of information sources designed to support EPA Regional, state, and contractor staff in data collection efforts for site investigation activities. SAID is designed to assist data collection activities, especially during Preliminary Assessments (PAs) and Site Inspections (SIs), and to support Hazard Ranking system (HRS) package preparation. SAID entries are cross-referenced according to categories of information and geographical areas and may be accessed in a variety of ways. The SAID database system is supplemented by a User's Guide and EPA region specific 'Phone book' listing of information sources.

Keywords: *Superfund, *Data bases, *Software, Hazardous materials, Waste disposal, Remedial action, Environment pollution, Site surveys, Data collection, Diskettes, *SAID(Site Assessment Information Directory), EPA Region 3.

**PB93-506145/REB** CP **D03**
**Site Assessment Information Directory (SAID) Region 4 (for Microcomputers). Date of Coverage: October 1991.** Data file.
Environmental Protection Agency, Washington, DC.
Oct 91, 1 diskette* EPA/DF/DK-93/079
System: IBM compatible; MS DOS operating system. 480K RAM required (550+ recommended). See also Region 1 - PB93-506111, Region 2 - PB93-506129, Region 3 - PB93-506137, Region 4 - PB93-506145, Region 5 - PB93-506152, Region 6 - PB93-506160, Region 7 - PB93-506178, Region 8 - PB93-506186, Region 9 - PB93-506194, Region 10 - PB93-506202. The datafile is on one 3 1/2 inch diskette, 1.44M high density. Documentation included; may be ordered separately as PB93-192821.

The Site Assessment Information Directory (SAID) is a database of information sources designed to support EPA Regional, state, and contractor staff in data collection efforts for site investigation activities. SAID is designed to assist data collection activities, especially during Preliminary Assessments (PAs) and Site Inspections (SIs), and to support Hazard Ranking system (HRS) package preparation. SAID entries are cross-referenced according to categories of information and geographical areas and may be accessed in a variety of ways. The SAID database system is supplemented by a User's Guide and EPA region specific 'Phone book' listing of information sources.

Keywords: *Superfund, *Data bases, *Software, Hazardous materials, Waste disposal, Remedial action, Environment pollution, Site surveys, Data collection, Diskettes, *SAID(Site Assessment Information Directory), EPA Region 4.

**PB93-506152/REB** CP **D03**
**Site Assessment Information Directory (SAID) Region 5 (for Microcomputers). Date of Coverage: 1991.** Data file.
Environmental Protection Agency, Washington, DC.
Oct 91, 1 diskette* EPA/DF/DK-93/080
System: IBM compatible; MS DOS operating system. 480K RAM required (550+ recommended). See also Region 1 - PB93-506111, Region 2 - PB93-506129, Region 3 - PB93-506137, Region 4 - PB93-506145, Region 5 - PB93-506152, Region 6 - PB93-506160, Region 7 - PB93-506178, Region 8 - PB93-506186, Region 9 - PB93-506194, Region 10 - PB93-506202. The datafile is on one 3 1/2 inch diskette, 1.44M high density. Documentation included; may be ordered separately as PB93-192839.

The Site Assessment Information Directory (SAID) is a database of information sources designed to support EPA Regional, state, and contractor staff in data collection efforts for site investigation activities. SAID is designed to assist data collection activities, especially during Preliminary Assessments (PAs) and Site Inspections (SIs), and to support Hazard Ranking system (HRS) package preparation. SAID entries are cross-referenced according to categories of information and geographical areas and may be accessed in a variety of ways. The SAID database system is supplemented by a User's Guide and EPA region specific 'Phone book' listing of information sources.

Keywords: *Superfund, *Data bases, *Software, Hazardous materials, Waste disposal, Remedial action, Environment pollution, Site surveys, Data collection, Diskettes, *SAID(Site Assessment Information Directory), EPA Region 5.

**PB93-506160/REB** CP **D03**
**Site Assessment Information Directory (SAID) Region 6 (for Microcomputers). Date of Coverage: October 1991.** Data file.
Environmental Protection Agency, Washington, DC.
Oct 91, 1 diskette* EPA/DF/DK-93/081
System: IBM compatible; MS DOS operating system. 480K RAM required (550+ recommended). See also Region 1 - PB93-506111, Region 2 - PB93-506129, Region 3 - PB93-506137, Region 4 - PB93-506145, Region 5 - PB93-506152, Region 6 - PB93-506160, Region 7 - PB93-506178, Region 8 - PB93-506186, Region 9 - PB93-506194, Region 10 - PB93-506202. The datafile is on one 3 1/2 inch diskette, 1.44M high density. Documentation included; may be ordered separately as PB93-192847.

The Site Assessment Information Directory (SAID) is a database of information sources designed to support EPA Regional, state, and contractor staff in data collection efforts for site investigation activities. SAID is designed to assist data collection activities, especially during Preliminary Assessments (PAs) and Site Inspections (SIs), and to support Hazard Ranking system (HRS) package preparation. SAID entries are cross-referenced according to categories of information and geographical areas and may be accessed in a variety of ways. The SAID database system is supplemented by a User's Guide and EPA region specific 'Phone book' listing of information sources.

Keywords: *Superfund, *Data bases, *Software, Hazardous materials, Waste disposal, Remedial action, Environment pollution, Site surveys, Data collection, Diskettes, *SAID(Site Assessment Information Directory), EPA Region 6.

**PB93-506178/REB** CP **D03**
**Site Assessment Information Directory (SAID) Region 7 (for Microcomputers). Date of Coverage: October 1991.** Data file.
Environmental Protection Agency, Washington, DC.
Oct 91, 1 diskette* EPA/DF/DK-93/082
System: IBM compatible; MS DOS operating system. 480K RAM required (550+ recommended). See also Region 1 - PB93-506111, Region 2 - PB93-506129, Region 3 - PB93-506137, Region 4 - PB93-506145, Region 5 - PB93-506152, Region 6 - PB93-506160, Region 7 - PB93-506178, Region 8 - PB93-506186, Region 9 - PB93-506194, Region 10 - PB93-506202. The datafile is on one 3 1/2 inch diskette, 1.44M high density. Documentation included; may be ordered separately as PB93-192854.

The Site Assessment Information Directory (SAID) is a database of information sources designed to support EPA Regional, state, and contractor staff in data collection efforts for site investigation activities. SAID is designed to assist data collection activities, especially during Preliminary Assessments (PAs) and Site Inspections (SIs), and to support Hazard Ranking system (HRS) package preparation. SAID entries are cross-referenced according to categories of information and geographical areas and may be accessed in a variety of ways. The SAID database system is supplemented by a User's Guide and EPA region specific 'Phone book' listing of information sources.

Keywords: *Superfund, *Data bases, *Software, Hazardous materials, Waste disposal, Remedial action, Environment pollution, Site surveys, Data collection, Diskettes, *SAID(Site Assessment Information Directory), EPA Region 7.

**PB93-506186/REB** CP **D03**
**Site Assessment Information Directory (SAID) Region 8 (for Microcomputers). Date of Coverage: 1991.** Data file.
Environmental Protection Agency, Washington, DC.
Oct 91, 1 diskette* EPA/DF/DK-93/083
System: IBM compatible; MS DOS operating system. 480K RAM required (550+ recommended). See also Region 1 - PB93-506111, Region 2 - PB93-506129, Region 3 - PB93-506137, Region 4 - PB93-506145, Region 5 - PB93-506152, Region 6 - PB93-506160, Region 7 - PB93-506178, Region 8 - PB93-506186, Region 9 - PB93-506194, Region 10 - PB93-506202. The datafile is on one 3 1/2 inch diskette, 1.44M high density. Documentation included; may be ordered separately as PB93-213817.

The Site Assessment Information Directory (SAID) is a database of information sources designed to support EPA Regional, state, and contractor staff in data collection efforts for site investigation activities. SAID is designed to assist data collection activities, especially during Preliminary Assessments (PAs) and Site Inspections (SIs), and to support Hazard Ranking system (HRS) package preparation. SAID entries are cross-referenced according to categories of information and geographical areas and may be accessed in a variety of ways. The SAID database system is supplemented by a User's Guide and EPA region specific 'Phone book' listing of information sources.

Keywords: *Superfund, *Data bases, *Software, Hazardous materials, Waste disposal, Remedial action, Environment pollution, Site surveys, Data collection, Diskettes, *SAID(Site Assessment Information Directory), EPA Region 8.

**PB93-506194/REB** CP **D03**
**Site Assessment Information Directory (SAID) Region 9 (for Microcomputers). Date of Coverage: October 1991.** Data file.
Environmental Protection Agency, Washington, DC.
Oct 91, 1 diskette* EPA/DF/DK-93/084
System: IBM compatible; MS DOS operating system. 480K RAM required (550+ recommended). See also Region 1 - PB93-506111, Region 2 - PB93-506129, Region 3 - PB93-506137, Region 4 - PB93-506145, Region 5 - PB93-506152, Region 6 - PB93-506160, Region 7 - PB93-506178, Region 8 - PB93-506186, Region 9 - PB93-506194, Region 10 - PB93-506202. The datafile is on one 3 1/2 inch diskette, 1.44M high density. Documentation included; may be ordered separately as PB93-213825.

The Site Assessment Information Directory (SAID) is a database of information sources designed to support EPA Regional, state, and contractor staff in data collection efforts for site investigation activities. SAID is designed to assist data collection activities, especially during Preliminary Assessments (PAs) and Site Inspections (SIs), and to support Hazard Ranking system (HRS) package preparation. SAID entries are cross-referenced according to categories of information and geographical areas and may be accessed in a variety of ways. The SAID database system is supplemented by a User's Guide and EPA region specific 'Phone book' listing of information sources.

Keywords: *Superfund, *Data bases, *Software, Hazardous materials, Waste disposal, Remedial action, Environment pollution, Site surveys, Data collection, Diskettes, *SAID(Site Assessment Information Directory), EPA Region 9.

**PB93-506202/REB** CP **D03**
**Site Assessment Information Directory (SAID) Region 10 (for Microcomputers). Date of Coverage: October 1991.** Data file.
Environmental Protection Agency, Washington, DC.
Oct 91, 1 diskette* EPA/DF/DK-93/085
System: IBM compatible; MS DOS operating system. 480K RAM required (550+ recommended). See also Region 1 - PB93-506111, Region 2 - PB93-506129, Region 3 - PB93-506137, Region 4 - PB93-506145, Region 5 - PB93-506152, Region 6 - PB93-506160, Region 7 - PB93-506178, Region 8 - PB93-506186, Region 9 - PB93-506194, Region 10 - PB93-506202.
The datafile is on one 3 1/2 inch diskette, 1.44M high density. Documentation included; may be ordered separately as PB93-213833.

The Site Assessment Information Directory (SAID) is a database of information sources designed to support EPA Regional, state, and contractor staff in data collection efforts for site investigation activities. SAID is designed to assist data collection activities, especially during Preliminary Assessments (PAs) and Site Inspections (SIs), and to support Hazard Ranking system (HRS) package preparation. SAID entries are cross-referenced according to categories of information and geographical areas and may be accessed in a variety of ways. The SAID database system is supplemented by a User's Guide and EPA region specific 'Phone book' listing of information sources.

Keywords: *Superfund, *Data bases, *Software, Hazardous materials, Waste disposal, Remedial action, Environment pollution, Site surveys, Data collection, Diskettes, *SAID(Site Assessment Information Directory), EPA Region 10.

**PB93-506301/REB** CP **D02**
**Evaporative Emission Model (EVAP 3.0) (for Microcomputers).** Software.
Environmental Protection Agency, Atlanta, GA. Region IV.
Feb 93, 1 diskette EPA/SW/DK-93/086
System: IBM PC or compatible; MS DOS operating system. Requires 640K of RAM, a math coprocessor, and some graphical display mode (Hercules card, CGA, EGA, VGA or Super VGA). See also PB91-510008.
The software is on one 3 1/2 inch diskette, 1.44M high density. Documentation included; may be ordered separately as PB93-213916.

The potential role of automotive evaporative emissions in the formation of photochemical smog has underscored the need for an accurate evaluation of real-world motor vehicle evaporative emission rates. Two general categories of information are needed to predict evaporative emissions for vehicles in actual use. The first category defines the environment that a vehicle experiences in the real world. This includes conditions such as driving pattern, ambient temperature, refueling behavior, and gasoline Reid vapor pressure (RVP). The second category describes how the vehicle responds to these conditions. This includes weathering of the fuel in the fuel tank and how evaporative emissions vary as a function of RVP, ambient temperature, and fuel tank level.

Keywords: *Evaporative emissions, *Air pollution emission factors, *Automobiles, *Software, Air pollution sources, Mobile pollutant sources, Smog, Photochemical reactions, Refueling losses, Vapor pressure, Diskettes, Driving style effect on exhaust emissions, Ambient temperature effect on exhaust, Fuel level, Fuel weathering.

**PB93-506426/REB** CP **T05**
**Environmental Fate Data Base (EFDB) Complete: XREF, CASLST, DATALOG, BIOLOG, CHEMFATE, and BIODEG. (Date of Coverage 1993).** Data file.
Environmental Protection Agency, Washington, DC. Office of Pollution, Prevention, and Toxics.
May 93, mag tape EPA/DF/MT-93/087
System: DEC VAX 4100; VMS5.5 operating system. Utility program: VMS Copy Utility. Supersedes PB90-502071, PB90-501297, PB90-501289, PB90-501271, PB90-501263, and PB90-501305.
Available in 9-track, ASCII character set tape, 1600 bpi, 6250 bpi, or 3480 cartridge.

The Environmental Fate Database (EFDB) is a data bank containing data or pointers to data on physical/chemical properties and environmental fate of several thousand chemicals. EFDB consists of 6 interrelated files: CASLST is a listing of CAS Registry Numbers, molecular formulae, and names for chemicals included in the other tapes (except for XREF). DATALOG provides a pointer to various data reported in the open literature pertaining to environmental fate of chemicals. BIOLOG provides a pointer to data on microbial degradation or toxicity reported in the open literature pertaining to particular chemicals. CHEMFATE is a file containing actual literature-derived data pertinent to the environmental fate of more than 500 chemicals, from a diverse group of chemical classes. BIODEG is an experimental value file, like CHEMFATE. It contains, for each of several hundred chemicals, (1) summaries of all available mixed culture biodegradation studies; (2) summary judgements of biodegradability based on the literature; and (3) judgments of the reliability of the summary biodegradability codes. XREF provides complete citations for the journal articles referenced in the other tapes.

Keywords: *Data file, *Chemical compounds, Physical properties, Chemical properties, Toxicity, Biodegradation, Environmental impacts, Magnetic tapes, *Environmental fate.

**PB93-506582/REB** CP **D02**
**Field Certification Tracking System (FCTS), Version 2.1 (for Microcomputers).** Software.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
Jul 93, 2 diskettes EPA/SW/DK-93/088
Requirements: a minimum of 1.5 MB of available disk space; 640 K of installed RAM, DOS 3.3 or greater.
Both 3 1/2 and 5 1/4 inch, double density diskettes are included in the package. Documentation included; may be ordered separately as PB93-963415.

The Field Certification Tracking System (FCTS) is a computer program designed to automate the tracking of certification training. Each employee has a training category which specifies what training elements need to be accomplished in order to maintain field certification. Each category contains a variable number of requirements. Each requirement within a category can be very flexible in the amount and frequency of training required. It can cover a wide variety from first aid training yearly to urinalysis quarterly. Because of the flexibility of the requirements, FCTS can be used for most any industry although it was designed by the EPA for the hazardous waste industry. In addition to tracking training requirements, FCTS will provide the user with several useful reports. It can list employees and needed training, or employees and projected needs for training in order to maintain certification. The reports can be useful management tools to maintain up to date training on all employees.

Keywords: *Software, *Personnel management, *Training, Certification, Requirements, Industries, Hazardous materials, Waste disposal, Diskettes.

**PB93-507044/REB** CP **T04**
**Biennial Reporting System (BRS) 1989 (Date of Coverage: 1989).** Data file.
Environmental Protection Agency, Washington, DC. Office of Solid Waste.
1989, mag tape* EPA/DF/MT-93/089
System: IBM ES/9000 operating system. Utility program: IEBGENER. See also PB91-591310 and PB93-592570.
Available in 9-track, EBCDIC character set tape, 1600 bpi, 6250 bpi, or 3480 cartridge. Documentation included; may be ordered separately as PB93-233740 and PB93-233757.

Product contains data compiled by the Biennial Reporting System (BRS) for the 'National Biennial RCRA Hazardous Waste Report (Based on 1989 data)'. The data were collected by states using the '1989 National Hazardous Waste Report Instructions and Forms' (EPA Form 8700-13-A/B), or the state's equivalent information source. Data for all states are included. Data for reports protected by RCRA Confidential Business Information (CBI) claims are not included. The data contains information describing the RCRA wastes generated and/or managed during 1989 by RCRA Treatment, Storage and Disposal Facilities (TSDF) and RCRA Large Quantity Generators (LQG). Data are reported by sites meeting the LQG and/or TSDF definitions. Sites are identified by their EPA/RCRA identification number. Response codes have been averted to match those of the '1991 Hazardous Waste Report: Instructions and Forms' (EPA Form 8700-13-A/B (5/80) (Revised 08-91).

Keywords: *Data file, *Hazardous materials, *Waste management, Sites, Waste treatment, Waste disposal, States(United States), Facilities, Magnetic tapes, Environmental Protection Agency.

**PB93-592570/REB**
SubscriptionPC**$2540.00**
**Resource Conservation and Recovery Information System (RCRIS) Extract Tapes.** Data file.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Jun 93, mag tape*
System: IBM ES 9021/900; MVS/ESA operating system. Data Base Language: FOCUS. Supersedes PB92-592290 (subscription) PB92-592291 (demand).
Available as a Standing Order, NTIS deposit account required. Price based on number of issues. Approximate annual cost for U.S., Canada, and Mexico $2540; price for others $5080. Available in 9-track EBCDIC character set, 1600 bpi, 6250 bpi, or 3480 cartridge. Also available individually; order number PB93-592571, price T11 for either 1600 or 6250 bpi. Documentation included.

The tape series contains data extracted from the Resource Conservation and Recovery Information System (RCRIS) Database. RCRIS contains information on hazardous waste handlers regulated by The Environmental Protection Agency (EPA) under the Resource Conservation and Recovery Act (RCRA). Data is supplied by the regulated community and RCRA permitting and compliance program personnel. All hazardous waste handlers are required to notify EPA of their existence by submitting the Federal Notification of Regulated Waste Activity Form (EPA Form 8700-12) or a State equivalent form. The Notification form provides basic identification information (e.g., handler name and location address, and owner/operator and contact names, addresses and phone numbers), specific hazardous waste activities (e.g., generator, transporter, or treatment/storage/disposal), and wastes handled. Treatment, storage and disposal facilities (TSDFs) are further required to submit Part A (EPA Form 8700-23) and Part B of their Hazardous Waste Permit Application. The Part A form provides more detailed information concerning wastes handled, plus SIC codes and process data. Information from the Notification and Part A forms described above, permit issuance data supplied by RCRA permit writers, and non-sensitive compliance and enforcement data collected by compliance program personnel is included on the tapes.

Keywords: *Hazardous materials, *Solid waste management, *Waste disposal, *Magnetic tapes, *Data bases, Waste treatment, Waste processing plants, Permits, Hazardous materials transportation, Pollution regulations, Notification procedures, Waste storage, *RCRIS(Resource Conservation and Recovery Information System).

**PB93-781979/REB** PC**$56.00**/MF**$22.00**
Virginia Univ., Charlottesville.
**Medical Waste Incinerator Operator Training Program: Course Handbook.**
Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
1 Apr 93, 357p EPA/453/B-93/018
Sponsored by Virginia Univ., Charlottesville.

The Course Handbook is part of a model State training program which addresses the training needs of medical waste incinerator (MWI) operators. Included are generic incinerator and air pollution control equipment design features, combustion control relationships, and operating and maintenance procedures which are designed to be consistent with the purposes of the Clean Air Act Amendments of 1990. The training program is not designed to replace the specific, on-the-job training programs which are crucial to proper operation and maintenance of medical waste incinerators.

Keywords: *Medical wastes, *Incinerators, *Operators(Personnel), *Manuals, Waste disposal, Air pollution control equipment, Boilers, Combustion kinetics, Combustion products, Education, State government, Medical waste incineration, Incinerator operator training.

**PB93-916202/REB** PC **A05**/MF **A01**
**National Transportation Safety Board Highway Accident Report: Charter Bus Loss of Control, Overturn, and Fire, Vernon, New Jersey, July 26, 1992.**
National Transportation Safety Board, Washington, DC.
23 Jun 93, 87p NTSB/HAR-93/02
Paper copy available on Standing Order, deposit account required (minimum deposit $100 U.S., Canada, and Mexico; all others $200). Single copy also available in paper copy or microfiche.

On July 26, 1992, the driver of a charter bus lost control of the bus as it descended a steep hill near Vernon, New Jersey. The bus struck two cars. Twelve passengers were ejected from the bus; six of them died. The safety issues discussed in the report are the deteriorated braking efficiency of the bus, the driver's handling of the gears, the adequacy of State and Federal oversight of motor carrier operations; the adequacy of the highway signs in preparing drivers to descend the hill, and the adequacy of New York State commercial vehicle inspections and safety/compliance reviews. The Safety Board made recommendations about these issues to the Federal Highway Administration, the New York Department of Motor Vehicles, the New York Department of Transportation, the American Association of Motor Vehicle Administrators, the United Bus Owners of America, and the American Bus Association.

Keywords: *Accident investigations, *Bus accidents, Multiple vehicle accidents, Loss of control, Fires, Ejection, Fatalities, Injuries, Brake failures, Deterioration, Maintenance, Highway signs, New Jersey, Overturn accidents, Vernon(New Jersey).

**PB93-963286/REB** PC **A01**/MF **A01**
**Superfund Accelerated Cleanup Model (SACM): Questions and Answers.** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Jul 93, 5p EPA/540/F-93/024, OSWER-9203.1-10FS
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The bulletin provides answers to issues the Regions have raised on the Superfund Accelerated Cleanup Model (SACM).

Keywords: *Hazardous materials, *Waste disposal, *Remedial action, Site surveys, Risk assessment, Guidance, Pollution regulations, *SACM(Superfund Accelerated Cleanup Model), National Priority List.

**PB93-963294/REB** PC **A03**/MF **A01**
**Superfund Administrative Improvements. Executive Summary.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
23 Jun 93, 19p EPA/540/R-93/067, OSWER-9200.0-14-1
See also PB93-963295.
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The report focuses on administrative improvements to the Superfund program suggested by the Superfund Administrative Improvements Task Force. Specific topics include enhancing enforcement fairness and reducing transaction costs; enhancing cleanup effectiveness and consistency; enhancing meaningful public involvement; and enhancing the state role in the Superfund program.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, Administrative procedures, Pollution regulations, Remedial action, Improvement, Standards compliance, Law enforcement, State government, Cleanup operations.

**PB93-963295/REB** PC **A04**/MF **A01**
**Superfund Administrative Improvements. Final Report.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
23 Jun 93, 54p EPA/540/R-93/068
See also PB93-963294.
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The report focuses on administrative improvements to the Superfund program suggested by the Superfund Administrative Improvements Task Force. Specific topics include enhancing enforcement fairness and reducing transaction costs; enhancing cleanup effectiveness and consistency; enhancing meaningful public involvement; and enhancing the state role in the Superfund program.

Keywords: *Superfund, *Waste disposal, *Hazardous materials, Administrative procedures, Pollution regulations, Remedial action, Improvement, Standards compliance, Law enforcement, State government.

**PB93-963297/REB** PC **A03**/MF **A01**
**Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis.** Directive.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
25 Jun 93, 31p EPA/540/F-93/042, OSWER-9355.3-20
See also PB89-184626.
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The memorandum revises the discount rate used in cost estimation for Superfund activities to 7%. This discount rate should be used in estimating the present worth value for potential alternatives in the remedial investigation/feasibility study and for remedial actions.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Interest rate, Cost estimation, Cost effectiveness, Economic analysis, Benefit cost analysis, Remedial action, Pollution regulations, Lease-purchase analysis.

**PB93-963298/REB** PC **A05**/MF **A02**
**Superfund Reauthorization: NACEPT Subcommittee Handbook.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
18 Jun 93, 100p EPA/540/R-93/072, OSWER-9200.1-14
Paper copy available on Standing Order, deposit account required (minimum deposit $200 U.S., Canada, and Mexico; all others $400). Single copies also available in paper copy or microfiche.

The handbook for the NACEPT Subcommittee on Superfund reauthorization includes overview of Superfund regulatory framework, program status, background materials from meetings prior to June 1993, and a selection of critical analyses of Superfund.

Keywords: *Superfund, *Pollution regulations, *Handbooks, Hazardous materials, Waste disposal, Cost analysis, Requirements, Legal aspects, Enforcement, Environmental policy, Reauthorization, Cleanup.

**PB93-963304/REB** PC **A01**/MF **A01**
**Cost of Remedial Action Model.** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
May 91, 4p OSWER-9375.5-06A/FS
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The Cost of Remedial Action (CORA) model is a computerized expert advisor used to select remedial actions for Superfund hazardous waste sites and estimate their costs. It may also be used for RCRA corrective actions. The model is used for both current site-specific estimates, and for program budgeting and planning.

Keywords: *Superfund, *Waste disposal, *Hazardous materials, Cost analysis, Cost estimates, Budgeting, Planning, Computerized simulation, *CORA(Cost of Remedial Action).

**PB93-963318/REB** PC **A03**/MF **A01**
**Cost of Remedial Actions (CORA) Model: Overview and Applications.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
R. K. Biggs, K. Klink, and J. Crenca. Apr 89, 11p
OSWER-9375.5-19
Presented at HAZMACON '89, Santa Clara, CA., April 1989.
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The Cost of Remedial Actions (CORA) model estimates site-specific remedial action costs for hazardous waste sites. The model is microcomputer-based and has two components: an expert system to recommend a range of remedial technologies, and a cost system. The expert system interacts with the user and develops ranges of recommended remedial action technologies. The cost system contains algorithms capable of developing order-of-magnitude cost estimates for 40 demonstrated technologies. The model was used by the U.S. EPA for the outyear Superfund remedial action budgeting for FY 1989, FY 1990, and FY 1991 budgeting. The model was also used to develop U.S. Navy Installation Program budgets for FY 1989, 1990, and 1991.

Keywords: *Hazardous materials, *Waste disposal, *Superfund, *Cost estimates, Economic analysis, Budgeting, Remediation, Computerized simulation, Documentation, Cost of remedial action, CORA model, SCAP(Superfund Comprehensive Accomplishments Plan).

**PB93-963326/REB** PC **A01**/MF **A01**
**Obligation of Funds under Superfund State Contracts.** Directive.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
5 Aug 93, 4p OSWER-9375.7-02
Paper copy available on Standing Order, deposit account required (minimum deposit $200 U.S., Canada, and Mexico; all others $400). Single copies also available in paper copy or microfiche.

The memorandum clarifies EPA's interpretation of 40 CFR Part 35, Subpart O, regarding the relationship between cost share assurances in Superfund State Contracts (SSCs) and the obligation of remedial action funds. EPA's policy is that remedial design monies may be obligated to another Federal agency to initiate the procurement process for a remedial action contract before an SSC is executed. However, the memorandum also reiterates Agency policy that an SSC must be in place before funds may be obligated for initiating or continuing remedial action.

Keywords: *Superfund, *Contract management, *State government, Hazardous materials, Waste disposal, Cost sharing, Pollution regulations, Remedial action, Budgeting, Intergovernmental relationships, Funds, Costs, Economic analysis.

**PB93-963327/REB** PC **A01**/MF **A01**
**NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.** Directive.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
21 Jun 93, 5p EPA/540/F-93/019, OSWER-9320.2-06
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The report discusses EPA's policy for categorizing bioremediation and soil vapor extraction sites as Construction Completions. Technologies addressed are: in-situ soil vapor extraction, in-situ bioremediation, and ex-situ bioremediation.

Keywords: *Government policies, *Construction, *Hazardous materials, *Superfund, *Directives, Guidelines, Sites, Response, Inspection, US EPA, Volatile organic compounds, Soils, Injection wells, Additives, Aquifers, Remedial action, *National Priority List, Soil vapor extraction, Bioremediation.

**PB93-963329/REB** PC **A02**/MF **A01**
**Technology Selection Guide for Wood Treater Sites.** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
26 May 93, 10p EPA/540/F-93/020, OSWER-9360.0-46FS
Paper copy available on Standing Order, deposit account required (minimum deposit $200 U.S., Canada, and Mexico; all others $400). Single copies also available in paper copy or microfiche.

The purpose of the memorandum is to transmit the Technology Selection Guide for Wood Treater Sites. The fact sheet is part of a series of guidance documents being developed on presumptive remedies at various categories of sites. The technology selection guide provides information on specific technologies and performance data. The information includes a procedural outline, practical considerations, and treatment technology tables for sludge, soil, sediment, and ground and surface water.

Keywords: *Superfund, *Wood preservatives, *Waste disposal, *Pollution control, Sites, Ground water, Creosote, Petroleum products, Hydrocarbons, Remedial action, Investigations, Aromatic polycyclic hydrocarbons, Oils, Soils, Waste treatment, Surface waters, Sludge, Technology transfer, Capping, Specifications, Abandoned wood treatment sites, Cleanup.

**PB93-963339/REB** PC **A03**/MF **A01**
**Presumptive Remedy for CERCLA Municipal Landfill Sites.** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Sep 93, 15p EPA/540/F-93/035, OSWER-9355.0-49FS
Paper copy available on Standing Order, deposit account required (minimum deposit $200 U.S., Canada, and Mexico; all others $400). Single copies also available in paper copy or microfiche.

The directive establishes containment as the presumptive remedy for CERCLA municipal landfills. The framework for the presumptive remedy for these sites is presented in a streamlining manual entitled Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites, February 1991 (OSWER Directive 9355. 3-11). The directive highlights and emphasizes the importance of certain streamlining principles related to the scoping (planning) stages of the remedial investigation/feasibility study (RI/FS) that were identified in the manual. The directive also provides clarification of and additional guidance in the following areas: (1) the level of detail appropriate for risk assessment of source areas at municipal landfills and (2) the characterization of hot spots.

Keywords: *Superfund, *Landfills, *Remediation, Municipal wastes, Containment, Exposure, Risk assessment, Site characterization, Technology assessment, Performance evaluation, Superfund Accelerated Cleanup Model.

**PB93-963342/REB** PC **A03**/MF **A01**
**PA Review Checklist.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
28 Apr 93, 16p OSWER-9345.0-08
See also PB92-963303.
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The preliminary assessment (PA) review checklist was designed to evaluate the quality of PA work products. The review will ensure that EPA decisions concerning the disposition of sites are made in a nationally consistent, scientifically based, and efficient manner. The order in which information is presented in the PA does not have to be consistent with the checklist, but the PA should be organized in a logical sequence and consistent with PA guidance. The checklist and the PA guidance manual can be ordered from the National Technical Information Service (NTIS) by calling 703-487-4650. To order both documents, the order number is PB92-963303. The checklist by itself is order number PB93-963342.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Assessments, Site characterization, Evaluation, Reporting, Reviewing, Preliminary assessment.

**PB93-963345/REB** PC **A02**/MF **A01**
**Presumptive Remedies: Policy and Procedures.** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Sep 93, 8p EPA/540/F-93/047, OSWER-9355.0-47FS
Paper copy available on Standing Order, deposit account required (minimum deposit $200 U.S., Canada, and Mexico; all others $400). Single copies also available in paper copy or microfiche.

The objective of the presumptive remedies initiative is to use the program's past experience to streamline site investigations and speed up selection of cleanup actions. Over time presumptive remedies are expected to ensure consistency in remedy selection and reduce the cost and time required to clean up similar types of sites. Presumptive remedies are expected to be used at all appropriate sites except under unusual site-specific circumstances. EPA plans to develop a series of directives on presumptive remedies for various types of sites. The directive serves as an overall guide to the presumptive remedies initiative and its effect on site cleanup. Through a question and answer format, it explains, in general terms, ways in which presumptive remedies will streamline or change the remedial and removal processes from the conventional processes and how certain Superfund policies will be affected by the initiative.

Keywords: *Superfund, *Government policies, *Administrative procedures, Hazardous materials, Waste disposal, Pollution regulations, Remediation, Technology assessment, Superfund Accelerated Cleanup Model.

**PB93-963346/REB** PC **A03**/MF **A01**
**Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites with Volatile Organic Compounds in Soils.** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Sep 93, 26p EPA/540/F-93/048, OSWER-9355.0-48FS
Paper copy available on Standing Order, deposit account required (minimum deposit $200 U.S., Canada, and Mexico; all others $400). Single copies also available in paper copy or microfiche.

Presumptive remedies are preferred technologies for common categories of sites, based on historical patterns of remedy selection and EPA's scientific and engineering evaluation of performance data on technology implementation. The directive identifies the presumptive remedies for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites with soils contaminated by volatile organic compounds (VOCs). Soil vapor extraction (SVE), thermal desorption, and incineration are the presumptive remedies for Superfund sites with VOC-contaminated soil assuming the site characteristics meet certain criteria.

Keywords: *Site characterization, *Technology assessment, *Soil contamination, *Superfund, Remediation, Hazardous materials, Incineration, Desorption, Site surveys, Volatile organic compounds, Soil vapor extraction, Superfund Accelerated Cleanup Model.

**PB93-963347/REB** PC **A02**/MF **A01**
**Site Assessment: Evaluating Risks at Superfund Sites.** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Sep 93, 8p OSWER-9345.4-03FS
Paper copy available on Standing Order, deposit account required (minimum deposit $200 U.S., Canada, and Mexico; all others $400). Single copies also available in paper copy or microfiche.

The report includes an overview of the site assessment process within the Superfund program and answers commonly asked questions.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Guidelines, Risk assessment, Sites, Emergencies, Oil spills, Pipelines, Love Canal, Solvents, Pesticides, Volatile organic compounds, Cargo transportation, Inspection, US EPA, Comprehensive Environmental Response Compensation and Liability Act and Amendments, Cleanup, Remedial action.

**PB93-963348/REB** PC **A02**/MF **A01**
**Guide to Community Involvement for Site Assessment Managers.** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Sep 93, 8p OSWER-9345.4-02FS
Paper copy available on Standing Order, deposit account required (minimum deposit $200 U.S., Canada, and Mexico; all others $400). Single copies also available in paper copy or microfiche.

The report includes information on community involvement initiatives that can be taken during the technical phases of site assessment and instructions on how to take these actions for hazardous wastes.

Keywords: *Hazardous materials, *Community relations, *Sites, *Pollution control, Citizen participation, Guidelines, Managers, Risk assessment, Technology assessment, Instructions, Inspection, Emergencies.

**PB93-963402/REB** PC **A04**/MF **A01**
**Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Aug 93, 67p EPA/540/R-93/057, OSWER-9360.0-32
Paper copy available on Standing Order, deposit account required (minimum deposit $200 U.S., Canada, and Mexico; all others $400). Single copies also available in paper copy or microfiche.

The purpose of the guidance is to provide information on the procedures and activities the U.S. Environmental Protection Agency (EPA) uses in conducting non-time-critical removal actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). On-Scene Coordinators (OSCs) and Remedial Project Managers (RPMs) should use this guidance to ensure that non-time-critical removal actions are conducted in accordance with applicable laws, regulations, and EPA policy. The guidance focuses primarily on those aspects of the removal process that are unique to non-time-critical removal actions.

Keywords: *Superfund, *Remediation, *Risk assessment, Pollution regulations, Hazardous materials, Waste disposal, Cost analysis, Guidelines, SACM(Superfund Accelerated Cleanup Model), Non-time-critical removal actions.

**PB93-963413/REB** PC **A02**/MF **A01**
**Guidance on Implementation of the 'Contribute to Remedial Performance' Provision.** Directive.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Apr 87, 6p OSWER-9360.0.13
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The provision promotes the performance of removal actions that address threats more efficiently by considering the overall site cleanup before the start of the action. To the maximum extent practicable, removal actions should be desigend to avoid wasteful, repetitive, short-term actions that do not contribute to the efficient, cost-effective performance of long-term remedial actions to be taken by the EPA, State, or other party. The major objective of this requirement is to provide maximum protection of public health and the environment at minimal cost by avoidance of removal restarts. The focus of this provision is on avoidance of restarts that are due to recurring threats that were not adequately abated in the original removal action, and threats from deteriorating site conditions that should have been foreseen.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Remedial action, Public health, Risk assessment, Exposure, Land pollution control, Planning, Environmental impacts, Evaluation, Site surveys, Cleanup operations.

**PB93-963415/REB** PC **A04**/MF **A01**
***Field Certification Tracking System (FCTS). User's Guide. Version 2.1.***
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
Jul 93, 55p EPA/540/C-93/003, OSWER-9285.3-03
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The document provides step by step guidelines for installing the Field Certification Tracking System (FCTS), Version 2.1. Hardware needs are described as well as where to call for help.

Keywords: *Installation manuals, *Superfund, User manuals(Computer programs), Standards, Requirements, Emergency response, Remediation, *FCTS(Field Certification Tracking System).

**PB93-963416/REB** PC **A01**/MF **A01**
**Determination of Imminent and Substantial Endangerment for Removal Actions.** Directive.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
B. M. Diamond, and H. L. Longest. 19 Aug 93, 2p EPA/540/F-93/039, OSWER-9360.0-34
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The memorandum clarifies the process for making endangerment determinations for removal actions pursuant to Delegation of Authority 14-14-A under Section 106 of CERCLA.

Keywords: *Superfund, *Hazardous materials, *Risk assessment, Public health, Waste disposal, Remedial action, Pollution regulations, Emergency response, Guidelines, Imminent danger.

**PB93-963419/REB** PC **A02**/MF **A01**
**Effect of OSHA's Bloodborne Pathogens Standard on Hazardous Waste Cleanup Activities.** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Aug 93, 7p OSWER-9360.0-31FS
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

Bloodborne pathogens are microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV). In addition to healthcare workers, the standard also may affect workers who handle waste potentially contaminated with blood or other potentially infectious material during response actions at uncontrolled hazardous waste sites. The purpose of the Fact Sheet is to describe the additional planning, training, and medical surveillance requirements that the new OSHA standard on bloodborne pathogens imposes upon On-Scene Coordinators (OSCs) and Remedial Project Managers (RPMs) during a Superfund response action.

Keywords: *Hazardous materials, *Occupational exposure, *Medical wastes, *Superfund, HIV, Hepatitis B virus, Occupational safety and health, Remediation, Biohazards, Safety standards, Medical personnel, Regulations, Cleanup operations, Bloodborne pathogens, Contaminated blood, Infectious materials.

**PB93-963420/REB** PC **A03**/MF **A01**
**Personal Air Sampling and Air Monitoring Requirements under 29 CFR 1910.120.** Fact sheet.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Aug 93, 16p OSWER-9360.8-17FS
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The Hazardous Waste Operations and Emergency Response (HAZWOPER) provides a general overview of the worker protection standards as they apply to operations conducted at uncontrolled hazardous waste sites. The purpose of the Fact Sheet is to summarize the HAZWOPER air monitoring and sampling aspects of these requirements. The Fact Sheet is composed of five parts: (1) Introduction to Air Monitoring and Air Sampling; (2) Air Monitoring Requirements Upon Initial Entry; (3) Air Monitoring Requirements After Initial Entry; (4) Conducting Air Monitoring and Sampling; and (5) Information Sources and Contacts.

Keywords: *Air pollution monitors, *Hazardous materials, *Occupational exposure, Air pollution sampling, Occupational safety and health, Requirements, Safety standards, Pollution regulations, Standards compliance, Personal monitors.

**PB93-963506/REB** PC **A04**/MF **A01**
**Summary of GIS Support to Superfund.**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
Jun 93, 62p EPA/600/X-93/062
Paper copy available on Standing Order, deposit account required (minimum deposit $200 U.S., Canada, and Mexico; all others $400). Single copies also available in paper copy or microfiche.

The document describes four Superfund-related projects involving the development of Geographic Information System applications. It identifies the role of GIS technology within the overall Superfund process and discusses the components of GIS and integration with the Superfund process.

Keywords: *Superfund, *Geographic information systems, *Site surveys, Hazardous materials, Waste disposal, Pollution control, Remediation.

**PB93-963614/REB** PC **A01**/MF **A01**
**Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Harvey and Knott Drum Site, New Castle County, Delaware).**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
1993, 5p EPA/520/F-93/007
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

From 1963 to 1969, two acres of the Harvey and Knott Drum site in New Castle County, Delaware served as an open dump and burning area for sanitary, municipal, and industrial wastes. Sludge, paint pigment, and solvents contaminated the site until the State of Delaware and the U.S. Environmental Protection Agency (EPA) intervened in 1981. Site conditions required a combination of traditional cleanup measures. After the immediate health threats posed by the site were eliminated, EPA reached an innovative, 'mixed funding' settlement for long-term cleanup with two parties responsible for the site contamination. The following actions highlight the success of the Superfund program: An emergency removal of contaminants reduced immediate environmental and public health effects; A rapid assessment of ground water safeguarded drinking water supplies; and The full cooperation of General Motors (GM) expedited implementation of the cleanup, valued at $3.2 million.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Water pollution control, Ground water, Sludge, Wetlands, Polychlorinated biphenyls, Heavy metals, Industrial wastes, Municipal wastes, *New Castle County(Delaware), Dumps, Volatile organic compounds, Cleanup.

**PB93-963616/REB** PC **A02**/MF **A01**
**Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Fulton Terminals Site Profile, Oswego County, NY).**
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
1993, 6p EPA/520/F-93/008
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The U.S. Environmental Protection Agency (EPA) achieved some unique successes at the Fulton Terminals hazardous waste site in New York. After 35 years as a manufacturing facility, millions of gallons of waste oils and sludges were improperly stored here enroute to an incinerator. Tank leaks and spillage contaminated soil, ground water and the Oswego River. EPA's Superfund program: Settled with 59 of 60 hazardous waste contributors to conduct a comprehensive $4 million cleanup and reimburse EPA $500,000 for past costs; Created an unprecedented financial arrangement that guaranteed payments from both major and minor parties, ensuring the timely cleanup of the site; and Worked with area citizens to award a Technical Assistance Grant, ensuring their participation in the selection of the remedy and in the oversight of cleanup operations.

Keywords: *Superfund, *Waste disposal, *Hazardous materials, *Pollution control, Soil contamination, Ground water, Oswego River, Polychorinated biphenyls, Heavy metals, Waste oils, Sludge, Waste transfer stations, *Fulton(New York), Oswego County(New York), Volatile organic compounds, Cleanup.

**PB93-963619/REB** PC **A03**/MF **A01**
**Guidance on CERCLA Settlements with De Micromis Waste Contributors.** Directive.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Jul 93, 18p OSWER-9834.17
Paper copy available on Standing Order, deposit account required (minimum deposit $225 U.S., Canada, and Mexico; all others $450). Single copies also available in paper copy or microfiche.

The purpose of the memorandum is to provide guidance on using CERCLA's settlement authorities to resolve the CERCLA liability of parties who have contributed even less hazardous substances to a site than the de minimis parties the Agency traditionally pursues. These parties will hereinafter be referred to as 'de micromis' parties. The memorandum describes the types of situations in which a Region may find that it is in the public interest to exercise enforcement discretion by offering de micromis settlements. The guidance also explains how to use EPA's existing settlement authority in an expeditious manner to resolve the liability of de micromis parties and to grant them the full extent of contribution protection available under the statute.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Lawsuits, Liabilities, Legal aspects, Remedial action, Pollution regulations, Regulatory guides, Enforcement, Case studies, Potentially responsible parties, De micromis settlements, Cleanup, Public interest.

**PB93-963703/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 1): Revere Textile Prints, Sterling, CT. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 40p EPA/ROD/R01-92/067
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 15-acre Revere Textile Prints site is an industrial facility, located in Sterling, Windham County, Connecticut. From 1879 to 1980, several textile processing facilities used the site to print colored and patterned fabrics, which involved using pigments, dyes, and solvents. Throughout the site's history, process rinse water and leftover printing pigments were disposed of into floor drains that drained into Moosup River. In 1980, the state ordered the PRP to dispose of the 1,500 drums offsite along with an unspecified amount of stained soils; the action was completed in 1983. Between 1982 and 1983, W. F. Norman Company purchased the site for metal stamping operations, and subsequently abandoned the site. The ROD addresses site soil, sediment, ground water, and surface water. The results of the RI have shown no evidence of significant site contamination, and where contaminants were detected, the levels were usually significantly below the federal MCLs.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Textile processes, Industrial wastes, Metal pressing, Ground water, Surface waters, Soil contamination, Land pollution, Risk assessment, Water pollution monitoring, *Record of Decision, *First remedial action, Cleanup, Sterling(Connecticut), Windham County(Connecticut).

**PB93-963704/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 1): Otis Air National Guard/Camp Edwards, MA. (First Remedial Action), May 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
20 May 92, 85p EPA/ROD/R01-92/071
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 22,000-acre Otis National Guard/Camp Edwards site is a former military vehicle maintenance facility on Cape Cod, Massachusetts, within the Massachusetts Military Reservation (MMR). The Area of Contamination Chemical Spill Area Number 4 (AOC CS-4) plume extends 11,000 feet and is located 1.1 miles from the southern boundary of MMR. Wastes and equipment handled at AOC CS-4 included oils, solvents, antifreeze, battery electrolytes, paint, and waste fuels. Additionally, the northern portion of AOC CS-4 was used as a storage yard for wastes generated by shops and laboratories operating at MMR. Liquid wastes were stored in containers or underground storage tanks (USTs) in an unbermed area or deposited in USTs designated for motor gasoline. The ROD addresses OU2, the interim action for MMR AOC CS-4 ground water to prevent further down gradient migration of the contaminants. The primary contaminants of concern affecting the ground water are VOCs, including PCE and TCE.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Water pollution control, Ground water, Aquifers, Liquid wastes, Waste oils, Polyvinyl chloride, Underground storage, Storage tanks, Military facilities, Cape Cod, Water pollution monitoring, *Record of Decision, *First remedial action, Cleanup, Otis Air Nation Guard/Camp Edwards, Massachusetts Military Reservation, Volatile organic compounds, Ethylene/trichloro.

**PB93-963705/REB** PC **A06**/MF **A02**
**Superfund Record of Decision (EPA Region 1): Town Garage Radio Beacon, Londonderry, NH. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 124p EPA/ROD/R01-92/070
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Town Garage Radio Beacon, NH, site includes the Holton Circle residential development of 23 homes, a town garage area, and an undeveloped hillslope and wetlands area in Londonderry, New Hampshire. From 1940 to 1968, the area was owned by the Department of Defense (DOD), who reportedly used it as a radio beacon facility from 1940 to 1947. The ROD provides a final remedy for the contaminated onsite ground water. No further remedial actions are anticipated for the site. The primary contaminants affecting the ground water are VOCs; and metals, including chromium.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Aquifers, Ground water, Water supply, Metals, Chromium, *Record of Decision, *First remedial action, Cleanup, Londonderry(New Hampshire), Volatile organic compounds.

**PB93-963706/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 1): Brunswick Naval Air Station, Operable Unit 2, ME. (Second Remedial Action), June 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
16 Jun 92, 76p EPA/ROD/R01-92/066
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 3,094-acre Brunswick Naval Air Station site (NAS Brunswick) is an active military facility located south of the Androscoggin River between Brunswick and Bath, Maine. NAS Brunswick, which first became active in the 1940's during World War II, has many areas onsite that were used for past disposal of hazardous materials. The ROD addresses an interim remedy for Site 2, the Eastern Plume, the source of which has been traced to Sites 4, 11, and 13. A future ROD will address a final remedy for the ground water at NAS Brunswick. The primary contaminants of concern affecting the ground water are VOCs, including PCE and TCE.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Maine, Naval air stations, Ground water, *Record of Decision, *Second remedial action, Cleanup, Brunswick Naval Air Station, Volatile organic compounds, Ethylene/trichloro, Ethylene/perchloro.

**PB93-963707/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 1): Newport Naval Education/Training Center, Newport, RI. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
29 Sep 92, 59p EPA/ROD/R01-92/072
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 85-acre Naval Education and Training Center (NETC) is a training facility and tank farm located on Aquidneck Island, Middletown, Rhode Island. The NETC facility is situated along 6 miles of shoreline bordering Narragansett Bay. There are currently four areas of contamination and six study areas, with NETC Newport under investigation. Tank Farm Five consists of 11 underground storage tanks (USTs), numbered 49 through 59, which were constructed between 1942 and 1943 for fuel storage and used until 1974. In 1985, analytical results collected from the monitoring wells installed in the ring drains of Tanks 53 and 56 revealed the presence of several chlorinated and aromatic hydrocarbons and traces of mercury. The interim ROD addresses management of the ground water in the vicinity of Tanks 53 and 56 to control or prevent further migration of contaminated ground water and remediation to begin to reduce the concentration of contaminants until a final remedy can be chosen. The primary contaminants of concern affecting the ground water are VOCs, including benzene and TCE; and metals, including arsenic, chromium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Aquidneck Island, Rhode Island, Naval shore facilities, Underground storage, Storage tanks, Benzene, Metals, Ground water, *Record of Decision, *First remedial action, Cleanup, Newport Naval Education and Training Center, Volatile organic compounds, Ethylene/trichloro.

**PB93-963708/REB** PC **A09**/MF **A02**
**Superfund Record of Decision (EPA Region 1): PSC Resources Site, Palmer, MA. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
15 Sep 92, 191p EPA/ROD/R01-92/069
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 21.5-acre PSC Resources site is a former waste oil and solvent reclamation facility located in Palmer, Hampden County, Massachusetts. Since 1898, there have been several owners of the PSC property, most involved in oil industry functions. In 1974, PSC Resources, Inc., purchased the property to operate an oil storage and processing facility, and in 1976, the company name was changed to Ag-Met Oil Services, Inc. The company began accepting solvents and lacquers for collection and disposal. The ROD addresses the final remedy for the site, which includes both source control and management of migration components. The primary contaminants of concern affecting the soil, sediment, debris, ground water, and surface water are VOCs, including benzene, PCE, and TCE; other organics, including PAHs and PCBs; and metals, including arsenic and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Polycyclic aromatic hydrocarbons, Polychlorinated biphenyls, Benzene, Waste oils, Soil contamination, Surface waters, Ground water, Sediments, Debris, *Record of Decision, *First remedial action, Cleanup, Hampden County(Massachusetts), Palmer(Massachusetts), Volatile organic compounds, Ethylene/trichloro, Ethylene/perchloro.

**PB93-963709/REB** PC **A07**/MF **A02**
**Superfund Record of Decision (EPA Region 1): Tibbetts Road, Barrington, NH. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
29 Sep 92, 149p EPA/ROD/R01-92/068
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 2-acre Tibbetts Road site is a former waste storage and disposal facility in Barrington, Strafford County, New Hampshire. From the 1940's to present, the site was used as a storage area for industrial wastes from automobile production and painting. The ROD addresses a final remedy for debris and ground water at the site. The primary contaminants of concern affecting the debris and ground water are VOCs including benzene, PCE, TCE, and xylenes; other organics, including PAHs; and metals, including chromium and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Polycyclic aromatic hydrocarbons, Xylenes, Metals, Industrial wastes, Ground water, Debris, *Record of Decision, *First remedial action, Cleanup, Barrington(New Hampshire), Strafford County(New Hampshire), Volatile organic compounds, Ethylene/trichloro, Ethylene/perchloro.

**PB93-963807/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 2): Bioclinical Laboratories, Town of Islip, Suffolk County, NY. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 58p EPA/ROD/R02-92/182
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 2.6-acre Bioclinical Laboratories (BCL) site is located in Bohemia, Suffolk County, New York. From 1972 to 1984, BCL used the site to formulate and repackage industrial chemicals for wholesale distribution to manufacturers. During this process, indoor sinks that were used for washing chemical mixing vessels drained to the east sanitary sewer system. In 1981, a fire partially destroyed BCL's chemical inventory and resulted in surface water runoff of hazardous waste. The county ordered BCL to clean out the sanitary system and submit a plan for installing a ground water monitoring system; however, no wells were ever installed. An additional source of contamination has been partially attributed to another tenant at the site, the Panatone Finishing Corporation. Panatone utilized a leaching pool on the north side of the building to dispose of effluent. In 1985, this leaching pool was pumped out, cleaned, and removed from service. The ROD will determine the nature and extent of contamination to ensure protection of human health and the environment and is the only OU planned for the site. As a result of previous clean-up activities, risk assessment results indicate that contaminant levels do not exceed risk-based standards.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Chemical plants, Organic compounds, Ground water, Surface waters, Water pollution, Risk assessment, *Record of Decision, *First remedial action, Cleanup, Bohemia(New York), Suffolk County(New York), Leaching pools.

**PB93-963808/REB** PC A03/MF A01
**Superfund Record of Decision (EPA Region 2): FAA Technical Center, Atlantic County, Atlantic City International Airport, NJ. (Third Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 42p EPA/ROD/R02-92/178
See also PB90-178203.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 5,000-acre FAA Technical Center site is located 8 miles northwest of Atlantic City, Atlantic Count, New Jersey, within the Atlantic Coastal Plain. In 1942, a Naval Air Base, including most of the existing runways, was constructed over two-thirds of the property. Interest in the property was transferred to the Federal Aviation Administration (FAA) in 1958 for use as research and development facilities and for the 1979 construction of the existing Technical/Administration Building. From 1978 to 1985, transformers containing PCB oil were stored on a 25- by 75-foot concrete pad, referred to as Area G, located at the lumber yard near building 125 in the western portion of the property. Some transformers are known to have leaked, contaminating the concrete pad and surrounding soil. During 1989, the entire concrete pad and contaminated soil were collected, excavated, and disposed of in an approved TSCA cell of a landfill. The ROD addresses principal threats to human health or the environment associated with PCB releases from the Area G transformer storage location. Based on the results of subsequent sampling, it is believed that Area G no longer poses a threat to human health or the environment.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Aircraft landing areas, Polychlorinated biphenyls, Insulating oil, Land pollution, Soil contamination, Risk assessment, Public health, *Record of Decision, *Third remedial action, Cleanup, Atlantic County(New Jersey).

**PB93-963809/REB** PC A03/MF A01
**Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 5), Lakehurst, NJ. (Sixth Remedial Action), January 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
3 Jan 92, 48p EPA/ROD/R02-92/191
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 7,400-acre Naval Air Engineering Center (NAEC) site is located in Jackson and Manchester Townships, Ocean County, New Jersey, approximately 14 miles inland from the Atlantic Ocean. The U.S. Air Force's Installation Restoration Program (IRP) has identified 44 potentially contaminated sites at NAEC, 16 of which have warranted further investigation to assess potential impacts. IRP investigations revealed three of these sites, Sites 5, 19, and 21, as having evidence of petroleum hydrocarbon contamination. As part of a 1991 removal action at each of these three sites, NAEC excavated and removed offsite for disposal, a total of 76 cubic yards of soil with petroleum hydrocarbon concentrations greater than 1,000 mg/kg. The ROD addresses any potential remaining petroleum hydrocarbon contamination at Sites 5, 19, and 21, as OU 5. Future RODs will address other OUS at NAEC. EPA has determined that the previously implemented removal actions have eliminated the need to conduct additional clean-up activitiies at these sites.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Naval shore facilities, Oil wastes, Hydrocarbons, Soil contamination, Land pollution, Risk assessment, Public health, *Record of Decision, *Sixth remedial action, Cleanup, Ocean County(New Jersey).

**PB93-963810/REB** PC A03/MF A01
**Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 6), Lakehurst, NJ. (Fifth Remedial Action), December 1991.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
31 Dec 91, 30p EPA/ROD/R02-92/192
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 7,400-acre Naval Air Engineering Center (NAEC) site is located in Jackson and Manchester Townships, Ocean County, New Jersey, approximately 14 miles inland from the Atlantic Ocean. The NAEC's mission is to conduct research, development, engineering, testing and system integration, limited production, and procurement for aircraft and airborne weapons systems. Historically, various operations at NAEC have required the use, handling, storage, and occasional onsite disposal of hazardous substances. The U.S. Air Force's Installation Restoration Program (IRP) has identified 44 contaminated sites at NAEC, 16 of which have warranted further investigation to assess potential impacts. One of these sites, Site 44, was used over a 34-year period for testing and storage of PCB-containing electrical transformers. In a 1991 removal action, NAEC excavated approximately 13 cubic yards of PCB-contaminated soil at concentrations greater than 5 mg/kg and transported the soil offsite for incineration. The ROD addresses any remaining contaminated soil at Site 44, as OU6. Subsequent RODs will address other OUs at NAEC. Post-excavation sampling has confirmed that the previously implemented removal action has accomplished the primary objective of remediating the site.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Naval shore facilities, Polychlorinated biphenyls, Insulating oil, Soil contamination, Land pollution, Risk assessment, Public health, *Record of Decision, *Fifth remedial action, Cleanup, Ocean County(New Jersey).

**PB93-963811/REB** PC A04/MF A01
**Superfund Record of Decision (EPA Region 2): North Sea Municipal Landfill, Suffolk County, Southampton, NY. (Second Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Sep 92, 58p EPA/ROD/R02-92/175
See also PB90-178898.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 131-acre North Sea Municipal Landfill site is an active landfill that is owned and operated by the Town of Southampton in Suffolk County, New York. In 1963, a landfill was constructed for the disposal of municipal solid waste, refuse, debris, and septic system wastes from residential, industrial, and commercial sources. There are three main landfill areas: a 13 acre area encompassing Cell No. 1 and related septic sludge lagoons, which received septic system sludge in the early 1960's in addition to municipal solid waste; Cell No. 2, which is 7 acres in size and was closed in 1990; and Cell No. 3, which is currently active, and accepts 80,000 tons of municipal waste annually. A ground water monitoring program, which has been conducted by the Town of Southampton since 1979, revealed a large ground water plume containing heavy metals that was migrating from Cell No. 1 toward Fish Cove. A 1989 ROD addressed onsite source contamination as OU1 and provided for capping Cell No. 1 to reduce the potential threat to human health and the environment by reducing the risk of contaminant migration. The ROD addresses onsite ground water, as OU2. Studies conducted during the risk assessment for OU2 confirmed that the risks to human health are within EPA's acceptable risk range.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Landfills, Industrial wastes, Municipal wastes, Sewage sludge, Heavy metals, Ground water, Water pollution monitoring, Public health, Risk assessment, *Record of Decision, *Second remedial action, Cleanup, Suffolk County(New York).

**PB93-963812/REB** PC A04/MF A01
**Superfund Record of Decision (EPA Region 2): Witco Chemical (Oakland Plant), Bergen County, Oakland, NJ. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Sep 92, 54p EPA/ROD/R02-92/177
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 9-acre Witco Chemical (Oakland Plant) site, a former technical research facility for the development of specialty chemicals, is located in Oakland, Bergen County, New Jersey. From 1966 to 1984, the Witco Chemical Corporation (Witco) neutralized laboratory wastewater in a 2,000-gallon underground acid neutralizing tank, and then discharged it to a series of underground seepage pits. In In response to state directives, Witco initiated a hydrogeological investigation in 1982 and determined that site soil, sludge, and ground water contained various organic compounds. Witco then replaced its underground seepage pit with a 6,000-gallon capacity fiberglass tank. The ROD addresses any remaining soil and ground water contamination resulting from site activities. Based on the results of remedial investigations, the removal of the seepage pits and surrounding soil by Witco during 1987 has effectively remediated the contamination at the site. The selected remedial action for the site is no further action, with implementation of limited ground water monitoring.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Chemical plants, Industrial wastes, Waste water, Pesticides, Organic compounds, Sludge, Ground water, Soil contamination, Water pollution monitoring, Risk assessment, *Record of Decision, *First remedial action, Cleanup, Oakland(New Jersey), Bergen County(New Jersey), Seepage pits.

**PB93-963813/REB** PC A05/MF A01
**Superfund Record of Decision (EPA Region 2): Higgins Farm, Franklin Township, Somerset County, NJ. (Second Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 92p EPA/ROD/R02-92/180
See also PB91-921496.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 75-acre Higgins Farm site is a former cattle farm in Franklin Township, Somerset County, New Jersey. During the 1960's, municipal sludge and penicillin waste were used as fertilizers on Higgins Farm. The site also contains three holding tanks and drums containing material removed from previous remedial investigations. In 1986, the owner excavated 50 containers, including drums; however, during excavation activities, some of the containers were punctured and their contents spilled onto the ground. The ROD addresses the final action for ground water to limit future migration of contaminated ground water to offsite areas, as OU2. The primary contaminants of concern affecting the ground water are VOCs, including benzene, PCE, TCE, and xylene.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Water pollution control, Ground water, Benzene, Xylene, Pesticides, Polyvinyl chloride, Water pollution monitoring, *Record of Decision, *Second remedial action, Cleanup, Franklin Township(New Jersey), Somerset County(New Jersey), Volatile organic compounds, Ethylene/trichloro.

**PB93-963814/REB** PC A04/MF A01
**Superfund Record of Decision (EPA Region 2): Evor Phillips Leasing Company, Old Bridge Township, Middlesex County, NJ. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 52p EPA/ROD/R02-92/188
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all

others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 6.5-acre Evor Phillips Leasing Company site is a former disposal facility in Old Bridge Township, Middlesex County, New Jersey. Beginning in 1969, Evor Phillips used the site for hauling activities until leasing the property to North American Metal and Chemical Company (NAMCC) in 1971. Silver recovery operations were conducted at the site by NAMCC. Additionally, the Naval Ammunition Depot Earle sent 2,000 gallons of drummed spent potassium hydroxide to the NAMCC. The ROD addresses an interim remedy for contaminated ground water at the site and a final remedy for the drum disposal areas as OU1. The primary contaminants of concern affecting the debris, and ground water are VOCs, including benzene, TCE, PCE, and toluene; other organics; and inorganics.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Waste processing plants, Ground water, Debris, Polychlorinated ethylene, Toluene, Inorganic compounds, *Record of Decision, *First remedial action, Cleanup, Middlesex County(New Jersey), Ethylene/trichloro.

**PB93-963815/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 1), Clinton County, NY. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 80p EPA/ROD/R02-92/189
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Plattsburgh Air Force Base (AFB) site is located south of the City of Plattsburgh, Clinton County, New York. The U.S. Air Force's Installation Restoration Program (IRP) identified 39 sites at Plattsburgh AFB with potential contamination by hazardous materials. One of these sites, the 10.1-acre LF-023 landfill, is located approximately 300 feet from the Plattsburgh AFB western boundary, and 600 feet northeast of a small mobile home development. The ROD addresses a final source control remedy for the contaminated soil, sediment, surface water, and ground water at the site, as OU1. The primary contaminants of concern affecting the soil, sediment, and surface water are VOCs, including benzene and xylenes; other organics, including PAHs and PCBs; and metals, including arsenic.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, New York, Air Force facilities, Soil contamination, Surface waters, Landfills, Polycyclic aromatic hydrocarbons, Polychlorinated biphenyls, Metals, *Record of Decision, *First remedial action, Cleanup, Plattsburgh Air Force Base, Volatile organic compounds, Installation Restoration Program.

**PB93-963816/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 3), Clinton County, NY. (Second Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 80p EPA/ROD/R02-92/190
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Plattsburgh Air Force Base (AFB) site is located south of the City of Plattsburgh, Clinton County, New York. The U.S. Air Force's Installation Restoration Program (IRP) identified 39 sites at Plattsburgh AFB with potential contamination by hazardous materials. One of these sites, the 13-acre LF-022 landfill, is located on the western side of the Base, 1,350 feet north of a small mobile home development. From 1959 to 1966, the landfill received domestic wastes from Plattsburgh AFB for disposal. The ROD addresses the contaminated soil at the site, as OU3, to minimize potential current and future ecological risks associated with exposure to pesticides in surface soil. The primary contaminants of concern affecting the soil and debris are VOCs; other organics, including pesticides; and metals, including chromium and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, New York, Air Force facilities, Debris, Landfills, Soil contamination, Pesticides, Metals, *Record of Decision, *Second remedial action, Cleanup, Plattsburgh Air Force Base, Volatile organic compounds.

**PB93-963817/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 2): Preferred Plating, Suffolk County, Farmingdale, NY. (Second Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Sep 92, 42p EPA/ROD/R02-92/181
See also PB90-150939.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 0.88-acre Preferred Plating site is a former metal plating facility in Farmingdale, Town of Babylon, Suffolk County, New York. From 1951 to 1976, Preferred Plating Corporation (PPC) operated a metal plating facility that degreased, cleaned, and finished metal parts. Untreated wastewater was discharged to four onsite concrete waste storage pits. The ROD addresses subsurface soil contamination contributing to the ground water problem attributable to the site. The primary contaminants of concern affecting the soil are VOCs, including benzene, PCE, TCE, toluene, and xylenes; metals, including arsenic, chromium, and lead; and inorganics, including cyanide.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Industrial wastes, Soil contamination, Polychlorinated ethylene, Metals, Inorganic compounds, Cyanides, *Record of Decision, *Second remedial action, Cleanup, Farmingdale(New York), Suffolk County(New York), Volatile organic compounds, Ethylene/trichloro.

**PB93-963818/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 2): Cosden Chemical Coatings, City of Beverly, Burlington County, NJ. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 62p EPA/ROD/R02-92/187
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 6.7-acre Cosden Chemical Coatings site is a paint formulation and manufacturing facility in Beverly, Burlington County, New Jersey. Land use in the area is predominantly residential, with some light industry. Until 1974, organic solvents used in the manufacturing process were recycled; thereafter, drums containing spent solvents were stored onsite. In 1986, the state undertook emergency removal of the drummed material and clean-up of surface spills around the drum storage areas. The ROD addresses the final remedy for the cleanup of contaminated soil, ground water contamination in the underlying aquifer, and the Cosden building. The primary contaminants of concern affecting the soil, debris, and ground water are VOCs, including benzene, TCE, toluene, and xylenes; and other organics. The selected remedial action for this site includes treating 8,000 cubic yards of contaminated soil onsite using in-situ solidification, and disposing of a small pile of concentrated PCB-contaminated soil offsite; and disposing of sludge generated during the treatment process offsite.

Keywords: *Superfund, *Coatings, *Volatile organic compounds, *Pollution control, Ground water, Paints, Chemical industry, Solvents, Resins, Storage tanks, Benzene, Soil properties, Underground storage, Asbestos, Sludge disposal, Biphenyl, Chlorine organic compounds, *Record of Decision, First remedial action-Final, *Burlington County(New Jersey), Cleanup.

**PB93-963819/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 2): Dover Municipal Well 4, Morris County, Dover, NJ. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 52p EPA/ROD/R02-92/194
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Dover Municipal Well 4 (DMW-4) site is located within the 500-year floodplain of the Rockaway River, in the Town of Dover, Morris County, New Jersey. Surrounding land use is mixed residential and commercial/light industrial. in 1980, sampling and analysis of ground water from DMW-4 identified the presence of VOCs-specifically, chlorinated solvents-above federal and state drinking water standards. Subsequently, DMW-4 was voluntarily removed from service by the Town, and standby Well 3 was activated as a potable water production well. The sources of VOC contamination have been traced to the Howmet Turbine Components Corporation (Dover Casting Division) and the New Jersey Natural Gas Company, both of which are under state administrative consent orders to remediate their individual properties. The ROD addresses remediation of the contaminated ground water in the shallow, intermediate, and deep aquifers at the DMW-4 site, as OU1. The primary contaminants of concern affecting the ground water are VOCs, including benzene, PCE and TCE, and, metals including lead. The selected remedial action for this site includes onsite pumping and treatment of contaminated ground water from both the intermediate and deep aquifers using air stripping to remove VOCs; discharging the treated water offsite to the public water supply system to be used for potable water, with reinjection of surplus quantities.

Keywords: *Superfund, *Volatile organic compounds, *Ground water, *Pollution control, Municipalities, Industrial wastes, Benzene, Water wells, Aquifers, Lead(Metal), Point sources, Air pollution, Emissions, Chlorine organic compounds, Pumping, Environmental monitoring, Activated carbon treatment, Waste recycling, Potable water, *Record of Decision, First remedial action, *Dover(New Jersey), Ethylene/Trichloro, Air stripping.

**PB93-963820/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 2): Ellis Property, Sharp Road, Burlington County, NJ. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 56p EPA/ROD/R02-92/176
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 36-acre Ellis Property site is located in Evesham Township, Burlington County, New Jersey. Land use in the area immediately surrounding the site is primarily agricultural, and approximately 60 residences are located within 1 mile of the site. From 1968 to 1978, approximately 4 acres of the property were used to store and recondition drums. Site features included a two-story building, with several washing tanks and troughs, three sheds, a storage area, and a boiler. State investigations in 1980 identified stained soil, areas devoid of vegetation, and hundreds of drums containing various unknown liquids, some of which had corroded and were leaking into the onsite soil. The ROD addresses a final remedy for the remaining contaminated soil and ground water at the site. The primary contaminants of concern affecting the soil and ground water are VOCs, including PCE and TCE; other organics, including PCBs; and metals, including arsenic, chromium, and lead. The selected remedial action for this site includes excavating all contaminated soil, and treating metal-contaminated soil onsite or offsite using stabilization if necessary, prior to offsite disposal in a landfill.

Keywords: *Superfund, *Volatile organic compounds, *Ground water, *Pollution control, Waste disposal, Aquifers, Soil properties, Drainage, Earth fills, Industrial wastes, Lead(Metal), Arsenic, Biphenyl, Chlorine organic compounds, Excavation, Soils, Hydrochloric acid, Waste treatment, Incineration, *Record of Deci-

sion, First remedial action, Burlington County(New Jersey), *Evesham Township(New Jersey), Ethylene/Trichloro, Polychlorinated biphenyl, Air stripping.

**PB93-963821/REB** PC **A05/MF A01**
**Superfund Record of Decision (EPA Region 2): Endicott Village Well Field, Broome County, NY. (Third Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 76p EPA/ROD/R02-92/184
See also PB92-963802 and PB88-185772.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 16-acre Endicott Village Well Field site is an inactive landfill in the Village of Endicott, Broome County, New York. The site includes a municipal drinking water supply well, known as the Ranney well. In May 1981, EPA detected vinyl chloride and other VOCs in the Ranney well discharge. The ROD addresses the Endicott Village landfill no. 1, the source of the site contamination, as OU2. The primary contaminants of concern affecting the soil, debris, and ground water are VOCs including 1,2-DCE, benzene, PCE, TCE, toluene, vinyl chloride, and xylenes; other organics including PAHs, PCBs, and pesticides; and metals, including lead. The selected remedial action for this site includes capping the majority of landfill no. 1 with a low permeability soil cap; covering the Tri-Cities Airport Controlled Activity Area and the compost facility area with a bituminous (asphalt) cap.

Keywords: *Superfund, *Volatile organic compounds, *Ground water, *Pollution control, Waste disposal, Earth fills, Soil properties, Industrial wastes, Benzene, Toluene, Vinyl chloride, Pesticides, Water wells, Metals, Observation wells, Xylenes, Capping, Coverings, Vents, Waste treatment, *Record of Decision, Third remedial action-final, Broome County(New York).

**PB93-963822/REB** PC **A07/MF A02**
**Superfund Record of Decision (EPA Region 2): Facet Enterprises, Village of Elmira Heights, Chemung County, NY. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
4 Sep 92, 150p EPA/ROD/R02-92/173
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 31-acre Facet Enterprises site is a manufacturing facility located in the Village of Elmira Heights, Chemung County, New York. Land use in the area is primarily residential and commercial. Since 1979, several site investigations have been conducted by EPA and the state. A 1986 draft remedial investigation revealed that VOCs, PCBs, and PAHs were present in site soil and sediment, and that VOCs. The ROD addresses a final remedy for the onsite contaminated soil, sediment, debris, and ground water. The primary contaminants of concern affecting the soil, sediment, debris, and ground water are VOCs, including TCE, benzene, toluene, xylenes, and PCE; other organics, including PCBs and PAHs; and metals, including arsenic, and lead. The selected remedial action for the site includes excavating contaminated soil and sediment from the disposal areas; disposing of approximately 1,275 cubic yards of TSCA waste with PCBs concentrations greater than 50 ppm offsite in a secure double-lined landfill facility; stabilizing of all RCRA wastes to prevent leaching of metals and disposing of 2,124 cubic yards of waste in a secure offsite RCRA-lined facility.

Keywords: *Superfund, *Volatile organic compounds, *Waste disposal, *Pollution control, *Waste treatment, Waste management, Ground water, Surface waters, Industrial wastes, Soil properties, Chlorine organic compounds, Extraction metals, Polycyclic aromatic hydrocarbons, US EPA, Earthfills, *Record of Decision, First remedial action-final, Elmira Heights Village(New York), *Chemung County(New York), Biphenyl/chloro, Polychlorined biphenyls.

**PB93-963823/REB** PC **A05/MF A01**
**Superfund Record of Decision (EPA Region 2): Imperial Oil/Champion Chemicals, Monmouth County, NJ. (Second Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
Sep 92, 90p EPA/ROD/R02-92/186
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 9.67-acre Industrial Latex site is a chemical adhesives and natural and synthetic rubber compounds manufacturer in Wallington, Bergen County, New Jersey. From 1951 to 1980, the Industrial Latex Corporation manufactured both chemical adhesives and natural and synthetic rubber compounds. Adhesives were initially formulated using vegetable protein in a solvent base. The ROD addresses the final remedy for the contamination present in the soil, sediment, buildings and equipment, drums, sludge, septic system, and hardened latex, as the first of two operable units. The primary contaminants of concern affecting the soil, sediment, sludge, and debris are VOCs including PCE, TCE, toluene, and xylenes; other organics, including PAHs, PCBs, pesticides, and phenols; and metals, including arsenic and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Industrial wastes, Soil contamination, Sludge, Polychlorinated biphenyls, Polycyclic aromatic hydrocarbons, Polychlorinated ethylene, Pesticides, Metals, Phenols, *Record of Decision, *First remedial action, Cleanup, Wallington(New Jersey), Bergen County(New Jersey), Volatile organic compounds, Ethylene/trichloro.

**PB93-963824/REB** PC **A04/MF A01**
**Superfund Record of Decision (EPA Region 2): Industrial Latex, Bergen County, Wallington, NJ. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 74p EPA/ROD/R02-92/185
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 9.67-acre Industrial Latex site is a chemical adhesives and natural and synthetic rubber compounds manufacturer in Wallington, Bergen County, New Jersey. From 1951 to 1980, the Industrial Latex Corporation manufactured both chemical adhesives and natural and synthetic rubber compounds. Adhesives were initially formmulated using vegetable protein in a solvent base. The ROD addresses the final remedy for the contamination present in the soil, sediment, buildings and equipment, drums, sludge, septic system, and hardened latex, asthe first of two operable units. The primary contaminants of concern affecting the soil, sediment, sludge, and debris are VOCs including PCE, TCE, toluene, and xylenes; other organics, including PAHs, PCBs, pesticides, and phenols; and metals, including arsenic and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Industrial wastes, Soil contamination, Sludge, Polychlorinated biphenyls, Polycyclic aromatic hydrocarbons, Polychlorinated ethylene, Pesticides, Metals, Phenols, *Record of Decision, *First remedial action, Cleanup, Wallington(New Jersey), Bergen County(New Jersey), Volatile organic compounds, Ethylene/trichloro.

**PB93-963825/REB** PC **A05/MF A02**
**Superfund Record of Decision (EPA Region 2): Islip Municipal Sanitary Landfill, Town of Islip, NY. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 98p EPA/ROD/R02-92/183
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 107.5-acre Islip Sanitary Landfill site is located in Hauppauge, Town of Islip, Suffolk County, New York. From 1963 to 1990, the site was operated as a municipal landfill; an incinerator, which was constructed onsite, operated from 1963 to 1968. The ROD addresses a final remedy for the contaminated soil, debris, and ground water at the site. The primary contaminants of concern affecting the soil, debris, and ground water are VOCs, including benzene, PCE, TCE, and toluene; other organics; and metals, including arsenic, chromium and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Landfills, Incinerators, Industrial wastes, Soil contamination, Ground water, Polychlorinated ethylene, Metals, *Record of Decision, *First remedial action, Cleanup, Islip(New York), Suffolk County(New York), Volatile organic compounds, Ethylene/trichloro.

**PB93-963826/REB** PC **A04/MF A01**
**Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 7), Ocean County, NJ. (Seventh Remedial Action), March 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
16 Mar 92, 62p EPA/ROD/R02-92/193
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 7,400-acre Naval Air Engineering Center (NAEC) site is located in Jackson and Manchester Townships, Ocean County, New Jersey, approximately 14 miles inland from the Atlantic Ocean. The U.S. Navy assumed control of the property in 1919, and it was formally commissioned Naval Air Station (NAS) Lakehurst in 1921. The NAEC was moved from the Naval Base, Philadelphia to NAS Lakehurst in 1974. Historically, various operations at NAEC have required the use, handling, storage, and occasional onsite disposal of hazardous substances. The ROD addresses an interim remedy for the principal threat at the site, migration of the contaminated groundwater plume from Areas A and B. The primary contaminants of concern affecting the soil and ground water at the site are VOCs, including benzene, PCE, TCE, toluene, and xylenes; other organics including PAHs and PCBs; and metals.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, New Jersey, Naval shore facilities, Soil contamination, Ground water, Polychlorinated ethylene, Polycyclic aromatic hydrocarbons, Polychlorinated biphenyls, Metals, *Record of Decision, *Seventh remedial action, Cleanup, Naval Air Engineering Center, Volatile organic compounds, Ethylene/trichloro.

**PB93-963827/REB** PC **A05/MF A01**
**Superfund Record of Decision (EPA Region 2): Rowe Industries Groundwater Contamination, Sag Harbor, NY. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
Sep 92, 80p EPA/ROD/R02-92/179
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 8.5-acre Rowe Industries Groundwater Contamination site is located in the Town of Sag Harbor, Suffolk County, New York. From the 1950's to the 1960's, Rowe Industries occupied the site and manufactured small electric motors and transformers. Chlorinated solvents were used to degrease oil-coated metals, and waste solvents were discharged from two tanks in the building into cesspools or to an open field 75 to 100 feet east of the building. The ROD addresses a final remedy for the contamination in soil and ground water attributable to the site. The primary contaminants of concern affecting the soil and ground water are VOCs, including benzene, PCE, TCE, toluene, and xylenes; and metals, including arsenic, chromium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Industrial wastes, Liquid

wastes, Soil contamination, Ground water, Metals, Polychlorinated ethylene, *Record of Decision, *First remedial action, Cleanup, Sag Harbor(New York), Suffolk County(New York), Volatile organic compounds, Ethylene/trichloro.

**PB93-963912/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Sep 92, 68p EPA/ROD/R03-92/157
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 2.5-acre Drum Dump site is a grass-covered clearing in the Tobyhanna Township, Monroe County, Pennslyvania. Between 1974 and 1978, approximately 600 drums of unknown contents from an unknown source were stored in the southeast corner of the site. In 1978, approximately 2 years after the sale of the site by the J.E.M. Partnership to LandMark, one of the partners of the J.E.M. Partnership arranged for the removal of the drums from the site at the request of LandMark. From 1983 to 1987, several investigations, monitoring events, and interim measures were completed at the site. It was concluded that some drums may have been buried onsite and that the contents of some of the drums stored there previously may have been dumped onto the ground. Current onsite investigations revealed that any previously identified site contaminants now have been reduced to levels that no longer pose a significant direct health threat or any threat from potential migration in ground water; and thus, the site does not warrant any further remediation.

Keywords: *Pennsylvania, *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Industrial wastes, Underground disposal, Risk assessment, Land pollution, Ground water, *Record of Decision, *First remedial action, Cleanup, Monroe County(Pennsylvania), Dumps.

**PB93-963913/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 40p EPA/ROD/R03-92/158
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 67-acre Suffolk City Landfill site is an unlined sanitary landfill located in Suffolk, Virginia. From 1967 to 1985, the City of Suffolk operated the landfill, which received municipal solid waste from both the City and Nansemond County. Wastes were disposed of onsite by the trench and fill method, compacted by lifts above grade, and then covered with approximately 2 feet of clean soil from an onsite borrow area. In 1983, when the permit for the operation of the landfill was reissued, it required the City to close the landfill once the regional landfill became operational, and to implement a closure plan, which had been submitted to the state. While preparing to implement the closure plan, the City discovered documentation that indicated that 1970, 20 tons of pesticide-contaminated debris had been disposed of in the landfill. In early 1989, the City placed an impermeable tarpaulin plastic liner over the pesticide disposal area to prevent surface water infiltration through the soil cover. The ROD addresses the onsite landfill area. Based on findings during the RI, EPA and the state have determined that the site does not pose an unacceptable risk to either human health or to the environment, and no remedial action is required.

Keywords: *Virginia, *Superfund, *Hazardous materials, *Waste disposal, *Water pollution control, Landfills, Pesticides, Path of pollutants, Ground water, Leaching, Infiltration, Risk assessment, *Record of Decision, *First remedial action, Cleanup, Suffolk(Virginia).

**PB93-963914/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 3): Eastern Diversified Metals Site, Schuylkill County, Hometown, PA. (Second Remedial Action), July 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
2 Jul 92, 88p EPA/ROD/R03-92/152
See also PB92-963933.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 25-acre Eastern Diversified Metals site is a former metal processing plant located in a sparsely populated area in Rush Township, Schuylkill County, Pennsylvania. An estimated 150 million pounds of waste insulation material, or fluff, was disposed onsite in a swale behind the plant. This fluff, which contains polyvinyl chloride, polyethylene insulation chips, fibrous material, paper, soil, and metals, is contained in a 7.5-acre pile onsite. The ROD addresses a final remedy for the remainder of the fluff onsite. The primary contaminants of concern for leaching from the fluff are organics, including dioxin and PCBs; and metals, including lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Dioxins, Metals, Polychlorinated biphenyls, Industrial wastes, Insulation, *Record of decision, *Second remedial action, Cleanup, Rush Township(Pennsylvania), Schuylkill County(Pennsylvania).

**PB93-963915/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 3): USA Aberdeen, Operable Unit One, Michaelsville, MD. (Second Remedial Action), June 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Jun 92, 66p EPA/ROD/R03-92/162
See also PB92-963909.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 20-acre USA Aberdeen Michaelsville Landfill is a municipal landfill located along the Chesapeake Bay in Harford County, Maryland. The site is in the northern portion of the Aberdeen Proving Ground (APG) in the Aberdeen Area (AA) between Michaelsville Road and Trench Warfare Road. The majority of materials reportedly disposed of at the site included domestic trash, trash from nonindustrial sources at APG, solvents, waste motor oils, PCB transformer oils, wastewater treatment sludges, pesticides containing thallium, insecticides containing selenium, and rodenticides containing antimony. The ROD addresses protection of the ground water by minimizing leachate flow and preventing current or future exposure to waste materials as the first of two OUs planned for the site. The primary contaminants of concern affecting the soil are organics, including pesticides; and metals, including chromium and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Landfills, Soil contamination, Pesticides, Metals, Municipal wastes, *Record of decision, *Second remedial action, Cleanup, Harford County(Maryland), Aberdeen Proving Grounds, Site capping.

**PB93-963916/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 3): Strasburg Landfill, Newlin Township, Chester County, PA. (Third Remedial Action), March 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
31 Mar 92, 68p EPA/ROD/R03-92/143
See also PB92-963913 and PB90-114703.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 22-acre Strasburg Landfill site is an inactive landfill located within a 220-acre tract of land in Newlin and West Bradford Townships, Chester County, Pennsylvania. This ROD addresses OU3, the landfill surface, including the integrity of the cap, nearby surface streams, air in and around the landfill, the surficial aquifer, and protection of ground water from further contamination. The primary contaminants of concern affecting the soil, debris and leachate are VOCs, including benzene, TCE, toluene and xylene.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Landfills, Soil contamination, Leachates, Environmental transport, Benzene, Toluene, Xylene, *Record of Decision, *Third remedial action, Cleanup, Chester County(Pennsylvania), Volatile organic compounds, Ethylene/trichloro.

**PB93-963917/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 3): Abex Corporation, Portsmouth, VA. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
29 Sep 92, 72p EPA/ROD/R03-92/159
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Abex site is a former brass and bronze foundry in Portsmouth, Virginia. Land use in the surrounding area is mixed residential, commercial, and light industrial. The site is located approximately one-half mile west of Elizabeth River, within the 500-year floodplain for the South branch of the River. The Elizabeth River Basin is heavily industrialized and receives wastewater discharges from U.S. Naval facilities, heavy industry, treatment facilities, urban runoff, and boating and docking facilities. From 1928 to 1978, Abex operated a facility that melted used railroad car journal bearings into sand molds to cast new railroad car bearings.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Water pollution, Ground water, Polycyclic aromatic hydrocarbons, Polychlorinated biphenyls, Chromium, Lead(Metal), Foundries, Bronze castings, *Record of Decision, First remedial action, Abex(Virginia).

**PB93-963918/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 3): Brown's Battery Breaking, Tilden Township, Berks County, PA. (Second Remedial Action), July 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
2 Jul 92, 78p EPA/ROD/R03-92/150
See also PB91-921437.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 14-acre Brown's Battery Breaking site is an inactive lead acid battery processing facility in Tilden Township, Berks County, Pennsylvania. From 1961 to 1971, the facility recovered lead-bearing materials from automobile and truck batteries by breaking the battery casings, draining the acid, and recovering the lead alloy, grids, plates, and plugs. During this time, battery acid and rinse water from recovery activities were dumped onto the soil, and crushed casings were disposed of onsite or used as a substitute for road gravel. The ROD addresses the remediation of onsite soil, battery casings, and ground water as a final action at the site. The primary contaminants of concern affecting the soil, debris, and ground water are metals, including lead and nickel; and other inorganics, including sulfate.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Inorganic compounds, Metals, Ground water, Soil contamination, Debris, *Record of Decision, *Second remedial action, Cleanup, Berks County(Pennsylvania).

**PB93-963919/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 3): Butz Landfill, Pocono and Jackson Townships, Monroe County, PA. (Second Remedial Action), June 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Jun 92, 80p EPA/ROD/R03-92/149

See also PB91-921438.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Butz Landfill is an inactive landfill in Jackson Township, Monroe County, Pennsylvania. Beginning in 1965, municipal waste, sewage sludge/liquids, and possibly some industrial wastes were accepted at the landfill. The ROD addresses OU2, designed to prevent human exposure to contaminated ground water. The primary contaminants of concern affecting the ground water are VOCs, including benzene; PCE, and TCE.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Landfills, Municipal wastes, Industrial wastes, Sewage sludge, Liquid wastes, Ground water, *Record of Decision, *Second remedial action, Cleanup, Monroe County(Pennsylvania), Volatile organic compounds, Ethylene/trichloro, Ethylene/perchloro.

**PB93-963920/REB** PC **A06**/MF **A02**
**Superfund Record of Decision (EPA Region 3): Commodore Semiconductor Group, Lower Providence Township, PA. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
29 Sep 92, 114p EPA/ROD/R03-92/155
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 14-acre Commodore Semiconductor Group (CSG) site is a manufacturing facility in Norristown, Montgomery County, Pennsylvania. Land use in the area is residential, commercial, and industrial with a wetland area located within 1 mile from the site. The site overlies a Class IIA aquifer that is used as a source of drinking water. From 1969 to present, the owners, including CGS, used the site to manufacture semiconductor chips. A concrete underground storage tank was installed adjacent to the southeast side of the building to store a waste solution known to contain TCE and other solvents generated from the manufacturing process. The concrete tank was reported to have leaked in 1974. In 1984, further state and EPA investigations confirmed contaminants onsite in ground water and drinking water. The ROD addresses the contamination of onsite ground water and drinking water. The primary contaminants of concern affecting the ground water are VOCs, including PCE and TCE.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Pennsylvania, Volatile organic compounds, Ground water, Water pollution, Underground storage, Storage tanks, Leakage, Record of Decision, First remedial action, TCE(Trichloroethylene).

**PB93-963921/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 3): Rhinehart Tire Fire Dump, Operable Unit 2, Winchester, VA. (Second Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
29 Sep 92, 34p EPA/ROD/R03-92/160
See also PB93-963921.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Rhinehart Tire Fire Dump site is located in a 22-acre drainage area of a sparsely populated rural area in western Frederick County, Virginia. Surface water runoff flows into a north-south tributary that discharges to Hogue Creek, which is 4,000 feet downstream. Bedrock is noted to be highly fractured, and the ground water flow in the overburden aquifer is toward Massey Run. From 1972 to 1983, the site owner conducted a tire disposal operation, which consisted of transporting discarded tires from various locations and storing them on a 5-acre wooded slope behind his home. An estimated 5 to 7 million tires that had been accumulated caught on fire in October 1983 and burned until July 1984. As a result of the fire, a free-flowing oily-tar, which contained anthracene, benzene, cadmium, chromium, ethylbenzene, napthalene, nickel, pyrene, toluene, and zinc, began to seep out of the tire pile into Massey Run and on to Hogue Creek.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Arsenic, Lead(Metal), Zinc, Tires, Solid waste, Tars, Soil contamination, Water pollution, Ground water, *Record of Decision, Second remedial action, Frederick County(Virginia).

**PB93-963922/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 3): Tonolli Corporation, Nesquehoning Borough, Carbon County, PA. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 90p EPA/ROD/R03-92/156
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available in paper copy or microfiche.

The 30-acre Tonolli site is located in Nesquehoning Borough, Carbon County, Pennsylvania. Land use in the area is predominantly industrial and residential. Two aquifers, an overburden aquifer and a bedrock aquifer, are found below the site, the latter being a current source of drinking water. Site-related impacts appear to be confined to the overburden aquifer only. From 1974 to 1986, the Tonolli Corporation operated a battery recycling and secondary lead smelting plant onsite. The ROD addresses a final remedy for all the contaminated media present onsite, including battery piles, onsite structures, soil, sediment, ground water, and surface water. The primary contaminants of concern affecting the soil, sediment, debris, ground water, and surface water are metals, including arsenic, cadmium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Industrial wastes, Ground water, Earth fills, Refineries, Sludge, Calcium sulfates, Metals, Lead(Metal), Soil properties, Arsenic, Storage tanks, Surface waters, Waste treatment, Sediments, Excavation, Consolidation, Batteries, *Record of Decision, First remedial action - Final, *Tonolli(Pennsylvania), Carbon County(Pennsylvania).

**PB93-963923/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, Operable Unit 1, Richmond, VA. (First Remedial Action), May 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
15 May 92, 85p EPA/ROD/R03-92/141
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 640-acre U.S. Defense General Supply Center (DGSC) is a military support, service, and storage facility located approximately 11 miles south of the City of Richmond, Virginia. From the 1940's to 1970's, DGSC provided multiple support functions for the U.S. Army. Operational areas consisted of indoor and outdoor material storage areas, a motor pool facility, a National Guard training area, fire training areas, and various acid neutralization pits. Materials that were stored in Open Storage Areas (OSA) consisted mainly of petroleum, oils, and lubricants although, in the past, there were reported pesticide and herbicide spills. The ROD addresses the interim remediation of OU1, the contaminated soil at OSA. The primary contaminants of concern affecting the soil are VOCs, including benzene, PCE, TCE, toluene, and xylenes; other organics, including PAHs, pesticides, and phenols; metals, including arsenic, chromium, and lead; acids; and oils.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Military facilities, Virginia, Polycyclic aromatic hydrocarbons, Pesticides, Phenols, Metals, Acids, Oils, Soil contamination, *Record of Decision, *First remedial action, Cleanup, US Defense General Supply Center, Volatile organic compounds, Ethylene/trichloro, Ethylene/perchloro.

**PB93-964009/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
22 Sep 92, 60p EPA/ROD/R04-92/125
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 4-acre Chem-form site is a former electrochemical machine design, manufacturing, and marketing facility in Pompano Beach, Broward County, Florida. From 1967 to 1985, Chem-form used the site as a certified repair station for refurbishing turbine engine components related to the aerospace industry and also provided services to utility companies that used turbine power plants. Additionally, they were involved in the design, manufacture, and marketing of electrochemical machines for other industries involved in the fabrication of metal parts. These operations resulted in substantial waste generation. Spent cutting oils were stored in stainless-steel vats and were routinely collected by reprocessing contractors. Organic solvents were used for metal cleaning and painting operations. Process wastewaters were discharged to an onsite septic tank/drain field system. Other wastewaters were discharged to an open trench. Prior to 1975, about 50 gallons of wastewater per day were disposed of in this manner. As a result of EPA investigations, a removal action was performed to remove approximately 3,000 cubic yards of soil from the field and trench areas at the site. The ROD addresses a final remedy for the ground water at the site, as OU1. Previous removal actions have now reduced contamination in ground water to below significant levels; therefore there are no contaminants of concern affecting this site.

Keywords: *Florida, *Superfund, *Hazardous materials, *Waste disposal, *Water pollution control, Waste oils, Waste water, Industrial wastes, Electrochemical machining, Industrial plants, Risk assessment, Ground water, *Record of Decision, *First remedial action, Cleanup, Pompano Beach(Florida), Broward County(Florida).

**PB93-964010/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 22p EPA/ROD/R04-92/119
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Oak Ridge Reservation (USDOE) (Operable Unit 18) site is located adjacent to the City of Oak Ridge, Anderson County, Tennessee. The Plating Shop Container Areas, which are within the fenced security area of Y-12, receive spent plating solutions and sludge. Spills in the Plating Shop Container Areas have released inorganic and organic contaminants to the surrounding subsurface soil; however, migration of contaminants to ground water and surface water is unlikely because they are present at low concentrations. The ROD addresses OU18, the soil in the Plating Shop Container Areas. Because the Plating Shop Container Areas are within the fenced security of Y-12 and are devoid of vegetation, the probability of detectable impacts to terrestrial and aquatic plants and animals is low. Currently, the total excess cancer risk is below the EPA-established range of concern, and noncarcinogenic health effects are also below the threshold for potential concern, based on a conservative exposure to protect human health at the Y-12 Plating Shop Container Areas. Therefore, there are no contaminants of concern affecting this site.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, *Oak Ridge Reservation, Organic compounds, Inorganic compounds, Water pollution, Path of pollutants, Land pollution, Soil contamination, Ground water, Surface waters, Risk assessment, *Record of Decision, *Fifth remedial action, Cleanup, Anderson County(Tennessee).

**PB93-964011/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
22 Sep 92, 52p EPA/ROD/R04-92/124
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 2-acre Wilson Concepts of Florida site operated as a manufacturing and metal-finishing facility in Pompano Beach, Broward County, Florida. From 1974 to 1987, Wilson Concepts of Florida, Inc., used the site to manufacture jet aircraft engine parts, metal-working machinery, and for associated operations, such as precision machining, drilling and milling of metal parts, vibratory deburring, degreasing, steam cleaning, and spray coating of parts. Chemicals used at the site included a variety of hydraulic and lubricating oils, metal protection agents, water coolants, methylene chloride, methyl ethyl ketone, and chemical cleaners. As a result of several inspections from 1976 through 1989, the Broward County Environmental Quality Control Board (BCEQCB) identified poor waste handling practices, including discharge of industrial wastes onto the ground. The ROD addresses onsite soil and ground water. EPA investigations have shown that the soil and ground water contamination associated with the site is no longer considered a health threat under current or likely land use conditions. Therefore, there are no contaminants of concern affecting the site.

Keywords: *Florida, *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Industrial plants, Industrial wastes, Oil wastes, Chemical compounds, Risk assessment, Ground water, Soil contamination, *Record of Decision, *First remedial action, Cleanup, Pompano Beach(Florida), Broward County(Florida).

**PB93-964012/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
25 Jun 92, 74p EPA/ROD/R04-92/121
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 5-acre Woodbury Chemical (Princeton Plant) site is a pesticide and fertilizer formulation and storage facility located approximately one-half mile southwest of Princeton, Dade County, Florida. From 1959 to the present, the site has been used for formulating technical-grade materials to produce pesticides and fertilizers. As a result of a tank leak or spill in the late 1970's, EPA conducted numerous investigations that revealed toxaphene contamination in soil. In 1990, a removal action was conducted at the site, which resulted in the excavation of contaminated soil. Soil contaminated with greater than 100 mg/kg of toxaphene was sent offsite to the GSX facility in Pinewood, South Carolina, and soil contaminated with less than 100 mg/kg was sent to the South Dade County landfill. The previous removal action has eliminated the principal threat at the site and no additional action is necessary to protect human health or the environment. Therefore, there are no contaminants of concern affecting this site.

Keywords: *Florida, *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Chemical industry, Pesticides, Toxaphene, Leaks, Risk assessment, Land pollution, *Record of Decision, *First remedial action, Cleanup, Princeton(Florida), Dade County(Florida).

**PB93-964013/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), A/M Area Groundwater Operable Unit 3, Aiken County, SC. (Third Remedial Action), June 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
29 Jun 92, 46p EPA/ROD/R04-92/110
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 300-square-mile Savannah River site (SRS) is a DOE facility located in Aiken County, 20 miles south of Aiken, South Carolina, and 25 miles southeast of Augusta, Georgia. The A/M area, located in the northwest portion of the SRS, contained many operations that involved the use of hazardous substances. Between 1952 and 1981, an estimated 13 million pounds of chlorinated solvents were used in the A/M area to degrease fuel and target tubes for use in the SRS reactors. An estimated 50 to 90 percent of the solvents evaporated during use; however, the remaining solvents were discharged to the process sewer system. As a result of these activities and incidents, a ground water plume, encompassing 1,200 acres beneath the A/M area, is contaminated with significant concentrations of VOCs. The ROD addresses an interim remedy for the A/M area ground water subsurface vadose zone, as OU3. The primary contaminants of concern affecting the ground water in the A/M area are VOCs, including PCE and TCE.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Water pollution control, Savannal River Plant, Ground water, Polyvinyl chloride, Water pollution monitoring, *Record of Decision, *Third remedial action, Cleanup, Aiken County(South Carolina), Volatile organic compounds, Ethylene/trichloro.

**PB93-964014/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Standard Auto Bumper Site, Dade County, Hialeah, FL. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Sep 92, 78p EPA/ROD/R04-92/116
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The approximately 1-acre Standard Auto Bumper site is a chromium and nickel plating facility in Hialeah, northeast Dade County, Florida. In 1959, Standard Auto Bumper began electroplating operations, and discharged wastewater from the electroplating and stripping process to an onsite drainage ditch/swale area west of the facility. In 1972, a wastewater treatment system was constructed to convert hexavalent chromium to insoluble trivalent chromium. Between 1972 and 1979, the effluent from this treatment system was discharged to an underground, drainage trench onsite. The ROD addresses onsite contaminated soil to reduce the migration of these contaminants to the ground water. The primary contaminants of concern affecting the soil are metals, including chromium and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Metals, Chromium, Lead(Metal), Waste water, Chemical effluents, Environmental transport, *Record of Decision, *First remedial action, Cleanup, Hialeah(Florida), Dade County(Florida).

**PB93-964015/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Yellow Water Road Dump, Duval County, Baldwin, FL. (Second Remedial Action), June 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Jun 92, 78p EPA/ROD/R04-92/103
See also PB91-921546.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 14-acre Yellow Water Road site is a former storage area for PCB-contaminated liquids and electrical equipment in Baldwin, Duval County, Florida. In 1981, AEEC entered into a joint venture with two other corporations with the intent of moving an incinerator to the site to destroy PCBs and began onsite storage of PCB-contaminated liquids and electrical equipment at the former operational area in anticipation of upcoming onsite incineration operations. In 1982, PCB-contaminated oils were spilled at the site during onsite salvage operations to remove valuable metal parts from transformer carcasses. The ROD addresses the appropriate remediation for the contaminated ground water as OU2. The primary contaminant of concern affecting the ground water is PCB, an organic.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Water pollution control, Ground water, Polychlorinated biphenyls, Liquid wastes, Industrial wastes, Transformers, Insulating oil, Water pollution monitoring, *Record of Decision, *Second remedial action, Cleanup, Baldwin(Florida), Duval County(Florida).

**PB93-964016/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 4): National Electric Coil/Cooper Industries, KY. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 42p EPA/ROD/R04-92/127
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 3.5-acre National Electric Coil/Cooper Industries site includes an active manufacturing facility in Dayhoit, Harlan County, Kentucky. A 1,000-gallon tank, which held the solvent, was maintained in a below-grade concrete pit. Periodically, the tank was drained and the waste liquid was allowed to flow overland and drain into the Cumberland River. Sludge from the tank and debris from an onsite furnace were disposed of along the riverbank. These improper disposal practices, which continued until the mid-1980's, have resulted in contamination of the local drinking water supply, drainage channels, river embankment property, and facility grounds. The ROD provides an interim remedy for the VOC contamination in the bedrock aquifer to further restrict migration of the VOC-contaminant plume. The primary contaminants of concern affecting the ground water in the bedrock aquifer and air are VOCs, including TCE, toluene, and xylenes; and metals, including lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Aquifers, Ground water, Surface waters, Industrial wastes, Liquid wastes, Sludge, Metals, Xylenes, Toluene, *Record of Decision, *First remedial action, Cleanup, Dayhoit(Kentucky), Harlan County(Kentucky), Volatile organic compounds, Ethylene/trichloro.

**PB93-964017/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Agrico Chemical, Escambia County, Pensacola, FL. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
29 Sep 92, 66p EPA/ROD/R04-92/123
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 35-acre Agrico Chemical site is a former fertilizer manufacturing facility located in Pensacola, Escambia County, Florida. In 1920, the production of superphosphate fertilizer began. The source rock used in the process was fluorapatite, which also contained silica and trace levels of aluminum and uranium. The ROD addresses a final remedy for contaminated soil and sludge at the site as OU1 to prevent current or future exposure. The primary contaminants of concern affecting the soil and sludge are VOCs; other organics including PAHs and pesticide residues; metals, including arsenic and lead; and radioactive materials.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Sludge, Polycyclic aromatic hydrocarbons, Pesticide residues, Metals, Radioactive wastes, Industrial wastes, *Record of Decision, *First remedial action, Cleanup, Pensacola(Florida), Escambia County(Florida), Volatile organic compounds.

**PB93-964018/REB** PC **A09**/MF **A02**
**Superfund Record of Decision (EPA Region 4): Benfield Industries, Haywood County, Hazelwood, NC. (First Remedial Action), July 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
31 Jul 92, 178p EPA/ROD/R04-92/104
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 3.5-acre Benfield Industries site is a former bulk chemical mixing and repackaging plant in Hazelwood, Haywood County, North Carolina. Products handled and stored at the facility by Benfield Industries included paint thinners; solvents; sealants; cleaners; deicing solutions; and wood preservers, including creosote. The ROD addresses the remediation of contaminated soil and ground water. The primary contaminants of concern affecting the soil and ground water are VOCs, including benzene; other organics including PAHs; and metals, including arsenic and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Ground water, Industrial wastes, Polycyclic aromatic hydrocarbons, Benzene, Metals, Arsenic, Lead(Metal), *Record of Decision, *First remedial action, Cleanup, Hazelwood(North Carolina), Haywood County(North Carolina), Volatile organic compounds.

**PB93-964019/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Carrier Air Conditioning, Collierville, TN. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
3 Sep 92, 66p EPA/ROD/R04-92/112
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 135-acre Carrier Air Conditioning site is an active manufacturing facility in the Town of Collierville, Shelby County, Tennessee. In 1967, Collierville leased the site property, buildings, and equipment to Carrier to manufacture residential heating and air-conditioning units. During the manufacturing process, aluminum sheeting is stamped and assembled with copper tubing to form air heat exchangers. Stamping and forming oils and dirt are removed prior to assembly. Until recently, trichloroethylene (TCE) was used onsite as the primary solvent for degreasing and cleaning parts. The ROD addresses a final remedy for the contaminated soil, sludge, and ground water at the Carrier facility and is the only ROD planned for the site. The primary contaminants of concern affecting the soil, sludge, and ground water are VOCs, including TCE and PCE; and metals, including lead and zinc.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Ground water, Sludge, Metals, Lead(Metal), Zinc, *Record of Decision, *First remedial action, Cleanup, Collierville(Tennessee), Volatile organic compounds, Ethylene/trichloro, Ethylene/perchloro.

**PB93-964020/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Florida Steel Corporation, Martin County, Indiantown, FL. (First Remedial Action), June 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Jun 92, 60p EPA/ROD/R04-92/122
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 150-acre Florida Steel site is located 2 miles northwest of Indiantown, Martin County, Florida. In 1969, the Indiantown site was acquired by Florida Steel Corporation (FSC) for the purpose of constructing a steel mill using electric arc furnace technology for recycling scrap steel, primarily junk automobiles, into new steel products. The ROD addresses the remaining contaminated onsite soil, sediment, and debris as OU1. The primary contaminants of concern affecting the soil, sediment and debris are organics, including PCBs; and metals, including lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Debris, Waste recycling centers, Metal scrap, Polychlorinated biphenyls, Metals, Lead(Metal), *Record of Decision, *First remedial action, Cleanup, Indiantown(Florida), Martin County(Florida).

**PB93-964021/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Madison County Sanitary Landfill, Madison, FL. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Sep 92, 92p EPA/ROD/R04-92/115
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 90-acre Madison County Sanitary Landfill is an active landfill area located in Madison, Madison County, Florida. In 1970, the City of Madison began operating the Madison County Landfill as a sanitary landfill. From 1971 to 1980, domestic waste from the city and surrounding area as well as local industrial wastes were disposed of in the landfill. During that time, the ITT Thompson Industries (formerly a division of ITT Corporation) disposed of waste in the landfill, including 55-gallon drums filled with waste polishing/buffer compounds at the site, but the exact location of disposal is not known. The ROD addresses both the onsite and offsite contaminated ground water in an effort to minimize the migration of contamination from the landfill to the surrounding community, to restore the ground water to drinking water quality for the chemicals of concern, and to monitor ground water in a manner that will verify the effectiveness of the selected remedy. The primary contaminants of concern affecting the soil and ground water are VOCs; other organics; and metals.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Landfills, Soil contamination, Ground water, Industrial wastes, Metals, Water pollution monitoring, Drinking water, Environmental transport, *Record of Decision, *First remedial action, Cleanup, Madison(Florida), Volatile organic compounds.

**PB93-964022/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Milan Army Ammunition Plant, TN. (First Remedial Action), September 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 74p EPA/ROD/R04-92/126
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 22,436-acre Milan Army Ammunition Plant (MAAP) is located in western Tennessee, 5 miles east of Milan, Tennessee. The facility was constructed in 1941 to produce and store fuses, boosters, and small- and large-caliber ammunition. The ROD addresses an interim remedy for the contaminated ground water beneath and immediately downgradient from the former ponds as OU1. The primary contaminants of concern affecting the ground water are VOCs, including carbon disulfide; other organics, including HMX, RDX, 2,4,6-TNT, 2,4-DNT, 2,6-DNT, 1,3-DNB, 1,3,5-trinitrobenzene, and nitrobenzene; and inorganics, including nitrate.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Munitions industry, Industrial plants, Explosives, Ground water, Aquifers, Nitrates, Inorganic compounds, *Record of Decision, *First remedial action, Cleanup, Milan(Tennessee), Volatile organic compounds.

**PB93-964023/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 1, SC. (First Remedial Action), June 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
29 Jun 92, 38p EPA/ROD/R04-92/108
Available on Standing Order, deposit account required for all RODS is $700 U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 300-square-mile Savannah River site (SRS) is a Department of Energy (DOE) facility located in Aiken, Barnwell, and Allendale Counties, South Carolina, 20 miles south of Aiken, South Carolina, and 25 miles southeast of Augusta, Georgia. From 1958 to 1985, SRS used a northwest portion of the site, termed the 'M-area', as a hazardous waste management facility (HWMF). The M-area HWMF or OU1 consisted of an unlined surface impoundment (settling basin), a process sewer line, an overflow drainage/seepage area, and an area known as Lost Lake, which represents a special ecological environment known as Carolina Bay. The interim ROD integrates previously completed RCRA closure activities that were required and approved by the South Carolina Department of Health and Environmental Control. The primary contaminants of concern affecting soil, sludge, and surface water are VOCs, including TCE and PCE; metals, including lead; acids; and radioactive materials, including uranium.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Savannah River Plant, South Carolina, Soil contamination, Surface waters, Sludge, Radioactive wastes, Metals, Acids, *Record of Decision, *First remedial action, Cleanup, Volatile organic compounds, Ethylene/trichloro, Ethylene/perchloro.

**PB93-964024/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 2, SC. (Second Remedial Action), June 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
29 Jun 92, 40p EPA/ROD/R04-92/109
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 300-square-mile Savannah River site (SRS) is a Department of Energy (DOE) facility located in Aiken, Barnwell, and Allendale Counties, South Carolina, 20 miles south of Aiken, South Carolina, and 25 miles southeast of Augusta, Georgia. From 1956 to 1985, SRS used a northwest portion of the site as a hazardous waste management facility (HWMF), which received waste from the Savannah River Metallurgical Laboratory (MET LAB). The interim ROD integrates previously completed RCRA closure activities that were required and approved by the South Carolina Department of Health and Environmental Control. The primary contaminants of concern affecting the soil, sediment, and debris are VOCs, including TCE; metals, including lead and chromium; and acids.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Savannah River Plant, South Carolina, Soil contamination, Debris, Metals, Acids, Lead(Metal), Chromium, *Record of Decision, *Second remedial action, Cleanup, Volatile organic compounds, Ethylene/trichloro.

**PB93-964025/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation, Operable Unit 6, Roane County, TN. (Fourth Remedial Action), September 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 56p EPA/ROD/R04-92/118
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Oak Ridge Reservation (USDOE) (OU6) site is located within the K-25 plant, a former uranium enrich-

ment facility in Oak Ridge, Roane County, Tennessee. Since the 1940's, the fabrication, decontamination, and maintenance processes associated with activities at the site, known as K-25, have produced hazardous and radioactive wastes. The ROD addresses an interim remedy to reduce the migration of contaminants and degradation of the environment caused by the SW31 discharge while the investigation of the K-1070 OU continues. The objective of the ROD, which addresses OU6, is to terminate the direct discharge of contaminants to surface water by intercepting and routing contaminated waters for treatment via an NPDES-permitted outfall prior to discharge to surface water. The primary contaminants of concern affecting the surface water are VOCs, including benzene, PCE, TCE, toluene, and xylenes; other organics, including PCBs and PAHs; and metals, including lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Oak Ridge Reservation, Surface waters, Polycyclic aromatic hydrocarbons, Polychlorinated biphenyls, Metals, *Record of Decision, *Fourth remedial action, Cleanup, Roane County(Tennessee), Volatile organic compounds, Ethylene/trichloro, Ethylene/perchloro.

**PB93-964026/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 4): USMC Camp Lejeune Military Reservation, NC. (First Remedial Action), September 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
23 Sep 92, 40p EPA/ROD/R04-92/120
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 500-acre Camp Lejeune Military Reservation is located 15 miles southeast of Jacksonville, in Onslow County, North Carolina. Within the site lies the Hadnot Point Industrial Area (HPIA), which was constructed in the late 1930's. It is composed of 75 buildings and facilities, which include gas stations, offices, storage yards, maintenance shops, and a dry cleaning plant. Several areas of the HPIA have been investigated for potential contamination attributed to Marine Corps activities and operations that resulted in a generation of potentially hazardous wastes. The ROD addresses an interim remedial action for the shallow aquifer at the HPIA to protect human health from exposure to VOCs and metals. The primary contaminants of concern affecting the shallow ground water aquifer are VOCs, including benzene and TCE; and metals, including arsenic, chromium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, North Carolina, Military facilities, Ground water, Arsenic, Chromium, Lead(Metal), Metals, Benzene, *Record of Decision, *First remedial action, Cleanup, Camp Lejeune Military Reservation, Volatile organic compounds, Ethylene/trichloro.

**PB93-964121/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 5): Alsco Anaconda Site, Gnadenhutten, OH. (Second Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 66p EPA/ROD/R05-92/214
See also PB90-162942.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 4.8-acre Alsco Anaconda site is located in Gnadenhutten, Tuscarawas County, Ohio, within the 50- and 100-year floodplains of the Tuscarawas River. It consists of four source areas which contained FO19 waste (waste water treatment sludge) generated by the adjacent aluminum products manufacturing facility. From 1965 through 1978, contamination at the Alsco Anaconda site occurred when waste water and waste water treatment sludge (F019) from the aluminum plant were disposed of in an unlined settling basin (which consisted of tow impoundments) and a sludge pit. The ROD addressed the contaminated ground water which constitutes the second operable unit at the site. The primary contaminants of concern affecting the ground water include organics such as cyanide, fluoride, and bis (2-ethylhexyl) phthalate; and metals including, chromium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Water pollution control, Aquifers, Ground water, Industrial wastes, Waste water, Sludge, Metals, Phthalates, Cyanides, Fluorides, Water pollution monitoring, *Record of Decision, *Second remedial action, Cleanup, Gnadenhutten(Ohio), Tuscarawas County(Ohio).

**PB93-964122/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 5): Butterworth No. 2 Landfill Site, Grand Rapids, MI. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
29 Sep 92, 40p EPA/ROD/R05-92/221
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 180-acre Butterworth No. 2 Landfill is a municipal landfill in Grand Rapids, Kent County, Michigan. After the enactment of Michigan Act 87 in 1965, Butterworth No. 1 was closed, and Butterworth No. 2 and No. 3 were opened. Several high-voltage power transmission lines pass through the landfill, and landfilling was not allowed in the areas below the power lines; however, it was discovered that the area was allegedly used to dispose of liquid wastes, such as solvents and paint sludge. Records indicate that from 1967 to 1971, approximately 3,000 to 4,000 cubic yards of waste per day were received at the landfill. The primary contaminants of concern affecting the soil are VOCs, including benzene, TCE, and xylenes; organics, including PCBs, and pesticides; and metals, including arsenic, chromium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Landfills, Soil contamination, Municipal wastes, Industrial wastes, Metals, Pesticides, Polychlorinated biphenyls, Pollution monitoring, *Record of Decision, *First remedial action, Cleanup, Grand Rapids(Michigan), Kent County(Michigan), Volatile organic compounds, Site capping.

**PB93-964123/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 1, Anoka County, Andover, MN. (Second Remedial Action), (Amendment), June 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
9 Jun 92, 22p EPA/ROD/R05-92/203
See also PB89-135354.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 50-acre South Andover site is composed of several privately owned parcels of land near Minneapolis in Anoka County, Minnesota. There are several source areas where former activities included drum storage, waste storage, and waste burning. Solid and liquid chemical waste dumping and open pit burning of solvents occurred during the 1960's and 1970's. Investigations showed that drum storage and chemical waste disposal sites were partially obscured by auto salvage operations and more than 3 million waste tires. The ROD amendment changes the 1988 ROD for ground water based on current data from a 1990 Design Investigation. The primary contaminants of concern affecting the ground water are VOCs, including acetone, ethyl benzene, methylchloride, PCE, TCE, toluene; and metals, including arsenic, chromium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Water pollution control, Ground water, Industrial wastes, Metals, Waste oils, Transformers, Water pollution monitoring, *Record of Decision, *Second remedial action, Cleanup, Andover(Minnesota), Anoka County(Minnesota), Volatile organic compounds.

**PB93-964124/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 5): Reilly Tar and Chemical, St. Louis Park, MN. (Fourth Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 44p EPA/ROD/R05-92/213
See also PB87-189387.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 80-acre Reilly Tar and Chemical (St. Louis Park) site is a former coal tar distillation and wood preserving plant in St. Louis Park, Minnesota. From 1917 to 1972, coal tar distillation process wastewater was discharged to onsite surface water; as a result, small wastewater spills occurred into onsite soil. The ROD addresses a final remedy for the contaminated Northern Area of the Drift Aquifer, a surficial aquifer that is not used as a drinking water source. The aquifer does provide recharge water for the bedrock aquifers and is hydraulically and geologically connected to the Platteville and St. Peter Aquifers. The primary contaminants of concern affecting the ground water are organics, such as PAHs.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Aquifers, Ground water, Industrial wastes, Waste water, Polycyclic aromatic hydrocarbons, Organic compounds, *Record of Decision, *Fourth remedial action, Cleanup, Saint Louis Park(Minnesota).

**PB93-964125/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 5): American Chemical Services, Griffith, IN. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 95p EPA/ROD/R05-92/217
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 36-acre American Chemical Services (ACS) site is a chemical manufacturing facility in Griffith, Indiana, which was formerly involved in solvent recovery. From the late 1960's to early 1970's, ACS manufactured barium naphtherate, brominated vegetable oil, lacquers and paints, liquid soldering fluid, and polyethylene solutions in polybutene. The ROD addresses a final remedy for the buried drums, as well as waste, contaminated soil, debris, and ground water. The primary contaminants of concern affecting the soil, debris, and ground water are VOCs, including benzene, TCE, toluene, and xylenes; other organics, including PCBs, PAHs and phenols; and metals, including arsenic, chromium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Chemical plants, Polycyclic aromatic hydrocarbons, Polychlorinated biphenyls, Metals, Soil contamination, Ground water, Debris, *Record of Decision, *First remedial action, Cleanup, Griffith(Indiana), Volatile organic compounds, Ethylene/trichloro.

**PB93-964126/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 5): Cannelton Industries Site, Sault Sainte Marie, MI. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 56p EPA/ROD/R05-92/220
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 75-acre Cannelton Industries site is a former tannery facility located in the Upper Peninsula of Michigan, in Sault Sainte Marie, Chippewa County. Land use in the area is predominantly residential and light industrial, with 400 single-family residences and an elementary school located within 1/2 mile of the site. Nearby residents and the school are connected to the City's

municipal water system, the source of which is the Saint Marys River intake, 1 mile upstream of the Cannelton site. The Saint Marys River, which is used both as a drinking water source and for recreational purposes, is adjacent to the lower area of the site. Part of the site lies within the 100-year floodplain of the river, and several wetlands areas surround the site. Additionally, the site overlies two aquifers that are hydraulically connected. From 1900 to 1958, Northwestern Leather Company operated a tannery facility onsite. The plant had no sewer system, and three drains discharged approximately 250,000 gallons per day of chemical waste to the Saint Marys River and adjacent wetlands.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Wetlands, Volatile organic compounds, Michigan, Soils, Sediments, Tanning materials, *Record of Decision, First remedial action, Sault Sainte Marie(Michigan).

**PB93-964127/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 5): Central Illinois Public Service, Taylorville Manufactured Gas Plant Site, Christian County, IL. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 85p EPA/ROD/R05-92/219
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 1-acre Central Illinois Public Service (CIPS) site is a former manufactured gas plant in Taylorville, Christian County, Illinois. The plant produced a low-quality gas from coal, which was used for lighting and heating. Onsite contamination by coal tar was discovered in 1985 during site construction. The ROD addressesses a final remedy for the remaining principal threat posed by ground water contamination at the site, and also documents the prior 1987 removal action. The primary contaminants of concern affecting the soil, sediment, debris, and ground water at the site are VOCs, including benzene, toluene, and xylenes; and other organics, including PAHs and phenols.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Coal tar, Ground water, Debris, Soil contamination, Sediments, Polycyclic aromatic hydrocarbons, Phenols, *Record of Decision, *First remedial action, Cleanup, Taylorville(Illinois), Christian County(Illinois), Volatile organic compounds.

**PB93-964128/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 5): City Disposal Sanitary Landfill, Dane County, WI. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Sep 92, 56p EPA/ROD/R05-92/222
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 38-acre City Disposal Sanitary Landfill site is an inactive landfill located in Dane County, Wisconsin. From 1966-1977, City Disposal Corporation, and later Acme Services, Inc., used the site for disposal of household, construction, debris, and industrial wastes. Industrial wastes included solvents from the plastic fabrication industry, mixtures of lubrication oil and water, and paint wastes. The ROD addresses the final remedy for contaminated soil, debris, and ground water. The primary contaminants of concern affecting the soil, debris, and ground water are VOCs, including benzene, TCE, toluene, and xylenes; other organics, including phenols; metals, including arsenic, chromium, lead; and inorganics.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Landfills, Industrial wastes, Soil contamination, Ground water, Debris, Metals, Inorganic compounds, *Record of Decision, *First remedial action, Cleanup, Dane County(Wisconsin), Volatile organic compounds, Ethylene/trichloro.

**PB93-964129/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 5): H. Brown Company, Walker, MI. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 86p EPA/ROD/R05-92/223
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The H. Brown Company, Inc., site is a former landfill and battery reclamation facility in Walker, Kent County, Michigan. Before 1961, the site was an uncontrolled dump that received unknown types and quantities of waste. From 1961 to 1982, the owner reclaimed lead from wet-cell batteries. The ROD addresses the final remedy for the site. The primary contaminants of concern affecting the soil, sediment, debris (battery casings), ground water, surface water, and air are VOCs, including benzene, toluene, and xylenes; other organics, including PAHs, PCBs, pesticides, and phenols; and metals, including arsenic, chromium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Landfills, Metals, Polychlorinated biphenyls, Polycyclic aromatic hydrocarbons, Soil contamination, Ground water, Surface waters, Aquifers, Air quality, Sediments, Debris, *Record of Decision, *First remedial action, Cleanup, Walker(Michigan), Kent County(Michigan), Volatile organic compounds.

**PB93-964130/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 5): MIDCO I, Gary, IN. (First Remedial Action), (Amendment), April 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
13 Apr 92, 76p EPA/ROD/R05-92/196
See also PB90-115965.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 4-acre Midco I site is an abandoned, industrial waste recycling, storage, and disposal facility in Gary, Indiana. The surrounding land use is mixed industrial, commercial, and residential. The Calumet Aquifer underlies the site and provides drinking water to wells within 1 mile of the site. The primary contaminants are VOCs, including TCE, toluene, and xylenes; metals, including chromium and lead; and inorganics. The amended remedial action for the ROD includes a reduction in the amount of soil to be treated to a minimum of 5,200 cubic yards because of the amendment to soil CALs and the determination that arsenic may not be present above background levels at the site; and treating the contaminated soil onsite using with soil vapor extraction, followed by in-situ solidification/stabilization; and excavating and treating contaminated sediment from the surrounding wetlands.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Industrial wastes, Volatile organic compounds, Ground water, Soils, Contamination, Heavy metals, Lead(Metal), Chromium, Toluene, Xylenes, Earth fills, Arsenic, Solidification, Waste treatment, Excavation, Pumping, *Record of Decision, First remedial action(Amendment), *Gary(Indiana), Air stripping, Vapor extraction.

**PB93-964131/REB** PC **A07**/MF **A02**
**Superfund Record of Decision (EPA Region 5): New Brighton/Arden Hills, Ramsey County, MN. (Eighth Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 144p EPA/ROD/R05-92/210
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 25-square-mile New Brighton/Arden Hills site includes the 4-square-mile. Twin Cities Army Ammunition Plant (TCAAP) in Ramsey County, Minnesota. Land use in the area is predominantly residential with commercial and industrial sectors. In 1981, state investigations of municipal and private drinking water wells in and around TCAAP identified contamination of ground water, onsite soil, sediment, and surface water by VOCs, other organics, and metals. Past removal actions and seven previous RODs, signed from 1983 to 1989, addressed interim remedial actions conducted by the Army and Alliant Techsystems and provided for the establishment of alternate drinking water supplies. The ROD addresses remediation of the south plume of offsite contaminated ground water, as OU3. The primary contaminants of concern affecting the ground water are VOCs, including benzene, TCE, and xylenes; other organics, including phenols; and metals, including chromium and lead. The selected remedial action for the site includes pumping and offsite treatment of contaminated ground water at the leading edge of the south plume using precipitation and filtration to remove inorganic solids and a pressurized granular activated carbon system to remove VOCs; and discharging the treated ground water offsite to the potable water supply.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Ground water, Industrial wastes, Ammunition, Volatile organic compounds, Heavy metals, Explosives, Water wells, Organic compounds, Benzene, Soils properties, Xylenes, Waste treatment, Activated carbon process, Precipitation(Chemistry), Filtration, Pumping, Monitoring, *Record of Decision, Eighth remedial action, *Ramsey County(Minnesota), New Brighton(Minnesota), Vapor extraction.

**PB93-964132/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 2, Anoka County, Andover, MN. (Second Remedial Action), December 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
24 Dec 92, 36p EPA/ROD/R05-92/202
See also PB89-135354.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 50-acre South Andover site is composed of several privately owned parcels of land near Minneapolis in Anoka County, Minnesota. Land use in the area is predominately commercial and residential, and several auto salvage and repair yards are located at, or adjacent to, the site. The site contains part of a wetlands area with several small recreational lakes in the vicinity. The site overlies three aquifers, one of which supplies the surrounding community with drinking water. Between 1954 and 1981, multiple waste storage and disposal activities occurred on several properties within the site boundaries. The selected remedial action for this site includes excavating and onsite treatment of 2,100 cubic yards of PAH-contaminated soil using ex situ biological treatment; excavating and disposing of the remaining 9,300 cubic yards of PAH, PCB, and metal-contaminated soil from areas 2, 3, 4, and 7 in an offsite solid waste landfill; sampling and removing offsite approximately 20 onsite drums; and monitoring surface water and sediment. The estimated present worth cost for this remedial action is $2,470,000, which includes an O&M cost of $195,000.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Lead(Metal), Soil contamination, Water pollution, Ground water, Polycyclic aromatic hydrocarbons, Polychlorinated biphenyls, Wetlands, Aquifers, *Record of Decision, Second remedial action, Anoka County(Minnesota).

**PB93-964133/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 5): Tri County/Elgin Landfill Site, Elgin, IL. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 52p EPA/ROD/R05-92/218
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 66-acre Tri County Landfill (TCL) site comprises two former landfills the Tri County Landfill and the

Elgin Landfill, located near the junction of Kane, Cook and DuPage Counties, Illinois. The two disposal operations overlapped to the point where the two landfills were indistinguishable. Land use in the area is predominantly agricultural. The local residents and businesses use private wells as their drinking water supply. Prior to the 1940's, both landfills were used for gravel mining operations. From 1968 to 1976, the TCL received liquid and industrial waste. State and county inspection reports revealed that open dumping, area filling, and dumping into the abandonded gravel quarry had occurred at the site. In addition, confined dumping, inadequate daily cover, blowing litter, fires, lack of access restrictions, and leachate flows were typical problems reported. In 1981, the landfill was closed with a final cover.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Illinois, Land pollution, Earth fills, Volatile organic compounds, Benzene, Polycyclic aromatic hydrocarbons, Polychlorinated biphenyls, Pesticides, Arsenic, Soil contamination, Water pollution, Ground water, *Record of Decision, First remedial action.

**PB93-964206/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 2), Vermilion Parish, LA. (First Remedial Action), September 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 80p EPA/ROD/R06-92/075
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 12.8-acre Gulf Coast Vacuum Services site is a former vacuum truck and oil field drilling mud plant in Vermilion Parish, Louisiana. From 1969 to 1984, several owners used the site as a trucking terminal for transporting various materials, primarily waste generated from oil exploration and production. The site contains two open waste pits, specifically, the Washout Pit and the West Pit, as well as two areas covered with vegetation, known as the Former West Pit. The ROD provides an interim remedy for OU2, the rainfall accumulation, contaminated overflow, and offsite migration from the Washout and West Pits. The primary contaminants of concern affecting the soil, sludge, and surface water (rainwater) are VOCs, including benzene, PCE, TCE, toluene, and xylenes; other organics, including dioxins, PAHs, PCBs, pesticides, and phenols; and metals, including arsenic, chromium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Surface waters, Rain water, Water pollution, Polychlorinated ethylene, Polycyclic aromatic hydrocarbons, Polychlorinated biphenyls, Terminal facilities, *Record of Decision, *First remedial action, Cleanup, Vermilion Parish(Louisiana), Volatile organic compounds, Ethylene/trichloro.

**PB93-964207/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 1), Vermilion Parish, LA. (Second Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 96p EPA/ROD/R06-92/076
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 12.8-acre Gulf Coast Vacuum Services site is a former vacuum truck and oil field plant in Vermilion Parish, Louisiana. From 1969 to 1980, several owners used the site as a trucking terminal to transport various metals, including waste generated from oil exploration and production activities. The site includes two open waste pits-specifically, the Washout Pit and West Pit-and two vegetated areas, known as the Former West Pit. The ROD addresses the final remedial action for all of the sources of contamination as OU1. The primary contaminants of concern affecting the soil, sediment, pit sludge, and ground water are VOCs, including benzene; other organics, including PCBs and naphthalene; and metals, including arsenic and barium.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Terminal facilities, Soil contamination, Ground water, Sludge, Polychlorinated biphenyls, Metals, *Record of Decision, *Second remedial action, Cleanup, Vermilion Parish(Louisiana), Volatile organic compounds.

**PB93-964208/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 6): Koppers (Texarkana Plant), TX. (First Remedial Action), (Amendment), March 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
4 Mar 92, 49p EPA/ROD/R06-92/068
See also PB89-188817.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 62-acre Koppers (Texarkana Plant) site is a former wood treatment facility located in Texarkana, Texas. From 1910 to 1961, the Koppers Company treated wood onsite using PCP, creosote, and metallic salts. After onsite operations ceased in 1961, the structures were removed and the property was sold for residential and industrial development. The 1992 ROD amendment appends the provisions of the mandate to the remedy, as established in the 1988 ROD. The primary contaminants of concern, as provided in the 1988 ROD, affecting the soil, sediment, debris, and ground water are VOCs, including benzene, toluene, and xylenes; other organics, including PAHs and PCP; and metals, including arsenic.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Industrial wastes, Soil contamination, Ground water, Water pollution, Metals, Polycyclic aromatic hydrocarbons, *Record of Decision, *First remedial action, Cleanup, Texarkana(Texas), Volatile organic compounds, PCP(Pentachlorophenol).

**PB93-964209/REB** PC **A09**/MF **A02**
**Superfund Record of Decision (EPA Region 6): Prewitt Abandoned Refinery, Prewitt, NM. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 188p EPA/ROD/R06-92/074
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 70-acre Prewitt Abandoned Refinery site is an abandoned crude oil refinery near the City of Prewitt in McKinley County, New Mexico. From 1938 to 1957, various companies, including the Atlantic Richfield Company (ARCO) and El Paso Natural Gas (EPNG) Company, used the site for basic refining operations. The ROD addresses remediation of all contaminated media at the site as a final action. The primary contaminants of concern affecting the soil, sludge, and ground water are VOCs, including benzene, TCE, toluene, and xylenes; other organics, including PAHs; metals, including lead; and inorganics, including asbestos.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Petroleum refineries, Soil contamination, Sludge, Ground water, Water pollution, Asbestos, Polycyclic aromatic hydrocarbons, Metals, *Record of Decision, *First remedial action, Cleanup, Prewitt(New Mexico), McKinley County(New Mexico), Volatile organic compounds, Ethylene/trichloro.

**PB93-964210/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 6): Double Eagle Refinery, Oklahoma City, OK. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Sep 92, 80p EPA/ROD/R06-92/073
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 12-acre Double Eagle Refinery (DER) site is a former oil reclamation plant in Oklahoma City, Oklahoma County, Oklahoma. From 1929 to approximately 1970, DER used the site to recycle approximately 600,000 gallons of used oil each month into finished lubricating oil. The ROD addresses a final remedy for OU1, Source Control Operable Unit. The primary contaminants of concern affecting the soil, sediment, sludge, debris, and surface water are VOCs, including benzene and PCE; other organics, including PAHs and PCBs; metals, including arsenic and lead; and acids.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Waste oil refineries, Water pollution, Surface waters, Soil contamination, Sludge, Polycyclic aromatic hydrocarbons, Polychlorinated biphenyls, Polychlorinated ethylene, *Record of Decision, *First remedial action, Cleanup, Oklahoma City(Oklahoma), Volatile organic compounds.

**PB93-964304/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
9 Mar 92, 24p EPA/ROD/R07-92/061
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 2.95-acre Hydro-Flex site, located in Topeka, Kansas, was used for manufacturing flexible copper couplings. From the 1970's to the 1980's, Hydro-Flex discharged an average of 90 gallons per day of process wastewater into an onsite wastewater disposal system consisting of a septic tank with three concrete manholes and a soil absorption field. In 1981, the onsite wastewater disposal ceased and was subsequently taken out of operation when Hydro-Flex was connected to the Topeka sewer system. A PA/SI performed by the state identified sludge and ground water contaminated with chromium and copper. The ROD addresses onsite sludge and ground water. EPA investigations have shown that levels of chromium and copper in the soil are not above naturally occurring levels and, therefore, no longer pose a health threat under current or likely land use conditions. Therefore, there are no contaminants of concern affecting this site.

Keywords: *Kansas, *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Industrial wastes, Sludge, Waste water, Ground water, Soil contamination, Risk assessment, Copper, Chromium, *Record of Decision, *First remedial action, Cleanup, Topeka(Kansas), Drinking water.

**PB93-964305/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 7): Pester Refinery, Butler County, El Dorado, KS. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 64p EPA/ROD/R07-92/060
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 10-acre Pester Refinery site is a former petroleum refining facility located in El Dorado, Butler County, Kansas. Petroleum refining operations in the area began in 1917, and from 1958 to 1977, Fina Oil Company operated a petroleum refinery at this site. Process wastes, such as slop-oil emulsion solids, API separator sludge, and heat exchanger bundle cleaning sludge were sent through a pipe to a burn pond. Gaseous waste products were ignited at the end of the pipe, and whatever did not burn was discharged to the pond. The ROD provides a final remedy for the principal source of contamination at the site, the burn pit sludge. The primary contaminants of concern affecting the soil and sludge are VOCs, including ethylbenzene, toluene, and xylenes; other organics, including PAHs and phenols; and metals, including arsenic, chromium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Petroleum refineries, Soil

contamination, Sludge, Polycyclic aromatic hydrocarbons, Phenols, Metals, *Record of Decision, *First remedial action, Cleanup, El Dorado(Kansas), Butler County(Kansas), Volatile organic compounds.

**PB93-964402/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 8): Denver Radium, Operable Unit 9, Denver, CO. (Eighth Remedial Action), December 1991.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
23 Dec 91, 52p EPA/ROD/R08-92/062
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Denver Radium site is a former radioactive mining site located in Denver, Denver County, Colorado. Industrial activities commenced at the site in 1886 with the construction of the Bailey Smelter. By 1903, the Colorado Zinc Company had constructed a mill on the site of the Bailey Smelter, and zinc milling operations continued until 1910. From 1914 to 1917, the U.S. Bureau of Mines operated a radium processing facility onsite, known as the National Radium Institute (NRI). Other onsite industrial activities included minerals recovery, manufacturing and servicing of storage batteries, treating and sacking of metallic ore insulation, oil reclamation, and landfilling. The ROD addresses approximately 16,500 cubic yards of metal-contaminated soil as OU9, the 9th of 11 OUs planned for the site. The primary contaminants of concern affecting the soil are metals, including arsenic, lead, and zinc.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Metals, Arsenic, Lead(Metal), Zinc, Mine wastes, *Record of Decision, *Eighth remedial action, Cleanup, Denver(Colorado).

**PB93-964403/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 8): Hill Air Force Base, UT. (Second Remedial Action), September 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
25 Sep 92, 38p EPA/ROD/R08-92/066
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 6,700-acre Hill Air Force Base (AFB) is located in north-central Utah, covering portions of Davis and Weber Counties. The Sodium Hydroxide Tank Site is a 29,000-square-foot area that surrounds two 12,000-gallon underground storage tanks (USTs) constructed in the 1950's. The tanks, approximately 5 feet below the ground surface, are used to store sodium hydroxide (NaOH) solution, which is used as an additive in wastewater treatment at the IWTP. In 1980, an estimated 150,000 gallons of NaOH solution leaked from the inlet connections to the tanks over a 1-year period. A second series of leaks occurred in 1984, releasing approximately 132,000 gallons. The interim ROD limits further degradation of ground water quality as a result of NaOH migration through the unsaturated zone. The primary contaminant of concern affecting the soil is an organic, NaOH.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Water pollution control, Air Force facilities, Ground water, Sodium hydroxides, Path of pollutants, Underground storage, Storage tanks, Leakage, Water pollution monitoring, *Record of Decision, *Second remedial action, Cleanup, Hill Air Force Base(Utah), Unsaturated zone.

**PB93-964404/REB** PC **A06**/MF **A02**
**Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), (Operable Unit 4), Golden, CO. (Third Remedial Action), April 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
6 Apr 92, 118p EPA/ROD/R08-92/064
See also PB91-921487.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Rocky Flats Plant (RFP) (USDOE) (OU4) site is part of the 6,500-acre nuclear weapons research, development, production, and plutonium processing complex in Jefferson County, Colorado. Since 1951, the Department of Energy (DOE) has used the site to manufacture components of nuclear weapons; process plutonium; fabricate, machining, and assemble components from metals. The central portion of RFP contains the Solar Evaporation Pond (SEPs) Waste Management Unit, including Ponds 207-A, 207-B North, 207-B Center, 207-B South, 207-C, and the Interceptor Trench System (ITS). The SEPs were formerly used to store and treat liquid process waste having less than 100,000 picocuries (pci/l) per liter of total long-lived alpha activity. The interim ROD addresses management and treatment of liquids contained in ponds 207-A, 207-B North, 207-B Center, 207-B South, and the water collected by the ITS as the OU4 at the site. The primary contaminants of concern affecting the surface water are VOCs, including TCE and carbon tetrachloride; metals, including chromium; and radioactive materials.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Rocky Flats Plant, Nuclear facilities, Surface waters, Radioactive wastes, Metals, Carbon tetrachloride, *Record of Decision, *Third remedial action, Cleanup, Jefferson County(Colorado), Volatile organic compounds, Ethylene/trichloro.

**PB93-964405/REB** PC **A06**/MF **A02**
**Superfund Record of Decision (EPA Region 8): Denver Radium Site, Operable Unit 8, Denver, CO. (Ninth Remedial Action), January 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Jan 92, 104p EPA/ROD/R08-92/063
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 10-acre Denver Radium (Operable Unit 8) site is a former radioactive extraction industry located in Denver, Denver County, Colorado. From the 1920's to 1984, the Shattuck property was used to treat and process molybdenum ores, radium slimes, and uranium compounds and ores. The ROD addresses a final remedy for radioactive contaminated debris, ground water, and soil, as OU8. The primary contaminants of concern affecting the soil, ground water, and debris are inorganics, including asbestos; metals, including arsenic and lead; and radioactive materials.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Inorganic compounds, Metals, Radioactive materials, Soil contamination, Ground water, Debris, *Record of Decision, *Ninth remedial action, Cleanup, Denver(Colorado).

**PB93-964406/REB** PC **A07**/MF **A02**
**Superfund Record of Decision (EPA Region 8): Idaho Pole National Priorities List Site, Bozeman, MT. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Sep 92, 134p EPA/ROD/R08-92/058
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 50-acre Idaho Pole Company (IPC) site is an active wood treatment facility located in Gallatin County, Bozeman, Montana. The IPC wood-treating facility began operation in 1945, using creosote to preserve wood. The spillage of oily wood-treating fluid has resulted in soil, ditch sediment, and ground water contamination both onsite and offsite in the surrounding vicinity. In addition, since the oily wood-treating fluid is lighter or less dense than water, a product layer exists beneath the site, above ground water. The ROD addresses contaminated onsite soil, sediment, and ground water. The primary contaminants of concern affecting these media are organics, including dioxins, oils, PAHs, pesticides, and phenols; and inorganics.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Polycyclic aromatic hydrocarbons, Dioxins, Pesticides, Phenols, Inorganic compounds, Oils, Soil contamination, Sediments, Ground water, *Record of Decision, *First remedial action, Cleanup, Bozeman(Montana), Gallatin County(Montana).

**PB93-964407/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 1, Weber County, UT. (Second Remedial Action), June 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
26 Jun 92, 68p EPA/ROD/R08-92/060
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

Since 1941, the 1,100-acre Ogden Defense Depot (DDOU) site, located in Ogden, Weber County, Utah, has been a key installation in the Department of Defense supply system. Operable Unit 1, which is located in the southwest part of the DDOU, is composed of the backfill material in the Plain City Canal, Burial Site 1, and Burial Site 3-B. Burial Site 1 was reported to have been used for the disposal of riot control agent (chloroacetophenone) and white smoke (hexachloroethane) containers in the 1940's. In the early 1960's, Burial Site 3-B was reportedly the burying ground for over 1,000 arctic-style rubber boots. The ROD addresses a final remedy for OU1 that will reduce the principal threats posed by contaminated soil and shallow ground water at the site. The primary contaminants of concern affecting the soil, debris, and ground water are VOCs, including TCE; other organics, including dioxins and pesticides; and metals, including arsenic and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Utah, Military facilities, Metals, Pesticides, Dioxins, Soil contamination, Ground water, Aquifers, Debris, *Record of Decision, *Second remedial action, Cleanup, Ogden Defense Depot, Volatile organic compounds, Ethylene/trichloro.

**PB93-964408/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 3, Weber County, UT. (Fourth Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Sep 92, 65p EPA/ROD/R08-92/067
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 1,100-acre Ogden Defense Depot (Operable Unit 3) site is a key installation in the Department of Defense (DOD) supply system in Ogden, Weber County, Utah. Since 1941, oily liquid materials and combustible solvents have been burned in pits, and solid materials have been buried onsite, burned, or removed for offsite disposal. From 1942 to 1946, over 1 million pounds of mustard agent were stored at the WW II Mustard Storage Facility. From the 1950's to 1960's, items also were buried intermittently at Burial Site 3-A. The ROD addresses the potential threats to future onsite residents and Depot workers posed by contaminated soil and debris, as OU3. The primary contaminants of concern affecting the soil and debris are organics, including pesticides; metals, including arsenic; and other inorganics.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Utah, Military facilities, Organic materials, Inorganic materials, Pesticides, Metals, Soil contamination, Debris, *Record of Decision, *Fourth remedial action, Cleanup, Ogden Defense Depot.

**PB93-964409/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 4, UT. (Third Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.

28 Sep 92, 76p EPA/ROD/R08-92/061
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 1,100-acre Ogden Defense Depot site has been a key installation in the Department of Defense (DOD) supply system in Ogden, Weber County, Utah. In the past, both liquid and solid materials have been buried, burned, or disposed of in several areas at the Defense Distribution Depot, Ogden, Utah (DDOU). These areas have been divided into four operable units. OU4 is composed of Burial Sites 4-A through 4-E. The ROD addresses the five burial sites as OU4. DDOU's analysis indicated that the soil in Burial Site 4-E is the primary source of ground water contamination, whereas Burial Site 4-A is considered a potential secondary source. OU4 is the third final response action and its goal is to reduce the principal threat posed by contaminated soil and shallow ground water that may occur as a result of future exposure of residents or onsite workers. The primary contaminants of concern affecting the soil, debris, and ground water are VOCs, including benzene; other organics, including pesticides and PCBs; and metals, including arsenic, chromium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Utah, Military facilities, Polychlorinated biphenyls, Pesticides, Metals, Soil contamination, Ground water, Aquifers, Debris, *Record of Decision, *Third remedial action, Cleanup, Ogden Defense Depot, Volatile organic compounds.

**PB93-964410/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 8): Portland Cement Co. (Kiln Dust No. 2 and No. 3), Operable Unit 2, Salt Lake City, UT. (Second Remedial Action), March 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
31 Mar 92, 52p EPA/ROD/R08-92/056
See also PB91-921540.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 71-acre Portland Cement (Kiln Dust No. 2 & No. 3) site, located in a primarily industrial/commercial area of Salt Lake City, Utah, consists of three separate but adjacent properties known as Site 2, Site 3, and the West Site. Between 1959 and 1983, the Portland Cement Company, which was purchased by Lone Star Industries in 1979, deposited approximately 495,000 cubic yards of waste cement kiln dust (CKD) on each of the three properties comprising the site. The ROD addresses the onsite contaminated soil and chrome-bearing bricks that provide a potential source of ground water contamination onsite. The primary contaminants of concern affecting the soil and waste CKD are metals, including arsenic, chromium, and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Kilns, Dust, Industrial wastes, Metals, Arsenic, Chromium, Lead(Metal), Soil contamination, *Record of Decision, *Second remedial action, Cleanup, Salt Lake City(Utah).

**PB93-964411/REB** PC **A19**/MF **A04**
**Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), Operable Unit 2, Golden, CO. (Fourth Remedial Action), September 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
1 Sep 92, 442p EPA/ROD/R08-92/065
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Rocky Flats Plant (USDOE) (Operable Unit 2) site is part of the 6,550-acre Department of Energy (DOE) nuclear weapons research, development, production, and plutonium processing complex in Jefferson County Colorado. Since 1951, DOE has used the site for manufacturing components for nuclear weapons, processing plutonium, and fabricating, machining, and assembling components from metals. The ROD addresses OU2, which includes the 903 Pad and Lip Area, Mound Area, and East Trenches Area, which are located southeast of the Rocky Flats Plant, and provides an interim remedy for contaminated soil and ground water. The primary contaminants of concern affecting the soil and ground water are VOCs including PCE, TCE, toluene, and xylenes; inorganics; metals, including arsenic, chromium, and lead; and radioactive materials.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Rocky Flats Plant, Colorado, Metals, Inorganic compounds, Radioactive materials, Soil contamination, Ground water, *Record of Decision, *Fourth remedial action, Cleanup, Volatile organic compounds.

**PB93-964412/REB** PC **A07**/MF **A02**
**Superfund Record of Decision (EPA Region 8): Silver Bow Creek/Butte Area, MT. (Second Remedial Action), June 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Jun 92, 130p EPA/ROD/R08-92/059
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Silver Bow Creek/Butte Area site is a mining and processing area located 7 miles east of Anaconda in the Upper Clark Fork River Basin, Deer Lodge County, Montana. Site contamination is the result of over 100 years of mining and process operations in the area. Until the early 1970's, mining, milling, and smelting wastes were dumped directly into Silver Bow Creek and transported downstream. The ROD addresses an interim remedy for all media at OU12. The primary contaminants of concern affecting the soil, sediment, ground water, and surface water in the inactive area are metals, including arsenic, chromium, and lead; and inorganics.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Clark Ford River, Silver Bow Creek, Mine wastes, Metals, Inorganic compounds, Soil contamination, Ground water, Surface waters, *Record of Decision, *Second remedial action, Cleanup, Deer Lodge County(Montana).

**PB93-964505/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 9): Hassayampa Landfill, AZ. (First Remedial Action), August 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
6 Aug 92, 64p EPA/ROD/R09-92/082
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Hassayampa Landfill site is a 10-acre area of a 47-acre municipal landfill that was previously used for hazardous waste disposal. Land use in the area is predominantly desert and is sparsely cultivated. The Hassayampa Landfill lies within the Hassayampa River drainage area, but outside of the 100-year floodplain. The estimated 1,100 people who reside within a 3-mile radius of the site use the aquifer underlying the site for their drinking water. From 1961 to the present, the Maricopa County Landfill Department owned and operated the site. Waste disposed of at the landfill consisted chiefly of municipal garbage, tree trimmings, and other plant refuse. In 1979, the state requested that Hassayampa Landfill accept hazardous waste as an alternate waste disposal site during a prohibition at City of Phoenix landfills. In the 18 months that the landfill accepted hazardous waste, up to 3.28 million tons of liquid waste and approximately 4,150 tons of solid waste were deposited.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Water pollution, Ground water, Volatile organic compounds, Chromium, Lead(Metal), *Record of Decision, First remedial action, Hassayampa River(Arizona).

**PB93-964506/REB** PC **A06**/MF **A02**
**Superfund Record of Decision (EPA Region 9): Iron Mountain Mine, Shasta County, CA. (Second Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 107p EPA/ROD/R09-92/083
See also PB87-189999.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 4,400-acre Iron Mountain Mine (IMM) site is a collection of inactive mines and associated property located on Iron Mountain, Shasta County, California. Land use in the area is predominantly commercial, with a wetlands located within 9 miles from the site. The Sacramento River is a major fishery and source of drinking water for the City of Redding, which is located 9 miles east of the site. IMM contains several inactive underground and open pit mines, numerous waste piles, abandoned mining facilities, and mine drainage treatment facilities. From 1979 to present, several owners, including Rhone-Poulenc Basic Chemicals, mined copper and other metals, such as gold, silver, pyrite, and zinc. In 1894, Mountain Mining Company acquired and began operating the mine. Mining waste generated was dumped into ravines and washed into several creeks, including Boulder and Sacramento. The ROD addresses control of the AMD sources in the Boulder Creek drainage basin from the Richmond and Lawson portals. Two planned RODs will address AMD to Slickrock Creek, sources for Boulder Creek drainage (excluded from the ROD), contaminated ground water, and other sources of contamination. The primary contaminants of concern affecting the sediment, debris and surface water are metals, including lead.

Keywords: *Waste disposal, *Pollution control, Wetlands, Potable water, Soil contamination, Sediments, Lead(Metal), Pyrite, Acid mine drainage, Surface waters, *Record of Decision, Shasta County(California), Second remedial action.

**PB93-964507/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 9): Jasco Chemical Company, Mountain View, CA. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 84p EPA/ROD/R09-92/085
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The selected remedial action for this site includes excavating and treating 1,100 cubic yards of contaminated soil onsite using enhanced biotreatment; treating air emissions using carbon adsorption, and treating or disposing of spent carbon offsite; testing residual soil, with pretreatment if necessary, and onsite disposal if treatment levels are met, or offsite disposal if clean up levels are still exceeded; extracting and treating contaminated ground water with an onsite liquid phase carbon adsorption unit, and discharging treated ground water offsite to a sanitary sewer, as permitted; implementing hydraulic controls to prohibit future plume migration, conducting quarterly ground water monitoring; and implementing institutional controls including deed restrictions to limit use of ground water. The estimated present worth cost for this remedial action ranges from $601,000 to $684,000, which includes a $32,800 annual O&M cost for 5-10 years.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Water pollution, Ground water, Volatile organic compounds, Benzene, Toluene, Xylenes, Chemical plants, Paint thinners, Degreasing, Underground storage, Storage tanks, *Record of Decision, First remedial action, Santa Clara County(California).

**PB93-964508/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 9): Purity Oil Sales, Fresno County, CA. (Second Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.

30 Sep 92, 53p EPA/ROD/R09-92/086
See also PB90-186453.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 6.8-acre Purity Oil Sales site is a former waste oil re-refiningfacility in the township of Malaga, Fresno County, California. Land use in the area is mixed agricultural, industrial, and residential, with the North Central Canal flowing along the southern border of the site. The town of Malaga surrounds the site at distances of about 1/2 mile or more. From 1934 to 1975, waste oil was re-refined onsite using a number of treatment processes, including clarification, chemical addition, dehydration, distillation, and filtration. Recent investigations have revealed that the most highly contaminated soil is in the former waste pit areas and extends from the surface to the ground water, and that the eastern 2.5 acres of the property demonstrates surface soil contamination to a 2-foot depth.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Water pollution, Ground water, Benzene, Toluene, Xylenes, Polycyclic aromatic hydrocarbons, Pesticides, Arsenic, Chromium, Lead(Metal), Petroleum refining, *Record of Decision, Second remedial action, Fresno County(California), Malaga(California).

**PB93-964509/REB** PC **A09**/MF **A03**
**Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 3, Sacramento, CA. (Second Remedial Action), December 1991.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
9 Dec 91, 199p EPA/ROD/R09-92/077
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 485-acre Sacramento Army Depot (SAAD) is a U.S. Army support, service, and storage facility located approximately 7 miles southeast of the City of Sacramento, California. Land use in the area is predominantly commercial and light industrial, with residential areas located mainly to the west. An estimated 56,000 people obtain water from a deep aquifer that is not considered to be contaminated by the facility. However, some wells in the surrounding area draw water from the upper aquifers. Past and present activities conducted at SAAD include electro-optics equipment repair, the emergency manufacture of parts, shelter repair, and metal treating. The primary waste-generating activities included metal-plating and painting. The selected remedial action for this site includes constructing and installing an onsite soil vapor extraction system to remove VOCs from contaminated soil; dehumidifying the air stream and treating the collected water vapor using UV/hydrogen peroxide; treating air emissions using granular activated carbon and transporting the residual carbon offsite for recycling and treatment; monitoring air emissions during the treatment process; and sampling media after 6 months to determine compliance with clean-up standards. The estimated present worth cost for the selected remedial action is $614,414. No O&M costs are associated with the selected remedial action.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Water pollution, Ground water, Volatile organic compounds, Xylenes, Pesticides, Lagoons(Ponds), *Record of Decision, Second remedial action, Sacramento(California).

**PB93-964510/REB** PC **A05**/MF **A01**
**Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 4, Sacramento, CA. (Third Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 79p EPA/ROD/R09-92/084
See also PB90-178831.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 485-acre Sacramento Army Depot (SAAD) site is a military facility in Sacramento County, California. Land use in the area is predominantly commercial and light industrial, with wetlands in the vicinity of several oxidation lagoons. The estimated 56,398 people who live within 2 to 3 miles of the site use municipal water as their drinking water supply. From 1950 to 1972, the lagoons received mostly industrial waste water from metal plating processes and domestic wastewater. The selected remedial action for the site includes excavating and treating approximately 15,500 cubic yards of contaminated soil onsite using soil washing; dewatering and then backfilling the treated soil onsite in the excavation areas, and storing the rinsate temporarily in onsite holding tanks for recycling; treating rinsate from the treatment process using chemical precipitation, clarification/flocculation, and chemical coagulation to remove metals, prior to discharge into the sanitary sewer; dewatering the sludge containing the precipitated metals, and stabilizing this if necessary, followed by disposal in an RCRA landfill or recovery at an offsite reclamation unit. The estimated present worth cost for this remedial action is $5,020,000. There are no O&M costs associated with the remedial action.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Water pollution, Lagoons(Ponds), Plating, Volatile organic compounds, Arsenic, Chromium, Lead(Metal), Wetlands, *Record of Decision, Third remedial action, Sacramento County(California).

**PB93-964606/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 10): Arrcom (Drexler Enterprise), Rathdrum, ID. (First Remedial Action), June 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Jun 92, 48p EPA/ROD/R10-92/039
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 1.2-acre Arrcom site is an abandoned waste oil recycling facility located 2.5 miles southwest of Rathdrum, Idaho. From 1960 to 1982, Arrcom used the site for oil recycling operations, which included an oil/water separation process, a shaking process to facilitate sedimentation, and a heating process for demulsification. Waste oil and recycled oil were stored in 27 tanks and 4 tank trucks. Sludge and waste oils were discarded in three disposal pits on the property or used for dust suppression on the road. In 1982, the site was abandoned, and investigations by EPA later that year revealed soil and waste oils contaminated with high levels of solvents, lead, and PCBs. Emergency response activities were conducted under EPA's removal program between 1983 and 1990. The ROD addresses the final remedy for the Arrcom site. Previous removal actions have eliminated the need to conduct remedial action at the site. The selected remedial action for the site is no further action, which is based on the post-removal soil and ground water sampling, supplemental remedial soil and ground water sampling, and the risk assessment. Removal actions onsite have reduced concentrations of contaminants in the soil to levels that do not pose a risk to human health and the environment.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Waste oil refineries, Waste recycling centers, Lead(Metal), Polychlorinated biphenyls, Sludge, Ground water, Soil contamination, Land pollution, Water pollution monitoring, Risk assessment, *Record of Decision, *First remedial action, Cleanup, Rathdrum(Idaho).

**PB93-964607/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 10): Fort Lewis Military Reservation, Landfill No. 5, Pierce County, WA. (First Remedial Action), July 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
10 Jul 92, 66p EPA/ROD/R10-92/049
See also PB91-921542.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 180-acre Fort Lewis (Landfill No. 5) site is located on the west side of the 86,000-acre Fort Lewis Military Reservation in Pierce County, Washington. From 1967 to 1990, the landfill accepted 77,000 tons per year of mixed municipal, industrial, commercial, and residential waste and 188,000 cubic yards per year of demolition waste from the Fort Lewis Military Reservation, the VA Medical Center, and McChord Air Force Base. Dewatered sludge from the Fort Lewis Sewage Treatment Plant was also disposed onsite. In 1985, as part of the closure procedures for the inactive portions of Landfill No. 5, the Army covered the east-west trenches with a multi-layer cap. Ground water modeling conducted from 1980 to 1984 revealed that contaminant concentrations in the ground water did not exceed regulatory standards and will decrease over time because the cap will reduce leachate production. The ROD addresses a final remedy for the inactive portions of the landfill. Recent investigations by the Army indicate that conditions at the site currently pose no unacceptable risks to human health or the environment.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Military facilities, Landfills, Sewage sludge, Municipal wastes, Industrial wastes, Ground water, Water pollution monitoring, Risk assessment, *Record of Decision, *First remedial action, Cleanup, Fort Lewis Military Reservation(Washington), Pierce County(Washington).

**PB93-964608/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 10): Pesticide Laboratory, Yakima, WA. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 22p EPA/ROD/R10-92/042
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 10-acre Pesticide Lab-Yakima site is located at the Yakima Agricultural Research Laboratory (YARL) in Yakima, Yakima County, Washington. The YARL, which has operated since 1961, develops insect control technologies to benefit fruit and vegetable agriculture in the Pacific Northwest. Wastes generated at the site consist of a wide variety of pesticide mixtures, rinsates from the cleaning of sprayers and other equipment, and solvents. In 1980, YARL received interim status under RCRA, however, in 1983, unpermitted discharges led to EPA investigations that revealed evidence of soil and potential ground water contamination from leaching of contaminants through the highly permeable sand and gravel. An RCRA Closure Plan, which was approved in 1990, provided for the removal and disposal of the septic tank contents, excavation and removal of the tank itself, washdown pad removal, additional background soil sampling, excavation and removal of contaminated soil to obtain clean-up levels, conformational soil sampling around the removed structures, installation of the three ground water monitoring wells, and 1 year of ground water sampling. Because all waste residues, contaminated soil, and subsoil have been removed or decontaminated pursuant to RCRA Clean Closure regulations, there are no contaminants of concern affecting this site.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Pesticides, Ground water, Soil contamination, Land pollution, Water pollution monitoring, Risk assessment, *Record of Decision, *First remedial action, Cleanup, Yakima(Washington).

**PB93-964609/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 10): Naval Air Station Whidbey Island - Ault Field, (Operable Unit 1, Area 6), Oak Harbor, WA. (First Remedial Action), April 1992.** Interim rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
21 Apr 92, 32p EPA/ROD/R10-92/034
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 260-acre waste site, a multiple use waste disposal area, is located on Naval Air Station (NAS) Whidbey Island-Ault Field, which is an active airbase northeast of the City of Oak Harbor, Island County, Washington. The northwest sector of the airbase, known as Area 6, maintains and provides support to naval aircraft and aviation facilities. From 1969 to 1988, hazardous wastes were dumped and stored at various pits, trenches, and landfills located in Area 6. The ROD addresses interim remediation of the ground water to prevent the spread of the contaminated plume in the aquifer to drinking water wells while other locations on the airbase are evaluated. The primary contaminants of concern affecting the ground water are VOCs, including TCE; and metals, including chromium and lead.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Naval air stations, Ground water, Aquifers, Water pollution, Metals, Landfills, *Record of Decision, *First remedial action, Cleanup, Oak Harbor(Washington), Island County(Washington), Volatile organic compounds, Ethylene/trichloro.

**PB93-964610/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 10): Umatilla Army Depot (Lagoons), Soils Operable Unit 2, Hermiston, OR. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
25 Sep 92, 54p EPA/ROD/R10-92/051
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Umatilla Army Depot lagoons site is located in the center of the 19,700-acre U.S. Army Depot Activity, Umatilla (UMDA), 5 miles west of Hermiston, in Morrow and Umatilla Counties, Oregon. From the 1950's through 1965, UMDA operated an onsite explosives washout plant, which processed munitions to remove and recover explosives using a pressurized hot water system. An estimated 85,000,000 gallons of effluent were discharged to the lagoons during plant operations. The ROD provides a final remedy for the soil present at the lagoons. The primary contaminants of concern affecting the soil are inorganics and explosives, including DNB, 2, 4-DNT, HMX, NB, TNB, TNT, and RDX.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Oregon, Military facilities, Soil contamination, Inorganic compounds, Chemical effluents, Lagoons, Explosives, *Record of Decision, *First remedial action, Cleanup, Umatilla Army Depot.

**PB93-964611/REB** PC **A08**/MF **A02**
**Superfund Record of Decision (EPA Region 10): Bunker Hill Mining and Metallurgical Complex, Shoshone County, ID. (Second Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
22 Sep 92, 173p EPA/ROD/R10-92/041
See also PB92-964601.
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The Bunker Hill Mining and Metallurgical Complex site, a 21-square-mile area centered around an inactive industrial mining and smelting site, includes the Cities of Kellogg, Page, Pinehurst, Smelterville, Wardner, Shoshone County, Idaho. The inactive several hundred acre industrial complex includes the Bunker Hill mine and mill, a lead and zinc smelter, and a phosphoric acid fertilizer plant. Initially, most solid and liquid residue from the complex was discharged into the river. When the river flooded, these materials were deposited onto the valley floor and were leached into onsite soil and ground water. The primary contaminants of concern affecting the soil, sediment, debris, ground water, and surface water are organics, including PCBs; metals, including arsenic and lead; and inorganics, including asbestos.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Water pollution, Ground water, Sediments, Idaho, Tailings, Lead(Metal), Zinc, Smelters, Polychlorinated biphenyls, Arsenic, Asbestos, *Record of Decision, Second remedial action, Bunker Hill Mine.

**PB93-964612/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 10): Eielson Air Force Base, AK. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
29 Sep 92, 58p EPA/ROD/R10-92/050
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 19,700-acre Eielson Air Force Base (EAFB) site, located 26 miles southeast of Fairbanks, Alaska, is primarily a tactical air support installation. Constructed in 1944, EAFB was originally a satellite installation of Fort Wainwright. Used jointly by the Army and Air Force, the site was designated Eielson AFB in 1948. Many industrial operations were conducted at the base, which generated waste oils, contaminated fuels and sludge, and spent solvents and cleansers. The selected remedial action for the site includes in situ bioventing of BTEX contaminated soil in the vadose zone, with monitoring of soil gases; collecting floating petroleum hydrocarbons from the ground water through wells, culverts, or trenches; incinerating recovered product onsite or transporting the offsite for recycling or disposal; treating extracted ground water, as needed, using air stripping, oil-water separation, or carbon filtration, as determined during the remedial design stage; and discharging the residual water onsite; monitoring petroleum product levels; collecting BTEX-LNAPLS using vacuum extraction wells, with carbon adsorption, followed by offsite disposal of carbon residuals; treating collected liquids using an oil and water separator, air stripper, or carbon adsorption; destroying air emissions using tip flare incineration; and monitoring ground water. The estimated capital cost for the remedial action is $3,867, with an annual O&M cost of $3,375 for 5 years.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Wastes, Sludges, Fuels, Solvents, Aquifers, Soil contamination, Volatile organic compounds, Benzene, Toluene, Xyelenes, Waste oils, *Record of Decision, First remedial action, Eielson Air Force Base(Alaska), Fairbanks(Alaska).

**PB93-964613/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 10): Joseph Forest Products, Wallowa County, OR. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 67p EPA/ROD/R10-92/043
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 18-acre Joseph Forest Products (JFP) site is a wood-processing facility in the City of Joseph, Wallowa County, Oregon. Land use in the area is predominantly industrial and agricultural. The City of Enterprise uses two springs located 4,000 feet from JFP to serve as its municipal water supply. In 1974, and again from 1977 to 1985, Joseph Forest Products, Inc., used the site as a lumber mill, processing wood into lumber products. The selected remedial action for the site includes demolishing contaminated onsite structures, including the process, storage, and mixing tanks, and the wooden structures and concrete slabs, followed by offsite disposal; decontaminating the concrete drip pad and tanks, followed by recycling or offsite disposal of debris; excavating surface and subsurface soil, with screening and segregation of hazardous waste for offsite disposal, with stabilization, if necessary, prior to disposal at appropriate facilities; backfilling any excavated areas; removing asbestos from the facility, with offsite disposal; removing underground storage tanks and any associated contaminated soil, with scrapping or offsite disposal; monitoring ground water; and implementing institutional controls, including deed and land use restrictions or environmental notices. The estimated capital cost for this remedial action is $550,000, with an annual O&M cost of $24,000 for 3 years.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Soil contamination, Arsenic, Chromium, Lead(Metal), Asbestos, Lumber, Sawmills, Soil contamination, Surface water, Sludges, *Record of Decision, First remedial action.

**PB93-964614/REB** PC **A04**/MF **A01**
**Superfund Record of Decision (EPA Region 10): McChord AFB, Washrack Treatment Area, WA. (First Remedial Action), September 1992.** Final rept.
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Sep 92, 70p EPA/ROD/R10-92/048
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 4,600-acre McChord Air Force Base (AFB) is located in Pierce County, Washington. The site contains a 22-acre parcel of land, referred to as the Site 54 Washrack Treatment Area (WTA), which contains weapon and aircraft maintenance facilities. From 1957 to 1985, several site areas, including Sites 54 and 60, were identified as waste spill and disposal areas. Floating fuel was identified as underlying a 300,000-square-foot area of the site, which resulted from unrecorded spills. The ROD addresses remediation of the excavated soil and the NAPL-contaminated ground water at Site 54. The primary contaminants of concern affecting the soil and ground water are VOCs; organics, including oils; and metals, including lead. The selected remedial action for the site includes excavating, consolidating, and treating fuel-contaminated soil onsite with ex-situ bioremediation, then backfilling the treated soil into an onsite trench; installing passive subsurface extraction trenches to collect LNAPLs, with onsite separation using fuel skimmers; and transporting the recovered fuel offsite in drums to either a recycling facility.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Waste treatment, Air Force facilities, Soils, Ground water, Volatile organic compounds, Oils, Lead(Metal), Gasoline, Excavation, Separation, Waste treatment, Fuels, Soils, Backfills, Drums, Waste recycling, *Record of Decision, First remedial action-Final, *Pierce County(Washington State).

**PB93-964615/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 2, ID. (Third Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
28 Sep 92, 49p EPA/ROD/R10-92/045
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 890-square mile Idaho National Engineering Laboratory (INEL) is located 32 miles west of Idaho Falls, Idaho. The site, established in 1949, is operated as a nuclear reactor technology development and waste management facility by the U.S. Department of Energy. Land use in the area is predominantly industrial and mixed use. The site overlies a sole source Class I aquifer, the Snake River Plain Aquifer. A 10-mile-square area within the INEL complex, referred to as Test Area North (TAN), was built in the 1950's to support the Aircraft Nuclear Propulsion Program sponsored by the U.S. Air Force and Atomic Energy Commission. The selected remedial action for the site includes pumping the contaminated ground water from the injection well and treating the ground water onsite using filtration to remove suspended solids, followed by air stripping and carbon adsorption to remove organics, and ion exchange to remove inorganics and radionuclides; modifying the existing TAN onsite disposal pond to receive treated ground water and ensure that it does not exceed discharge limits; transporting any spent carbon offsite to a permitted facility for regeneration; installing two additional ground water monitoring wells within the contaminant plume; monitoring air emissions; and implementing administrative and institutional controls, including ground water use restrictions.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, US DOE, Radioactive wastes, Volatile organic compounds, Lead(Metal), Chromium, Mercury(Metal), Tritium, Strontium, *Record of Decision, Third remedial action.

**PB93-964616/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 22, ID. (Fourth Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
30 Sep 92, 37p EPA/ROD/R10-92/046
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 890-square mile Idaho National Engineering Laboratory (INEL), located 32 miles west of Idaho Falls, Idaho, is operated by the U.S. Department of Energy. Land use in the area is predominantly industrial and mixed use. The site overlies a sole source Class I aquifer, known as the Snake River Plain Aquifer. Within INEL, an area known as the Power Burst Facility (PBF) operated from 1972 to 1985 and supported the testing of pressurized-water fuel rods under hypothetical reactor accidents. The selected interim remedial action for this site includes removing and solidifying/stabilizing the 100 cubic yards of contaminated sediment from the evaporation pond by grouting, followed by onsite disposal in the Radioactive Waste Management Complex (RWMC) at INEL along with existing low-level waste containers; removing sludge and sediment from the waste sump; treating the sludge by grouting, if feasible, based on the results of treatability studies, and disposing of the treated sludge onsite in RWMC; decontaminating the discharge pipe; and sampling the remaining sediment to verify residual contaminant concentrations. The estimated total cost for the remedial action is $480,000. No O & M were provided for the remedial action.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Idaho, Sludges, Radioactive wastes, Corrosion inhibitors, Nuclear reactors, Soil contamination, *Record of Decision, Fourth remedial action, Snake River Plain Aquifer.

**PB93-964617/REB** PC **A03**/MF **A01**
**Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 23, ID. (Second Remedial Action), June 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
2 Jun 92, 30p EPA/ROD/R10-92/040
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The US DOE Idaho National Engineering Laboratory (INEL), established in 1949, is located 32 miles west of Idaho Falls, Idaho. The facility occupies 890 square miles, and land use in the area is predominantly industrial. The Snake River Plain Aquifer, which underlies the INEL, has been designated as a sole source, Class I, aquifer pursuant to the Safe Drinking Water Act. Within the INEL is a 270-square-mile area, formerly known as the Naval Proving Ground (NPG), which was used prior to World War II for naval artillery testing, explosives, storage bunker testing, and ordnance disposal. Investigations by site personnel have resulted in the discovery of numerous unexploded ordnance devices, such as 3- to 16-inch artillery shells, partially exploded 125- to 2,000-pound bombs, anti-tank mines, and depth charges. The ROD addresses OU23, which covers six locations on the site: the CFA gravel pit, the storage bunkers north of Idaho Chemical Processing Plant, the National Oceanic and Atmospheric Grid, CFA Building 633 Zone, Fire Station II Zone, and Power Line Road.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Idaho, Explosives, Bombs(Ordnance), Mines(Ordnance), Projectiles, Depth charges, Soil contamination, *Record of Decision, Snake River Plain Aquifer, Second remedial action.

**PB93-964618/REB** PC **A07**/MF **A02**
**Superfund Record of Decision (EPA Region 10): Wyckoff/Eagle Harbor, WA. (First Remedial Action), September 1992.**
Environmental Protection Agency, Washington, DC. Office of Emergency and Remedial Response.
29 Sep 92, 127p EPA/ROD/R10-92/047
Available on Standing Order, deposit account required for all RODS is $700 for U.S., Canada, and Mexico; all others $1,400. Deposit required for each region, $200 U.S., Canada, and Mexico; all others $400. Also available individually in paper copy or microfiche.

The 3,780-acre Wyckoff/Eagle Harbor site is located on the east side of Bainbridge Island, in Central Puget Sound, Kitsap County, Washington. The site consists of an inactive 40-acre wood treating facility owned by Wyckoff, the adjacent 500-acre Eagle Harbor and other upland sources of contamination to the Harbor, including a former shipyears. The selected remedial action for this site includes dredging, dewatering, excavating approximately 1,000 to 7,000 cubic yards of intertidal sediment that exceed levels of 5 mg/kg mercury and/or lower moderate PAH concentrations, followed by treatment using solidification/stabilization, if necessary, to comply with LDR as determined by bench scale tests; transporting sediment, which cannot be treated to meet LDR offsite for disposal at a RCRA-permitted landfill; treating wastewater from the dewatering process using carbon adsorption before discharge into the harbor; capping over sediment in areas of high concern with a 1-meter thick layer of clean sediment; placing a thin layer of clean sediment in subtidal areas of low to moderate concern to enhance natural sediment recovery; conducting long-term environmental monitoring; and implementing institutional controls to prevent exposure to contaminated fish and shellfish. The estimated present worth cost for this remedial action ranges from $6,200,000 to $16,000,000 which includes a present worth O&M cost of $1,100,000 for 10 years.

Keywords: *Superfund, *Hazardous materials, *Waste disposal, *Pollution control, Polycyclic aromatic hydrocarbons, Arsenic, Chromium, Lead(Metal), Shipyards, Creosote, Sediments, Wood preservatives, *Record of Decision, Kitsap County(Washington), Eagle Harbor(Washington), First remedial action.

**PB94-963201/REB** PC **A01**/MF **A01**
**Superfund Accelerated Cleanup Model (SACM) Coordination Strategy.** Directive.
Environmental Protection Agency, Washington, DC. Office of Solid Waste and Emergency Response.
14 Sep 93, 4p OSWER-9203.1-11
Paper copy available on Standing Order, deposit account required (minimum deposit $200 U.S., Canada, and Mexico; all others $400). Single copies also available in paper copy or microfiche.

The memorandum introduces a coordination strategy that is designed to promote the implementation of the Superfund Accelerated Cleanup Model (SACM).

Keywords: *Superfund, *Hazardous materials, *Waste management, *Directives, Regions, Coordination, Strategy, Models, US EPA, Government policies, Workers, Communicating, Relationships, *Cleanup.

**AD-A267 517/1/REB** PC **A03**/MF **A01**
**Federal Consistency Guidance: Federal Consistency with State Nonpoint Source Management Programs.** Final rept.
Environmental Protection Agency, Washington, DC.
Aug 89, 26p

No abstract available.

Keywords: *Environmental protection, State law, Federal law, Clean Water Act, NPS(State Nonpoint Sources), *NPS Management program, Environmental protection agency.

**DE93014387/REB** PC **A03**/MF **A01**
Department of Energy, Washington, DC.
**Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.** Bibliography.
Oak Ridge National Lab., TN.
D. W. Yarbrough. Dec 92, 34p EPA-600/R-92-203, ORNL/M-2426
Contract AC05-84OR21400
Sponsored by Department of Energy, Washington, DC.

This review of the literature on heat flow through powders was motivated by the use of fine powder systems to produce high thermal resistivities (thermal resistance per unit thickness). The term "superinsulations" has been used to describe this type of material, which has thermal resistivities in excess of 20 ft(sup 2)-h-F/Btu (3.52 K-m(sup 2/)W) per inch (2.54 cm) of insulation thickness. The present report is concerned with superinsulations obtained using evacuated powders. The literature review has shown that the calculation of heat flow through gas-powder systems is highly developed. One major weakness in the calculational procedures is the absence of structural features for the powders, which are invariably characterized as regular arrays of spheres or cubes rather than random irregularly shaped particles. The effect of particle size distribution on the shape and size of void spaces is not modeled, although it affects the thermal conductivity of the gas. Calculations of thermal performance based on simplified descriptions of the porosity distribution can be used to show the dependence of thermal resistance on interstitial gas pressure. The literature reviewed in this report provides a basis for predicting the interstitial gas pressure at which thermal conductivity begins to increase. The objective is to design filler material for powder insulation systems with ultrafine void spaces that will permit pressure increases without dramatic thermal conductivity increases.

Keywords: *Powders, *Thermal Insulation, *Bibliographies, Heat Flux, Heat Transfer, Particle Size, *Reviews, *Thermal Conductivity, Two-Phase Flow, EDB/320106.

**DE93500869/REB** PC **A03**/MF **A01**
**Foerbraenning av sorterat industriavfall. Huvudrapport. (Incineration of sorted industrial wastes. Main report).**
Swedish Environmental Protection Agency, Solna.
Nov 92, 39p SNV-4160, NUTEK-AVF-93-1, RVF-92-17
Swedish. Also pub. as ISBN 91-620-4160-6.

The aim of the project has been to evaluate suitable combustion technologies and environmental consequences of waste incineration, and to suggest classification criteria of sorted industrial wastes. Industrial wastes have been sampled at six swedish sites with already established programs, and transported to one of these sites for incineration tests. For each of the six different waste categories the following properties were determined: Calorific content, Carbon dioxide emission, Ash composition, Flue gas emissions, and Incinerator design. (12 figs., 14 tabs.).

Keywords: *Industrial Wastes, Cadmium, Calorific Value, Carbon Dioxide, Combustion, Emission, Hydrochloric Acid, *Incinerators, Lead, Mercury, Sorting, Sulfur, Sweden, *Foreign technology, EDB/092000.

**DE93500872/REB** PC **A03**/MF **A01**
**Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).**
Swedish Environmental Protection Agency, Solna.
T. Viberg, and T. Oehrstroem. Sep 92, 34p SNV-4161, NUTEK-AVF-93-1, RVF-92-17-1, , MKS-92-74
Swedish.

Characterization and preparation of industrial wastes from several different swedish sources for use in incineration plants are described. Comparative combustion tests were performed at the Borlaenge incineration plant. Each waste-type was analyzed according to its content of wood, paper, laminates, plastics, rubbers, textiles, metals, and other combustible/non-combustible materials. (16 figs., 10 tabs.).

Keywords: *Industrial Wastes, Ash Content, Calorific Value, Classification, Comminution, Moisture, Paper, Plastics, Rubbers, Sampling, Sorting, Sulfur, Sweden, Textiles, Wood Wastes, *Foreign technology, EDB/091000, *Incineration.

**DE93500877/REB** PC **A04**/MF **A01**
**Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).**
Swedish Environmental Protection Agency, Solna.
J. Bergstroem, and T. Oehrstroem. Sep 92, 74p SNV-4162, NUTEK-AVF-93-1, RVF-92-17-2, , MKS-93-83

Swedish.

Industrial wastes of different provenance (six in all, and one mixture of two of those) were incinerated in a testing campaign for 24 hours each. In this report, measurements from the tests are reviewed, including flue gas emissions, ash and slag analysis, heat and moisture content of the fuel, and analysis of organic chlorine compounds and trace metals. (13 figs., 59 tabs.).

Keywords: *Industrial Wastes, Ash Content, Calorific Value, Emission, Hydrochloric Acid, Incinerators, Moisture, Nitrogen Oxides, Performance Testing, Sorting, Sulfur, *Foreign technology, EDB/092000, *Incineration.

**N93-30052/3/REB** PC **A02**/MF **A01**
National Aeronautics and Space Administration, Washington, DC.
**Search for Radiative Neutrino Decay from Supernovae.**
New Hampshire Univ., Durham.
R. S. Miller, and R. C. Svoboda. 1993, 6p NAS 1.26:193118, LSU-HEPA-93-7, NASA-CR-193118
Contract NAG5-2062

This document presents the data analysis procedures proposed for use with the COMPTEL instrument aboard the Compton Gamma Ray Observatory (GRO) in the search for radiative neutrino decay from supernovae. The proposed analysis methodology is an extension of a standard procedure used by the COMPTEL team in searching for a variety of source types. We have applied the procedures to a set of simulated data to demonstrate the feasibility of the method to this project.

Keywords: Computerized simulation, Emission spectra, Energy spectra, *Gamma ray astronomy, *Gamma rays, Mathematical models, *Neutrinos, Radioactive decay, Spectrum analysis, Stellar radiation, Stellar spectra, *Supernovae, Data processing, Data reduction, Feasibility analysis, Gamma ray observatory.

# TITLE INDEX

Reports are listed alphabetically by title. A, An, and The at the beginning of a title are ignored in alphabetizing.

## SAMPLE ENTRY

| | |
|---|---|
| Title | **Sensitivity of Ecological Landscapes and Regions to Global Climatic Change.** |
| NTIS Order Number/Media Codes Price Codes | PB90-120072/REB PC A09/MF A01 |

# TITLE INDEX

3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
PB93-217669/REB 93-04 PC **A12**/MF **A03**

32P-Postlabeling in Studies of PAH Activation.
PB93-106631/REB 93-01 PC **A03**/MF **A01**

Aatgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC **A14**/MF **A03**

Abstract Proceedings: Superfund Technical Support Project General Meeting. Held in Athens, Georgia on December 3-6, 1990.
PB93-205862/REB 93-04 PC **A03**/MF **A01**

Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02**/MF **A01**

Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

Acid Aerosol Measurement Methods: A Summary of U.S. EPA Intercomparisons.
PB93-221885/REB 93-04 PC **A02**/MF **A01**

Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC **A03**/MF **A01**

Acid Precipitation in North America: 1986 Annual and Seasonal Data Summaries from Acid Deposition System Data Base.
PB93-223154/REB 93-04 PC **A04**/MF **A01**

Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC **A03**/MF **A01**

Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.
PB93-236305/REB 93-04 PC **A03**/MF **A01**

Acute and Delayed Effects of Diisopropyl Fluorophosphate on Body Temperature, Heart Rate and Motor Activity in the Awake, Unrestrained Rat.
PB93-228971/REB 93-04 PC **A03**/MF **A01**

Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC **A03**/MF **A01**

Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC **A03**/MF **A01**

Adding a Landscape Ecology Perspective to Conservation and Management Planning.
PB93-234516/REB 93-04 PC **A03**/MF **A01**

Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02**/MF **A01**

ADL Migration Estimation Model (for Microcomputers) (Release Number 1).
PB93-500684/REB 93-01 CP **D02**

Advacate-Low-Cost Process for SO2 Control.
PB93-141117/REB 93-01 PC **A02**/MF **A01**

Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC **A03**/MF **A01**

Advanced Utility Simulation Model. Project Summary.
PB93-222636/REB 93-04 PC **A02**/MF **A01**

Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC **A03**/MF **A01**

Aeros Manual Series. Volume 5. Aeros Manual of Codes. Update Number 9.
PB93-200798/REB 93-01 PC **A10**/MF **A03**

Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03**/MF **A01**

Aerosol Measurement: Principles, Techniques, and Applications.
PB93-212827/REB 93-04 PC **A03**/MF **A01**

Age-Related Changes in Disposition and Metabolism of Benzene in Male C57BL/6N Mice.
PB93-107191/REB 93-01 PC **A02**/MF **A01**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
PB93-128015/REB 93-01 PC **A04**/MF **A01**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC **A04**/MF **A01**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
PB93-128031/REB 93-01 PC **A06**/MF **A02**

Agricultural Pesticide Emissions Associated with Common Crops in the United States.
PB93-173136/REB 93-01 PC **A03**/MF **A01**

Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
PB93-141554/REB 93-01 PC **A02**/MF **A01**

Air Emissions Testing.
PB93-180933/REB 93-01 PC **A02**/MF **A01**

Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC **A02**/MF **A01**

Air monitoring in the Arctic: 1980-90.
DE92563060/REB 93-01 PC **A03**/MF **A01**

Air pollutants in urban areas. A bibliography 1985-1991.
DE93769990/REB 93-01 PC **A04**/MF **A01**

Air Quality Criteria for Carbon Monoxide.
PB93-167492/REB 93-01 PC **A99**/MF **A06**

Air/Superfund National Technical Guidance Study Series. Air Emissions from Area Sources: Estimating Soil and Soil-Gas Sample Number Requirements.
PB93-173995/REB 93-01 PC **A04**/MF **A01**

Air/Superfund National Technical Guidance Study Series: Applicability of Open Path Monitors for Superfund.
PB93-138154/REB 93-01 PC **A07**/MF **A02**

Air/Superfund National Technical Guidance Study Series: Compilation of Information on Real-Time Air Monitoring for Use at Superfund Sites.
PB93-199222/REB 93-04 PC **A05**/MF **A02**

Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.
PB93-215648/REB 93-04 PC **A03**/MF **A01**

Air/Superfund National Technical Guidance Study Series: Evaluation of Short-Term Air Action Levels for Superfund Sites.
PB93-200913/REB 93-01 PC **A14**/MF **A03**

Air/Superfund National Technical Guidance Study Series. Models for Estimating Air Emission Rates from Superfund Remedial Actions.
PB93-186807/REB 93-01 PC **A08**/MF **A02**

Air/Superfund National Technical Guidance Study Series. Volume 1. Overview of Air Pathway Assessments for Superfund Sites (Revised).
PB93-173987/REB 93-01 PC **A05**/MF **A01**

Air/Superfund National Technical Guidance Study Series. Volume 4. Guidance for Ambient Air Monitoring at Superfund Sites (Revised).
PB93-199214/REB 93-01 PC **A08**/MF **A02**

Air Toxics: The Research Challenge of the 1990 Clean Air Act Amendments.
PB93-106664/REB 93-01 PC **A02**/MF **A01**

Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
PB93-227551/REB 93-04 PC **A06**/MF **A02**

Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.
PB93-218501/REB 93-04 PC **A07**/MF **A02**

Airborne Particle Sizes and Sources Found in Indoor Air.
PB93-107019/REB 93-01 PC **A03**/MF **A01**

Alternate Performance Standard Project: Interpreting the Post-Construction Test.
PB93-175529/REB 93-01 PC **A03**/MF **A01**

Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
PB93-122307/REB 93-01 PC **A03**/MF **A01**

Alternating Current Electrocoagulation for Superfund Site Remediation.
PB93-205144/REB 93-04 PC **A02**/MF **A01**

Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.
PB93-212785/REB 93-04 PC **A03**/MF **A01**

Alternative Control Techniques Document-NOx Emissions from Process Heaters.
PB93-186211/REB 93-01 PC **A10**/MF **A03**

Alternative Control Techniques Document. NOx Emissions from Stationary Gas Turbines.
PB93-156586/REB 93-01 PC **A11**/MF **A03**

Alternative Control Technology Document: Carbon Reactivation Processes.
PB93-180826/REB 93-01 PC **A06**/MF **A02**

Alternative Control Technology Document: Control of VOC Emissions from the Application of Agricultural Pesticides.
PB93-199131/REB 93-01 PC **A12**/MF **A03**

Always a River: Supplemental Environmental Education Curriculum on the Ohio River and Water Grades K-12.
PB93-200905/REB 93-01 PC **A14**/MF **A03**

Ambient Aquatic Life Water Quality Criteria for Antimony (III).
PB93-202778/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Di-2-Ethylhexyl Phthalate.
PB93-202752/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Hexachlorobenzene.
PB93-202760/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Silver.
PB93-202604/REB 93-01 PC **A06**/MF **A02**

Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC **A03**/MF **A01**

Ambient Water and Sediment Quality of Galveston Bay: Present Status and Historical Trends. Volume 1.
PB93-205789/REB 93-04 PC **A09**/MF **A03**

Amendment to Historical Definitions of NPL Deletion Start and Completion Dates.
PB93-963278/REB 93-01 PC **A01**/MF **A01**

America's Wetlands: Our Vital Link between Land and Water.
PB93-206399/REB 93-04 PC **A02**/MF **A01**

Ammonia Abatement System for Whole-Body Small Animal Inhalation Exposures to Acid Aerosols.
PB93-229516/REB 93-04 PC **A03**/MF **A01**

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown Refinery. Refinery Release Inventory.
PB92-228550/REB 93-01 PC **A12**/MF **A03**

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown, Virginia. Ecological Impacts of the Yorktown Refinery on the York River Estuarine Environment.
PB92-228634/REB 93-01 PC **A05**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Executive Summary (Revised May 1992).
PB92-228519/REB 93-01 PC **A03**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Groundwater and Soil Data.
PB92-228576/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Measurements of Hydrocarbon Emissions and Ambient Air Concentrations at the Amoco Yorktown Refinery. Air Quality Data. Volume 1.
PB92-228592/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Pollution Prevention Workshop.
PB92-228543/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Project Peer Review. Report of the Peer Review Committee of the Amoco/EPA Pollution Prevention Project at the Yorktown, Virginia Refinery.
PB92-228618/REB 93-01 PC **A10**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Public Perceptions. Report of Observations, Thoughtleader Interviews and Focus Groups Yorktown Refinery Public Perception Study.
PB92-228642/REB 93-01 PC **A99**/MF **A06**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Solid Waste Data.
PB92-228568/REB 93-01 PC **A05**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Surface Water Data.
PB92-228584/REB 93-01 PC **A08**/MF **A02**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC **A08**/MF **A02**

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Air Quality Data. Volume 2.
PB92-228600/REB 93-04 PC **A16**/MF **A03**

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Project Summary.
PB92-228527/REB 93-01 PC **A08**/MF **A02**

# TITLE INDEX


Anaerobic Dehalogenation and Its Environmental Implications. Abstracts of 1992 American Society for Microbiology Conference. Held in Athens, Georgia on August 30-September 4, 1992.
PB93-217792/REB 93-04 PC **A04**/MF **A01**

Analysis of Acid Precipitation Samples Collected by State Agencies. Sampling Period: January-December 1990.
PB93-144152/REB 93-01 PC **A12**/MF **A03**

Analysis of Atmospheric Deposition Samples from Easton, Pennsylvania.
PB93-181600/REB 93-01 PC **A04**/MF **A01**

Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03**/MF **A01**

Analysis of DNA Strand Breaks Induced in Rodent Liver In vivo, Hepatocytes in Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC **A03**/MF **A01**

Analysis of IAQ Control Options and the Effects of Sources and Sinks.
PB93-131647/REB 93-01 PC **A02**/MF **A01**

Analysis of Original Equipment and Aftermarket Manufacturer Oxygen Sensor Constructional, Functional, and Price Differences.
PB93-208007/REB 93-04 PC **A18**/MF **A04**

Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC **A07**/MF **A02**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit.
PB93-168839/REB 93-01 PC **A02**/MF **A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit (May 1993).
PB93-221869/REB 93-04 PC **A03**/MF **A01**

Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC **A03**/MF **A01**

Analytical Methods for the National Sewage Sludge Survey.
PB93-236024/REB 93-04 PC **A12**/MF **A03**

Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.
PB93-222354/REB 93-04 PC **A03**/MF **A01**

Animal Models for Assessing the Neurobehavioral Impact of Airborne Pollutants.
PB93-107233/REB 93-01 PC **A03**/MF **A01**

Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC **A03**/MF **A01**

Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04**/MF **A01**

Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC **A02**/MF **A01**

Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
PB93-115806/REB 93-01 PC **A05**/MF **A01**

Application of a Data-Assimilating Prognostic Meteorological Model to Two Urban Areas.
PB93-126571/REB 93-01 PC **A05**/MF **A01**

Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
PB93-141463/REB 93-01 PC **A02**/MF **A01**

Application of DNA Probes to Analysis of Bacteriophage Distribution Patterns in the Environment.
PB93-121200/REB 93-01 PC **A02**/MF **A01**

Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC **A03**/MF **A01**

Application of the Ecotone Concept in Defining Nutrient Management Requirements for the Upper Potomac River Basin.
PB93-199560/REB 93-01 PC **A03**/MF **A01**

Application of the 'Tradescantia micronucleus' Assay for the Genetic Evaluation of Chemical Mixtures in Soil and Aqueous Media.
PB93-141380/REB 93-01 PC **A02**/MF **A01**

Applications Analysis Report: Silicate Technology Corporation's Solidification/Stabilization Technology for Organic and Inorganic Contaminants in Soils.
PB93-172948/REB 93-01 PC **A07**/MF **A02**

Applications of Pulse Combustion in Industrial and Incineration Processes.
PB93-131639/REB 93-01 PC **A03**/MF **A01**

Applied Geologic, Microbiological, and Engineering Constraints of In-situ BTEX Bioremediation.
PB93-141513/REB 93-01 PC **A03**/MF **A01**

Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.
PB93-234490/REB 93-04 PC **A03**/MF **A01**

Aquatic Toxicity Information on VAX VMS Backup (AQUIRE for VMS).
PB93-505733/REB 93-01 CP **T02**

Aquatic Toxicity Information Retrieval Data Base: A Technical Support Document. (Revised July 1992).
PB93-192631/REB 93-04 PC **A03**/MF **A01**

Aquatic Toxicity Information Retrieval Data Base (AQUIRE).
PB93-505725/REB 93-04 CP **T02**

ARARs Fact Sheet: Compliance with the Clean Air Act and Associated Air Quality Requirements.
PB92-963282/REB 93-01 PC **A03**/MF **A01**

Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08**/MF **A02**

Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13**/MF **A03**

Armitage-Doll Two-Stage Model: Implications and Extension.
PB93-222842/REB 93-04 PC **A02**/MF **A01**

Aromatic Hydrocarbon Degradation: A Molecular Approach.
PB93-229433/REB 93-04 PC **A03**/MF **A01**

Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC **A02**/MF **A01**

ASESS 1.01A (3 1/2 Inch Diskette) (for Microcomputers).
PB93-505154/REB 93-01 CP **D02**

ASHRAE Standard 62: Ventilation for Acceptable Indoor Air Quality.
PB93-106797/REB 93-01 PC **A03**/MF **A01**

ASSESS User's Guide.
PB93-163251/REB 93-01 PC **A03**/MF **A01**

ASSESS 1.01A (5 1/4 Inch Diskette) (for Microcomputers).
PB93-505295/REB 93-01 CP **D02**

Assessing Potential Exposures from Routine Use of VOC-Contaminated Groundwater.
PB93-173060/REB 93-01 PC **A02**/MF **A01**

Assessing Potential Indoor Air Impacts for Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-122257/REB 93-01 PC **A09**/MF **A03**

Assessing the Environmental Consumer Market.
PB93-116028/REB 93-01 PC **A03**/MF **A01**

Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.
PB93-228948/REB 93-04 PC **A03**/MF **A01**

Assessment and Control of Bioconcentratable Contaminants in Surface Waters.
PB93-229613/REB 93-04 PC **A13**/MF **A03**

Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Guidance.
PB93-154730/REB 93-01 PC **A10**/MF **A03**

Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Initiative Guidance (for Microcomputers).
PB93-505394/REB 93-04 CP **D02**

Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
PB93-222024/REB 93-04 PC **A02**/MF **A01**

Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03**/MF **A01**

Association of Personal and Workplace Characteristics with Reported Health Symptoms of 6771 Government Employees in Washington, DC.
PB93-212264/REB 93-04 PC **A02**/MF **A01**

Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC **A02**/MF **A01**

Atmopheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
PB93-121069/REB 93-01 PC **A02**/MF **A01**

Atmospheric Chemistry and Physical Fate of HCFCs and HFCs and Their Degradation Products.
PB93-131449/REB 93-01 PC **A03**/MF **A01**

Atmospheric Deposition of Toxic Metals to Lake Michigan: Preliminary Annual Model Calculations.
PB93-120954/REB 93-01 PC **E02**/MF **A01**

Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
PB93-175503/REB 93-01 PC **A03**/MF **A01**

ATSDR Health Consultations under CERCLA.
PB93-963334/REB 93-01 PC **A01**/MF **A01**

Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02**/MF **A01**

AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
PB93-100113/REB 93-01 PC **A10**/MF **A03**

AutoMOUSE (Modular Oriented Uncertainty SystEm) - An Improvement to the MOUSE Computerized Uncertainty Analysis Program (for Microcomputers).
PB93-500007/REB 93-01 CP **D03**

Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
PB93-212652/REB 93-04 PC **A03**/MF **A01**

Babcock and Wilcox Cyclone Furnace Vitrification Technology: Applications Analysis Report.
PB93-122315/REB 93-01 PC **A03**/MF **A01**

Babcock and Wilcox Cyclone Furnace Vitrification. Technology Demonstration Summary.
PB93-145621/REB 93-01 PC **A02**/MF **A01**

Bacillus thuringiensis var. kurstaki Affects a Beneficial Insect, the Cinnabar Moth (Lepidoptera: Arctidae).
PB93-199651/REB 93-01 PC **A02**/MF **A01**

Background Information Document to Support NESHAPS Rulemaking on Nuclear Power Reactors.
PB93-199321/REB 93-01 PC **A14**/MF **A03**

Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

Baseline Emissions Forecasts for Industrial Non-Boiler Sources. Project Summary.
PB93-222560/REB 93-04 PC **A01**/MF **A01**

Baseline Point Source Load Inventory, 1985. 1991 Reevaluation Report No. 2.
PB93-193761/REB 93-01 PC **A03**/MF **A01**

Basic Concepts of Contaminant Sorption.
PB93-146835/REB 93-01 PC **A01**/MF **A01**

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC **A10**/MF **A03**

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC **A15**/MF **A03**

Behavior of Metals in Soils.
PB93-131480/REB 93-01 PC **A03**/MF **A01**

Behavioral Development Following Daily Episodes of Mother-Infant Separation in the Rat.
PB93-141406/REB 93-01 PC **A01**/MF **A01**

Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-228450/REB 93-04 PC **A02**/MF **A01**

Benefits and Feasibility of Effluent Trading between Point Sources: An Analysis in Support of Clean Water Act Reauthorization.
PB93-217636/REB 93-04 PC **A04**/MF **A01**

Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC **A01**/MF **A01**

Benzene Equipment Leak Inspection Manual.
PB93-199123/REB 93-01 PC **A06**/MF **A02**

Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. aeschynomene' Transformants with Benomyl Resistance.
PB93-212629/REB 93-04 PC **A02**/MF **A01**

Biennial Reporting System (BRS) 1989 (Date of Coverage: 1989).
PB93-507044/REB 93-04 CP **T04**

Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03**/MF **A01**

Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Chlorinated Organic Compounds by 'Phanerochaete chrysosporium', a Wood-Rotting Fungus.
PB93-204147/REB 93-01 PC **A03**/MF **A01**

Biodegradation of Crystal Violet by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191609/REB 93-01 PC **A02**/MF **A01**

Biodegradation of DDT (1,1,1-Trichloro-2,2-Bis(4-Chlorophenyl)Ethane) by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191617/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191351/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium': Involvement of the Lignin Degrading System.
PB93-191583/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191559/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Polycyclic Aromatic Hydrocarbons by 'Phanerochaete chrysosporium'.
PB93-191591/REB 93-01 PC **A02**/MF **A01**

Biodegradation of 2,4,5-Trichlorophenoxyacetic Acid in Liquid Culture and in Soil by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191542/REB 93-01 PC **A02**/MF **A01**

Biodiversity and Management of Natural Resources: The Issues.
PB93-106912/REB 93-01 PC **A01**/MF **A01**

Biologic Markers in Reproductive Toxicology.
PB93-100980/REB 93-01 PC **A18**/MF **A04**

Biologic Markers of Air-Pollution Stress and Damage in Forests.
PB93-110187/REB 93-01 PC **A17**/MF **A03**

Biological and Water Quality Survey of Sugar Creek and Tributaries Crawford County, Illinois, August and September 1992.
PB93-217180/REB 93-04 PC **A04**/MF **A01**

Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC **A03**/MF **A01**

Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC **A02**/MF **A01**

Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC **A02**/MF **A01**

Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC **A03**/MF **A01**

Biomass Combustion in Gas-Turbine-Based Systems.
PB93-185742/REB 93-01 PC **A02**/MF **A01**

Bioremediation.
PB93-149193/REB 93-01 PC **A03**/MF **A01**

Bioremediation: An Information Update on Applying Bioremediation to Site Cleanup.
PB93-126175/REB 93-01 PC **A03**/MF **A01**

Bioremediation as a Technology: Experiences with the Exxon Valdez Oil Spill.
PB93-121226/REB 93-01 PC **A03**/MF **A01**

Bioremediation in the Field: Number 1, November 1990.
PB93-206340/REB 93-04 PC **A03**/MF **A01**

Bioremediation of Chlorinated Solvents in the Vadose Zone.
PB93-221935/REB 93-04 PC **A02**/MF **A01**

Bioremediation of Hazardous Wastes.
PB93-116143/REB 93-01 PC **A04**/MF **A01**

Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC **A03**/MF **A01**

Bioresponse Testing of Sources of Indoor Air Contaminants.
PB93-222032/REB 93-04 PC **A02**/MF **A01**

Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport.
PB93-141497/REB 93-01 PC **A02**/MF **A01**

Biotransformation and Mineralization of Alkylbenzenes under Denitrifying Conditions.
PB93-229623/REB 93-04 PC **A03**/MF **A01**

Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.
PB93-221950/REB 93-04 PC **A01**/MF **A01**

Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC **A02**/MF **A01**

Bitertanol, a Triazole Fungicide, Increases Operant Responding but Not Motor Activity.
PB93-236370/REB 93-04 PC **A02**/MF **A01**

Bladder-wrack (Fucus vesiculosus L) as an indicator for radionuclides in the environment of Swedish nuclear power plants.
DE93603681/REB 93-01 PC **A03**/MF **A01**

Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03**/MF **A01**

Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.
PB93-234540/REB 93-04 PC **A04**/MF **A01**

Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

Broad-Based Environmental Life Cycle Assessment.
PB93-199495/REB 93-01 PC **A02**/MF **A01**

Building and HVAC Characterization for Commercial Building Indoor Air Quality Investigations.
PB93-198844/REB 93-01 PC **A07**/MF **A02**

Calciners and Dryers in Mineral Industries: Background Information for Promulgated Standards.
PB93-122448/REB 93-01 PC **A04**/MF **A01**

CALINE: California Line Source Model (for Microcomputers).
PB93-500254/REB 93-01 CP **D02**

Carbon Disulfide Emission Control Options.
PB93-124667/REB 93-01 PC **A03**/MF **A01**

Carbon Monoxide Exposure of Subjects with Documented Cardiac Arrhythmias.
PB93-179943/REB 93-01 PC **A03**/MF **A01**

Carver-Greenfield Process (Trade Name) Dehydro-Tech Corporation. Applications Analysis Report.
PB93-101152/REB 93-01 PC **A03**/MF **A01**

Case Studies in Wellhead Protection: Ten Examples of Innovative Wellhead Protection Programs.
PB93-207363/REB 93-04 PC **A03**/MF **A01**

Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
PB93-205037/REB 93-04 PC **A02**/MF **A01**

Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC **A13**/MF **A03**

Cell Density and Non-Equilibrium Sorption Effects on Bacterial Dispersal in Groundwater Microcosms.
PB93-141505/REB 93-01 PC **A03**/MF **A01**

Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC **A03**/MF **A01**

Characteristics of Non-Petroleum Underground Storage Tanks.
PB93-185775/REB 93-01 PC **A03**/MF **A01**

Characterization of Catalase Activities in a Root-Colonizing Isolate of 'Pseudomonas putida' (Revised).
PB93-205052/REB 93-04 PC **A02**/MF **A01**

Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC **A02**/MF **A01**

Characterization of Eastern U.S. Spruce-Fir Soils.
PB93-141133/REB 93-01 PC **A03**/MF **A01**

Characterization of Emissions from the Simulated Open-Burning of Non-Metallic Automobile Shredder Residue.
PB93-172914/REB 93-01 PC **A05**/MF **A01**

Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC **A03**/MF **A01**

Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1. Technical Report.
PB93-205722/REB 93-04 PC **A11**/MF **A03**

Characterization of Organic Emission from a Wood Finishing Product-Wood Stain.
PB93-150100/REB 93-01 PC **A02**/MF **A01**

Characterization of PM-10 Emissions from Antiskid Materials Applied to Ice- and Snow-Covered Roadways.
PB93-150209/REB 93-01 PC **A05**/MF **A01**

Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC **A03**/MF **A01**

Characterization of Reference Artemia III for Marine Toxicological Studies.
PB93-212595/REB 93-04 PC **A03**/MF **A01**

Characterization of Selected Public Health Issues in Galveston Bay.
PB93-205771/REB 93-04 PC **A08**/MF **A02**

Characterization of the Alkane-Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis': Identification of a New P450 Gene Family.
PB93-229268/REB 93-04 PC **A03**/MF **A01**

Characterization of the Organic Emissions from the Thermal Destruction of CFCs.
PB93-205557/REB 93-04 PC **A10**/MF **A03**

Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC **A03**/MF **A01**

Characterizing the Distribution of Observed Precipitation and Runoff over the Continental United States.
PB93-141570/REB 93-01 PC **A03**/MF **A01**

Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC **A03**/MF **A01**

Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.
PB93-231835/REB 93-04 PC **A02**/MF **A01**

Chemical Contaminants in House Dust: Occurrences and Sources.
PB93-228542/REB 93-04 PC **A02**/MF **A01**

Chemical Emergency Preparedness and Prevention Advisory: Hydrogen Fluoride, Series 8, No. 3.
PB93-234797/REB 93-04 PC **A02**/MF **A01**

Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02**/MF **A01**

Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203693/REB 93-04 PC **A07**/MF **A02**

Chemical Shoreline Cleaning Agents for Oil Spills: Update State-of-the-Art on Mechanisms of Action and Factors Influencing Performance.
PB93-203701/REB 93-04 PC **A04**/MF **A01**

Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC **A02**/MF **A01**

Chemically Induced Histopathology in Aquatic Invertebrates (Chapter 14).
PB93-222263/REB 93-04 PC **A03**/MF **A01**

Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC **A02**/MF **A01**

Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans.
PB93-122182/REB 93-01 PC **A03**/MF **A01**

Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans, December 1992.
PB93-226058/REB 93-04 PC **A04**/MF **A01**

Chesapeake Bay American Eel Fishery Management Plan. Agreement Commitment Report 1991.
PB93-226017/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Atlantic Croaker and Spot Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226629/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Coordinated Split Sample Program Annual Report, 1990-1991: Analytical Methods and Quality Assurance Workgroup of the Chesapeake Bay Program Monitoring Subcommittee.
PB93-208270/REB 93-04 PC **A06**/MF **A02**

Chesapeake Bay Program Annual Progress Report, Wetlands Workgroup, December 1991.
PB93-136893/REB 93-01 PC **A03**/MF **A01**

Chesapeake Bay Striped Bass Fishery Management Plan: Chesapeake Bay Program. Annual Progress Report (April 1992).
PB93-114585/REB 93-01 PC **A03**/MF **A01**

Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC **A12**/MF **A03**

Chesapeake Bay Summer Flounder Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226637/REB 93-04 PC **A03**/MF **A01**

# TITLE INDEX


Cholinesterases of Aquatic Animals.
PB93-236222/REB 93-04 PC A03/MF A01

Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC A02/MF A01

Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC A02/MF A01

Citizen's Guide to Ground-Water Protection.
PB93-115814/REB 93-01 PC A03/MF A01

Clarification of Delegation to Approve Consistency Exemptions at NPL Sites.
PB93-963281/REB 93-01 PC A01/MF A01

Clark-Fork-Pend Oreille Basin Water Quality Study: A Summary of Findings and a Management Plan.
PB93-208148/REB 93-04 PC A08/MF A02

Clean Water Act (Section 319): An Evaluation of Program Implementation in Region 10.
PB93-145654/REB 93-01 PC A05/MF A01

Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
PB93-202620/REB 93-01 PC A07/MF A02

Clean Water and the American Economy. Proceedings: Surface Water. Volume 1. Held on October 19-21, 1992.
PB93-202612/REB 93-01 PC A14/MF A03

Climate Change Impacts on Net Primary Production in China.
PB93-222271/REB 93-04 PC A03/MF A01

Clinton, New Jersey, Radon Mitigation Follow-Up and Long-Term Monitoring. Project Summary.
PB93-222594/REB 93-04 PC A02/MF A01

Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
PB93-204972/REB 93-04 PC A03/MF A01

Cloning and Expression in 'Escherichia coli' of Pseudomonas Strain LB400 Genes Encoding Polychlorinated Biphenyl Degradation.
PB93-229227/REB 93-04 PC A02/MF A01

Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance.
PB93-193795/REB 93-01 PC A05/MF A01

Cold Starting an Alcohol-Fueled Engine with Ultrasonic Fuel Atomization.
PB93-206597/REB 93-04 PC A03/MF A01

Collection and Chemical Analysis of Lichens for Biomonitoring.
PB93-149862/REB 93-01 PC A03/MF A01

Column Vapor Extraction Experiments on Gasoline Contaminated Soil.
PB93-131514/REB 93-01 PC A03/MF A01

Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC A03/MF A01

Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
PB93-165759/REB 93-01 PC A03/MF A01

Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC A03/MF A01

Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC A05/MF A01

Commencement Bay Nearshore/Tideflats Feasibility Study. Development of Sediment Cleanup Goals.
PB93-181253/REB 93-01 PC A05/MF A01

Commencement Bay Nearshore/Tideflats Feasibility Study. Executive Summary.
PB93-181220/REB 93-01 PC A08/MF A02

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
PB93-181238/REB 93-01 PC A25/MF A06

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 2. Appendices.
PB93-181246/REB 93-01 PC A18/MF A04

Comments on Recent Data for Particle Deposition in Human Nasal Passages.
PB93-181105/REB 93-01 PC A02/MF A01

Commercial Marine Vessel Contributions to Emission Inventories.
PB93-173961/REB 93-01 PC A07/MF A02

Commitment to Watershed Protection: A Review of the Clean Lakes Program.
PB93-210300/REB 93-04 PC A04/MF A01

Community Right-to-Know and Small Business: Understanding Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act of 1986.
PB93-207538/REB 93-04 PC A03/MF A01

Companies that Generate, Treat, Dispose or Recover Hazardous Waste. 1991 Annual Report.
PB93-216638/REB 93-04 PC A15/MF A03

Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC A02/MF A01

Comparative Health Effects Assessment of Drinking Water Treatment Technologies: Report to Congress.
PB93-216950/REB 93-04 PC A03/MF A01

Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC A03/MF A01

Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC A02/MF A01

Comparing Sampling Designs for Monitoring Ecological Status and Trends: Impact of Temporal Patterns (Chapter 3).
PB93-222289/REB 93-04 PC A03/MF A01

Comparing the Accuracy of Equation Formats for Modeling Microbial Population Decay Rates.
PB93-131548/REB 93-01 PC A03/MF A01

Comparison of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model and Wind Tunnel Data.
PB93-226751/REB 93-04 PC A08/MF A02

Comparison of Aerosol Acidity in Urban and Semi-Rural Environments.
PB93-131712/REB 93-01 PC A03/MF A01

Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
PB93-226534/REB 93-04 PC A02/MF A01

Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.
PB93-221968/REB 93-04 PC A02/MF A01

Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).
PB93-212470/REB 93-04 PC A03/MF A01

Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-226831/REB 93-04 PC A03/MF A01

Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC A03/MF A01

Comparison of Ground-Water Sampling Devices Based on Equilibration of Water Quality Indicator Parameters.
PB93-149201/REB 93-01 PC A03/MF A01

Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC A02/MF A01

Comparison of Methods for Estimating Global Methane Emissions from Landfills.
PB93-212561/REB 93-04 PC A03/MF A01

Comparison of Mid-Bay and Lateral Station Water Quality Data in the Chesapeake Bay Mainstem: Chesapeake Bay Program.
PB93-206288/REB 93-04 PC A05/MF A01

Comparison of Modeled Concentration Profiles Using Site-Specific and Constant-Condition Meteorological Data for the ISCLT and PAL Models.
PB93-120921/REB 93-01 PC A02/MF A01

Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC A07/MF A02

Comparison of Systematic and Random Sampling for Estimating the Accuracy of Maps Generated from Remotely Sensed Data.
PB93-191443/REB 93-01 PC A02/MF A01

Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Induction of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC A03/MF A01

Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC A03/MF A01

Comparison of the Efficiency of Polycarbonate and Mixed Cellulose Ester Filters for Use in the Filtration of Water Samples.
PB93-194363/REB 93-01 PC A02/MF A01

Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
PB93-229151/REB 93-04 PC A03/MF A01

Compendium of Current Monitoring Programs in Tampa Bay and Its Watershed.
PB93-191666/REB 93-01 PC A05/MF A01

Compendium of Federal Financial Assistance Programs: Targeting Programs for State and Local Ground-Water Protection.
PB93-116069/REB 93-01 PC A06/MF A02

Compendium of Methods for Marine and Estuarine Environmental Studies.
PB93-202570/REB 93-01 PC A10/MF A03

Compendium of ROD Language for FY 1993 Focus Areas.
PB93-963328/REB 93-01 PC A04/MF A01

Competition Potentials of Environmentally Applied Bacteria with Human Fecal Microbiota.
PB93-181147/REB 93-01 PC A02/MF A01

Compilation of Air Pollutant Emission Factors. Volume 1. Stationary Point and Area Sources. Supplement E.
PB93-157105/REB 93-01 PC A10/MF A03

Compilation of Ground-Water Models.
PB93-209401/REB 93-04 PC A13/MF A03

COMPLEX1 (for Microcomputers).
PB93-504538/REB 93-01 CP D05

Compliance Data System Quality Assurance Manual, June 1984.
PB93-199339/REB 93-01 PC A10/MF A03

Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC A02/MF A01

Consensus Method for Determining Groundwaters under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA).
PB93-180818/REB 93-01 PC A04/MF A01

Conservation and Sequestration of Carbon: The Potential of Forest and Agroforest Management Practices.
PB93-229656/REB 93-04 PC A03/MF A01

Conservation Tillage Impacts on National Soil and Atmospheric Carbon Levels.
PB93-191500/REB 93-01 PC A03/MF A01

Consideration of ARARs during Removal Actions.
PB92-963410/REB 93-01 PC A02/MF A01

Constructed Wetland Design: the First Generation.
PB93-131753/REB 93-01 PC A02/MF A01

Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC A02/MF A01

Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
PB93-229706/REB 93-04 PC A02/MF A01

Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC A03/MF A01

Contaminated Sediments News: Number 5, April, 1992.
PB93-207413/REB 93-04 PC A02/MF A01

Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC A02/MF A01

Contingency Analysis Modeling for Superfund Sites and Other Sources.
PB93-169126/REB 93-01 PC A13/MF A03

Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC A03/MF A01

Contribution to Indoor Ozone Levels of an Ozone Generator.
PB93-234557/REB 93-04 PC A03/MF A01

Control of Air Emissions from Superfund Sites.
PB93-215614/REB 93-04 PC A08/MF A02

Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines. Federal Certification Test Results for 1993 Model Year.
PB93-164523/REB 93-01 PC A15/MF A03

Control Techniques for Volatile Organic Compound Emissions from Stationary Sources, December 1992.
PB93-150258/REB 93-01 PC A20/MF A04

Control Technology Center FY92: A Summary of Program Accomplishments.
PB93-199230/REB 93-01 PC A03/MF A01

Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC A03/MF A01

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel - Final Report.
PB93-197929/REB 93-01 PC **A03**/MF **A01**

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC **A03**/MF **A01**

Coprocessing of Fossil Fuels and Biomass for CO2 Emission Reduction in the Transportation Sector.
PB93-194165/REB 93-01 PC **A02**/MF **A01**

Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC **A02**/MF **A01**

Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03**/MF **A01**

Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomegalovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC **A03**/MF **A01**

Corrosion Control Principles and Strategies for Reducing Lead and Copper in Drinking Water Systems.
PB93-199420/REB 93-01 PC **A03**/MF **A01**

Cost Effective Corn and Soybean Production Without Tillage: Fact or Fiction (May 1988).
PB93-157568/REB 93-01 PC **A03**/MF **A01**

Cost Effectiveness Analysis of Effluent Guidelines and Standards for the Aluminum Forming Category.
PB93-156107/REB 93-01 PC **A03**/MF **A01**

Cost of Providing Government Services to Alternative Residential Patterns.
PB93-207728/REB 93-04 PC **A09**/MF **A02**

Cost of Remedial Action Model.
PB93-963304/REB 93-04 PC **A01**/MF **A01**

Cost of Remedial Actions (CORA) Model: Overview and Applications.
PB93-963318/REB 93-04 PC **A03**/MF **A01**

Course 1. Model Curriculum for Training Asbestos Abatement Contractors and Supervisors (Training Manual).
PB93-780773/REB 93-01 PC**$182.00**

Course 2. Model Curriculum for School Building Inspectors (Training Manual).
PB93-780823/REB 93-01 PC**$136.00**

Course 3. Model Curriculum for School Asbestos Management Planners (Training Manual).
PB93-780872/REB 93-01 PC**$81.00**

Course 4. Model Curriculum for Asbestos Abatement Workers (English Version) (Training Manual).
PB93-780922/REB 93-01 PC**$235.00**

Course 5. Presentation to Accompany 'Guidance for Controlling Asbestos-Containing Materials in Buildings' (Training Manual).
PB93-780971/REB 93-01 PC**$41.00**

Criteria for Review of Hazardous Materials Emergency Plans.
PB93-207348/REB 93-04 PC **A03**/MF **A01**

Critical concentrations of heavy metals in the mor horizon of Swedish forests.
DE93778471/REB 93-01 PC **A03**/MF **A01**

Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC **A03**/MF **A01**

Crosswalk/Air Toxic Emission Factor Data Base Management System (XATEF) Version 2.0 (for Microcomputers).
PB93-504793/REB 93-01 CP **D02**

CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 1. Technical Formulations.
PB93-107076/REB 93-01 PC **A03**/MF **A01**

CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 2. Performance Characteristics.
PB93-107084/REB 93-01 PC **A03**/MF **A01**

Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.
PB93-229680/REB 93-04 PC **A03**/MF **A01**

Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03**/MF **A01**

Cytokine (Tumor Necrosis Factor, IL-6, and IL-8) Production by Respiratory Syncytial Virus-Infected Human Alveolar Macrophages.
PB93-181006/REB 93-01 PC **A02**/MF **A01**

Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02**/MF **A01**

Cytoplasmic Microtubular Dynamics and Chromatin Organization during Mammalian Oogenesis and Oocyte Maturation.
PB93-194413/REB 93-01 PC **A03**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Diethylene Glycol Dinitrate (DEGDN).
PB93-117000/REB 93-01 PC **A03**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Tetranitromethane (TNM).
PB93-116994/REB 93-01 PC **A03**/MF **A01**

Data Management Strategy for the Tampa Bay National Estuary Program: Recommendations and Implementation Plan.
PB93-191633/REB 93-01 PC **A09**/MF **A03**

Database of Benthic Sampling Locations in Tampa Bay.
PB93-191211/REB 93-01 PC **A05**/MF **A01**

Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

Decision Model for Biomarkers of Exposure.
PB93-106995/REB 93-01 PC **A03**/MF **A01**

Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC **A02**/MF **A01**

Delineation of Wellhead Protection Areas in Fractured Rocks.
PB93-115822/REB 93-01 PC **A08**/MF **A02**

Demonstration of a Trial Excavation at the McColl Superfund Site.
PB93-100121/REB 93-01 PC **A04**/MF **A01**

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC **A07**/MF **A02**

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 1: Pages 1 through 662.
PB93-218246/REB 93-04 PC **A99**/MF **A06**

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 2: Pages 663 through 1389.
PB93-218253/REB 93-04 PC **A99**/MF **A06**

Deposition of Sulfate Acid Aerosols in the Developing Human Lung.
PB93-236388/REB 93-04 PC **A03**/MF **A01**

Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
PB93-141356/REB 93-01 PC **A03**/MF **A01**

Dermal Penetration of ((14)C)Captan in Young and Adult Rats.
PB93-107142/REB 93-01 PC **A03**/MF **A01**

Design and Construction of Demonstration/Research Wetlands for Treatment of Dairy Farm Wastewater.
PB93-202836/REB 93-01 PC **A03**/MF **A01**

Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC **A03**/MF **A01**

Design of a Basinwide Monitoring Program for the Tampa Bay Estuary.
PB93-194694/REB 93-01 PC **A05**/MF **A01**

Design of New Schools and Other Large Buildings Which Are Radon Resistant and Easy to Mitigate.
PB93-131662/REB 93-01 PC **A03**/MF **A01**

Design of the Clean Air Act Deposition Monitoring Network.
PB93-120947/REB 93-01 PC **A03**/MF **A01**

Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02**/MF **A01**

Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

Determination of Carboxylic Acids by Ion-Exclusion Chromatography with Non-Suppressed Conductivity and Optical Detectors.
PB93-181212/REB 93-01 PC **A02**/MF **A01**

Determination of Imminent and Substantial Endangerment for Removal Actions.
PB93-963416/REB 93-04 PC **A01**/MF **A01**

Determination of Nine Haloacetic Acids in Finished Drinking Water.
PB93-204121/REB 93-01 PC **A03**/MF **A01**

Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
PB93-121176/REB 93-01 PC **A02**/MF **A01**

Determination of Rates of Reaction in the Gas-Phase in the Troposphere. Theory and Practice. 5. Rate of Indirect Photoreaction.
PB93-149334/REB 93-01 PC **A08**/MF **A02**

Determination of the Strong Acidity of Atmospheric Fine-Particles (< 2.5 mum) Using Annular Denuder Technology. Standard Method, Enhanced Method.
PB93-178234/REB 93-01 PC **A07**/MF **A02**

Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.
PB93-210383/REB 93-04 PC **A07**/MF **A02**

Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC **A02**/MF **A01**

Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
PB93-229565/REB 93-04 PC **A02**/MF **A01**

Developing Improved Strategies to Determine Male Reproductive Risk from Environmental Toxins.
PB93-167286/REB 93-01 PC **A03**/MF **A01**

Development and Application of Borehole Flowmeters for Environmental Assessment.
PB93-185817/REB 93-01 PC **A03**/MF **A01**

Development and Evaluation of a Revised Area Source Algorithm for the Industrial Source Complex Long Term Model.
PB93-226777/REB 93-04 PC **A06**/MF **A02**

Development and Evaluation of a Transportable Fast Gas Chromatograph for the Monitoring of Organic Vapors in Air.
PB93-228526/REB 93-04 PC **A02**/MF **A01**

Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC **A02**/MF **A01**

Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC **A08**/MF **A02**

Development and Validation of a Source Test Method for 2,4-Toluene Diisocyanate.
PB93-204055/REB 93-01 PC **A03**/MF **A01**

Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
PB93-228518/REB 93-04 PC **A02**/MF **A01**

Development Document for Effluent Limitations Guidelines and Standards for the Aluminum Forming Point Source Category.
PB93-208213/REB 93-04 PC **A99**/MF **A06**

Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category (Proposed).
PB93-206522/REB 93-04 PC **A23**/MF **A04**

Development Document for Effluent Limitations Guidelines and Standards for the Pharmaceuticals Manufacturing Point Source Category.
PB93-206969/REB 93-04 PC **A04**/MF **A01**

Development Document for Effluent Limitations Guidelines and Standards for the Porcelain Enameling. Point Source Category.
PB93-206514/REB 93-04 PC **A21**/MF **A04**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Inorganic Chemicals Manufacturing Point Source Category, Phase 2 (Proposed).
PB93-206530/REB 93-04 PC **A24**/MF **A04**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 1.
PB93-206498/REB 93-04 PC **A24**/MF **A04**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 2.
PB93-206506/REB 93-04 PC **A22**/MF **A04**

Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards, and Pretreatment Standards for the Paint Formulating Point Source Category.
PB93-206472/REB 93-04 PC **A21**/MF **A04**

Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Pharmaceutical Manufacturing Point Source Category.
PB93-206221/REB 93-04 PC **A22**/MF **A04**

Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.
PB93-222628/REB 93-04 PC **A01**/MF **A01**

Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11**/MF **A03**

Development of a Field Test Method for the Determination of Lead in Paint and Paint-Contaminated Dust and Soil.
PB93-173128/REB 93-01 PC **A03**/MF **A01**

Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC **A03**/MF **A01**

Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02**/MF **A01**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC **A02**/MF **A01**

PB93-214419/REB 93-04 PC **A05**/MF **A01**

Development of an Improved Urban Airshed Modeling System.
PB93-120889/REB 93-01 PC **A03**/MF **A01**

Development of Conversion Factors for Heavy-Duty Bus Engines G/BHP-HR to G/Mile.
PB93-232932/REB 93-04 PC **A03**/MF **A01**

Development of Genetically Enhanced Baculovirus Pesticides (Chapter 5).
PB93-149235/REB 93-01 PC **A02**/MF **A01**

Development of Good Combustion Practice for Municipal Waste Combustors.
PB93-131613/REB 93-01 PC **A03**/MF **A01**

Development of Index of Biotic Integrity Expectations for the Ecoregions of Indiana. I. Central Corn Belt Plain.
PB93-149383/REB 93-01 PC **A06**/MF **A02**

Development of Residential Wood Consumption Estimation Models.
PB93-199248/REB 93-01 PC **A04**/MF **A01**

Development of Sampling and Analytical Methods for the Measurement of Nitrous Oxide from Fossil Fuel Combustion Sources.
PB93-194330/REB 93-01 PC **A07**/MF **A02**

Development of Size-Specific Data from Particulate Control Technology Research Reports.
PB93-131456/REB 93-01 PC **A03**/MF **A01**

Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC **A02**/MF **A01**

Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03**/MF **A01**

Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.
PB93-228872/REB 93-04 PC **A03**/MF **A01**

Developmental Toxicity of Bromohydroquinone (BHQ) and BHQ-Glutathione Conjugates in vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02**/MF **A01**

Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC **A03**/MF **A01**

Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02**/MF **A01**

Digital Topographic Approach to Modeling: The Distribution of Precipitation in Mountainous Terrain.
PB93-106649/REB 93-01 PC **A03**/MF **A01**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC **A18**/MF **A04**

Direct Effects of Ethane Dimethanesulphonate on Epididymal Function in Adult Rats. An In vitro Demonstration.
PB93-141281/REB 93-01 PC **A03**/MF **A01**

Directory of OAQPS Information Services, May 1993.
PB93-196624/REB 93-01 PC **A03**/MF **A01**

Discussion: Response to Internal Reviews of My Paper, 1993 Census Bureau Annual Research Conference.
PB93-191385/REB 93-01 PC **A02**/MF **A01**

Discussions with the Public Concerning NPL Listings.
PB93-963338/REB 93-01 PC **A03**/MF **A01**

Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.
PB93-222214/REB 93-04 PC **A10**/MF **A03**

Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-228880/REB 93-04 PC **A03**/MF **A01**

Disruption of Cytochrome the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.
PB93-229276/REB 93-04 PC **A03**/MF **A01**

Dissolved Organic Carbon and Sulfate Sorption by Spodosol Mineral Horizons.
PB93-229631/REB 93-04 PC **A02**/MF **A01**

Distribution of Cardiac Output during Diurnal Changes of Activity in Rats.
PB93-180982/REB 93-01 PC **A02**/MF **A01**

Distribution of Selected Fish Species in Tampa Bay.
PB93-191229/REB 93-01 PC **A04**/MF **A01**

Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and Chincoteague Bay, 1991.
PB93-191120/REB 93-01 PC **A13**/MF **A03**

Dithicarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.
PB93-228989/REB 93-04 PC **A02**/MF **A01**

DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC **A02**/MF **A01**

DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03**/MF **A01**

DNA Isolation from Small Tissue Samples Using Salt and Spermine.
PB93-181048/REB 93-01 PC **A01**/MF **A01**

DNAPL Site Evaluation.
PB93-150217/REB 93-01 PC **A16**/MF **A03**

Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

Downwash of Plumes in the Vicinity of Buildings: A Wind-Tunnel Study.
PB93-212819/REB 93-04 PC **A03**/MF **A01**

Draft Ground-Water Disinfection Rule.
PB93-134351/REB 93-01 PC **A05**/MF **A01**

Dredged Material Ocean Dumping Reference Document.
PB93-223568/REB 93-04 PC **A04**/MF **A01**

Drinking Water and Health: Disinfectants and Disinfectant By-Products. Volume 7.
PB93-112290/REB 93-01 PC **A06**/MF **A02**

Drinking Water Handbook for Public Officials.
PB93-226595/REB 93-04 PC **A04**/MF **A01**

Drinking Water Information Guide.
PB93-222958/REB 93-04 PC **A06**/MF **A02**

Drinking Water Regulations under the Safe Drinking Water Act.
PB93-194033/REB 93-01 PC **A03**/MF **A01**

Drinking Water State Revolving Fund: Ensuring Safe Drinking Water for America.
PB93-227858/REB 93-04 PC **A02**/MF **A01**

Drinking Water Toxicity Profiles.
PB93-122406/REB 93-01 PC **A09**/MF **A02**

Drinking Water Training Resources Directory: A National Training Coalition Directory of Current Training Materials. First Edition.
PB93-202802/REB 93-01 PC **A07**/MF **A02**

Dry Deposition Flux Calculations for the National Dry Deposition Network.
PB93-178242/REB 93-01 PC **A05**/MF **A02**

Dry Flue Gas Cleaning Processes for Achieving Air Pollutant Emissions Requirements.
PB93-131605/REB 93-01 PC **A03**/MF **A01**

Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
PB93-121184/REB 93-01 PC **A02**/MF **A01**

Dynamic River Basin Water Quality Model.
PB93-190890/REB 93-01 PC **A05**/MF **A01**

Dynamometer Testing of On-Road Vehicles from the Los Angeles in-Use Emissions Study.
PB93-222297/REB 93-04 PC **A03**/MF **A01**

Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).
PB93-222586/REB 93-04 PC **A01**/MF **A01**

Ecologically Acceptable Strategy for the Use of Genetically Engineered Baculovirus Pesticides.
PB93-149243/REB 93-01 PC **A02**/MF **A01**

Economic Analysis of Effluent Guidelines: Mineral Mining and Processing Industry.
PB93-167765/REB 93-01 PC **A14**/MF **A03**

Economic Analysis of Interim Final Effluent Guidelines for the Gum and Wood Chemicals Industry. Group 2.
PB93-167740/REB 93-01 PC **A04**/MF **A01**

Economic Analysis of Pretreatment Standards: The Secondary Copper and Aluminum Subcategories of the Nonferrous Metals Manufacturing Point Source Category.
PB93-167757/REB 93-01 PC **A07**/MF **A02**

Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC **A07**/MF **A02**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants.
PB93-156495/REB 93-01 PC **A04**/MF **A01**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants, July 1986.
PB93-156503/REB 93-01 PC **A05**/MF **A01**

Economic Assessment of Reducing Fluoride in Drinking Water.
PB93-115830/REB 93-01 PC **A05**/MF **A01**

Economic Benefits of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-168797/REB 93-01 PC **A08**/MF **A02**

Economic Growth Analysis System (E-GAS) for all EPA Regions (I through X) (for Microcomputers).
PB93-505469/REB 93-04 CP **D18**

Economic Growth Analysis System (E-GAS) for EPA Region I - New England States (for Microcomputers).
PB93-505477/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).
PB93-505493/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).
PB93-505543/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).
PB93-505501/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).
PB93-505519/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).
PB93-505527/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
PB93-505485/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP **D03**

Economic Growth Analysis System: Reference Manual.
PB93-183408/REB 93-04 PC **A12**/MF **A03**

Economic Growth Analysis System: User's Guide.
PB93-183416/REB 93-04 PC **A04**/MF **A01**

Economic Impact Analysis of Effluent Limitations and Standards for the Nonferrous Metals Smelting and Refining Industry. Phase 2.
PB93-167781/REB 93-01 PC **A09**/MF **A03**

Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
PB93-173979/REB 93-01 PC **A22**/MF **A04**

Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Gold Placer Mining Industry.
PB93-203990/REB 93-04 PC **A07**/MF **A02**

Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Plastics Molding and Forming Industry.
PB93-167773/REB 93-01 PC **A05**/MF **A01**

Economic Impacts of RCRA Regulations on the Plating and Polishing Industry.
PB93-158988/REB 93-01 PC **A07**/MF **A02**

Ecotoxicological Principles for Avian Field Studies Using Radiotelemetry or Remote Sensing.
PB93-212793/REB 93-04 PC **A02**/MF **A01**

Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC **A01**/MF **A01**

Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02**/MF **A01**

Effect of Aerosolization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC **A02**/MF **A01**

Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02**/MF **A01**

Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02**/MF **A01**

Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
PB93-229607/REB 93-04 PC **A02**/MF **A01**

Effect of Methoxychlor on Ovarian Steroidogenesis: Role in Early Pregnancy Loss.
PB93-181030/REB 93-01 PC **A02**/MF **A01**

Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC **A03**/MF **A01**

Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03**/MF **A01**

Effect of OSHA's Bloodborne Pathogens Standard on Hazardous Waste Cleanup Activities.
PB93-963419/REB 93-04 PC **A02**/MF **A01**

Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.
PB93-212645/REB 93-04 PC **A02**/MF **A01**

Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC **A02**/MF **A01**

Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02**/MF **A01**

Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02**/MF **A01**

Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
PB93-120970/REB 93-01 PC **A02**/MF **A01**

Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC **A02**/MF **A01**

Effect of the Distribution System on Drinking-Water Quality.
PB93-173722/REB 93-01 PC **A03**/MF **A01**

Effects of 'Beauveria bassiana' on Embryos of the Inland Silverside Fish ('Menidia beryllina').
PB93-131811/REB 93-01 PC **A02**/MF **A01**

Effects of Chemical Contaminants on Blood Chemistry of Teleost Fish: A Bibliography and Synopsis of Selected Effects.
PB93-168961/REB 93-01 PC **A03**/MF **A01**

Effects of CO2 and Climate Change on Forest Trees.
PB93-222339/REB 93-04 PC **A07**/MF **A02**

Effects of CO2 and Temperature on Five Rice Cultivars.
PB93-141158/REB 93-01 PC **A02**/MF **A01**

Effects of Culture Parameters on DDT (1,1,1-Trichloro-2,2-BIS(4-Chlorophenyl)Ethane) Biodegradation by 'Phanerochaete chrysosporium'.
PB93-191567/REB 93-01 PC **A03**/MF **A01**

Effects of Dopaminergic Drugs on Working and Reference Memory in Rats.
PB93-236412/REB 93-04 PC **A03**/MF **A01**

Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

Effects of Food Density on Growth and on Patterns of Prey Depletion by Larval Silverside Fish, 'Menidia beryllina' (Cope): A Laboratory Investigation with Image Analysis.
PB93-212587/REB 93-04 PC **A03**/MF **A01**

Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
PB93-179950/REB 93-01 PC **A03**/MF **A01**

Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
PB93-236321/REB 93-04 PC **A03**/MF **A01**

Effects of Kraft Mill Effluent on the Sexuality of Fishes: An Environmental Early Warning.
PB93-168847/REB 93-01 PC **A03**/MF **A01**

Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC **A02**/MF **A01**

Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Bensidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC **A02**/MF **A01**

Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
PB93-135671/REB 93-01 PC **A01**/MF **A01**

Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
PB93-212454/REB 93-04 PC **A03**/MF **A01**

Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC **A05**/MF **A01**

Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC **A07**/MF **A02**

Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC **A01**/MF **A01**

Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02**/MF **A01**

Electrophoresis Gel Buffer Recirculator for under Twenty Dollars.
PB93-181014/REB 93-01 PC **A01**/MF **A01**

EMAP and Other Tools for Measuring Biodiversity, Habitat Conditions, and Environmental Trends.
PB93-106748/REB 93-01 PC **A03**/MF **A01**

Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03**/MF **A01**

Emergency Disinfection of Drinking Water.
PB93-223188/REB 93-04 PC **A01**/MF **A01**

Emergency Planning and Community Right-to-Know Act: Section 313 Release Reporting Requirements (August 1991).
PB93-205847/REB 93-04 PC **A03**/MF **A01**

Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.
PB93-205383/REB 93-04 PC **A03**/MF **A01**

Emerging Technology Report: Metals Treatment at Superfund Sites by Absorptive Filtration.
PB93-231165/REB 93-04 PC **A04**/MF **A01**

Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC **A02**/MF **A01**

Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
PB93-105518/REB 93-01 PC **A08**/MF **A02**

Emissions and Fuel Economy Effects of the Fuelon Power Gasoline Fuel Additive.
PB93-236701/REB 93-04 PC **A03**/MF **A01**

Emissions and Fuel Economy Results 1992 Car Models (for Microcomputers).
PB93-504546/REB 93-01 CP **D02**

Emissions and Fuel Economy Results 1993 Car Models (for Microcomputers).
PB93-504553/REB 93-01 CP **D02**

Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC **A03**/MF **A01**

Empirical Model of Vehicle Emissions.
PB93-199602/REB 93-01 PC **A02**/MF **A01**

Enabling Document for New Source Performance Standards for Calciners and Dryers in Mineral Industries.
PB93-122455/REB 93-01 PC **A04**/MF **A01**

Enabling Document for Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants.
PB93-147007/REB 93-01 PC **A07**/MF **A02**

Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC **A03**/MF **A01**

Enforcement Four-Year Strategic Plan: Enhanced Environmental Enforcement for the 1990's.
PB93-129724/REB 93-01 PC **A05**/MF **A01**

Engineered Plants in the Environment.
PB93-234532/REB 93-04 PC **A03**/MF **A01**

Engineering Bulletin: Pyrolysis Treatment.
PB93-105583/REB 93-01 PC **A02**/MF **A01**

Engineering Bulletin: Slurry Walls.
PB93-105575/REB 93-01 PC **A02**/MF **A01**

Engineering Bulletin: Technology Preselection Data Requirements.
PB93-105591/REB 93-01 PC **A02**/MF **A01**

Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC **A02**/MF **A01**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 1.
PB93-209013/REB 93-04 PC **A03**/MF **A01**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 2.
PB93-209021/REB 93-04 PC **A15**/MF **A03**

Ensuring the Adequacy of Cost Share Provisions in Superfund State Contracts.
PB93-963336/REB 93-01 PC **A03**/MF **A01**

ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC **A02**/MF **A01**

Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

Environmental Characteristics of EPA, NRC, and DOE Sites Contaminated with Radioactive Substances.
PB93-185551/REB 93-01 PC **A05**/MF **A01**

Environmental Fate Constants for Organic Chemicals under Consideration for EPA's Hazardous Waste Identification Projects.
PB93-221046/REB 93-04 PC **A09**/MF **A02**

Environmental Fate Data Base (EFDB) Complete: XREF, CASLST, DATALOG, BIOLOG, CHEMFATE, and BIODEG. (Date of Coverage 1993).
PB93-506426/REB 93-04 CP **T05**

Environmental Management Inventory of Galveston Bay.
PB93-205797/REB 93-04 PC **A06**/MF **A02**

Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC **A12**/MF **A03**

Environmental Monitoring and Assessment Program: EMAP-Arid Colorado Plateau Pilot Study, 1992. Implementation Plan.
PB93-181618/REB 93-01 PC **A08**/MF **A02**

Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC **A03**/MF **A01**

Environmental Monitoring and Assessment Program: Gulf Coast Salt Marsh Pilot Study.
PB93-122398/REB 93-01 PC **A03**/MF **A01**

Environmental Monitoring and Assessment Program: 1990 Project Descriptors.
PB93-116150/REB 93-01 PC **A04**/MF **A01**

Environmental Monitoring Issues: Results of Workshops Held in July 1992 as Part of EPA's Eighth Annual Waste Testing and Quality Assurance Symposium.
PB93-216075/REB 93-04 PC **A12**/MF **A03**

Environmental Monitoring Methods Index. Version 1.0 Software. User's Manual.
PB92-169648/REB 93-01 PC **A06**/MF **A02**

Environmental Pollution Control Alternatives: Reducing Water Pollution Control Costs in the Electroplating Industry. (Revised).
PB93-122240/REB 93-01 PC **A04**/MF **A01**

Environmental Protection Agency Civil Enforcement Docket.
PB93-921700/REB 93-01 Subscription

# TITLE INDEX


EPA Bibliography on Surface Contamination.
PB93-168904/REB 93-01 PC **A02/MF A01**

EPA (Environmental Protection Agency) Publications Bibliography, Quarterly Abstract Bulletin.
PB93-904200/REB 93-01 Subscription

EPA Evaluation of the Fuelon Power Gasoline Fuel Additive under Section 511 of the Motor Vehicle Information and Cost Savings Act.
PB93-236693/REB 93-04 PC **A03/MF A01**

EPA Model Asbestos Worker Training Course. Instructor's Manual. Course 4 (English Version) (Training Manual).
PB93-780948/REB 93-01 PC **A15**

EPA Model Asbestos Worker Training Instructor's Resources. Course 4 (English Version) (Training Manual).
PB93-780955/REB 93-01 PC **A09**

EPA Model Asbestos Worker Training Manual. Course 4 (English Version).
PB93-780930/REB 93-01 PC **A14**

EPA Model Pretreatment Ordinance (for Microcomputers).
PB93-506079/REB 93-04 CP **D02**

EPA Pesticide RED FACTS Sheets: Indole-3-Butyric Acid.
PB93-107282/REB 93-01 PC **A02/MF A01**

EPA Priorities for Biologic Markers Research in Environmental Health.
PB93-181113/REB 93-01 PC **A02/MF A01**

EPA's Ground Water and Drinking Water Program: Making a Difference.
PB93-136612/REB 93-01 PC **A03/MF A01**

EPA's Indoor Air/Pollution Prevention Workshop.
PB93-222065/REB 93-04 PC **A03/MF A01**

EPA's Information Management System for Tracking Reasonable Further Progress.
PB93-212389/REB 93-04 PC **A03/MF A01**

EPA's Life Cycle Methodology: Guidelines for Use in Development of Packaging.
PB93-194199/REB 93-01 PC **A03/MF A01**

EPA's Photovoltaic Demand-Side Management Cost-Shared Demonstrations.
PB93-212413/REB 93-04 PC **A02/MF A01**

EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02/MF A01**

EPA's Reassessment of Dioxin Risk: Directed Health Research.
PB93-228922/REB 93-04 PC **A02/MF A01**

EPA's Research in LCA Methodology.
PB93-212439/REB 93-04 PC **A03/MF A01**

EPANET Water Quality Model.
PB93-236552/REB 93-04 PC **A03/MF A01**

Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC **A04/MF A01**

Equilibrium Analysis of Carbon Pools and Fluxes of Forest Biomes in the Former Soviet Union.
PB93-191484/REB 93-01 PC **A02/MF A01**

Establishing Priorities in the U.S. EPA's Indoor Air Engineering Research Program.
PB93-221984/REB 93-04 PC **A02/MF A01**

Establishing Quantitative Performance Criteria for Wetland Restoration.
PB93-236610/REB 93-04 PC **A01/MF A01**

Estimate of Global Methane Emissions from Coal Mines.
PB93-212553/REB 93-04 PC **A03/MF A01**

Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215655/REB 93-04 PC **A04/MF A01**

Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215622/REB 93-04 PC **A04/MF A01**

Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215630/REB 93-04 PC **A04/MF A01**

Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC **A03/MF A01**

Estimation of the Cost of Using Chemical Protective Clothing.
PB93-168805/REB 93-01 PC **A03/MF A01**

Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03/MF A01**

Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC **A10/MF A03**

Estuary Program Primer. National Estuary Program.
PB93-193753/REB 93-01 PC **A06/MF A02**

Ethylene Oxide Emissions from Commercial Sterilization/Fumigation Operations: Background Information for Proposed Standards.
PB93-226744/REB 93-04 PC **A13/MF A03**

Evaluating Materials for Healthy Buildings.
PB93-131621/REB 93-01 PC **A03/MF A01**

Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC **A03/MF A01**

Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC **A03/MF A01**

Evaluation and Costing of NOx Controls for Existing Utility Boilers in the NESCAUM Region.
PB93-142016/REB 93-01 PC **A18/MF A04**

Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.
PB93-229193/REB 93-04 PC **A02/MF A01**

Evaluation of a Sorbent-Based Preconcentrated for Analysis of VOCs in Air Using Gas Chromatography-Atomic Emission Detection.
PB93-121077/REB 93-01 PC **A02/MF A01**

Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03/MF A01**

Evaluation of Carbon Black Slurries as Clean Burning Fuels.
PB93-222057/REB 93-04 PC **A03/MF A01**

Evaluation of CO Intersection Modeling Techniques Using a New York City Database.
PB93-105559/REB 93-01 PC **A10/MF A03**

Evaluation of Commercially-Available Portable Gas Chromatographs.
PB93-121051/REB 93-01 PC **A02/MF A01**

Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
PB93-202851/REB 93-04 PC **A06/MF A02**

Evaluation of Emissions from Masonry Heaters and Masonry Fireplaces in Homes.
PB93-173078/REB 93-01 PC **A03/MF A01**

Evaluation of Environmental Marketing Terms in the United States.
PB93-175784/REB 93-01 PC **A10/MF A03**

Evaluation of FGD Dry Injection Sorbents and Additives. Volume 1. Development of High Reactivity Sorbents. Project Summary.
PB93-228484/REB 93-04 PC **A02/MF A01**

Evaluation of Laboratory Tests to Determine the Effectiveness of Chemical Surface Washing Agents.
PB93-194215/REB 93-01 PC **A02/MF A01**

Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.
PB93-228468/REB 93-04 PC **A02/MF A01**

Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
PB93-180875/REB 93-01 PC **A06/MF A02**

Evaluation of Mitigation for Acid Aluminum Leachate from a Highway Fill in Garrett County, Maryland.
PB93-180321/REB 93-01 PC **A04/MF A01**

Evaluation of Nitrogen Oxide Emissions Data from TVA Coal-Fired Boilers.
PB93-138865/REB 93-01 PC **A06/MF A02**

Evaluation of Para-Dichlorobenzene Emissions from Solid Moth Repellant as a Source of Indoor Air Pollution.
PB93-107035/REB 93-01 PC **A02/MF A01**

Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC **A04/MF A01**

Evaluation of Portable Gas Chromatographs.
PB93-168813/REB 93-01 PC **A03/MF A01**

Evaluation of Portable Multisorbent Air Samplers for Use with an Automated Multitube Analyzer.
PB93-172930/REB 93-01 PC **A05/MF A01**

Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC **A03/MF A01**

Evaluation of Resistively Heated Fuel Injection Technology to Reduce Cold Start Emissions and Assist Starting/Driveaway of a Methanol-Fueled Vehicle.
PB93-144350/REB 93-01 PC **A03/MF A01**

Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03/MF A01**

Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.
PB93-229870/REB 93-04 PC **A25/MF A06**

Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC **A04/MF A01**

Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.
PB93-216869/REB 93-04 PC **A03/MF A01**

Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC **A12/MF A03**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound.
PB93-122206/REB 93-01 PC **A09/MF A02**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound, Appendices.
PB93-122216/REB 93-01 PC **A16/MF A03**

Evaluation of the Bioremediation of a Contaminated Soil with Phytotoxicity Tests.
PB93-191625/REB 93-01 PC **A03/MF A01**

Evaluation of the Effects of Methanol during Early Pregnancy in the Rat.
PB93-231850/REB 93-04 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Acetamide, N-Fluoren-2-yl (53-96-3).
PB93-181626/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Acrylonitrile (107-13-1).
PB93-181634/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Aldrin (309-00-2).
PB93-181642/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Alpha-Hexachlorocyclohexane (319-84-6).
PB93-185049/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Amitrole (61-82-5).
PB93-181659/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Arsenic and Inorganic Arsenic Compounds.
PB93-181667/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Asbestos (1332-21-4).
PB93-184885/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Auramine (492-80-8).
PB93-184893/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Azaserine (115-02-6).
PB93-184901/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Aziridine (151-56-4).
PB93-184919/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benz(a)anthracene (00056-55-3).
PB93-184935/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benz(c)acridine (225-51-4).
PB93-184927/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzene (71-43-2).
PB93-184943/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzidine and Its Salt (92-87-5).
PB93-184976/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzo(a)Pyrene (50-32-8).
PB93-185007/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzo(b)fluoranthene (00205-99-2).
PB93-184984/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzo(k)fluoranthene (207-08-9).
PB93-184992/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzotrichloride (97-07-7).
PB93-185015/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzyl Chloride (100-44-7).
PB93-185023/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
PB93-185031/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Beta-Hexachlorocyclohexane (319-85-7).
PB93-185056/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(Chloromethyl)Ether (542-88-1).
PB93-185080/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(2-Chloroethyl)Ether (111-44-4).
PB93-185072/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(2-Ethylhexyl)Phthalate (117-81-7).
PB93-185098/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Cacodylic Acid (75-60-5).
PB93-184851/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Cadmium (7740-43-9), Cadium Acetate (543-90-8), Cadmium Bromide (7789-42-6), Cadmium Chloride (10108-64-2).
PB93-185106/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Carbon Tetrachloride (56-23-5).
PB93-185114/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlorambucil (305-03-3).
PB93-185213/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlordane (57-74-9).
PB93-185221/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlornaphazine (494-03-1).
PB93-185239/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chloroform (67-66-3).
PB93-194249/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chloromethyl Methyl Ether (Technical Grade) (107-30-2).
PB93-185122/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chromium and Hexavalent Chromium Compounds.
PB93-185148/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chrysene (218-01-9).
PB93-185155/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Coke Oven Emissions.
PB93-185163/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Creosote (8001-58-9).
PB93-185171/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Cyclophosphamide (50-18-0).
PB93-185189/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Daunomycin (20830-81-3).
PB93-185197/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDD (72-54-8).
PB93-185205/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDE (72-55-9).
PB93-185247/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDT (50-29-3).
PB93-185254/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diallate (2303-16-4).
PB93-185262/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diaminotoluene (Mixed) (95-80-7).
PB93-185270/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dibenz(a,h)Anthracene (53-70-3).
PB93-185288/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dichlorophenylarsine (696-28-6).
PB93-184869/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dieldrin (60-57-1).
PB93-194272/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diethylarsine (692-42-2).
PB93-184877/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diethylstilbestrol (56-53-1).
PB93-194306/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dihydrosafrole (94-58-6).
PB93-185312/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethyl Sulfate (77-78-1).
PB93-194322/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethylaminoazobenzene (60-11-7).
PB93-185338/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethylcarbamoyl Chlo.
PB93-185361/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dinitrotoluene (Mixture) (25321-14-6).
PB93-185395/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Epichlorohydrin (106-89-8).
PB93-192334/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl Carbamate (Urethane) (51-79-6).
PB93-192342/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl Methanesulfonate (62-50-0).
PB93-193597/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl 4,4'-Dichlorobenzilate (510-15-6).
PB93-192359/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylene Dibromide (106-93-4).
PB93-192367/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylene Oxide (75-21-8).
PB93-192375/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylenethiourea (96-45-7).
PB93-193589/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Formaldehyde (50-00-0).
PB93-193605/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Gamma-Hexachlorocyclohexane (Lindane) (58-89-9).
PB93-185064/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Glycidylaldehyde (765-34-4).
PB93-193613/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Heptachlor Epoxide (1024-57-3).
PB93-190486/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Heptachlor (76-44-8).
PB93-190478/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachlorobenzene (118-74-1).
PB93-190494/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachlorobutadiene (87-68-3).
PB93-190502/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachloroethane (67-72-1).
PB93-190510/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hydrazine (302-01-2).
PB93-190528/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Indeno(1,2,3-CD)Pyrene (193-39-5).
PB93-190536/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Isosafrole (120-58-1).
PB93-190544/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Kepone Chlordecone (143-50-0).
PB93-190569/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Lasiocarpine (303-34-4).
PB93-190577/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Melphalan (148-82-3).
PB93-196301/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methyl Chloride (74-87-3).
PB93-196319/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methyl Iodide (74-88-4).
PB93-196343/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methylthiouracil (56-04-2).
PB93-196368/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Mitomycin C (50-07-7).
PB93-196376/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Methyl-N'-Nitro-N-Nitrosoguanidine (70-25-7).
PB93-196350/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Ethylurea (759-73-9).
PB93-196475/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurea (684-93-5).
PB93-196483/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurethane (165-53-2).
PB93-196491/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Butylamine (924-16-3).
PB93-196426/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Propylamine (621-64-7).
PB93-196467/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodiethanolamine (1116-54-7).
PB93-196434/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodiethylamine (55-18-5).
PB93-196442/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodimethylamine (62-75-9).
PB93-196459/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosomethylvinylamine (4549-40-0).
PB93-196509/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosopiperidine (100-75-4).
PB93-196517/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosopyrrolidine.
PB93-196525/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Nickel (7740-02-0).
PB93-196400/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of o-Toluidine Hydrochloride (636-21-5).
PB93-202349/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of o-Toluidine (95-53-4).
PB93-201200/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of p-Toluidine (106-49-0).
PB93-201192/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachloroethane (76-01-7).
PB93-185320/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachloronitrobenzene (82-68-8).
PB93-196541/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachlorophenol (87-86-5).
PB93-196558/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Phenacetin (62-44-2).
PB93-196566/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Polychlorinated Biphenyls (1336-36-3) Including Specific Aroclors.
PB93-196574/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Safrole (94-59-7).
PB93-201291/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Selenium Sulfide (Selenium Disulfide) (7488-56-4).
PB93-201283/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Streptozotocin (18883-66-4).
PB93-201275/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Tetrachloroethylene (127-18-4).
PB93-201234/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Thioacetamide (62-55-5).
PB93-201226/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Thiourea (62-56-6).
PB93-201218/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Toxaphene (8001-35-2).
PB93-202331/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trichloroethylene (79-01-6).
PB93-202323/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of Trichlorophenol (Mixed) (2516-78-22).
PB93-202315/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of Tris(2,3-Dibromopropyl) Phosphate (126-72-7).
PB93-202281/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of Trypan Blue (72-57-1).
PB93-202273/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of Uracil Mustard (66-75-1).
PB93-202265/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of Vinyl Chloride (75-01-4).
PB93-202257/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,1,1,2-Tetrachloroethane (630-20-6).
PB93-201259/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,1,2,2-Tetrachloroethane (79-34-5).
PB93-201242/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,1,2-Trichloroethane (79-00-5).
PB93-204584/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,1 Dimethylhydrazine (57-14-7).
PB93-185379/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,2:3,4-Diepoxybutane (1464-53-5).
PB93-194290/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,2:7,8-Dibenzopyrene (189-55-9).
PB93-185296/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,2-Dibromo-3-Chloropropane (96-12-8).
PB93-185304/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,2-Dichloroethane (107-06-2).
PB93-194264/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,2-Diethylhydrazine (1615-80-1).
PB93-194298/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,2-Dimethylhydrazine (540-73-8).
PB93-185387/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,2-Diphenylhydrazine (122-66-7).
PB93-192326/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,2-Propylenimine (75-55-8).
PB93-196590/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,3-Propane Sultone (1120-71-4).
PB93-196582/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1,4-Dioxane (123-91-1).
PB93-185429/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 1-Naphthylamine (134-32-7).
PB93-196384/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (1746-01-6).
PB93-201267/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 2,4,5-Trichlorophenol (95-95-4).
PB93-202307/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 2,4,6-Trichlorophenol (88-06-2).
PB93-202299/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 2,4-Dinitrotoluene (121-14-2).
PB93-185403/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 2,6-Dinitrotoluene (606-20-2).
PB93-185411/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 2-Naphthylamine (91-59-8).
PB93-196392/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 2-Nitropropane (79-46-9).
PB93-196418/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 3,3'-Dichlorobenzidine (91-94-1).
PB93-194256/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 3,3'-Dimethoxybenzidine (119-90-4).
PB93-194314/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 3,3'-Dimethylbenzidine (119-93-7).
PB93-185353/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 3-Methylcholanthrene (59-49-5).
PB93-196327/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 4,4'-Methylenebis (1-Chloroaniline) (101-14-4).
PB93-196335/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 4-Chloro-o-Toluidine Hydrochloride (3165-93-3).
PB93-185130/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 5-Nitro-O-Toluidine (99-55-8).
PB93-196533/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 7,12-Dimethylbenz(a)anthracene (57-97-6).
PB93-185346/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity Saccharin (81-07-2).
PB93-196608/REB 93-01 PC A03/MF A01

Evaluation of Three Cleaning Methods for Removing Asbestos from Carpet: Determination of Airborne Asbestos Concentrations Associated with Each Method.
PB93-218568/REB 93-04 PC A05/MF A01

Evaluation of Three Oil Spill Laboratory Dispersant Effectiveness Tests.
PB93-191377/REB 93-01 PC A02/MF A01

Evaluation of Two Methods for the Measurement of Mercury Emissions in Exhaust Gases from a Municipal Waste Combustor.
PB93-105542/REB 93-01 PC A05/MF A01

Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
PB93-221636/REB 93-04 PC A04/MF A01

Evaluation of Ventilation Performance for Indoor Space.
PB93-212751/REB 93-04 PC A02/MF A01

Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180691/REB 93-01 PC A03/MF A01

EVAP3.0 CRC Evaporative Emission Model: User's Manual.
PB93-213916/REB 93-04 PC A03/MF A01

Evaporative Emission Model (EVAP 3.0) (for Microcomputers).
PB93-506301/REB 93-04 CP D02

Evidence for Direct Effect of Magnetic Fields on Neurite Outgrowth.
PB93-236669/REB 93-04 PC A02/MF A01

Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
PB93-131845/REB 93-01 PC A03/MF A01

Exercising Flexibility through the Superfund Accelerated Cleanup Model (SACM).
PB93-963253/REB 93-01 PC A01/MF A01

Expanding Global Forest Management: An 'Easy First' Proposal.
PB93-199669/REB 93-01 PC A02/MF A01

Expedited Response Actions.
PB93-963410/REB 93-01 PC A02/MF A01

Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.
PB93-212363/REB 93-04 PC A02/MF A01

Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC A03/MF A01

Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC A02/MF A01

Experimental Investigation of PIC Formation in CFC-12 Incineration.
PB93-191294/REB 93-01 PC A07/MF A02

Exploring the Effects of Vector to Raster and Raster to Vector Conversion.
PB93-122166/REB 93-01 PC A04/MF A01

Exposure Modeling of Acid Aerosols.
PB93-228559/REB 93-04 PC A02/MF A01

Extending the Tracking of Analytical Services to Potentially Responsible Party-Lead Superfund Sites (Supplemental Guidance on OSWER Directive 9240.0-2A).
PB93-963502/REB 93-01 PC A03/MF A01

Extraction and Recovery of Lead Species from Soil.
PB93-150142/REB 93-01 PC A02/MF A01

Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC A02/MF A01

Extrapolation Modeling of Aerosol Deposition in Human and Laboratory Rat Lungs.
PB93-181097/REB 93-01 PC A03/MF A01

Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC A02/MF A01

Facility Response Plans.
PB93-963408/REB 93-01 PC A01/MF A01

Fact Sheet: National Primary Drinking Water Regulations for Lead and Copper.
PB93-193746/REB 93-01 PC A03/MF A01

Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC A03/MF A01

Fate of 'Bacillus sphaericus' and 'Bacillus thuringiensis' Serovar 'Israelensis' in the Aquatic Environment.
PB93-121143/REB 93-01 PC A02/MF A01

Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC A02/MF A01

Fate of Priority Pollutants in Publicly Owned Treatment Works. Pilot Study.
PB93-203974/REB 93-04 PC A03/MF A01

FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC A02/MF A01

Feasibility of Including Fugitive PM-10 Emissions Estimates in the EPA Emissions Trends Report.
PB93-169084/REB 93-01 PC A03/MF A01

Federal Certification Test Results for 1992 Model Year. Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines.
PB93-111219/REB 93-01 PC A13/MF A03

Federal Consistency Guidance: Federal Consistency with State Nonpoint Source Management Programs.
AD-A267 517/1/REB 93-04 PC A03/MF A01

Federal Insecticide, Fungicide, and Rodenticide Act as Amended.
PB93-116085/REB 93-01 PC A05/MF A01

Federal Policies and Technological Problem-Solving.
PB93-142107/REB 93-01 PC A03/MF A01

Federal Register Volume 57 No. 175 Wednesday, September 9, 1992 Notices. Part 2. Final NPDES General Permits for Storm Water Discharges from Construction Sites; Fact Sheet.
PB93-227635/REB 93-04 PC A03/MF A01

Federal Register, Volume 58, No. 72. Part 2. Environmental Protection Agency, 40 CFR Parts 122 et al. Water Quality Guidance for the Great Lakes System and Correction; Proposed Rules.
PB93-183002/REB 93-01 PC A11/MF A03

Federal Test Procedure Review Project: Preliminary Technical Report.
PB93-207975/REB 93-04 PC A11/MF A03

Federal Test Procedure Review Project: Status Report.
PB93-197903/REB 93-01 PC A03/MF A01

Field and Laboratory Studies of Chemical Contamination and Environmentally Related Diseases in Fish and Molluscs of New England.
PB93-199438/REB 93-01 PC A02/MF A01

Field Applications of Robotic Systems in Hazardous Environments, p1-29 1993. See also PB86-176344 and PB92-166743.
PB93-229755/REB 93-04 PC A03/MF A01

Field Certification Tracking System (FCTS). User's Guide. Version 2.1.
PB93-963415/REB 93-04 PC A04/MF A01

Field Certification Tracking System (FCTS), Version 2.1 (for Microcomputers).
PB93-506582/REB 93-04 CP D02

Field-Deployable Monitors for Volatile Organic Compounds in Air. (Essential Capabilities of a Portable Gas Chromatograph).
PB93-185700/REB 93-01 PC A03/MF A01

Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC A02/MF A01

Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC A03/MF A01

Field Test of a Generic Method for Halogenated Hydrocarbons.
PB93-212181/REB 93-04 PC A13/MF A03

Final Regulatory Impact Analysis and Summary and Analysis of Comments: Control of Vehicular Evaporative Emissions.
PB93-228138/REB 93-04 PC **A07/MF A02**

Final Results of the Condors Convective Diffusion Experiment.
PB93-212728/REB 93-04 PC **A03/MF A01**

Financing Models for Environmental Protection: Helping Communities Meet Their Environmental Goals.
PB93-124998/REB 93-01 PC **A05/MF A01**

Fish and Fisheries Management in Lakes and Reservoirs. Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-210375/REB 93-04 PC **A15/MF A03**

FLEX: An Expert System for Reviewing the Chemical Resistance of Flexible Membrane Liners for Waste Management.
PB93-106706/REB 93-01 PC **A03/MF A01**

Flexible Membrane Liner Advisory Expert System (FLEX) (for Microcomputers) (Version 3.0).
PB93-502631/REB 93-01 CP **D02**

Florida Small Systems Compliance Project.
PB93-115855/REB 93-01 PC **A04/MF A01**

Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC **A04/MF A01**

Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03/MF A01**

Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03/MF A01**

Foam Scrubbing (Chapter 9).
PB93-236560/REB 93-04 PC **A03/MF A01**

Foerbraenning av sorterat industriavfall. Huvudrapport. (Incineration of sorted industrial wastes. Main report).
DE93500869/REB 93-04 PC **A03/MF A01**

Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
DE93500877/REB 93-04 PC **A04/MF A01**

Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
DE93500872/REB 93-04 PC **A03/MF A01**

Forest Fires in Russia: Carbon Dioxide Emissions to the Atmosphere.
PB93-229664/REB 93-04 PC **A02/MF A01**

Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.
PB93-212637/REB 93-04 PC **A03/MF A01**

Forest Management in Russia: Challenges and Opportunities in the Era of Perestroika.
PB93-106961/REB 93-01 PC **A02/MF A01**

Forest Sector Carbon Budget of the United States: Carbon Pools and Flux under Alternative Policy Options.
PB93-196996/REB 93-01 PC **A10/MF A03**

Formaldehyde-Contaminated Fog Effects on Plant Growth.
PB93-121101/REB 93-01 PC **A02/MF A01**

Formation and Control of Combustion Pollutants from Gasoline-Fueled Spark-Ignition Motor Vehicle Engines. (Revised November 1992).
PB93-141042/REB 93-01 PC **A04/MF A01**

Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.
PB93-205102/REB 93-04 PC **A02/MF A01**

Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC **A02/MF A01**

Framework for Characterization. (Revised Final Report March 1992).
PB93-191237/REB 93-01 PC **A04/MF A01**

Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC **A05/MF A01**

Framework for Ecological Risk Assessment.
PB93-102192/REB 93-01 PC **A04/MF A01**

Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC **A02/MF A01**

Frequency and Nature of Specific-Locus Mutations Induced in Female Mice by Radiations and Chemicals: A Review.
PB93-194447/REB 93-01 PC **A03/MF A01**

Freshwater environmental monitoring in Sweden. Proposals from a working group.
DE93778474/REB 93-01 PC **A08/MF A02**

Fuel Economy Guide, 1992. 3-Number.
PB93-111193/REB 93-01 PC **A04/MF A01**

Fuel Economy Guide, 1992. 6-Number.
PB93-111201/REB 93-01 PC **A04/MF A01**

Fuel Economy Guide, 1993. 3-Number.
PB93-169340/REB 93-01 PC **A04/MF A01**

Fuel Economy Guide, 1993. 6 Number.
PB93-169357/REB 93-01 PC **A04/MF A01**

Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures.
PB93-122273/REB 93-01 PC **A09/MF A03**

Fundamental Mass Transfer Models for Indoor Air Pollution Sources.
PB93-221992/REB 93-04 PC **A02/MF A01**

Further Direction on Implementing the Superfund Accelerated Cleanup Model (SACM).
PB93-963291/REB 93-01 PC **A02/MF A01**

Future Context of Sustainable Agriculture: Planning for Uncertainty.
PB93-191518/REB 93-01 PC **A03/MF A01**

Gasoline and Methanol Exposures from Automobiles within Residences and Attached Garages.
PB93-222222/REB 93-04 PC **A02/MF A01**

Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC **A03/MF A01**

Gene Expression during Oogenesis in Mice.
PB93-194389/REB 93-01 PC **A03/MF A01**

Gene Expression in Pre-Implantation Mammalian Embryos.
PB93-194397/REB 93-01 PC **A03/MF A01**

General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC **A04/MF A01**

General Information on Applying for Registration of Pesticides in the United States.
PB93-115939/REB 93-01 PC **A08/MF A02**

General Provisions for 40 CFR Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories. Background Information for Proposed Regulation.
PB93-226090/REB 93-04 PC **A06/MF A02**

General Public Notification for Public Water Systems.
PB93-167096/REB 93-01 PC **A05/MF A01**

Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC **A03/MF A01**

Genetic Analysis of the aggA Locus Involved in Agglutination and Adherence of 'Pseudomonas putida', a Beneficial Fluorescent Pseudomonad.
PB93-205029/REB 93-04 PC **A03/MF A01**

Genetic and Cell-Free Studies of PCB Biodegradation in 'Pseudomonas putida' LB400.
PB93-229748/REB 93-04 PC **A03/MF A01**

Genetic Damage In vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04/MF A01**

Genetic Toxicology of Putative Nongenotoxic Carcinogens.
PB93-175636/REB 93-01 PC **A03/MF A01**

Genetically Engineered Baculoviruses as Agents for Pest Control.
PB93-150175/REB 93-01 PC **A03/MF A01**

Genotoxicity of 2,4,5-Trichlorophenoxyacetic Acid Biodegradation Products in the 'Salmonella' Reversion and Lambda Prophage-Induction Bioassays.
PB93-107175/REB 93-01 PC **A02/MF A01**

Genus- and Group-Specific Hybridization Probes for Determinative and Environmental Studies of Sulfate-Reducing Bacteria.
PB93-168987/REB 93-01 PC **A02/MF A01**

Geo-EAS: Software for Geostatistics 1.2.1 (3 1/2 inch Version) (for Microcomputers).
PB93-504967/REB 93-01 CP **D02**

Geo-EAS: Software for Geostatistics 1.2.1 (5 1/4 Inch Version) (for Microcomputers).
PB93-504959/REB 93-01 CP **D02**

Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC **A03/MF A01**

Geographical Distribution and Source Type Analysis of Toxic Metal Emissions.
PB93-121036/REB 93-01 PC **A02/MF A01**

Geophysics Advisor Expert System, Version 2.0.
PB93-163285/REB 93-01 PC **A03/MF A01**

Geophysics Advisor Expert System (Version 2.0) (for Microcomputers).
PB93-505162/REB 93-01 CP **D02**

Geostatistical Environmental Assessment Software: User's Guide. GEO-EAS 1.2.1.
PB93-163236/REB 93-01 PC **A07/MF A02**

Geotechnical Systems for Structures on Contaminated Sites: A Technical Guidance Document.
PB93-209419/REB 93-04 PC **A08/MF A02**

Glass Markets Information System: Application Records.
PB93-193902/REB 93-01 PC **A21/MF A04**

Glass Markets Information System; Application Summary Reports.
PB93-197887/REB 93-01 PC **A05/MF A01**

Global Climates: Past, Present, and Future. Activities for Integrated Science Education.
PB93-222313/REB 93-04 PC **A06/MF A02**

Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. Documentation Manual, DISC-A. Volume 1. NGDC Key to Geophysical Records Documentation No. 27.
PB93-146090/REB 93-01 PC **A11/MF A03**

Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. User's Guide. Volume 1. NGDC Key to Geophysical Records Documentation No. 26.
PB93-146082/REB 93-01 PC **A07/MF A02**

Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC **A03/MF A01**

Global Flux of Methane from Shallow Submarine Sediments.
PB93-222388/REB 93-04 PC **A03/MF A01**

Global Inventory of Volatile Organic Compound Emissions from Anthropogenic Sources.
PB93-107001/REB 93-01 PC **A03/MF A01**

Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.
PB93-212579/REB 93-04 PC **A02/MF A01**

Global Oceans Directory. A Compendium of Organizations Dedicated to Marine Conservation.
PB93-206555/REB 93-04 PC **A08/MF A02**

Glossary for Avian Conservation Biology.
PB93-106656/REB 93-01 PC **A03/MF A01**

Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC **A03/MF A01**

Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02/MF A01**

Gonadal Effects of Fetal Exposure to the Azo Dye Congo Red in Mice: Infertility in Female but Not Male Offspring.
PB93-181071/REB 93-01 PC **A03/MF A01**

Great Lakes Water Quality Guidance Docket Index.
PB93-207769/REB 93-04 PC **A05/MF A01**

Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study Technical Background Document (for Microcomputers).
PB93-505402/REB 93-04 CP **D04**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Human Health (February 1993 Draft).
PB93-154680/REB 93-01 PC **A09/MF A03**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC **A04/MF A01**

Great Lakes Water Quality Initiative Technical Support Document for Human Health Criteria and Values (January 1993 Draft).
PB93-154698/REB 93-01 PC **A05/MF A01**

Greenhouse gases. Emissions and countermeasures in an international perspective.
DE93721674/REB 93-01 PC **A07/MF A02**

Greening of World Trade: A Report to EPA from the Trade and Environment Committee of the National Advisory Council for Environmental Policy and Technology.
PB93-176980/REB 93-01 PC **A11/MF A03**

Ground-Water Modeling Compendium. Model Fact Sheets, Descriptions, Applications and Assessment Framework.
PB93-207504/REB 93-04 PC **A08/MF A02**

Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1. Fish Sampling and Analysis.
PB93-237899/REB 93-04 PC **A16/MF A03**

Guidance for Capacity Assurance Planning. Capacity Planning Pursuant to CERCLA Section 104(c)(9).
PB93-209898/REB 93-04 PC **A09/MF A02**

Guidance for Federal Facilities on Release Notification Requirements under CERCLA and SARA Title III.
PB93-963412/REB 93-01 PC **A03**/MF **A01**

Guidance for Growth Factors, Projections, and Control Strategies for the 15 Percent Rate-of-Progress Plans.
PB93-186476/REB 93-01 PC **A09**/MF **A03**

Guidance for Performing Site Inspections under CERCLA.
PB92-963375/REB 93-01 PC **A11**/MF **A03**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
PB93-100907/REB 93-01 PC **A07**/MF **A02**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

Guidance for Writing Permits for the Use or Disposal of Sewage Sludge.
PB93-217537/REB 93-04 PC **A18**/MF **A04**

Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources. March 1991 Edition.
PB93-222933/REB 93-04 PC **A24**/MF **A04**

Guidance Manual for Control of Slug Loadings to POTWs.
PB93-202745/REB 93-01 PC **A08**/MF **A02**

Guidance Manual for POTW Pretreatment Program Development.
PB93-186112/REB 93-01 PC **A14**/MF **A03**

Guidance Manual for the Review of Permitted and Civil Works Projects for the Ocean Disposal of Dredged Material.
PB93-223048/REB 93-04 PC **A14**/MF **A03**

Guidance on CERCLA Settlements with De Micromis Waste Contributors.
PB93-963619/REB 93-04 PC **A03**/MF **A01**

Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA.
PB93-963402/REB 93-04 PC **A04**/MF **A01**

Guidance on Enforcement of the Requirements of the Surface Water Treatment Rule.
PB93-186633/REB 93-01 PC **A03**/MF **A01**

Guidance on Evaluation, Resolution, and Documentation of Analytical Problems Associated with Compliance Monitoring.
PB93-229847/REB 93-04 PC **A03**/MF **A01**

Guidance on Implementation of the 'Contribute to Remedial Performance' Provision.
PB93-963413/REB 93-04 PC **A02**/MF **A01**

Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP.
PB93-963252/REB 93-01 PC **A03**/MF **A01**

Guidance on Program Management Activities under ARCS.
PB93-963280/REB 93-01 PC **A03**/MF **A01**

Guidance on Setting Priorities for NPL Candidate Sites.
PB93-963333/REB 93-01 PC **A02**/MF **A01**

Guidance on the Adjusted Base Year Emissions Inventory and the 1996 Target for the 15 Percent Rate of Progress Plans.
PB93-122356/REB 93-01 PC **A04**/MF **A01**

Guidance on the Application of Refined Dispersion Models for Hazardous/Toxic Air Releases.
PB93-210359/REB 93-04 PC **A20**/MF **A04**

Guidance on the Relationship between the 15 Percent Rate-of-Progress Plans and Other Provisions of the Clean Air Act.
PB93-200525/REB 93-01 PC **A04**/MF **A01**

Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters.
PB93-234672/REB 93-04 PC **A99**/MF **E06**

Guide for Conducting Contaminant Source Inventories for Public Drinking Water Supplies. Technical Assistance Document.
PB93-126407/REB 93-01 PC **A06**/MF **A02**

Guide for Conducting Treatability Studies under CERCLA.
PB93-126787/REB 93-01 PC **A05**/MF **A01**

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Quick Reference Fact Sheet.
PB93-121325/REB 93-01 PC **A02**/MF **A01**

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Remedy Selection. Interim Guidance.
PB93-126597/REB 93-01 PC **A03**/MF **A01**

Guide for Cost-Effectiveness and Cost-Benefit Analysis of State and Local Ground Water Protection Programs.
PB93-207397/REB 93-04 PC **A06**/MF **A02**

Guide to Community Involvement for Site Assessment Managers.
PB93-963348/REB 93-04 PC **A02**/MF **A01**

Guide to Effective Inspection Reports for Air Pollution Violations. Stationary Source Compliance Training Series.
PB93-199107/REB 93-01 PC **A04**/MF **A01**

Guide to Federal Water Quality Programs and Information: A Guide with Computer Software Developed by the Interagency Work Group on Water Quality.
PB93-186245/REB 93-01 PC **A09**/MF **A02**

Guide to Nonpoint Source Pollution Control. Controlling Nonpoint Source Pollution: A Guide.
PB93-234292/REB 93-04 PC **A07**/MF **A02**

Guide to Performing Reinspections under the Asbestos Hazard Emergency Response Act (AHERA).
PB93-128007/REB 93-01 PC **A06**/MF **A02**

Guide to the Asbestos NESHAP as Revised November 1990.
PB93-199362/REB 93-01 PC **A04**/MF **A01**

Guide to Using Chesapeake Bay Program Water Quality Monitoring Data.
PB93-205888/REB 93-04 PC **A07**/MF **A02**

Guideline for Graphic Arts Calculations.
PB93-199370/REB 93-01 PC **A05**/MF **A01**

Guideline for Modeling Carbon Monoxide from Roadway Intersections.
PB93-210391/REB 93-04 PC **A04**/MF **A01**

Guideline on Air Quality Models (Revised): Appendix W of 40 CFR Part 51 (Supplement B).
PB93-213213/REB 93-04 PC **A03**/MF **A01**

Guidelines for Delineation of Wellhead Protection Areas, 1993.
PB93-215861/REB 93-04 PC **A10**/MF **A03**

Guidelines for Deriving Ambient Aquatic Life Advisory Concentrations.
PB93-236057/REB 93-04 PC **A03**/MF **AC1**

Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances.
PB93-206449/REB 93-04 PC **A06**/MF **A02**

Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

Guidelines for Estimating and Applying Rule Effectiveness for Ozone CO State Implementation Plan Base Year Inventories.
PB93-131498/REB 93-01 PC **A05**/MF **A01**

Guidelines for MACT Determinations under Section 112(j) (Proposal).
PB93-183283/REB 93-04 PC **A08**/MF **A02**

Guidelines for Mercury Measurements from Stationary Sources: Quality Assurance Handbook. Section 3.19. Volume 3.
PB93-131209/REB 93-01 PC **A08**/MF **A02**

Guidelines for Stack Testing at Municipal Waste Combustion Facilities. Project Summary.
PB93-222610/REB 93-04 PC **A02**/MF **A01**

Guidelines for Water Use.
PB93-222180/REB 93-04 PC **A12**/MF **A03**

Guides to Pollution Prevention: Metal Casting and Heat Treating Industry.
PB93-127793/REB 93-01 PC **A05**/MF **A01**

Guides to Pollution Prevention: The Mechanical Equipment Repair Industry.
PB93-121317/REB 93-01 PC **A03**/MF **A01**

Guides to Pollution Prevention: The Metal Finishing Industry.
PB93-100105/REB 93-04 PC **A04**/MF **A01**

Guiding Principles for Chemical Accident Prevention, Preparedness and Response.
PB93-217560/REB 93-04 PC **A07**/MF **A02**

Habitat Quality Assessment of Two Wetland Treatment Systems in Mississippi: A Pilot Study.
PB93-135614/REB 93-01 PC **A06**/MF **A02**

Habitat Quality Assessment of Two Wetland Treatment Systems in the Arid West: A Pilot Study.
PB93-222305/REB 93-04 PC **A06**/MF **A02**

Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04**/MF **A01**

Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
PB93-233914/REB 93-04 PC **A12**/MF **A03**

Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC **A06**/MF **A02**

Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC **A07**/MF **A02**

Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC **A10**/MF **A03**

Handbook: Remediation of Contaminated Sediments.
PB93-116275/REB 93-01 PC **A04**/MF **A01**

Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC **A22**/MF **A04**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1A. National Impacts Assessment.
PB93-156552/REB 93-01 PC **A08**/MF **A02**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1B. Control Technologies.
PB93-156560/REB 93-01 PC **A13**/MF **A03**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1C. Model Emission Sources.
PB93-156578/REB 93-01 PC **A11**/MF **A03**

Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212538/REB 93-04 PC **A03**/MF **A01**

Hazardous Waste Management.
PB93-116135/REB 93-01 PC **A03**/MF **A01**

Hazardous Waste Management Planning Needs and Practices: A Review of Several State Agency Approaches.
PB93-193225/REB 93-04 PC **A04**/MF **A01**

Hazardous Waste Report, 1991: Instructions and Forms.
PB93-233757/REB 93-04 PC **A08**/MF **A02**

Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC **A05**/MF **A01**

Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 1. Disposition and Pharmacokinetics.
PB93-222651/REB 93-04 PC **A07**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 2. Mechanisms of Toxic Actions.
PB93-222669/REB 93-04 PC **A03**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 3. Acute, Subchronic, and Chronic Toxicity.
PB93-222677/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 4. Immunotoxic Effects.
PB93-222685/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.
PB93-222693/REB 93-04 PC **A06**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 6. Carcinogenicity of TCDD in Animals.
PB93-222701/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 7. Epidemiology/Human Data.
PB93-222719/REB 93-04 PC **A07**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 8. Dose-Response Relationships.
PB93-222727/REB 93-04 PC **A11**/MF **A03**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. (Chapters 1 through 8).
PB93-222644/REB 93-04 PC **E99**/MF **E99**

Health Effects Assessment Summary Tables.
PB93-921100/REB 93-01 Standing Order

Health Effects of Arsenic in Drinking Water: Research Needs.
PB93-141331/REB 93-01 PC **A02**/MF **A01**

Heavy-Duty Engine Testing Report Cummins/EPA/Taiwan Correlation Test Results, 1993.
PB93-236172/REB 93-04 PC **A03**/MF **A01**

Heavy-Duty Engine Testing Report Non-Road Engine Configurations Injection Timing Effects Test Results, 1992.
PB93-236164/REB 93-04 PC **A05**/MF **A01**

Heavy metal concentrations in agricultural soils critical to microorganisms.
DE93778472/REB 93-01 PC **A03**/MF **A01**

Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC **A03/MF A01**

Highlights of the EPA Innovative Regulatory Strategies Workshop: Market-Based Incentives and other Innovations for Air Pollution Control. Summary of Workshop Discussion Sessions. Held in Washington, DC. on January 15-17, 1992.
PB93-150290/REB 93-01 PC **A05/MF A01**

Highlights: Superfund Program Management. Fiscal Year 1993.
PB93-963261/REB 93-01 PC **A03/MF A01**

Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04/MF A01**

Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03/MF A01**

Horsehead Resource Development Company, Inc., Flame Reactor Technology. Technology Demonstration Summary.
PB93-145639/REB 93-01 PC **A02/MF A01**

Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02/MF A01**

HSED SACM Report. Volume 1, Number 1, January 1993.
PB93-963289/REB 93-01 PC **A01/MF A01**

Human Health Effects of Air Pollution.
PB93-231843/REB 93-04 PC **A03/MF A01**

Human Health Risk Assessment for the Use and Disposal of Sewage Sludge: Benefits of Regulation.
PB93-111540/REB 93-04 PC **A14/MF A03**

Human Upper Respiratory Tract Responses to Inhaled Pollutants with Emphasis on Nasal Lavage.
PB93-181089/REB 93-01 PC **A02/MF A01**

Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204960/REB 93-01 PC **A03/MF A01**

Hydraulic Conductivity of Three Geosynthetic Clay Liners.
PB93-131746/REB 93-01 PC **A02/MF A01**

Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03/MF A01**

IAQPC: An Indoor Air Quality Simulator.
PB93-212397/REB 93-04 PC **A03/MF A01**

Identification of a Senior Superfund Official for Addressing Special NPL Site-Related Issues.
PB93-963279/REB 93-01 PC **A01/MF A01**

Identification of Cost Factors for the Ocean Disposal Alternative for Low-Level Radioactive Waste.
PB93-203917/REB 93-04 PC **A03/MF A01**

Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC **A02/MF A01**

Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC **A01/MF A01**

Illinois Annual Air Quality Report, 1991.
PB93-208775/REB 93-04 PC **A05/MF A01**

Illinois Annual Air Quality Report, 1992.
PB93-208759/REB 93-04 PC **A05/MF A01**

Illinois Water Quality Management Plan.
PB93-138451/REB 93-01 PC **A07/MF A02**

Immunoassay for p-Nitrophenol in Urine (Chapter XX).
PB93-175552/REB 93-01 PC **A03/MF A01**

Impact of fuels on diesel exhaust emissions. A chemical and biological characterization.
DE92563058/REB 93-01 PC **A08/MF A02**

Impacts of Climate Change on Rice Yield: A Comparison of Four Model Performances.
PB93-191526/REB 93-01 PC **A03/MF A01**

Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
PB93-212462/REB 93-04 PC **A03/MF A01**

Impacts of Section 404 Permits Requiring Compensatory Mitigation on Wetlands in California (USA).
PB93-212512/REB 93-04 PC **A03/MF A01**

Implementation Plan for Removing Impediments to Migratory Fishes in the Chesapeake Bay Watershed (January-December 1991).
PB93-116572/REB 93-01 PC **A03/MF A01**

Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.
PB93-229649/REB 93-04 PC **A03/MF A01**

Importance of Experimenter-Blind Procedure in Neurotoxicology (Mini-Review).
PB93-175628/REB 93-01 PC **A02/MF A01**

Importance of Fish Diseases: An Overview.
PB93-204113/REB 93-01 PC **A03/MF A01**

Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC **A01/MF A01**

In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC **A03/MF A01**

In-situ Bioremediation of Ground Water.
PB93-146850/REB 93-01 PC **A01/MF A01**

In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC **A12/MF A03**

In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03/MF A01**

In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with in vivo Data.
PB93-107167/REB 93-01 PC **A03/MF A01**

In vitro Mammalian Mutagenesis as a Model for Genetic Lesions in Human Cancer.
PB93-141471/REB 93-01 PC **A02/MF A01**

In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02/MF A01**

Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC **A01/MF A01**

Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC **A06/MF A02**

Incineration of Hazardous Waste: A Critical Review Update.
PB93-185916/REB 93-01 PC **A03/MF A01**

Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC **A02/MF A01**

Incorporating Uncertainty Associated with Censored Water Quality Data in Parametric Trend Analysis.
PB93-208262/REB 93-04 PC **A03/MF A01**

Index to the Monthly Hotline Report Questions (June 1982 to December 1991).
PB92-131374/REB 93-01 PC **A07/MF A02**

Indian Primacy Procedures Handbook for the Public Water System Supervision (PWSS) Program and the Underground Injection Control (UIC) Program.
PB93-185585/REB 93-01 PC **A09/MF A02**

Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03/MF A01**

Indoor Concentration Modeling of Aerosol Strong Acidity.
PB93-204071/REB 93-01 PC **A02/MF A01**

Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC **A02/MF A01**

Indoor Radon Reduction in Crawl-Space Houses: A Review of Alternative Approaches.
PB93-173177/REB 93-01 PC **A03/MF A01**

Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
PB93-121259/REB 93-01 PC **A02/MF A01**

Industrial Boiler Furnace Sorbent Injection Algorithm Development.
PB93-222438/REB 93-04 PC **A01/MF A01**

Industrial Boiler Low NOx Combustion Retrofit Cost Algorithm Development. Project Summary.
PB93-222578/REB 93-04 PC **A01/MF A01**

Industrial Source Complex LongTerm (ISCLT) (for Microcomputers).
PB93-500239/REB 93-01 CP **D03**

Industrial Source Complex Short Term (ISCST) (for Microcomputers).
PB93-500221/REB 93-01 CP **D03**

Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC **A02/MF A01**

Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC **A02/MF A01**

Influence of Elevated CO2 and Temperature on Wetland Rice Root Dynamics.
PB93-141141/REB 93-01 PC **A02/MF A01**

Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC **A03/MF A01**

Influence of Root Colonizing Bacteria on the Defense Responses of Bean.
PB93-205045/REB 93-04 PC **A03/MF A01**

Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
PB93-205011/REB 93-04 PC **A02/MF A01**

Information Management Guidelines for the Wetlands Research Program.
PB93-202844/REB 93-01 PC **A04/MF A01**

Information Technology Architecture.
PB93-122430/REB 93-01 PC **A03/MF A01**

Inhibition of Alkylbenzene Biodegradation under Denitrifying Conditions by Using Acetylene Block Technique.
PB93-121242/REB 93-01 PC **A02/MF A01**

Initial Assessment of Emissions from Heat Setting Carpet Yarn.
PB93-229862/REB 93-04 PC **A04/MF A01**

Initiatives to Streamline the Alternative Remedial Contracting Strategy (ARCS) Contracts' Award Fee Process.
PB93-963275/REB 93-01 PC **A03/MF A01**

Ink and Cleaner Waste Reduction Evaluation for Flexographic Printers.
PB93-191286/REB 93-01 PC **A03/MF A01**

Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
PB93-131704/REB 93-01 PC **A03/MF A01**

Innovative Treatment Technologies: Semi-Annual Status Report (Fourth Edition).
PB93-133387/REB 93-01 PC **A05/MF A01**

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 2) (for Microcomputers).
PB93-500288/REB 93-01 CP **D02**

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 3) (for Microcomputers).
PB93-505352/REB 93-04 CP **D02**

INSEA User's Manual Environmental Performance Model of Incineration at Sea Operations.
PB93-206977/REB 93-04 PC **A07/MF A02**

Inside the Hotline: A Compilation of 1992 Monthly Hotline Reports.
PB93-159572/REB 93-01 PC **A05/MF A01**

Institutional Solutions to Drinking Water Problems: Maine Case Studies.
PB93-180834/REB 93-01 PC **A03/MF A01**

Instruction Manual for the Biennial Reporting System (BRS) NTIS Data Tape.
PB93-233740/REB 93-04 PC **A05/MF A01**

Instruction Manual for the Resource Conservation and Recovery Information System (RCRIS) Extract Data Tapes.
PB93-183499/REB 93-04 PC **A03/MF A01**

Integrating Sustainable Agriculture, Ecology, and Environmental Policy. Conference Proceedings.
PB93-191492/REB 93-01 PC **A02/MF A01**

Inter-Regional Comparison of Patterns and Trends in Surface Water Acidification Across the United States.
PB93-236453/REB 93-04 PC **A03/MF A01**

Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC **A06/MF A02**

Interim Protocol for Testing the Effects of Microbial Pathogens on Subterranean Termites ('Isoptera: rhinotermitidae').
PB93-124634/REB 93-01 PC **A03/MF A01**

Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202828/REB 93-01 PC **A08/MF A02**

Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows ('Cyprinodon variegatus').
PB93-204998/REB 93-04 PC **A03/MF A01**

Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
PB93-175677/REB 93-01 PC **A02/MF A01**

International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.
PB93-222073/REB 93-04 PC **A02/MF A01**

International Evaluation of In-situ Biorestoration of Contaminated Soil and Groundwater (September 1990)--Translation.
PB93-207553/REB 93-04 PC **A03/MF A01**

International Trade in Environmental Protection Equipment: An Assessment of Existing Data.
PB93-236206/REB 93-04 PC **A04**/MF **A01**

International Validation of a Neurobehavioral Screening Battery: The IPCS/WHO Collaborative Study.
PB93-175594/REB 93-01 PC **A02**

Interpretive Analysis of Observed and Modeled Mesoscale Ozone Photochemistry in Areas with Numerous Point Sources.
PB93-212702/REB 93-04 PC **A03**/MF **A01**

Interspecies Modeling of Inhaled Particle Deposition Patterns.
PB93-181121/REB 93-01 PC **A03**/MF **A01**

Introduction to Nonpoint Source Pollution and Wetland Mitigation.
PB93-106953/REB 93-01 PC **A03**/MF **A01**

*Introduction to Water Quality-Based Toxics Control for the* NPDES Program.
PB93-207967/REB 93-04 PC **A03**/MF **A01**

Inventory of Methane Losses from the Natural Gas Industry.
PB93-131720/REB 93-01 PC **A03**/MF **A01**

Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC **A02**/MF **A01**

*Investigation of Contaminant Transport from the Saginaw* Confined Disposal Facility.
PB93-199610/REB 93-01 PC **A03**/MF **A01**

Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC **A05**/MF **A02**

Investigation of Possible Uses of Surplus CFC/Halon Chemicals.
PB93-229771/REB 93-04 PC **A07**/MF **A02**

*Investigation of Test Kits for Detection of Lead in Paint, Soil* and Dust.
PB93-221653/REB 93-04 PC **A07**/MF **A02**

Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03**/MF **A01**

Irrigated Wetlands of the Colorado Plateau: Information Synthesis and Habitat Evaluation Method.
PB93-186260/REB 93-01 PC **A05**/MF **A02**

Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
PB93-229458/REB 93-04 PC **A03**/MF **A01**

Isolation and Diversity of Actinomycetes in the Chesapeake Bay.
PB93-205060/REB 93-01 PC **A02**/MF **A01**

Isolation and Purification of Bacterial DNA from Soil.
PB93-149276/REB 93-01 PC **A04**/MF **A01**

Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
PB93-229482/REB 93-04 PC **A03**/MF **A01**

Isolation of the Alkane Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis'.
PB93-229284/REB 93-04 PC **A02**/MF **A01**

Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC **A02**/MF **A01**

Issues and Approaches to Improving Transportation Modeling for Air Quality Analysis.
PB93-194066/REB 93-01 PC **A05**/MF **A02**

Kinetics of Chemical Weathering in B Horizon Spodosol Fraction.
PB93-141539/REB 93-01 PC **A02**/MF **A01**

Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 1. Technical Report and Appendices A-F.
PB93-191302/REB 93-01 PC **A13**/MF **A03**

Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 2. Appendices G-N.
PB93-191310/REB 93-01 PC **A15**/MF **A03**

Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
PB93-105534/REB 93-01 PC **A04**/MF **A01**

Laboratory Simulation of Turbulent Convection Over an Urban Heat Island.
PB93-120871/REB 93-01 PC **A02**/MF **A01**

Laboratory Studies on the Stability and Transport of Inorganic Colloids Through Natural Aquifer Material (Chapter 49).
PB93-175537/REB 93-01 PC **A02**/MF **A01**

Laboratory Testing of Commercially Available Power Frequency Magnetic Field Survey Meters.
PB93-131506/REB 93-01 PC **A15**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
PB93-227163/REB 93-04 PC **A11**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
PB93-227171/REB 93-04 PC **A12**/MF **A03**

*Lake and Reservoir Restoration Guidance Manual: Second* Edition.
PB93-207926/REB 93-04 PC **A15**/MF **A03**

Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC **A02**/MF **A01**

Lake Water Quality Assessment Program: Southern Illinois Lakes.
PB93-215929/REB 93-04 PC **A03**/MF **A01**

*Landfill Containment and Cover Systems.*
PB93-106698/REB 93-01 PC **A03**/MF **A01**

Landfill Containment Systems Regulations.
PB93-106722/REB 93-01 PC **A03**/MF **A01**

Landscape-Scale Effects of Toxic Events for Ecological Risk Assessment.
PB93-236628/REB 93-04 PC **A03**/MF **A01**

Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02**/MF **A01**

Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3, Hydraulic Conductivity Variability and Calculated Macrodispersivities.
PB93-107050/REB 93-01 PC **A03**/MF **A01**

LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC **A05**/MF **A01**

Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
PB93-217784/REB 93-04 PC **A07**/MF **A02**

Lead and Copper Monitoring Guidance for Water Systems Serving 3,301 to 10,000 Persons.
PB93-174548/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 101 to 500 Persons.
PB93-174522/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 501 to 3,300 Persons.
PB93-174530/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Rule Guidance Manual. Volume 2. Corrosion Control Treatment.
PB93-101533/REB 93-01 PC **A10**/MF **A03**

Lead in Drinking Water Regulation: Public Education Guidance (Guidance for Conducting a Community-Based Public Education Program on Lead in Drinking Water).
PB93-101079/REB 93-01 PC **A04**/MF **A01**

Learning Guide for State/Local Drinking Water Agreements.
PB93-185601/REB 93-01 PC **A07**/MF **A02**

Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC **A04**/MF **A01**

Life Cycle Analysis (Video Conference Paper).
PB93-194207/REB 93-01 PC **A02**/MF **A01**

Life-Cycle Assessment: Inventory Guidelines and Principles.
PB93-139681/REB 93-01 PC **A07**/MF **A02**

Life Cycle Design Guidance Manual. Environmental Requirements and the Product System.
PB93-164507/REB 93-04 PC **A09**/MF **A03**

Light-Duty Automotive Technology and Fuel Economy Trends through 1993.
PB93-199255/REB 93-01 PC **A06**/MF **A02**

Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC **A02**/MF **A01**

*Linking Estuarine Water Quality and Impacts on Living Re*sources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
PB93-207561/REB 93-04 PC **A03**/MF **A01**

Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.
DE93014387/REB 93-04 PC **A03**/MF **A01**

Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC **A03**/MF **A01**

Living Resources Monitoring Plan: Annual Progress Report.
PB93-116580/REB 93-01 PC **A03**/MF **A01**

Living Resources Subcommittee: Annual Summary.
PB93-112506/REB 93-01 PC **A03**/MF **A01**

LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC **A02**/MF **A01**

Locating and Estimating Air Emissions from Sources of *Methylene Chloride.*
PB93-207579/REB 93-04 PC **A10**/MF **A03**

Locating and Estimating Air Emissions from Sources of Styrene.
PB93-207520/REB 93-04 PC **A08**/MF **A02**

Location of *Leaks in Pressurized Petroleum Pipelines by* Means of Passive-Acoustic Sensing Methods.
PB93-185783/REB 93-01 PC **A03**/MF **A01**

Long-term forest fertilization experiments in Finland and Sweden - their use for vitality and nutrient balance studies.
DE93778473/REB 93-01 PC **A07**/MF **A02**

Long-Term Survival and Plasmid Maintenance of 'Escherichia coli' in Marine Microcosms.
PB93-236230/REB 93-04 PC **A02**/MF **A01**

Longterm Response of Lakes to Acidic Deposition.
PB93-229722/REB 93-04 PC **A02**/MF **A01**

Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

Low-Level and NARM Radioactive Wastes. Draft Environmental Impact Statement for Proposed Rules. Volume 1. Background Information Document.
PB93-200673/REB 93-01 PC **A99**/MF **A06**

Macromolecular Adduction by Trichloroacetonitrile in the Fischer 344 Rat Following Oral Gavage.
PB93-107134/REB 93-01 PC **A03**/MF **A01**

MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC **A02**/MF **A01**

Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-228906/REB 93-04 PC **A01**/MF **A01**

Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.
PB93-212801/REB 93-04 PC **A03**/MF **A01**

Managing Ground Water Contamination Sources in Wellhead Protection Areas: A Priority Setting Approach.
PB93-115863/REB 93-01 PC **A12**/MF **A03**

Managing Nonpoint Source Pollution. Final Report to Congress on Section 319 of the Clean Water Act (1989).
PB93-200897/REB 93-01 PC **A10**/MF **A03**

*Manual: Alternative Wastewater Collection Systems.*
PB93-116259/REB 93-01 PC **A10**/MF **A03**

Manual for the Certification of Laboratories Analyzing Drinking Water. Criteria and Procedures Quality Assurance (Third Edition).
PB93-145688/REB 93-01 PC **A03**/MF **A01**

Manual of Federal Geographic Data Products.
PB93-236503/REB 93-04 PC **A17**/MF **A03**

Marine and Estuarine Protection: Programs and Activities.
PB93-179000/REB 93-01 PC **A03**/MF **A01**

*Marine Debris Action Agenda for the Gulf of Mexico:* Framework for Action.
PB93-223469/REB 93-04 PC **A08**/MF **A02**

Marine Industry Characterization Report.
PB93-216174/REB 93-04 PC **A10**/MF **A03**

*Maritime Industrial Waste Project Reduction of Toxicant* Pollution from the Maritime Industry in Puget Sound.
PB93-119568/REB 93-01 PC **A08**/MF **A02**

Markets for Recovered Aluminum.
PB93-170132/REB 93-01 PC **A03**/MF **A01**

*Markets for Recovered Glass.*
PB93-169845/REB 93-01 PC **A03**/MF **A01**

Maternal Age Effect: The Enigma of Down Syndrome and Other Trisomic Conditions.
PB93-194421/REB 93-01 PC **A03**/MF **A01**

*Mathematical Model of Plant Uptake and Translocation of* Organic Chemicals: Development of the Model.
PB93-106938/REB 93-01 PC **A02**/MF **A01**

Mathematical Model of Plant Uptake and Translocations of Organic Chemicals: Application to Experiments.
PB93-106946/REB 93-01 PC **A03**/MF **A01**

Maturational Changes in Dermal Absorption of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Fischer 344 Rats.
PB93-229490/REB 93-04 PC **A02**/MF **A01**

Maumee River Basin Pilot Watershed Study. Volume 5. Continued Watershed Monitoring (1981-1985) and Rainulator Study - Detailed Data (1986).
PB93-128098/REB 93-01 PC **A10**/MF **A03**

Maya Forest: Key Issues and Recommendations for Action: A Workshop Report. Held in Flores, Guatemala on February 8-9, 1993.
PB93-183713/REB 93-04 PC **A03**/MF **A01**

Measurement and Distribution of Radon and Radon Progeny: An Overview of Indoor Radon Risk Reduction in the United States.
PB93-107092/REB 93-01 PC **A02**/MF **A01**

Measurement of Biogenic Emissions from Corn.
PB93-180883/REB 93-01 PC **A02**/MF **A01**

Measurement of Sediment Resuspension Rates in Long Island Sound.
PB93-222115/REB 93-04 PC **A01**/MF **A01**

Measurement of the Surface Permeability of Basement Concretes.
PB93-232114/REB 93-04 PC **A03**/MF **A01**

Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC **A03**/MF **A01**

Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC **A03**/MF **A01**

Measurements of electric and magnetic fields in the Waianae, Hawaii area.
DE92019891/REB 93-01 PC **A03**/MF **A01**

Measurements of total ozone.
DE92563059/REB 93-01 PC **A04**/MF **A01**

Mechanical Integrity Testing and Training Facility, Ada, Oklahoma.
PB93-222859/REB 93-04 PC **A02**/MF **A01**

Mechanisms of Aldehyde-Induced Bronchial Reactivity: Role of Airway Epithelium.
PB93-179927/REB 93-01 PC **A04**/MF **A01**

Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC **A02**/MF **A01**

Mechanisms of TCDD-Induction of Cleft Palate: Insights from in vivo and in vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

Mechanisms Underlying Somatosensory Cortical Dynamics: 1. In vivo Studies.
PB93-107217/REB 93-01 PC **A03**/MF **A01**

Mechanisms Underlying Somatosensory Cortical Dynamics: 2. In vitro Studies.
PB93-107225/REB 93-01 PC **A03**/MF **A01**

Medical Waste Incinerator Operator Training Program: Course Handbook.
PB93-781979/REB 93-04 PC**$56.00**/MF**$22.00**

Medium Systems That Failed to Conduct Required Initial Lead Tap Monitoring and Reporting.
PB93-196632/REB 93-01 PC **A03**/MF **A01**

Mentor-Protege Program.
PB93-963251/REB 93-01 PC **A02**/MF **A01**

MESOPUFF (for Microcomputers).
PB93-500247/REB 93-01 CP **D02**

Metabolism and Disposition of Inorganic Arsenic in Laboratory Animals and Humans.
PB93-107183/REB 93-01 PC **A02**/MF **A01**

Metal concentrations of the mor layer.
DE92563061/REB 93-01 PC **A05**/MF **A01**

Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194181/REB 93-01 PC **A03**/MF **A01**

Methane Emissions from the Natural Gas Industry.
PB93-212421/REB 93-04 PC **A03**/MF **A01**

Methane Emissions from Wetland Rice Areas of Asia.
PB93-191468/REB 93-01 PC **A03**/MF **A01**

Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC **A02**/MF **A01**

Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.
PB93-236362/REB 93-04 PC **A04**/MF **A01**

Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03**/MF **A01**

Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC **A03**/MF **A01**

Method for the Determination of Asbestos in Bulk Building Materials. (Test Method).
PB93-218576/REB 93-04 PC **A05**/MF **A02**

Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC **A06**/MF **A02**

Methodology for Analysis of Detention Basins for Control of Urban Runoff Quality.
PB93-223576/REB 93-04 PC **A04**/MF **A01**

Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02**/MF **A01**

Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04**/MF **A01**

Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03**/MF **A01**

Methodology to Estimate Nonroad Equipment Populations by Nonattainment Areas.
PB93-174332/REB 93-01 PC **A05**/MF **A01**

Methods for Analyzing Extreme Events Under Climate Change.
PB93-146827/REB 93-01 PC **A03**/MF **A01**

Methods for Assessing Exposure to Chemical Substances. Volume 11. Methodology for Estimating the Migration of Additives and Impurities from Polymeric Materials.
PB93-134096/REB 93-01 PC **A09**/MF **A02**

Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC **A02**/MF **A01**

Methods for the Determination of Chemical Substances in Marine and Estuarine Environmental Samples.
PB93-182913/REB 93-01 PC **A05**/MF **A01**

Methylbromide and Its Alternatives as Fumigants, 1979-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149912/REB 93-01 PC **A09**/MF **A03**

Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC **A03**/MF **A01**

Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC **A02**/MF **A01**

Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC **A03**/MF **A01**

Microbial Trophic Interactions in Aquatic Microcosms Designed for Testing Genetically Engineered Microorganisms: A Field Comparison.
PB93-236248/REB 93-04 PC **A03**/MF **A01**

Microcosm and In situ Field Studies of Enhanced Biotransformation of Trichloroethylene by Phenol-Utilizing Microorganisms.
PB93-222867/REB 93-04 PC **A02**/MF **A01**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: A Field Test in Snuff Users.
PB93-141448/REB 93-01 PC **A03**/MF **A01**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC **A03**/MF **A01**

Mineral Dissolution Rates: A Comparison of Laboratory and Field Studies.
PB93-141182/REB 93-01 PC **A01**/MF **A01**

Mineralization of Recalcitrant Environmental Pollutants by a White Rot Fungus. Proceedings of the National Conference on Hazardous Wastes and Hazardous Materials. Held in Washington, DC. on March 16-18, 1987.
PB93-204154/REB 93-01 PC **A02**/MF **A01**

Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93-148252/REB 93-01 PC **A08**/MF **A02**

Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02**/MF **A01**

Mobile On-Site Recycling of Metalworking Fluids.
PB93-216562/REB 93-04 PC **A04**/MF **A01**

Model Calculations of the Annual Atmospheric Deposition of Toxic Metals to Lake Michigan.
PB93-120905/REB 93-01 PC **A03**/MF **A01**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Instructor's Course Syllabus. Course 1 (Training Manual).
PB93-780799/REB 93-01 PC **A09**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Student Notebook. Course 1 (Training Manual).
PB93-780781/REB 93-01 PC **A21**

Model EPA Curriculum for Training Building Inspectors. Instructor's Course Syllabus. Course 2 (Training Manual).
PB93-780849/REB 93-01 PC **A07**

Model EPA Curriculum for Training Building Inspectors. Student Notebook. Course 2 (Training Manual).
PB93-780831/REB 93-01 PC **A17**

Model EPA Curriculum for Training Management Planners. Instructor's Course Syllabus. Course 3 (Training Manual).
PB93-780898/REB 93-01 PC **A04**

Model EPA Curriculum for Training Management Planners. Student Notebook. Course 3 (Training Manual).
PB93-780880/REB 93-01 PC **A07**

Model Pollution Prevention Plan for the Kraft Segment of the Pulp and Paper Industry.
PB93-145605/REB 93-01 PC **A04**/MF **A01**

Modeling Contaminant Propagation in Drinking-Water Distribution Systems.
PB93-205136/REB 93-04 PC **A03**/MF **A01**

Modeling Individual Exposure from Indoor Sources.
PB93-119840/REB 93-01 PC **A03**/MF **A01**

Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC **A03**/MF **A01**

Modeling of Indoor Air Quality for a Personal Computer.
PB93-106771/REB 93-01 PC **A03**/MF **A01**

Modeling of the Fast Organic Emissions from a Wood-Finishing Product: Floor Wax.
PB93-107027/REB 93-01 PC **A02**/MF **A01**

Modeling Protocol for Applying MESOPUFF II to Long Range Transport Problems.
PB93-226108/REB 93-04 PC **A04**/MF **A01**

Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03**/MF **A01**

Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC **A02**/MF **A01**

Modelling Epicodic Acidification of Surface Waters: The State of Science.
PB93-106920/REB 93-01 PC **A03**/MF **A01**

Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.
PB93-212769/REB 93-04 PC **A03**/MF **A01**

Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC **A03**/MF **A01**

Molecular Basis of Biodegradation of Chloroaromatic Compounds.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

Molecular Regulation of the Induction of Cytochrome P-450E in the Estuarine Fish Fundulus Heteroclitus.
AD-A258 623/8/REB 93-01 PC **A11**/MF **A03**

Molecular Size Exclusion by Soil Organic Materials Estimated from Their Swelling in Organic Solvents.
PB93-228583/REB 93-04 PC **A02**/MF **A01**

Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC **A08**/MF **A02**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 10,001 to 50,000 Persons.
PB93-174555/REB 93-01 PC **A04**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 50,001 to 100,000 Persons.
PB93-174514/REB 93-01 PC **A04**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving > 100,000 Persons.
PB93-174563/REB 93-01 PC **A04**/MF **A01**

Monitoring, Research, and Surveillance Plan for the 106-Mile Deepwater Municipal Sludge Dump Site and Environs.
PB93-207744/REB 93-04 PC **A07**/MF **A02**

Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC **A24**/MF **A04**

Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC **A02**/MF **A01**

Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
PB93-121127/REB 93-01 PC **A03**/MF **A01**

MULTIMED: The Multimedia Exposure Assessment Model for Evaluating the Land Disposal of Wastes-Model Theory.
PB93-186252/REB 93-01 PC **A07**/MF **A02**

Multiple Chemical Sensitivities. Addendum to Biologic Markers in Immunotoxicology.
PB93-222990/REB 93-04 PC **A09**/MF **A03**

Multiple Metals Stack Emission Measurement Methodology for Stationary Sources, Current Status.
PB93-185734/REB 93-01 PC **A02**/MF **A01**

Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC **A02**/MF **A01**

Municipal Water Pollution Prevention Bibliography: 1992, the Year of Clean Water. Celebration and Commitment.
PB93-141063/REB 93-01 PC **A03**/MF **A01**

Municipal Water Pollution Prevention Program, National MWPP Conference. Held in Washington, DC. on April 27-28, 1993.
PB93-231140/REB 93-04 PC **A03**/MF **A01**

Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03**/MF **A01**

Mutational Risks in Females: Genomic Imprinting and Maternal Molecules.
PB93-194488/REB 93-01 PC **A03**/MF **A01**

National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC **A07**/MF **A02**

National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Index, 1992.
PB93-206571/REB 93-04 PC **A99**/MF **A06**

National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Volume 6. Citations, 1992.
PB93-207652/REB 93-04 PC **A10**/MF **A03**

National Air Toxics Information Clearinghouse: NATICH Data Base Report of Federal, State, Local and EPA Air Toxics Activities.
PB93-206589/REB 93-04 PC **A99**/MF **E06**

National Air Toxics Information Clearinghouse: Ongoing Research and Regulatory Development Projects, July 1992.
PB93-206563/REB 93-04 PC **A14**/MF **A03**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

National Directory of Citizen Volunteer Environmental Monitoring Programs (Third Edition).
PB93-207496/REB 93-04 PC **A03**/MF **A01**

National Emission Standards for Hazardous Air Pollutants Compliance Extensions for Early Reductions: Background Information for Promulgated Standards.
PB93-149425/REB 93-01 PC **A06**/MF **A02**

National Estuary Program Guidance. Comprehensive Conservation and Management Plans: Content and Approval Requirements.
PB93-217172/REB 93-04 PC **A03**/MF **A01**

National List of Asbestos Landfills.
PB93-200517/REB 93-01 PC **A10**/MF **A03**

National Performance Audit Program (NPAP).
PB93-212322/REB 93-04 PC **A02**/MF **A01**

National Pesticide Survey: Glossary.
PB93-115970/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Project Summary.
PB93-115988/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Summary Results of EPA's National Survey of Pesticides in Drinking Water Wells.
PB93-115996/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Survey Analytes.
PB93-116010/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Survey Design.
PB93-116002/REB 93-01 PC **A02**/MF **A01**

National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges (40CFR Parts 122, 123, and 124 Final Rule).
PB93-226728/REB 93-04 PC **A06**/MF **A02**

National Priorities List Sites: Alabama, 1992.
PB93-963201/REB
93-01
see individual report for order number and price

National Priorities List Sites: Alaska, 1992.
PB93-963202/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Arkansas, 1992.
PB93-963205/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC **A12**/MF **A03**

National Priorities List Sites: Colorado, 1992.
PB93-963207/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Connecticut, 1992.
PB93-963208/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Delaware, 1992.
PB93-963209/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Florida, 1992.
PB93-963210/REB 93-01 PC **A08**/MF **A02**

National Priorities List Sites: Georgia, 1992.
PB93-963211/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Idaho, 1992.
PB93-963212/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Illinois, 1992.
PB93-963213/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Indiana, 1992.
PB93-963214/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Iowa, 1992.
PB93-963215/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Kansas, 1992.
PB93-963216/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Kentucky, 1992.
PB93-963217/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Louisiana, 1992.
PB93-963218/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Maine, 1992.
PB93-963219/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Maryland, 1992.
PB93-963220/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Massachusetts, 1992.
PB93-963221/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Michigan, 1992.
PB93-963222/REB 93-01 PC **A10**/MF **A03**

National Priorities List Sites: Minnesota, 1992.
PB93-963223/REB 93-01 PC **A07**/MF **A02**

National Priorities List Sites: Mississippi, 1992.
PB93-963224/REB 93-01 PC **A03**/MF **A01**

National Priorities List Sites: Missouri, 1992.
PB93-963225/REB 93-01 PC **A05**/MF **A02**

National Priorities List Sites: Montana, 1992.
PB93-963226/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Nebraska, 1992.
PB93-963227/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: New Hampshire, 1992.
PB93-963228/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: New Jersey, 1992.
PB93-963229/REB 93-01 PC **A14**/MF **A03**

National Priorities List Sites: New Mexico, 1992.
PB93-963230/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: New York, 1992.
PB93-963231/REB 93-01 PC **A11**/MF **A03**

National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: North Carolina, 1992.
PB93-963232/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Ohio, 1992.
PB93-963234/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Oklahoma, 1992.
PB93-963235/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Oregon, 1992.
PB93-963236/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Pennsylvania, 1992.
PB93-963237/REB 93-01 PC **A12**/MF **A03**

National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Rhode Island, 1992.
PB93-963239/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: South Carolina, 1992.
PB93-963240/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Tennessee, 1992.
PB93-963241/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Texas, 1992.
PB93-963242/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Utah, 1992.
PB93-963243/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Vermont, 1992.
PB93-963244/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Virginia, 1992.
PB93-963245/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Washington, 1992.
PB93-963246/REB 93-01 PC **A08**/MF **A02**

National Priorities List Sites: West Virginia, 1992.
PB93-963247/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Wisconsin, 1992.
PB93-963248/REB 93-01 PC **A07**/MF **A02**

National Priorities List Sites: Wyoming, 1992.
PB93-963249/REB 93-01 PC **A03**/MF **A01**

National Priorities List Sites (1992).
PB93-963250/REB 93-01 PC**$700.00**

National Public Water System Supervision Program. FY 1992 Compliance Report.
PB93-180867/REB 93-01 PC **A04**/MF **A01**

National Radon Contractor Proficiency (RCP) Program. Proficiency Report, July 1993.
PB93-209997/REB 93-04 PC **A11**/MF **A03**

National Radon Measurement Proficiency Program: Individual Proficiency Report.
PB93-209989/REB 93-04 PC **A16**/MF **A03**

National Study of Chemical Residues in Fish. Volume 1.
PB93-114981/REB 93-01 PC **E09**/MF **A01**

National Study of Chemical Residues in Fish. Volume 2.
PB93-114999/REB 93-01 PC **E11**/MF **A04**

National Transportation Safety Board Highway Accident Report: Charter Bus Loss of Control, Overturn, and Fire, Vernon, New Jersey, July 26, 1992.
PB93-916202/REB 93-04 PC **A05**/MF **A01**

NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC **A02**/MF **A01**

Near Coastal Program Plan for 1991: Estuaries.
PB93-116176/REB 93-01 PC **A12**/MF **A03**

Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC **A02**/MF **A01**

Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
PB93-204063/REB 93-01 PC **A02**/MF **A01**

New Approaches to Estimation of Solid-Waste Quantity and Composition.
PB93-185908/REB 93-01 PC **A02**/MF **A01**

New Mathematical Model of Pollutant Dispersion Near a Building.
PB93-236529/REB 93-04 PC **A03**/MF **A01**

New technology for refrigeration and heating plants.
DE93721673/REB 93-01 PC **A03**/MF **A01**

News-Notes Number 21: The Condition of the Environment and the Nonpoint Sources of Water Pollution.
PB93-204030/REB 93-01 PC **A03**/MF **A01**

News Notes, Number 22: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-126183/REB 93-01 PC **A03**/MF **A01**

News-Notes Number 23: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-204006/REB 93-01 PC **A03**/MF **A01**

Ninety-Day Toxicity Study of Chloral Hydrate in the Sprague-Dawley Rat.
PB93-107118/REB 93-01 PC **A03**/MF **A01**

Ninety-Day Toxicity Study of Sodium Monochloroacetate in Sprague-Dawley Rats.
PB93-107100/REB 93-01 PC **A03**/MF **A01**

Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.
PB93-212686/REB 93-04 PC **A03**/MF **A01**

Nonpoint Source Pollution: Land Use and Water Quality.
PB93-223014/REB 93-04 PC **A03**

Nonroad Mobile Source Sales and Attrition Study: Identification and Evaluation of Available Data Sources.
PB93-190098/REB 93-01 PC **A11**/MF **A03**

Northeast Indiana Conservation Tillage Demonstration Project. Final Report (1981-1985).
PB93-128056/REB 93-01 PC **A03**/MF **A01**

Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC **A02**/MF **A01**

NPDES Storm Water Program. Question and Answer Document. Volume 1.
PB93-223410/REB 93-04 PC **A03**/MF **A01**

NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC **A01**/MF **A01**

Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
PB93-222909/REB 93-04 PC **A03**/MF **A01**

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119873/REB 93-01 PC **A02**/MF **A01**

PB93-229185/REB 93-04 PC **A02**/MF **A01**

Nutrient Movement through Beach Media: Problems and Field Results Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191344/REB 93-01 PC **A03**/MF **A01**

Nutrients and Phytoplankton in Puget Sound.
PB93-119576/REB 93-01 PC **A08**/MF **A02**

OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC **A04**/MF **A01**

Obligation of Funds under Superfund State Contracts.
PB93-963326/REB 93-04 PC **A01**/MF **A01**

Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC **A02**/MF **A01**

Observations on the State of Marine Disease Studies (Chapter 18).
PB93-204170/REB 93-01 PC **A03**/MF **A01**

Occurrence Assessment for Disinfectants and Disinfection By-Products (Phase 6a) in Public Drinking Water.
PB93-134377/REB 93-01 PC **A04**/MF **A01**

Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC **A03**/MF **A01**

Office of Wastewater Enforcement and Compliance (OWEC): Primer.
PB93-226736/REB 93-04 PC **A05**/MF **A01**

Office of Wastewater Enforcement and Compliance Strategic Plan.
PB93-223204/REB 93-04 PC **A03**/MF **A01**

Office of Water Environmental and Program Information Systems Compendium, FY 1992.
PB93-186203/REB 93-01 PC **A08**/MF **A02**

Oil and Hazardous Materials Technical Assistance Data System, (OHM-TADS) Fields and Their Definitions. Users' Guide.
PB93-111706/REB 93-01 PC **A03**/MF **A01**

Oil and Hazardous Materials, Technical Assistance Data System (OHM-TADS) (for Microcomputers).
PB93-500577/REB 93-01 CP **D06**

Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.
PB93-236578/REB 93-04 PC **A04**/MF **A01**

Olfactory Evoked Responses to Odorous Stimuli of Different Intensities.
PB93-141315/REB 93-01 PC **A02**/MF **A01**

Olfactory Toxicity of Beta,Beta'-Iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC **A02**/MF **A01**

Oligohaline Areas in Tampa Bay Tributaries: Spatial Extent and Species Lists.
PB93-191179/REB 93-01 PC **A03**/MF **A01**

On-Board Corrosion Analysis of a Recovered Nuclear Waste Container.
PB93-202927/REB 93-01 PC **A03**/MF **A01**

On-Line Measurement of Nitrous Oxide from Combustion Sources by Automated Gas Chromatography.
PB93-106847/REB 93-01 PC **A03**/MF **A01**

On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC **A09**/MF **A02**

On-Site Waste Ink Recycling: Technology Evaluation Report.
PB93-141026/REB 93-01 PC **A04**/MF **A01**

Online Guided Tour of the Cleanup Information Bulletin Board System. (CLU-IN: Cleanup Information Bulletin Board).
PB93-193704/REB 93-01 PC **A03**/MF **A01**

Opportunities and Challenges for Local Emergency Planning Committees: Bestseller in EPCRA.
PB93-234789/REB 93-04 PC **A02**/MF **A01**

Opportunities for Pollution Prevention Research to Support the 33/50 Program.
PB93-107266/REB 93-01 PC **A06**/MF **A02**

Opportunities for the Use of Geosynthetics in Waste Management Facilities.
PB93-131670/REB 93-01 PC **A03**/MF **A01**

Optical Remote Measurement of Toxic Gases.
PB93-229409/REB 93-04 PC **A03**/MF **A01**

Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC **A02**/MF **A01**

Organic Air Emissions from Waste Management Facilities.
PB93-215598/REB 93-04 PC **A07**/MF **A02**

Organic Combustion Fingerprints of Three Common Home Heating Fuels.
PB93-222123/REB 93-04 PC **A02**/MF **A01**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 3) (for Microcomputers).
PB93-500270/REB 93-01 CP **D02**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 4) (for Microcomputers).
PB93-505345/REB 93-04 CP **D02**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 5) (for Microcomputers).
PB93-506053/REB 93-04 CP **D02**

Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC **A03**/MF **A01**

OSWER Integrated Health and Safety Standard Operating Practices.
PB93-963401/REB 93-01 PC **A01**/MF **A01**

OSWER Source Book. Volume 1. Training and Technology Transfer Resources, 1992-1993.
PB93-143980/REB 93-01 PC **A10**/MF **A03**

OSWER Source Book. Volume 2. Training and Technology Transfer Resources, 1992-1993.
PB93-144129/REB 93-01 PC **A11**/MF **A03**

OSWER Superfund Telephone Directory.
PB92-963289/REB 93-01 PC **A03**/MF **A01**

Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
PB93-128114/REB 93-01 PC **A04**/MF **A01**

Outreach to Manufacturers of Lead Test Kits.
PB93-216570/REB 93-04 PC **A03**/MF **A01**

Overview of Existing State Alternative Financing Programs: Financing Drinking Water System Capital Needs in the 1990's.
PB93-132637/REB 93-01 PC **A05**/MF **A01**

Overview of Strategic Planning at the Environmental Protection Agency.
PB93-126064/REB 93-01 PC **A03**/MF **A01**

Overview of the Outyear Liability Model (OLM).
PB93-963259/REB 93-01 PC **A02**/MF **A01**

Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

Oxidation of Biphenyl by a Multicomponent Enzyme System from 'Pseudomonas' sp. Strain LB400.
PB93-229466/REB 93-04 PC **A02**/MF **A01**

Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium 'Nitrosomonas europaea'.
PB93-169076/REB 93-01 PC **A02**/MF **A01**

Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
PB93-191575/REB 93-01 PC **A02**/MF **A01**

Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
PB93-229474/REB 93-04 PC **A02**/MF **A01**

Oxidative Degradation of Phenanthrene by the Ligninolytic Fungus 'Phanerochaete chrysosposium'.
PB93-199511/REB 93-01 PC **A02**/MF **A01**

Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC **A02**/MF **A01**

PA Review Checklist.
PB93-963342/REB 93-04 PC **A03**/MF **A01**

PA-Score (Preliminary Assessment Score) User's Manual and Tutorial. Version 2.1.
PB93-108322/REB 93-01 PC **A05**/MF **A01**

PA-Score (Preliminary Assessment Score), Version 2.1, 3 1/2 inch (for Microcomputers).
PB93-500353/REB 93-01 CP **D02**

PA-Score (Preliminary Assessment Score), Version 2.1, 5 1/4 inch (for Microcomputers).
PB93-500346/REB 93-01 CP **D02**

Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC **A05**/MF **A01**

Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02**/MF **A01**

Particle-Size-Dependent Efficiency of Air Cleaners.
PB93-221976/REB 93-04 PC **A01**/MF **A01**

Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02**/MF **A01**

Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.
PB93-212033/REB 93-04 PC **A01**/MF **A01**

Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02**/MF **A01**

Passive Sampling of Groundwater Monitoring Wells without Purging: Multilevel Well Chemistry and Tracer Disappearance.
PB93-181170/REB 93-01 PC **A03**/MF **A01**

Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC **A23**/MF **A04**

Pathogenicity of 'Salmonella pullorum' in Northern Bobwhite Quail and Mallard Ducks.
PB93-135739/REB 93-01 PC **A03**/MF **A01**

Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.
PB93-229425/REB 93-04 PC **A03**/MF **A01**

PCR Primers Specific for Detection of a Rat Repetitive Sequence.
PB93-141398/REB 93-01 PC **A01**/MF **A01**

Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC **A02**/MF **A01**

Performance of an Aquatic Multispecies System in Evaluating the Effects of a Model Microbial Pest Control Agent on Nontarget Organisms.
PB93-131803/REB 93-01 PC **A03**/MF **A01**

Performance of Pilot Scale Bioventing at an Aviation Gasoline Spill Site.
PB93-221943/REB 93-04 PC **A02**/MF **A01**

Performance Tracking under ARCS Contracts.
PB93-963276/REB 93-01 PC **A01**/MF **A01**

Periphyton Photosynthesis as an Indicator of Effluent Toxicity: Relationship to Effects on Animal Test Species.
PB93-131829/REB 93-01 PC **A02**/MF **A01**

Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.
PB93-184620/REB 93-01 PC **A03**/MF **A01**

Permits and Permit 'Equivalency' Processes for CERCLA On-Site Response Actions.
PB93-963325/REB 93-01 PC **A02**/MF **A01**

Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
PB93-185866/REB 93-01 PC **A02**/MF **A01**

Personal Air Sampling and Air Monitoring Requirements under 29 CFR 1910.120.
PB93-963420/REB 93-04 PC **A03**/MF **A01**

Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

Pesticide Compact Label File - 1990 Updates.
PB93-911600/REB 93-01 Subscription

Pesticide Fact Sheet: Arsenic Acid (H3AsO4).
PB93-198711/REB 93-01 PC **A02**/MF **A01**

Pesticide Fact Sheet: Glufosinate Ammonium.
PB93-219830/REB 93-04 PC **A03**/MF **A01**

Pesticide Fact Sheet: GY-81/Enzone.
PB93-219848/REB 93-04 PC **A03**/MF **A01**

Pesticide Fact Sheet: 'Metarhizium anisopliae' Strain ESF1.
PB93-206787/REB 93-01 PC **A01**/MF **A01**

Pesticide Fact Sheet Number 20.1: Amitrole.
PB93-149680/REB 93-01 PC **A02**/MF **A01**

Pesticide Fact Sheet Number 20.2: Amitrole.
PB93-144368/REB 93-01 PC **A02**/MF **A01**

Pesticide Fact Sheet Number 236: Pyridate.
PB93-130441/REB 93-01 PC **A03**/MF **A01**

Pesticide Fact Sheet Number 239: Cimectacarb.
PB93-206753/REB 93-04 PC **A02**/MF **A01**

Pesticide Fact Sheet Number 240: Dimethenamid. SAN 582H/Frontier (Trade Name) Herbicide.
PB93-198695/REB 93-01 PC **A03**/MF **A01**

Pesticide Fact Sheet: Polyhedral Occlusion Bodies of the Nuclear Polyhedrosis Virus of 'Spodoptera exigua'.
PB93-206779/REB 93-01 PC **A02**/MF **A01**

Pesticide Fact Sheet: 'Pseudomonas cepacia' Type Wisconsin.
PB93-206746/REB 93-04 PC **A02**/MF **A01**

Pesticide Fact Sheet: Streptomyces sp. Strain K61.
PB93-206761/REB 93-04 PC **A02**/MF **A01**

Pesticide Fact Sheet: 1-Indole-3-Butanethioic Acid, S-Phenyl Ester.
PB93-219822/REB 93-04 PC **A02**/MF **A01**

Pesticide Reregistration, March 1991.
PB93-205896/REB 93-04 PC **A03**/MF **A01**

Pesticide Reregistration Progress Report.
PB93-178994/REB 93-01 PC **A03**/MF **A01**

Pesticide Reregistration Progress Report, April 1993.
PB93-226199/REB 93-04 PC **A03**/MF **A01**

Pesticide Reregistration Progress Report, October 1991.
PB93-206605/REB 93-04 PC **A03**/MF **A01**

Pesticide Reregistration Rejection Rate Analysis Residue Chemistry/Environmental Fate Follow Up Guidance for Conducting Rotational Crop Studies.
PB93-194041/REB 93-01 PC **A03**/MF **A01**

Pesticide Reregistration Rejection Rate Analysis Residue Chemistry. Follow-up Guidance for Generating Storage Stability Data; Submission of Raw Data; Maximum Theoretical Concentration Factors; Flowchart Diagrams.
PB93-193696/REB 93-01 PC **A04**/MF **A01**

Pesticide Safety and Training Materials Catalog (Catalogo de Materiales Educativos y Proteccion Sobre Pesticidas).
PB93-200814/REB 93-01 PC **A07**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC **A10**/MF **A03**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC **A99**/MF **E11**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC **A21**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC **A07**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC **A20**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC **A05**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC **A24**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC **A05**/MF **A01**

Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC **A03**/MF **A01**

Petitions to Delist Hazardous Wastes: A Guidance Manual. Second Edition.
PB93-169365/REB 93-01 PC **A08**/MF **A02**

Phase II Fact Sheet: National Primary Drinking Water Regulations for 38 Inorganic and Synthetic Organic Chemicals.
PB93-193787/REB 93-01 PC **A03**/MF **A01**

Phasing out of CFCs in the electronics and engineering industries in Sweden.
DE93711212/REB 93-01 PC **A03**/MF **A01**

Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC **A03**/MF **A01**

Photochemical Conversion of Solar Energy in the Environment.
PB93-167187/REB 93-01 PC **A03**/MF **A01**

Physical and Chemical Parameters of Sediment Extraction and Fractionation That Influence Toxicity, as Evaluated by Microtox (Trade Name).
PB93-185882/REB 93-01 PC **A03**/MF **A01**

Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC **A02**/MF **A01**

Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
PB93-173102/REB 93-01 PC **A03**/MF **A01**

Physiological and Nonspecific Biomarkers.
PB93-119832/REB 93-01 PC **A05**/MF **A01**

Physiological Limitations on Phytoplankton Productivity in the Ocean.
PB93-204923/REB 93-01 PC **A02**/MF **A01**

Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-180990/REB 93-01 PC **A03**/MF **A01**

Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

Pilot Project for Vehicle Scrapping in Illinois.
PB93-232890/REB 93-04 PC **A08**/MF **A02**

Pilot-Scale Evaluation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02**/MF **A01**

Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.
PB93-212306/REB 93-04 PC **A02**/MF **A01**

Pilot Study to Evaluate Methods for the Assessment of Exposure of Small Children to Pesticides in the Residential Environment.
PB93-119899/REB 93-01 PC **A03**/MF **A01**

Planning and Progress of EPA's Pollution Prevention Research Program.
PB93-165767/REB 93-01 PC **A02**/MF **A01**

Plume Definition in Regions of Strong Bending.
PB93-221844/REB 93-04 PC **A02**/MF **A01**

Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC **A02**/MF **A01**

Pollution Prevention for Cleaner Air: EPA's Air and Energy Engineering Research Laboratory.
PB93-173730/REB 93-01 PC **A03**/MF **A01**

Pollution Prevention for the Kraft Pulp and Paper Industry.
PB93-145613/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention: Meeting the Environmental Challenges of the 1990s. Region 5 FY 91 Accomplishments.
PB93-128106/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention Opportunity Assessment and Implementation Plan. For Simpson Tacoma Kraft Company, Tacoma, Washington.
PB93-145670/REB 93-01 PC **A05**/MF **A01**

Pollution Prevention Opportunity Assessment: Geochemistry Laboratory, Sandia National Laboratories.
PB93-146900/REB 93-01 PC **A03**/MF **A01**

Pollution Prevention Opportunity Assessment: Manufacturing and Fabrication Repair Laboratory at Sandia National Laboratories.
PB93-146868/REB 93-01 PC **A03**/MF **A01**

Pollution Prevention Opportunity Assessment: USDA Beltsville Agricultural Research Center.
PB93-146843/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention Research Ongoing: EPA's Risk Reduction Engineering Laboratory.
PB93-212447/REB 93-04 PC **A02**/MF **A01**

Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC **A02**/MF **A01**

Portraits of Our Coastal Waters. Supplement to the National Water Quality Inventory. Report from the EPA Regions.
PB93-207546/REB 93-04 PC **A03**/MF **A01**

Possible Influence of Hydrogen Concentration on Microbial Methane Stable Hydrogen Isotopic Composition.
PB93-205128/REB 93-04 PC **A03**/MF **A01**

Potential Bias from Non-Continuous Monitoring of Ambient Ozone Concentrations for Characterizing Hourly and Daily 7- and 12-Hour Average Concentrations.
PB93-191534/REB 93-01 PC **A02**/MF **A01**

Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC **A03**/MF **A01**

Potential Intertidal Habitat Restoration Sites in the Duwamish River Estuary.
PB93-122190/REB 93-01 PC **A05**/MF **A02**

Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03**/MF **A01**

PR Notice 86-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144012/REB 93-01 PC **A01**/MF **A01**

PR Notice 86-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144020/REB 93-01 PC **A01**/MF **A01**

PR Notice 86-3. Notice to Producers, Registrants, and Formulators.
PB93-144038/REB 93-01 PC **A01**/MF **A01**

PR Notice 86-4. Notice to Registrants of Pesticides, and Applicants for Pesticide Registration.
PB93-144046/REB 93-01 PC **A02**/MF **A01**

PR Notice 86-5. Notice to Producers, Formulators, Distributors and Registrants.
PB93-144053/REB 93-01 PC **A03**/MF **A01**

PR Notice 87-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-141687/REB 93-01 PC **A03**/MF **A01**

PR Notice 87-2. Notice to Procedures, Registrants, and Formulators.
PB93-144061/REB 93-01 PC **A01**/MF **A01**

PR Notice 87-3. Notice to Manufacturers, Formulators, Distributors and Registrants of Pesticide Products.
PB93-144079/REB 93-01 PC **A01**/MF **A01**

PR Notice 87-4. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-141695/REB 93-01 PC **A03**/MF **A01**

PR Notice 87-5. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-144087/REB 93-01 PC **A03**/MF **A01**

PR Notice 87-6. Notice to Manufacturers, Formulators, Procedures, and Registrants of Pesticide Products.
PB93-144095/REB 93-01 PC **A02**/MF **A01**

PR Notice 87-7. Notice to Producers, Formulators and Registrants of Pesticides.
PB93-146108/REB 93-01 PC **A02**/MF **A01**

PR Notice 87-8. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-147015/REB 93-01 PC **A02**/MF **A01**

PR Notice 87-9. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149151/REB 93-01 PC **A01**/MF **A01**

PR Notice 87-10. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149169/REB 93-01 PC **A01**/MF **A01**

PR Notice 87-11. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-149664/REB 93-01 PC **A01**/MF **A01**

PR Notice 92-1. Notice to Manufacturers, Formulators, Producers, and Registrants of Pesticide Products.
PB93-219467/REB 93-04 PC **A02**/MF **A01**

PR Notice 92-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219475/REB 93-04 PC **A01**/MF **A01**

PR Notice 92-3. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticide Products.
PB93-219483/REB 93-04 PC **A03**/MF **A01**

PR Notice 92-4. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219491/REB 93-04 PC **A01**/MF **A01**

PR Notice 92-5. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219509/REB 93-04 PC **A01**/MF **A01**

PR Notice 92-6. Notice to Manufacturers, Producers, Formulators and Registrants of Pesticides.
PB93-219517/REB 93-04 PC **A01**/MF **A01**

PR Notices 86-1 through 86-5.
PB93-144004/REB 93-01 PC **E99**/MF **E99**

PR Notices 92-1 through 92-6.
PB93-219459/REB 93-04 PC **E99**/MF **E99**

Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC **A03**/MF **A01**

Preamble and Final Sludge Rule (for Microcomputers).
PB93-500478/REB 93-01 CP **D01**

Precollege Education: A Vital Component if Sustainable Agriculture is to Take Root.
PB93-168870/REB 93-01 PC **A03**/MF **A01**

Predictors of Individual Differences in Acute Response to Ozone Exposure.
PB93-228849/REB 93-04 PC **A02**/MF **A01**

PRELIM, Version 4.0 (for Microcomputers).
PB93-505980/REB 93-04 CP **D03**

PRELIM Version 4.0 Users Guide. Documentation for the EPA Computer Program for Development of Local Discharge Limitations under the Pretreatment Program. Data Tape Documentation.
PB93-192748/REB 93-04 PC **A05**/MF **A01**

Preliminary Data Summary for the Pulp, Paper and Paperboard Point Source Category.
PB93-202935/REB 93-01 PC **A04**/MF **A01**

Preliminary Diagnostic Procedures for Radon Control. Project Summary.
PB93-222545/REB 93-04 PC **A01**/MF **A01**

Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02**/MF **A01**

Preliminary Ranking Evaluation Score (PREscore) Version 2.0 (for Microcomputers).
PB93-505915/REB 93-04 CP **D02**

Preliminary Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease.
PB93-214344/REB 93-04 PC **A05**/MF **A02**

Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies.
PB92-220532/REB 93-04 PC **A08**/MF **A02**

PREscore Software: Users Manual and Tutorial Version 2.0.
PB93-192698/REB 93-04 PC **A05**/MF **A01**

Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC **A15**/MF **A03**

Presumptive Remedies: Policy and Procedures.
PB93-963345/REB 93-04 PC **A02**/MF **A01**

Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites with Volatile Organic Compounds in Soils.
PB93-963346/REB 93-04 PC **A03**/MF **A01**

Presumptive Remedy for CERCLA Municipal Landfill Sites.
PB93-963339/REB 93-04 PC **A03**/MF **A01**

Primary Structure of the 'Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
PB93-229441/REB 93-04 PC **A03**/MF **A01**

Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
PB93-229243/REB 93-04 PC **A03**/MF **A01**

Private Wells: Guidance for What to Do After the Flood.
PB93-226710/REB 93-04 PC **A02**/MF **A01**

Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or Inhalable Particulate Data (Draft).
PB93-200640/REB 93-01 PC **A04**/MF **A01**

Procedures for Identifying Reasonably Available Control Technology for Stationary Sources of PM-10.
PB93-175776/REB 93-01 PC **A08**/MF **A02**

Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone. Volume 2. Emission Inventory Requirements for Photochemical Air Quality Simulation Models (Revised).
PB93-234375/REB 93-04 PC **A11**/MF **A03**

Proceeding of the Workshop on the Sea-Surface Microlayer in Relation to Ocean Disposal. Held in Airlie, Virginia on December 18-19, 1985.
PB93-206993/REB 93-04 PC **A06**/MF **A02**

Proceedings and Summary of the Workshop on Finfish as Indicators of Toxic Contamination. Held in Airlie, Virginia on July 27-28, 1986.
PB93-208320/REB 93-04 PC **A06**/MF **A02**

Proceedings: Galveston Bay Characterization Workshop. Held on February 21-23, 1991.
PB93-205672/REB 93-04 PC **A11**/MF **A03**

Proceedings: Interagency Symposium (2nd) on Stabilization of Soils and Other Materials. Held in Metairie, Louisiana on November 2-5, 1992.
PB93-131977/REB 93-01 PC **A17**/MF **A04**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Held in Tampa, Florida on April 16-19, 1991.
PB93-124162/REB 93-01 PC **E99**/MF **E99**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 1. Sessions P, 0, 1A, 2A, 3A, 4A, 6A, 6B, 9C and 10B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124170/REB 93-01 PC **A20**/MF **A04**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 2. Sessions 1B, 2B, 3B, 4B, 7A, 7B, 8A, 8B and 9B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124188/REB 93-01 PC **A21**/MF **A04**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 3. Sessions 1C, 2C, 3C, 4C, 6C, 7C, 8C, 9A, and 10A/C. Held in Tampa, Florida on April 16-19, 1991.
PB93-124196/REB 93-01 PC **A21**/MF **A04**

Proceedings of Annual Analytical Symposium (7th). Held in Norfolk, Virginia on March 28-29, 1984.
PB93-237519/REB 93-04 PC **A99**/MF **A06**

Proceedings of Annual Analytical Symposium (10th). U.S. Environmental Protection Agency, Office of Water, Industrial Technology Division. Held in Norfolk, Virginia on May 13-14, 1987.
PB93-234771/REB 93-04 PC **A99**/MF **E08**

Proceedings of National Integrated Pest Management Forum. Held in Arlington, VA., on June 17-19, 1992.
PB93-124675/REB 93-01 PC **A07**/MF **A02**

Proceedings of the Annual EPA Conference on Analysis of Pollutants in the Environment (15th). Held in Norfolk, Virginia on May 6-7, 1992.
PB93-152601/REB 93-01 PC **A99**/MF **A06**

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Atmospheric Deposition of Critical Issue Forum. Held in Annapolis, Maryland on November 5, 1992.
PB93-193738/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Contaminated Sediments Critical Issue Forum. Held in Annapolis, Maryland on December 10, 1992.
PB93-194017/REB 93-01 PC **A03**/MF **A01**

Proceedings of the EPA/A and WMA International Symposium (1992), Measurement of Toxic and Related Air Pollutants. Held in Durham, North Carolina on May 4-9, 1992.
PB93-121093/REB 93-01 PC **A01**/MF **A01**

Proceedings of the EPA's Contaminated Sediment Management Strategy Forums.
PB93-126399/REB 93-01 PC **A10**/MF **A03**

Proceedings of the Indoor Radon Modeling Workshop, Florida Radon Research Program. Held in Tampa, Florida on April 16-17, 1991.
PB93-172922/REB 93-01 PC **A09**/MF **A02**

Proceedings of the International Workshop on Carbon Cycling in Boreal Forest and Sub-Arctic Ecosystems: Biospheric Responses and Feedbacks to Global Climate Change.
PB93-205540/REB 93-04 PC **A13**/MF **A03**

Proceedings of the Midwest Pollution Control Biologists Meeting, 1991. Environmental Indicators: Measurement and Assessment Endpoints. Held in Lincolnwood, Illinois on March 19-22, 1991.
PB93-145712/REB 93-01 PC **A06**/MF **A02**

Proceedings of the National Citizens' Volunteer Water Monitoring Conference (3rd). Held in Annapolis, Maryland on March 29-April 2, 1992. Building Partnerships in the Year of Clean Water.
PB93-207108/REB 93-04 PC **A09**/MF **A02**

Proceedings of the National Conference (3rd): Water Quality Standards for the 21st Century. Held in Las Vegas, Nevada on August 31-September 3, 1992.
PB93-144210/REB 93-01 PC **A16**/MF **A03**

Proceedings of the National United States Environmental Protection Agency Conference on Household Hazardous Waste Management (7th). Held in Minneapolis, Minnesota on December 8-12, 1992.
PB93-170116/REB 93-01 PC **A99**/MF **A06**

Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC **A07**/MF **A02**

Proceedings of the Ocean Dumping Workshop 106-Mile Site. Held in Ocean City, NJ., on March 28-30, 1989.
PB93-208072/REB 93-04 PC **A07**/MF **A02**

Proceedings of the Symposium on Soil Venting. Held in Houston, Texas on April 29-May 1, 1991.
PB93-122323/REB 93-01 PC **A15**/MF **A03**

Proceedings of the 1989 Midwest Pollution Control Biologists Meeting. Held in Chicago, Illinois on February 14-17, 1989.
PB93-143691/REB 93-01 PC **A08**/MF **A02**

Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 1.
PB93-122331/REB 93-01 PC **A99**/MF **A06**

Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 2.
PB93-122349/REB 93-01 PC **A99**/MF **A06**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Held in Minneapolis, Minnesota on September 22-25, 1992.
PB93-196186/REB 93-01 PC **E99**/MF **E99**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

Proceedings: Tiered Testing Issues for Freshwater and Marine Sediments. Held in Washington, DC. on September 16-18, 1992.
PB93-152619/REB 93-01 PC **A22**/MF **A04**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991.
PB93-212835/REB 93-04 PC **E99**/MF **E99**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 1. Sessions 1-3.
PB93-212843/REB 93-04 PC **A15**/MF **A03**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 2. Sessions 4 and 5.
PB93-212850/REB 93-04 PC **A20**/MF **A04**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 3. Sessions 6-8.
PB93-212868/REB 93-04 PC **A19**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Held in Washington, DC. on December 3-6, 1991.
PB93-196087/REB 93-01 PC **E99**/MF **E99**

Proceedings: 1991 SO2 Control Symposium. Volume 1. Opening Session and Sessions 1-3.
PB93-196095/REB 93-01 PC **A19**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 2. Sessions 4 and 5A.
PB93-196103/REB 93-01 PC **A22**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 3. Sessions 5B and 6.
PB93-196111/REB 93-01 PC **A20**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 4. Session 7.
PB93-196129/REB 93-01 PC **A15**/MF **A03**

Proceedings: 1991 SO2 Control Symposium. Volume 5. Session 8.
PB93-196137/REB 93-01 PC **A13**/MF **A03**

Process for Regional Assessment of Wetland Risk.
PB93-146793/REB 93-01 PC **A09**/MF **A02**

Program for Providing Engineering Technical Assistance to Site Remediation Managers.
PB93-185809/REB 93-01 PC **A02**/MF **A01**

Program to Analyze Aquifer Test Data and Check for Validity with the Jacob Method.
PB93-181154/REB 93-01 PC **A02**/MF **A01**

Projections of Regional Fuel Oil and Natural Gas Prices. Project Summary.
PB93-222552/REB 93-04 PC **A01**/MF **A01**

Proposed Revisions to Ocean Dumping Criteria: Final Environmental Impact Statement. Volume 2.
PB93-206548/REB 93-04 PC **A99**/MF **A06**

Proposed Water Quality Guidance for the Great Lakes System.
PB93-164515/REB 93-01 PC **A14**/MF **A03**

Protecting Coastal and Wetlands Resources: A Guide for Local Governments.
PB93-105567/REB 93-01 PC **A09**/MF **A03**

Protecting Confidentiality in Establishment Surveys.
PB93-180958/REB 93-01 PC **A03**/MF **A01**

Protecting Local Ground-Water Supplies through Wellhead Protection.
PB93-216109/REB 93-04 PC **A03**/MF **A01**

Protecting the Environment: A Research Strategy for the 1990s.
PB93-115954/REB 93-01 PC **A04**/MF **A01**

Protecting the Nation's Wetlands, Oceans, and Watersheds: An Overview of Programs and Activities.
PB93-105609/REB 93-01 PC **A03**/MF **A01**

Protecting Visibility in National Parks and Wilderness Areas.
PB93-186393/REB 93-01 PC **A20**/MF **A04**

Protection of Pome Fruits, March 1985-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149904/REB 93-01 PC **A13**/MF **A03**

Proteins from Eight Eukaryotic Cytochrome P-450 Families Share a Segmented Region of Sequence Similarity.
PB93-229235/REB 93-04 PC **A02**/MF **A01**

Protocol-A Computerized Solid Waste Quantity and Composition Estimation System (Version 1.02) (for Microcomputers).
PB93-506061/REB 93-04 CP **D03**

Protocol for Determining the Best Performing Model.
PB93-226082/REB 93-04 PC **A03**/MF **A01**

Protocol for Equipment Leak Emission Estimates.
PB93-229219/REB 93-04 PC **A12**/MF **A03**

Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.
PB93-222370/REB 93-04 PC **A02**/MF **A01**

PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
PB93-174027/REB 93-01 PC **A17**/MF **A04**

Public Access: A How To Guide.
PB93-111029/REB 93-01 PC **A09**/MF **A03**

Public Health Action Agenda for the Gulf of Mexico: Frame Work for Action.
PB93-223426/REB 93-04 PC **A06**/MF **A02**

Publications Office of Science and Technology: Catalog.
PB93-152577/REB 93-01 PC **A06**/MF **A02**

Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-226864/REB 93-04 PC **A02**/MF **A01**

Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-228815/REB 93-04 PC **A02**/MF **A01**

Quality Assurance and Quality Control in the Development and Application of Ground-Water Models.
PB93-178226/REB 93-01 PC **A08**/MF **A02**

Quality Assurance Field Operations Report for the Pilot Study Evaluating the Habitat Value of Wetland Treatment Systems.
PB93-134682/REB 93-01 PC **A04**/MF **A01**

Quality Assurance Plan for 1991 Pilot Study of the Ecological Condition of Municipal Wastewater Constructed Wetland Treatment Systems.
PB93-134674/REB 93-01 PC **A05**/MF **A01**

Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC **A11**/MF **A03**

Quality of Our Nation's Water: 1990.
PB93-205904/REB 93-04 PC **A03**/MF **A01**

Quantification of Germ-Cell Risk Associated with the Induction of Heritable Translocations.
PB93-199677/REB 93-01 PC **A03**/MF **A01**

Quantification of Nitro- and Hydroxylated Nitro-Aromatic/Polycyclic Aromatic Hydrocarbons in Selected Ambient Air Daytime Winter Samples.
PB93-141190/REB 93-01 PC **A03**/MF **A01**

Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.
PB93-222081/REB 93-04 PC **A03**/MF **A01**

Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03**/MF **A01**

Questions and Answers on Release Notification Requirements and Reportable Quantity Adjustments.
PB93-963411/REB 93-01 PC **A03**/MF **A01**

R-245ca: A Potential Far-Term Alternative for R-11.
PB93-173144/REB 93-01 PC **A02**/MF **A01**

Radiation- and Chemically-Induced Chromosome Aberrations in Mouse Oocytes: A Comparison with Effects in Males.
PB93-194462/REB 93-01 PC **A02**/MF **A01**

Radioecology in Nordic limnic systems - present knowledge and future prospects.
DE92643948/REB 93-01 PC **A04**/MF **A01**

Radionuclides in Drinking Water. National Primary Drinking Water Regulations for Radionuclides. Proposed Rules.
PB93-194058/REB 93-01 PC **A03**/MF **A01**

Radon Measurement in Schools: Revised Edition.
PB93-237493/REB 93-04 PC **A04**/MF **A01**

Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

Radon/Radon Progeny Measurement Proficiency Program: Cumulative Proficiency Report (Revised September 1987).
PB93-203909/REB 93-04 PC **A03**/MF **A01**

Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.
PB93-229383/REB 93-04 PC **A03**/MF **A01**

Rapid Efficient Production of Baculovirus Expression Vectors.
PB93-226896/REB 93-04 PC **A03**/MF **A01**

Rapid Measurement of Aqueous Hydroxyl Radical Concentrations in Steady-State HO Flux Systems.
PB93-131779/REB 93-01 PC **A03**/MF **A01**

Rapid Phase Indentification of Mixed Crystalline Solids.
PB93-212355/REB 93-04 PC **A03**/MF **A01**

RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC **A05**/MF **A01**

RCRA Ground-Water Monitoring: Draft Technical Guidance.
PB93-139350/REB 93-01 PC **A10**/MF **A03**

RCRA Implementation Plan, FY 1993.
PB93-176956/REB 93-01 PC **A05**/MF **A02**

RCRA Public Involvement Manual.
PB93-231066/REB 93-04 PC **A11**/MF **A03**

Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry.
PB93-214328/REB 93-04 PC **A03**/MF **A01**

Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry Using Revised Compliance Costs. (Revised January 1992).
PB93-186104/REB 93-01 PC **A03**/MF **A01**

Reaction Kinetics of Ca-Based Sorbents with HCl.
PB93-131860/REB 93-01 PC **A03**/MF **A01**

Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC **A02**/MF **A01**

Reactions of Potential Organic Water Contaminants with Aqueous Chlorine and Monochloramine.
PB93-175040/REB 93-01 PC **A04**/MF **A01**

Reactions That Modify Chemistry in Lakes of the National Surface Water Survey.
PB93-229672/REB 93-04 PC **A02**/MF **A01**

Reactive Plume Model IV (RPM-IV) User's Guide.
PB93-217412/REB 93-04 PC **A23**/MF **A04**

Reassignment of GLP Transportation Functions.
PB93-963501/REB 93-01 PC **A01**/MF **A01**

Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC **A03**/MF **A01**

Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

Recent Advances in Measuring Exhaled Breath and Estimating Exposure and Body Burden for Volatile Organic Compounds (VOCS).
PB93-212314/REB 93-04 PC **A03**/MF **A01**

Recent Developments in Cleanup Technologies.
PB93-236289/REB 93-04 PC **A03**/MF **A01**

Recent Sulfur Enrichment in the Sediments of Little Rock Lake, Wisconsin.
PB93-135721/REB 93-01 PC **A03**/MF **A01**

Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03**/MF **A01**

Reclamation of Urban Stormwater.
PB93-185791/REB 93-01 PC **A03**/MF **A01**

Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
PB93-199388/REB 93-01 PC **A03**/MF **A01**

Recommended Performance Standard of the Florida Radon Research Program.
PB93-122281/REB 93-01 PC **A03**/MF **A01**

Recommended Quality Assurance Procedures for Opacity Continuous Emission Monitoring Systems.
PB93-199263/REB 93-01 PC **A05**/MF **A01**

Recovery of CFCs from refrigeration equipment. Current processes.
DE93778476/REB 93-01 PC **A04**/MF **A01**

Recovery of DNA from Soils and Sediments.
PB93-222834/REB 93-04 PC **A02**/MF **A01**

Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC **A03**/MF **A01**

Recreational Fishery By-Catch in the Galveston Bay System.
PB93-205805/REB 93-04 PC **A06**/MF **A02**

Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC **A03**/MF **A01**

Recycling Nickel Electroplating Rinse Waters by Low Temperature Evaporation and Reverse Osmosis.
PB93-218865/REB 93-04 PC **A04**/MF **A01**

RED Facts: Capsaicin.
PB93-100311/REB 93-01 PC **A02**/MF **A01**

RED Facts: Ethylene.
PB93-100345/REB 93-01 PC **A02**/MF **A01**

RED Facts: Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-232916/REB 93-04 PC **A02**/MF **A01**

RED Facts: Iron Salts.
PB93-198703/REB 93-01 PC **A02**/MF **A01**

RED Facts: 'Nosema locustae'.
PB93-100352/REB 93-01 PC **A02**/MF **A01**

RED Facts: Oxalic Acid.
PB93-173953/REB 93-01 PC **A02**/MF **A01**

RED Facts: Silver.
PB93-232924/REB 93-04 PC **A02**/MF **A01**

RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02**/MF **A01**

RED Facts: Sodium Hydroxide.
PB93-124683/REB 93-01 PC **A02**/MF **A01**

RED Facts: Streptomycin and Streptomycin Sulfate.
PB93-100378/REB 93-01 PC **A02**/MF **A01**

RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC **A02**/MF **A01**

RED Facts: 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-232908/REB 93-04 PC **A02**/MF **A01**

Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.
PB93-229144/REB 93-04 PC **A03**/MF **A01**

Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02**/MF **A01**

Region 10 In-Stream Biological Monitoring Handbook: For Wadable Streams in the Pacific Northwest.
PB93-226611/REB 93-04 PC **A05**/MF **A01**

Regional Interim Emission Inventories (1987-1991). Volume 1. Development Methodologies.
PB93-236107/REB 93-04 PC **A07**/MF **A02**

Regional Interim Emission Inventories (1987-1991). Volume 2. Emission Summaries.
PB93-236115/REB 93-04 PC **A08**/MF **A02**

Regional Modeling Analysis of the Dependencies of Atmospheric Oxidants to Perturbations in NOx and Hydrocarbon Emissions.
PB93-180925/REB 93-01 PC **A02**/MF **A01**

Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC **A14**/MF **A03**

Regulatory Applications of Sediment Criteria.
PB93-174472/REB 93-01 PC **A03**/MF **A01**

Regulatory Effectiveness Study for the Armand Bayou Coastal Preserve.
PB93-205680/REB 93-04 PC **A08**/MF **A02**

Regulatory Effectiveness Study for the Christmas Bay Coastal Preserve.
PB93-205698/REB 93-04 PC **A09**/MF **A03**

Regulatory Impact Analysis: Control of Sulfur and Aromatics Contents of on-Highway Diesel Fuel.
PB93-207660/REB 93-04 PC **A12**/MF **A03**

Regulatory Impact Analysis for the National Emissions Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Seven Other Processes.
PB93-143972/REB 93-01 PC **A09**/MF **A02**

Regulatory Impact Analysis of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-174613/REB 93-01 PC **A06**/MF **A02**

Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC **A09**/MF **A02**

Regulatory Impact Analysis (RIA) for the Proposed Great Lakes Water Quality Guidance (for Microcomputers).
PB93-505386/REB 93-04 CP **D02**

Relating Air Cleaner Efficiency to Indoor Air Quality.
PB93-212405/REB 93-04 PC **A03**/MF **A01**

Relationship between Serum Cholinesterase Activity and the Change in Body Temperature and Motor Activity in the Rat: A Dose-Response Study of Diisopropyl Fluorophosphate.
PB93-175644/REB 93-01 PC **A02**/MF **A01**

Relationship between Water Temperatures and Air Temperatures for Central U.S. Streams.
PB93-135655/REB 93-01 PC **A07**/MF **A02**

Relationship of Total Viable and Culturable Cells in Epiphytic Populations of 'Pseudomonas syringae'.
PB93-222826/REB 93-04 PC **A02**/MF **A01**

Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03**/MF **A01**

Relationships between Ozone Precursor Levels and Response to Emissions Reductions: Analysis of Regional Oxidant Model Results for the Northeastern United States.
PB93-186294/REB 93-01 PC **A07**/MF **A02**

Release of PCB and mercury from fibre sediments.
DE93778469/REB 93-01 PC **A05**/MF **A01**

Removal Efficiencies in Terms of Particle Size and Concentration in a Suburban Home of Console Air Cleaners.
PB93-222016/REB 93-04 PC **A03**/MF **A01**

Removal of Beryllium from Drinking Water by Chemical Coagulation and Lime Softening.
PB93-150134/REB 93-01 PC **A03**/MF **A01**

Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC **A02**/MF **A01**

Removal of Radionuclides by Electrokinetic Soil Processing.
PB93-222875/REB 93-04 PC **A02**/MF **A01**

Repeated Maternal Separation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC **A03**/MF **A01**

Repeated Sequences Including RS1100 'Pseudomonas cepacia' AC1100 Function as IS Elements.
PB93-205177/REB 93-04 PC **A02**/MF **A01**

Replacement of Charcoal Sorbent in the VOST.
PB93-221893/REB 93-04 PC **A03**/MF **A01**

Replacement of Hazardous Material in Wide Web Flexographic Printing Process.
PB93-229126/REB 93-04 PC **A05**/MF **A01**

Report of the Neurotoxicity Risk Assessment Guidelines Peer Review Workshop. Held in Washington, DC. on June 2-3, 1992.
PB93-146918/REB 93-01 PC **A08**/MF **A02**

Report on the Ecological Risk Assessment Guidelines Strategic Planning Workshop. Held in Miami, Florida on April 30-May 2, 1991.
PB93-102200/REB 93-01 PC **A05**/MF **A01**

Report on the EPA/Manufacturer Cooperative I/M Testing Program.
PB93-208015/REB 93-04 PC **A10**/MF **A03**

Report to Congress on Implementation of Section 112 of the Clean Air Act Amendments of 1990.
PB93-236008/REB 93-04 PC **A05**/MF **A01**

Report to Congress on Implementation of Section 403(c) of the Federal Water Pollution Control Act.
PB93-207488/REB 93-04 PC **A07**/MF **A02**

Report to the United States Congress on Radionuclides in Drinking Water: Multimedia Risk and Cost Assessment of Radon in Drinking Water.
PB93-209427/REB 93-04 PC **A08**/MF **A02**

Reporting and Recordkeeping Requirements for Waste Disposal: A Field Guide.
PB93-199115/REB 93-01 PC **A03**/MF **A01**

Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.
PB93-236347/REB 93-04 PC **A02**/MF **A01**

Required Contracts Management Training for Regional Superfund Personnel.
PB93-963258/REB 93-01 PC **A01**/MF **A01**

Reregistration Eligibility Document (RED): Capsaicin. (List D, Case 4018).
PB93-101434/REB 93-01 PC **A08**/MF **A02**

Reregistration Eligibility Document (RED) Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-234763/REB 93-04 PC **A07**/MF **A02**

Reregistration Eligibility Document (RED): Iron Salts.
PB93-200780/REB 93-01 PC **A05**/MF **A02**

Reregistration Eligibility Document (RED) 'Nosema locustae'.
PB93-100360/REB 93-01 PC **A07**/MF **A02**

Reregistration Eligibility Document (RED): Oxalic Acid.
PB93-169100/REB 93-01 PC **A06**/MF **A02**

Reregistration Eligibility Document (RED): Silver.
PB93-232973/REB 93-04 PC **A05**/MF **A02**

Reregistration Eligibility Document (RED) Soap Salts.
PB93-101673/REB 93-01 PC **A13**/MF **A03**

Reregistration Eligibility Document (RED): Sodium Hydroxide.
PB93-124691/REB 93-01 PC **A07**/MF **A02**

Reregistration Eligibility Document (RED): Streptomycin and Streptomycin Sulfate.
PB93-100386/REB 93-01 PC **A09**/MF **A02**

Reregistration Eligibility Document (RED) Zinc Salts.
PB93-101657/REB 93-01 PC **A11**/MF **A03**

Reregistration Eligibility Document (RED) 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-234755/REB 93-04 PC **A07**/MF **A02**

Research and Information Needs Related to Nonpoint Source Pollution and Wetlands in the Watershed: An EPA Perspective.
PB93-168862/REB 93-01 PC **A02**/MF **A01**

Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC **A09**/MF **A02**

Research to Improve Health Risk Assessments (RIHRA) Program.
PB93-116226/REB 93-01 PC **A06**/MF **A02**

Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.
PB93-236586/REB 93-04 PC **A03**/MF **A01**

Resistance of Membranes in Cover Systems to Root Penetration by Grass and Trees.
PB93-106714/REB 93-01 PC **A02**/MF **A01**

Resource Conservation and Recovery Information System (RCRIS) Data Element Dictionary.
PB93-192656/REB 93-04 PC **A24**/MF **A04**

Resource Conservation and Recovery Information System (RCRIS) Extract Tapes.
PB93-592570/REB 93-04 SubscriptionPC**$2540.00**

Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders.
PB93-134419/REB 93-01 PC**$29.00**/MF **A04**

Response Action Contractor Final Indemnification Guidelines. Volume 2, Number 1, March 1993.
PB93-963290/REB 93-01 PC **A01**/MF **A01**

Restoration of the Anacostia River.
PB93-136364/REB 93-01 PC **A05**/MF **A01**

Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
PB93-143709/REB 93-01 PC **A08**/MF **A02**

Restoration Potential of Diked Estuarine Wetlands in Washington and Oregon. Phase 2: Identification of Candidate Sites in Puget Sound.
PB93-145597/REB 93-01 PC **A04**/MF **A01**

Restructuring Manual: A Training Manual for State Drinking Water Personnel as They Meet the Challenges of the 1986 Safe Drinking Water Act Amendments.
PB93-180842/REB 93-01 PC **A04**/MF **A01**

Results of U.S. EPA Research Waste Combustion Residues.
PB93-106672/REB 93-01 PC **A03**/MF **A01**

Retrospective Performance Evaluation on In situ Bioremediation: Site Characterization.
PB93-221919/REB 93-04 PC **A03**/MF **A01**

Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127801/REB 93-01 PC **A06**/MF **A02**

Review of EPA's Environmental Monitoring and Assessment Program (EMAP). Interim Report.
PB93-146348/REB 93-01 PC **A03**/MF **A01**

Review of Tampa Bay Information for Interim Nutrient Budgets and Historical Loadings of Bay Segments.
PB93-191187/REB 93-01 PC **A03**/MF **A01**

Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC **A03**/MF **A01**

Review of the Literature on Potential Reproductive and Developmental Toxicity of Electric and Magnetic Fields.
PB93-141307/REB 93-01 PC **A03**/MF **A01**

Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
PB93-135663/REB 93-01 PC **A07**/MF **A02**

Revision of Methodology for Deriving National Ambient Water Quality Criteria for the Protection of Human Health: Report of Workshop and EPA's Preliminary Recommendations for Revision.
PB93-213494/REB 93-04 PC **A06**/MF **A02**

Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis.
PB93-963297/REB 93-04 PC **A03**/MF **A01**

Rice Field Inventory Using AVHRR Data.
PB93-135697/REB 93-01 PC **A03**/MF **A01**

Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC **A02**/MF **A01**

Risk assessment, Health-Environment. A research programme during the period 1992/93-1994/95.
DE93711214/REB 93-01 PC **A03**/MF **A01**

Risk Communication About Chemicals in Your Community. Facilitator's Manual and Guide.
PB93-200541/REB 93-01 PC **A05**/MF **A02**

Risk Reduction Engineering Laboratory Site Remediation Technical Support Program: FY92 Annual Report.
PB93-217651/REB 93-04 PC **A03**/MF **A01**

Role and Design of Water Quality Monitoring on Forested Watersheds.
PB93-222248/REB 93-04 PC **A02**/MF **A01**

Role and Function of Forest Buffers in the Chesapeake Bay Basin for Nonpoint Source Management.
PB93-207405/REB 93-04 PC **A03**/MF **A01**

Role of Ecological Sample Surveys in the Implementation of Biocriteria.
PB93-234524/REB 93-04 PC **A03**/MF **A01**

Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
PB93-194223/REB 93-01 PC **A03**/MF **A01**

Role of Nitrate in the Acidification of Streams in the Catskill Mountains of New York.
PB93-150167/REB 93-01 PC **A03**/MF **A01**

Role of Ozone in Tracheal Cell Transformation.
PB93-179935/REB 93-01 PC **A03**/MF **A01**

Role of Ozone Precursors in Tropospheric Ozone Formation and Control: A Report to Congress.
PB93-226694/REB 93-04 PC **A04**/MF **A01**

Role of Soil Organic Acids in Mineral Weathering Processes (Chapter 6).
PB93-149268/REB 93-01 PC **A04**/MF **A01**

Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC **A02**/MF **A01**

Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants (Revised).
PB93-212025/REB 93-04 PC **A05**/MF **A01**

Sampling and Assessment Issues in Using Fish as Indicators of Ecological Condition in Lakes: A Workshop Report. (3rd Draft Report).
PB93-186278/REB 93-01 PC **A03**/MF **A01**

Sampling, Characterizing and Mapping Contaminated Sediments in River Harbors.
PB93-135705/REB 93-01 PC **A02**/MF **A01**

Sanering av Jaernsjoen i Emaan. Huvudstudie. (Remediation of lake Jaernsjoen in the Emaan river. Main report).
DE93711213/REB 93-01 PC **A04**/MF **A01**

Sanitary Survey Training: Instructor's Guide for Inspectors of Small Water Systems.
PB93-115871/REB 93-01 PC **A05**/MF **A01**

Sanitary Survey Training: Instructor's Guide for Sanitarians of Micronesia.
PB93-115889/REB 93-01 PC **A09**/MF **A02**

SARA '200' Remedial Action Starts Requirement.
PB93-963324/REB 93-01 PC **A01**/MF **A01**

Saving Bays and Estuaries: A Primer for Establishing and Managing Estuary Programs. Appendices G, H, and I.
PB93-116077/REB 93-01 PC **A05**/MF **A02**

Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.
PB93-229177/REB 93-04 PC **A03**/MF **A01**

SCOUT: A Data Analysis Program (Version 1.40) (for Microcomputers).
PB93-505303/REB 93-01 CP **D02**

SCREEN2 Model User's Guide.
PB93-216885/REB 93-04 PC **A04**/MF **A01**

Screening Methodology for Assessing Leaking UST Sites and Clean Up Technologies.
PB93-199404/REB 93-01 PC **A03**/MF **A01**

Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised.
PB93-219095/REB 93-04 PC **A05**/MF **A01**

Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-198988/REB 93-01 PC **A03**/MF **A01**

Search for Radiative Neutrino Decay from Supernovae.
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

Sediment Classification Methods Compendium.
PB93-115186/REB 93-01 PC **A11**/MF **A03**

Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.
PB93-222362/REB 93-04 PC **A03**/MF **A01**

Segmentation Development for Galveston Bay.
PB93-205748/REB 93-04 PC **A07**/MF **A02**

Selecting Remediation Techniques for Contaminated Sediment.
PB93-216273/REB 93-04 PC **A10**/MF **A03**

Selection of a 'Pseudomonas cepacia' Strain Constitutive for the Degradation of Trichloroethylene.
PB93-169027/REB 93-01 PC **A02**/MF **A01**

Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
PB93-121333/REB 93-01 PC **A03**/MF **A01**

Seminar Publication. Medical and Institutional Waste Incineration: Regulations, Management, Technology, Emissions, and Operations.
PB93-116283/REB 93-01 PC **A03**/MF **A01**

Sensitivity Analysis of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model.
PB93-226769/REB 93-04 PC **A05**/MF **A01**

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP6 of Rotavirus.
PB93-168946/REB 93-01 PC **A02**

Sequence Similarities in the Genes Encoding Polychlorinated Biphenyl Degradation by 'Pseudomonas' Strain LB400 and 'Alcaligenes eutrophus' H850.
PB93-229201/REB 93-04 PC **A01**/MF **A01**

Setting an Agenda for Research in the Federal Statistical System: Needs for Statistical Disclosure Limitation Procedures.
PB93-204097/REB 93-04 PC **A03**/MF **A01**

Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC **A04**/MF **A01**

Sewage Treatment Plant NSPS: Responses to Comments on April 1986 Proposed Revisions.
PB93-223584/REB 93-04 PC **A03**/MF **A01**

Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC **A03**/MF **A01**

Shoreline Survey for Unpermitted Discharges to Galveston Bay.
PB93-205706/REB 93-04 PC **A03**/MF **A01**

Short Communication: Improved Thin-Layer Chromatographic Separation of 32P-Postlabeled DNA Adducts.
PB93-229615/REB 93-04 PC **A02**/MF **A01**

Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC **A03**/MF **A01**

Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).
PB93-221836/REB 93-04 PC **A03**/MF **A01**

Simple Mini-Method to Extract DNA Directly from Soil for Use with Polymerase Chain Reaction Amplification.
PB93-222792/REB 93-04 PC **A02**/MF **A01**

Simplified Cycle Simulation Model for the Performance Rating of Refrigerants and Refrigerant Mixtures.
PB93-130383 93-01 *Not available NTIS*

Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119881/REB 93-01 PC **A03**/MF **A01**

Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

Simulation of Microbial Occurrence, Exposure and Health Risks after Drinking Water Treatment Processes.
PB93-134393/REB 93-01 PC **A05**/MF **A02**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
PB93-173664/REB 93-01 PC **A02**/MF **A01**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131668/REB 93-01 PC **A03**/MF **A01**

Simulation of Performance of Chlorine-Free Fluorinated Ethers and Fluorinated Hydrocarbons to Replace CFC-11 and CFC-114 in Chillers.
PB93-175511/REB 93-01 PC **A03**/MF **A01**

Simulation of Raw Water and Treatment Parameters in Support of the Disinfection By-Products Regulatory Impact Analysis.
PB93-134401/REB 93-01 PC **A03**/MF **A01**

Simultaneous Control of PM-10 and Hazardous Air Pollutants: Rationale for Selection of Hazardous Air Pollutants as Potential Particulate Matter or Associated with Particulate Matter at Source Conditions.
PB93-216380/REB 93-04 PC **A05**/MF **A01**

Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.
PB93-228492/REB 93-04 PC **A02**/MF **A01**

Site Assessment: Evaluating Risks at Superfund Sites.
PB93-963347/REB 93-04 PC **A02**/MF **A01**

Site Assessment Information Directory (SAID) Region 1 (for Microcomputers). Date of Coverage: October 1991.
PB93-506111/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 2 (for Microcomputers). Date of Coverage: October 1991.
PB93-506129/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 3 (for Microcomputers). Date of Coverage: October 1991.
PB93-506137/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 4 (for Microcomputers). Date of Coverage: October 1991.
PB93-506145/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 5 (for Microcomputers). Date of Coverage: 1991.
PB93-506152/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 6 (for Microcomputers). Date of Coverage: October 1991.
PB93-506160/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 7 (for Microcomputers). Date of Coverage: October 1991.
PB93-506178/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 8 (for Microcomputers). Date of Coverage: 1991.
PB93-506186/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 9 (for Microcomputers). Date of Coverage: October 1991.
PB93-506194/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 10 (for Microcomputers). Date of Coverage: October 1991.
PB93-506202/REB 93-04 CP **D03**

Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.
PB93-227205/REB 93-04 PC **A04**/MF **A01**

SITE-Emerging Technologies: Laser Induced Photochemical Oxidative Destruction of Toxic Organics in Leachates and Groundwaters.
PB93-131431/REB 93-01 PC **A04**/MF **A01**

Site Enforcement Tracking System (SETS): PRP Listing by Site for Region 4.
PB93-177178/REB 93-01 PC **A99**

SITE Program Demonstration of the SBP Technologies, Inc., Membrane Filtration System on Creosote-Contaminated Water.
PB93-228567/REB 93-04 PC **A02**/MF **A01**

Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03**/MF **A01**

Slowing the Waste Behemoth: Source Reduction is Overshadowed by Recycling's Success.
PB93-194546/REB 93-01 PC **A02**/MF **A01**

Small Community Water and Wastewater Treatment.
PB93-215606/REB 93-04 PC **A05**/MF **A01**

Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC **A02**/MF **A01**

Smart Moves in Superfund - Regional Pilots and Initiatives. Volume 1, Number 2, September 1992.
PB93-963283/REB 93-01 PC **A01**/MF **A01**

Smart Moves in Superfund - Revitalization One Year Later. Volume 1, Number 3, January 1993.
PB93-963284/REB 93-01 PC **A01**/MF **A01**

Soil Biology and Ecology.
PB93-199453/REB 93-01 PC **A03**/MF **A01**

Soil-Mediated Effects of Atmospheric Deposition on Eastern U.S. Spruce-Fir Forests.
PB93-141125/REB 93-01 PC **A03**/MF **A01**

Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02**/MF **A01**

Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02**/MF **A01**

Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
PB93-222776/REB 93-04 PC **A02**/MF **A01**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991.
PB93-174753/REB 93-01 PC **E99**/MF **E99**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 1.
PB93-174761/REB 93-01 PC **A24**/MF **A04**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 2.
PB93-174779/REB 93-01 PC **A25**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
PB93-174787/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 2.
PB93-174795/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 1.
PB93-174803/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 2.
PB93-174811/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 4.
PB93-174829/REB 93-01 PC **A13**/MF **A03**

Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC **A02**/MF **A01**

Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC **A03**/MF **A01**

Sorption and Reemission of Formaldehyde by Gypsum Wallboard.
PB93-180917/REB 93-01 PC **A03**/MF **A01**

Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC **A02**/MF **A01**

Source Apportionment of Air Pollution in China: Extending the Usefulness of Receptor Modeling by Combining Multivariate and Chemical Mass Balance Models.
PB93-185726/REB 93-01 PC **A03**/MF **A01**

Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC **A03**/MF **A01**

Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC **A02**/MF **A01**

Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC **A03**/MF **A01**

Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence In situ Hybridization.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

Spatiotemporal Variability of Non-Urban Ozone Concentrations Over the Eastern United States and Its Potential Replication by Satellite Data.
PB93-191328/REB 93-01 PC **A03**/MF **A01**

Spawning Periodicity of the Inland Silverside, 'Menidia beryllina' (Pisces: Atherinidae) in the Laboratory: Relationship to Lunar Cycles.
PB93-236297/REB 93-04 PC **A02**/MF **A01**

Spray Characteristics of Two Types of Fuel Injectors.
PB93-180859/REB 93-01 PC **A03**/MF **A01**

Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC **A02**/MF **A01**

Stagnation Diffusion Observed in a Deeply Pooling Valley during STAGMAP.
PB93-120897/REB 93-01 PC **A02**/MF **A01**

Standard Document for Remedial Site Assessment Decisions.
PB93-963268/REB 93-01 PC **A01**/MF **A01**

Standards of Performance for New Stationary Sources. Volume 1. Introduction, Summary and Standards: A Compilation as of December 31, 1985.
PB93-199297/REB 93-01 PC **A08**/MF **A02**

State Air Pollution Control Programs: A Profile Report.
PB93-122364/REB 93-01 PC **A03**/MF **A01**

State and Local Funding of Nonpoint Source Control Programs.
PB93-228146/REB 93-04 PC **A09**/MF **A02**

State Clean Water Strategies: Meeting the Challenges of the Future.
PB93-217628/REB 93-04 PC **A03**/MF **A01**

State Sludge Management Program Guidance Manual.
PB93-128122/REB 93-01 PC **A06**/MF **A02**

Statistical Analyses of COADS Wind Data in Coastal Regions of the United States.
PB93-212777/REB 93-04 PC **A03**/MF **A01**

Statistical Evaluation of the EMAP-Wetlands Classification.
PB93-199446/REB 93-01 PC **A03**/MF **A01**

Statistical Problems Arising from Environmental Issues.
PB93-185718/REB 93-01 PC **A01**/MF **A01**

Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03**/MF **A01**

Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC **A20**/MF **A04**

Status of ASHRAE Standard 62. Ventilation for Acceptable Indoor Air Quality.
PB93-222040/REB 93-04 PC **A02**/MF **A01**

Status of Pesticides in Reregistration and Special Review (Rainbow Report), June 1993.
PB93-230829/REB 93-04 PC **A17**/MF **A03**

Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC **A01**/MF **A01**

Status Report on Analytical Methods to Support the Disinfectant/Disinfection By-Products Regulation.
PB93-134898/REB 93-01 PC **A03**/MF **A01**

Status Report on Development of Regulations for Disinfectants and Disinfection By-Products.
PB93-134914/REB 93-01 PC **A03**/MF **A01**

Status Report on the Development of Draft MCLGs for Disinfectants and By-Products.
PB93-134906/REB 93-01 PC **A05**/MF **A01**

Steroidogenic Assessment Using Ovary Culture in Cycling Rats: Effects of Bis(2-Diethylhexyl) Phthalate on Ovarian Steroid Production.
PB93-181022/REB 93-01 PC **A03**/MF **A01**

Stochastic Methodology for Regional Wind-Field Modeling.
PB93-229391/REB 93-04 PC **A03**/MF **A01**

Storm and Combined Sewer Overflow: An Overview of EPA's Research Program.
PB93-185957/REB 93-01 PC **A03**/MF **A01**

Storm Water Management for Construction Activities. Developing Pollution Prevention Plans and Best Management Practices. Summary Guidance.
PB93-223550/REB 93-04 PC **A03**/MF **A01**

Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC **A02**/MF **A01**

Strain Comparisons of DFP Neurotoxicity in Rats.
PB93-228609/REB 93-04 PC **A03**/MF **A01**

Strategic Assessment of Near Coastal Waters: Northeast Case Study.
PB93-136521/REB 93-01 PC **A06**/MF **A02**

Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

Strategy for Environmental Health Research at EPA.
PB93-116168/REB 93-01 PC **A06**/MF **A02**

Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02**/MF **A01**

STREAM: An Exposure Assessment Methodology for Agricultural Pesticide Runoff.
PB93-106888/REB 93-01 PC **A03**/MF **A01**

Stream Indicator and Design Workshop.
PB93-222321/REB 93-04 PC **A05**/MF **A01**

Stress Cracking Behavior of HDPE Geomembranes and Its Prevention.
PB93-196616/REB 93-01 PC **A06**/MF **A02**

Stress Proteins in Aquatic Organisms: An Environmental Perspective.
PB93-199578/REB 93-01 PC **A03**/MF **A01**

Structure and Performance of the Health Effects Institute.
PB93-200335/REB 93-01 PC **A08**/MF **A02**

Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC **A03**/MF **A01**

Study of Highway Vehicle Emission Inventory Procedures for Selected Urban Areas.
PB93-185577/REB 93-01 PC **A04**/MF **A01**

Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC **A02**/MF **A01**

Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03**/MF **A01**

Subjective-Probability-Based Scenarios for Uncertain Input Parameters: Stratospheric Ozone Depletion, December 1990.
PB93-143741/REB 93-01 PC **A03**/MF **A01**

Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.
PB93-222404/REB 93-04 PC **A02**/MF **A01**

Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
PB93-185536/REB 93-01 PC **A11**/MF **A03**

Successful Practices in Title III Implementation. Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Cameron County, Texas; Bucks County, Pennsylvania; Harford County, Maryland; Dallas County, Texas. Series 6, Number 7.
PB93-130086/REB 93-01 PC **A03**/MF **A01**

Successful Practices in Title 3 Implementation Chemical Emergency Preparedness and Prevention Technical Assitance Bulletin. Series 6, Number 8.
PB93-126126/REB 93-01 PC **A03**/MF **A01**

Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC **A07**/MF **A02**

Summary of Factors Affecting Compliance by Ferrous Foundaries. Volume 1. Text.
PB93-199347/REB 93-01 PC **A05**/MF **A02**

Summary of GIS Support to Superfund.
PB93-963506/REB 93-04 PC **A04**/MF **A01**

Summary of Implementation and Demonstration Projects in Bays and Estuaries.
PB93-194637/REB 93-01 PC **A07**/MF **A02**

Summary of Public Comments and EPA Responses on the Draft Report: The Role of Ozone Precursors in Tropospheric Ozone Formation and Control.
PB93-226702/REB 93-04 PC **A03**/MF **A01**

Summary of the 1987 Carver-Greenfield Sludge Drying Technology Workshop: Problems and Solutions. Held in Los Angeles, California on March 10-11, 1987.
PB93-174506/REB 93-01 PC **A04**/MF **A01**

Summary of the 1987 EPA National Performance Audit Program on Source Measurements.
PB93-223444/REB 93-04 PC **A03**/MF **A01**

Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107043/REB 93-01 PC **A02**/MF **A01**

Summary of Workshop III: Evoked Potentials.
PB93-175610/REB 93-01 PC **A01**/MF **A01**

Superfund Accelerated Cleanup Model (SACM) Coordination Strategy.
PB94-963201/REB 93-04 PC **A01**/MF **A01**

Superfund Accelerated Cleanup Model (SACM): Questions and Answers.
PB93-963286/REB 93-04 PC **A01**/MF **A01**

Superfund Accelerated Cleanup Model (SACM). Volume 1, Number 4, November 1992.
PB92-963287/REB 93-01 PC **A01**/MF **A01**

Superfund Administrative Improvements. Executive Summary.
PB93-963294/REB 93-04 PC **A03**/MF **A01**

Superfund Administrative Improvements. Final Report.
PB93-963295/REB 93-04 PC **A04**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (American Thermostat Corporation, New York).
PB92-963627/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Ciba-Geigy Corporation, McIntosh, Alabama).
PB92-963630/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Krysowaty Farm, Hillsborough, New Jersey).
PB92-963629/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Valley of the Drums, Bullitt County, Kentucky).
PB92-963618/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Wide Beach Section of Brant, New York).
PB92-963628/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Fulton Terminals Site Profile, Oswego County, NY).
PB93-963616/REB 93-04 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Harvey and Knott Drum Site, New Castle County, Delaware).
PB93-963614/REB 93-04 PC **A01**/MF **A01**

Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC **A09**/MF **A02**

Superfund Engineering Issue: Considerations for Evaluating the Impact of Metals Partitioning during the Incineration of Contaminated Soils from Superfund Sites.
PB93-121341/REB 93-01 PC **A03**/MF **A01**

Superfund: Environmental Progress.
PB93-206209/REB 93-04 PC **A03**/MF **A01**

Superfund: Environmental Response and Health and Safety (Training Materials).
PB93-963100/REB 93-01 Standing Order

Superfund: EPA/ICMA Superfund Revitalization Conference. Held in Chicago, Illinois on November 12-13, 1992.
PB93-963274/REB 93-01 PC **A04**/MF **A01**

Superfund Innovative Technology Evaluation Program: Progress and Accomplishments Fiscal Year 1991. A 5th Report to Congress.
PB93-126613/REB 93-01 PC **A05**/MF **A01**

Superfund Innovative Technology Evaluation (SITE) Program.
PB93-116093/REB 93-01 PC **A03**/MF **A01**

Superfund Progress. Aficionado's Version. Progress as of September 30, 1992.
PB93-963255/REB 93-01 PC **A03**/MF **A01**

Superfund Progress: Fall/Winter 1992.
PB93-963254/REB 93-01 PC **A03**/MF **A01**

Superfund: Qualified Disadvantaged Business Utilization in State Response.
PB92-963283/REB 93-01 PC **A01**/MF **A01**

Superfund Reauthorization: NACEPT Subcommittee Handbook.
PB93-963298/REB 93-04 PC **A05**/MF **A02**

Superfund Record of Decision (EPA Region 1): Brunswick Naval Air Station, Operable Unit 2, ME. (Second Remedial Action), June 1992.
PB93-963706/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 1): Darling Hill Dump, Lyndon, VT. (First Remedial Action), June 1992.
PB93-963702/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Newport Naval Education/Training Center, Newport, RI. (First Remedial Action), September 1992.
PB93-963707/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 1): Otis Air National Guard/Camp Edwards, MA. (First Remedial Action), May 1992.
PB93-963704/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 1): PSC Resources Site, Palmer, MA. (First Remedial Action), September 1992.
PB93-963706/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 1): Revere Textile Prints, Sterling, CT. (First Remedial Action), September 1992.
PB93-963703/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Tibbetts Road, Barrington, NH. (First Remedial Action), September 1992.
PB93-963709/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 1): Town Garage Radio Beacon, Londonderry, NH. (First Remedial Action), September 1992.
PB93-963705/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 2): Bioclinical Laboratories, Town of Islip, Suffolk County, NY. (First Remedial Action), September 1992.
PB93-963807/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Cosden Chemical Coatings, City of Beverly, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963818/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Dover Municipal Well 4, Morris County, Dover, NJ. (First Remedial Action), September 1992.
PB93-963819/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Ellis Property, Sharp Road, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963820/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Endicott Village Well Field, Broome County, NY. (Third Remedial Action), September 1992.
PB93-963821/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Evor Phillips Leasing Company, Old Bridge Township, Middlesex County, NJ. (First Remedial Action), September 1992.
PB93-963814/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): FAA Technical Center, Atlantic County, Atlantic City International Airport, NJ. (Third Remedial Action), September 1992.
PB93-963808/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Facet Enterprises, Village of Elmira Heights, Chemung County, NY. (First Remedial Action), September 1992.
PB93-963822/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 2): Higgins Farm, Franklin Township, Somerset County, NJ. (Second Remedial Action), September 1992.
PB93-963813/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Imperial Oil/Champion Chemicals, Monmouth County, NJ. (Second Remedial Action), September 1992.
PB93-963823/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Industrial Latex, Bergen County, Wallington, NJ. (First Remedial Action), September 1992.
PB93-963824/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Islip Municipal Sanitary Landfill, Town of Islip, NY. (First Remedial Action), September 1992.
PB93-963825/REB 93-04 PC **A05**/MF **A02**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 5), Lakehurst, NJ. (Sixth Remedial Action), January 1992.
PB93-963809/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 6), Lakehurst, NJ. (Fifth Remedial Action), December 1991.
PB93-963810/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 7), Ocean County, NJ. (Seventh Remedial Action), March 1992.
PB93-963826/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): North Sea Municipal Landfill, Suffolk County, Southampton, NY. (Second Remedial Action), September 1992.
PB93-963811/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Pasley Solvents and Chemicals, Town of Hempstead, Nassau County, NY. (First Remedial Action), April 1992.
PB93-963805/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 1), Clinton County, NY. (First Remedial Action), September 1992.
PB93-963815/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 3), Clinton County, NY. (Second Remedial Action), September 1992.
PB93-963816/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Preferred Plating, Suffolk County, Farmingdale, NY. (Second Remedial Action), September 1992.
PB93-963817/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Ramapo Landfill Site, Rockland County, NY. (First Remedial Action), March 1992.
PB93-963801/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Rowe Industries Groundwater Contamination, Sag Harbor, NY. (First Remedial Action), September 1992.
PB93-963827/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Witco Chemical (Oakland Plant), Bergen County, Oakland, NJ. (First Remedial Action), September 1992.
PB93-963812/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Abex Corporation, Portsmouth, VA. (First Remedial Action), September 1992.
PB93-963917/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Brown's Battery Breaking, Tilden Township, Berks County, PA. (Second Remedial Action), July 1992.
PB93-963918/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Butz Landfill, Pocono and Jackson Townships, Monroe County, PA. (Second Remedial Action), June 1992.
PB93-963919/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Commodore Semiconductor Group, Lower Providence Township, PA. (First Remedial Action), September 1992.
PB93-963920/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 3): Dixie Caverns Landfill Site, Operable Unit 2, Roanoke County, VA. (Second Remedial Action), September 1992.
PB93-963907/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Dublin Water Supply, Bucks County, PA. (First Remedial Action), December 1991.
PB93-963903/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 3): Eastern Diversified Metals Site, Schuylkill County, Hometown, PA. (Second Remedial Action), July 1992.
PB93-963914/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): MW Manufacturing Site, Montour County, PA. (Subsequent Remedial Action), June 1992.
PB93-963904/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Raymark Site, Operable Unit 1, Montgomery County, PA. (First Remedial Action), December 1991.
PB93-963902/REB 93-01 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 3): Rhinehart Tire Fire Dump, Operable Unit 2, Winchester, VA. (Second Remedial Action), September 1992.
PB93-963921/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.
PB93-963912/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Strasburg Landfill, Newlin Township, Chester County, PA. (Third Remedial Action), March 1992.
PB93-963916/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.
PB93-963913/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Tonolli Corporation, Nesquehoning Borough, Carbon County, PA. (First Remedial Action), September 1992.
PB93-963922/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, Operable Unit 1, Richmond, VA. (First Remedial Action), May 1992.
PB93-963923/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, (Operable Unit 5), Richmond, VA. (First Remedial Action), March 1992.
PB93-963901/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): USA Aberdeen, Operable Unit One, Michaelsville, MD. (Second Remedial Action), June 1992.
PB93-963915/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Agrico Chemical, Escambia County, Pensacola, FL. (First Remedial Action), September 1992.
PB93-964017/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Benfield Industries, Haywood County, Hazelwood, NC. (First Remedial Action), July 1992.
PB93-964018/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 4): Carrier Air Conditioning, Collierville, TN. (First Remedial Action), September 1992.
PB93-964019/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964009/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Florida Steel Corporation, Martin County, Indiantown, FL. (First Remedial Action), June 1992.
PB93-964020/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Madison County Sanitary Landfill, Madison, FL. (First Remedial Action), September 1992.
PB93-964021/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Milan Army Ammunition Plant, TN. (First Remedial Action), September 1992.
PB93-964022/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): National Electric Coil/Cooper Industries, KY. (First Remedial Action), September 1992.
PB93-964016/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), A/M Area Groundwater Operable Unit 3, Aiken County, SC. (Third Remedial Action), June 1992.
PB93-964013/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 1, SC. (First Remedial Action), June 1992.
PB93-964023/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 2, SC. (Second Remedial Action), June 1992.
PB93-964024/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Standard Auto Bumper Site, Dade County, Hialeah, FL. (First Remedial Action), September 1992.
PB93-964014/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation, Operable Unit 6, Roane County, TN. (Fourth Remedial Action), September 1992.
PB93-964025/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.
PB93-964010/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): USMC Camp Lejeune Military Reservation, NC. (First Remedial Action), September 1992.
PB93-964026/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964011/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.
PB93-964012/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Yellow Water Road Dump, Duval County, Baldwin, FL. (Second Remedial Action), June 1992.
PB93-964015/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): Alsco Anaconda Site, Gnadenhutten, OH. (Second Remedial Action), September 1992.
PB93-964121/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): American Chemical Services, Griffith, IN. (First Remedial Action), September 1992.
PB93-964125/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): Butterworth No. 2 Landfill Site, Grand Rapids, MI. (First Remedial Action), September 1992.
PB93-964122/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Cannelton Industries Site, Sault Sainte Marie, MI. (First Remedial Action), September 1992.
PB93-964126/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Central Illinois Public Service, Taylorville Manufactured Gas Plant Site, Christian County, IL. (First Remedial Action), September 1992.
PB93-964127/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): City Disposal Sanitary Landfill, Dane County, WI. (First Remedial Action), September 1992.
PB93-964128/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 5): Clare Water Supply Site, Clare County, Clare, MI. (Second Remedial Action), September 1992.
PB93-964106/REB 93-01 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 5): Columbus Old Municipal Landfill, Columbus, IN. (First Remedial Action), March 1992.
PB93-964104/REB 93-01 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 5): Grand Traverse Overall Supply Site, Greilickville, MI. (First Remedial Action), February 1992.
PB93-964101/REB 93-01 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 5): H. Brown Company, Walker, MI. (First Remedial Action), September 1992.
PB93-964129/REB 93-04 PC **A05/MF A01**

Superfund Record of Decision (EPA Region 5): Kohler Landfill, Kohler, WI. (First Remedial Action), March 1992.
PB93-964111/REB 93-01 PC **A05/MF A02**

Superfund Record of Decision (EPA Region 5): Metal Working Shop, Benzie County, Lake Ann, MI. (First Remedial Action), June 1992.
PB93-964113/REB 93-01 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 5): MIDCO I, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964130/REB 93-04 PC **A05/MF A01**

Superfund Record of Decision (EPA Region 5): Midco II, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964102/REB 93-01 PC **A05/MF A01**

Superfund Record of Decision (EPA Region 5): New Brighton/Arden Hills, Ramsey County, MN. (Eighth Remedial Action), September 1992.
PB93-964131/REB 93-04 PC **A07/MF A02**

Superfund Record of Decision (EPA Region 5): Reilly Tar and Chemical, St. Louis Park, MN. (Fourth Remedial Action), September 1992.
PB93-964124/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 5): Savanna Army Depot, Savanna, IL. (First Remedial Action), March 1992.
PB93-964116/REB 93-01 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 1, Anoka County, Andover, MN. (Second Remedial Action), (Amendment), June 1992.
PB93-964123/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 2, Anoka County, Andover, MN. (Second Remedial Action), December 1992.
PB93-964132/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 5): Torch Lake Site, Operable Units 1 and 3, Houghton County, MI. (First Remedial Action), September 1992.
PB93-964120/REB 93-01 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 5): Tri County/Elgin Landfill Site, Elgin, IL. (First Remedial Action), September 1992.
PB93-964133/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 5): Twin Cities AF Reserve (SAR Landfill), MN. (First Remedial Action), March 1992.
PB93-964103/REB 93-01 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 6): Double Eagle Refinery, Oklahoma City, OK. (First Remedial Action), September 1992.
PB93-964210/REB 93-04 PC **A05/MF A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 1), Vermilion Parish, LA. (Second Remedial Action), September 1992.
PB93-964207/REB 93-04 PC **A05/MF A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 2), Vermilion Parish, LA. (First Remedial Action), September 1992.
PB93-964206/REB 93-04 PC **A05/MF A01**

Superfund Record of Decision (EPA Region 6): Koppers (Texarkana Plant), TX. (First Remedial Action), (Amendment), March 1992.
PB93-964208/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 6): Prewitt Abandoned Refinery, Prewitt, NM. (First Remedial Action), September 1992.
PB93-964209/REB 93-04 PC **A09/MF A02**

Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.
PB93-964304/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 7): Pester Refinery, Butler County, El Dorado, KS. (First Remedial Action), September 1992.
PB93-964305/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 8): Denver Radium, Operable Unit 9, Denver, CO. (Eighth Remedial Action), December 1991.
PB93-964402/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 8): Denver Radium Site, Operable Unit 8, Denver, CO. (Ninth Remedial Action), January 1992.
PB93-964405/REB 93-04 PC **A06/MF A02**

Superfund Record of Decision (EPA Region 8): Hill Air Force Base, UT. (Second Remedial Action), September 1992.
PB93-964403/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 8): Idaho Pole National Priorities List Site, Bozeman, MT. (First Remedial Action), September 1992.
PB93-964406/REB 93-04 PC **A07/MF A02**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 1, Weber County, UT. (Second Remedial Action), June 1992.
PB93-964407/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 3, Weber County, UT. (Fourth Remedial Action), September 1992.
PB93-964408/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 4, UT. (Third Remedial Action), September 1992.
PB93-964409/REB 93-04 PC **A05/MF A01**

Superfund Record of Decision (EPA Region 8): Portland Cement Co. (Kiln Dust No. 2 and No. 3), Operable Unit 2, Salt Lake City, UT. (Second Remedial Action), March 1992.
PB93-964410/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), Operable Unit 2, Golden, CO. (Fourth Remedial Action), September 1992.
PB93-964411/REB 93-04 PC **A19/MF A04**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), (Operable Unit 4), Golden, CO. (Third Remedial Action), April 1992.
PB93-964404/REB 93-04 PC **A06/MF A02**

Superfund Record of Decision (EPA Region 8): Silver Bow Creek/Butte Area, MT. (Second Remedial Action), June 1992.
PB93-964412/REB 93-04 PC **A07/MF A02**

Superfund Record of Decision (EPA Region 9): Hassayampa Landfill, AZ. (First Remedial Action), August 1992.
PB93-964505/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 9): Iron Mountain Mine, Shasta County, CA. (Second Remedial Action), September 1992.
PB93-964506/REB 93-04 PC **A06/MF A02**

Superfund Record of Decision (EPA Region 9): Jasco Chemical Company, Mountain View, CA. (First Remedial Action), September 1992.
PB93-964507/REB 93-04 PC **A05/MF A01**

Superfund Record of Decision (EPA Region 9): Purity Oil Sales, Fresno County, CA. (Second Remedial Action), September 1992.
PB93-964508/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 3, Sacramento, CA. (Second Remedial Action), December 1991.
PB93-964509/REB 93-04 PC **A09/MF A03**

Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 4, Sacramento, CA. (Third Remedial Action), September 1992.
PB93-964510/REB 93-04 PC **A05/MF A01**

Superfund Record of Decision (EPA Region 9): Westinghouse Electric (Sunnyvale Plant), Sunnyvale, CA. (First Remedial Action), October 1991.
PB93-964501/REB 93-01 PC **A05/MF A01**

Superfund Record of Decision (EPA Region 10): Arrcom (Drexler Enterprise), Rathdrum, ID. (First Remedial Action), June 1992.
PB93-964606/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 10): Bunker Hill Mining and Metallurgical Complex, Shoshone County, ID. (Second Remedial Action), September 1992.
PB93-964611/REB 93-04 PC **A08/MF A02**

Superfund Record of Decision (EPA Region 10): Eielson Air Force Base, AK. (First Remedial Action), September 1992.
PB93-964612/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 10): Elmendorf Air Force Base, Operable Unit 2, Source Area ST41, Anchorage, AK. (First Remedial Action), September 1992.
PB93-964604/REB 93-01 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 10): Fort Lewis Military Reservation, Landfill No. 5, Pierce County, WA. (First Remedial Action), July 1992.
PB93-964607/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 10): Joseph Forest Products, Wallowa County, OR. (First Remedial Action), September 1992.
PB93-964613/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 10): McChord AFB, Washrack Treatment Area, WA. (First Remedial Action), September 1992.
PB93-964614/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 10): Naval Air Station Whidbey Island - Ault Field, (Operable Unit 1, Area 6), Oak Harbor, WA. (First Remedial Action), April 1992.
PB93-964609/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 10): Pesticide Laboratory, Yakima, WA. (First Remedial Action), September 1992.
PB93-964608/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 10): Umatilla Army Depot (Lagoons), Soils Operable Unit 2, Hermiston, OR. (First Remedial Action), September 1992.
PB93-964610/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 2, ID. (Third Remedial Action), September 1992.
PB93-964615/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 22, ID. (Fourth Remedial Action), September 1992.
PB93-964616/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 23, ID. (Second Remedial Action), June 1992.
PB93-964617/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 10): Wyckoff/Eagle Harbor, WA. (First Remedial Action), September 1992.
PB93-964618/REB 93-04 PC **A07/MF A02**

Superfund Records of Decision Update. Volume 7, Number 2, November 1992.
PB93-963256/REB 93-01 PC **A02/MF A01**

Superfund: Report of the EPA Superfund Revitalization Public Meeting Held on June 24, 1992. Volumes 1 and 2.
PB92-963288/REB 93-01 PC **A06/MF A02**

Superfund Response Action Contracts.
PB93-963292/REB 93-01 PC **A01/MF A01**

Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175651/REB 93-01 PC **A03/MF A01**

Supplement to the Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics and Synthetic Fibers Point Source Category.
PB93-214336/REB 93-04 PC **A08/MF A02**

Supplement to the OCPSF Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category.
PB93-186096/REB 93-04 PC **A11/MF A03**

Supplemental for Pretreatment to the Interim Final Development Document for the Secondary Aluminum Segment of the Nonferrous Metals Manufacturing. Point Source Category.
PB93-232122/REB 93-04 PC **A07/MF A02**

Supplemental Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation.
PB93-209872/REB 93-04 PC **A06/MF A02**

Supplementary Development Document for Effluent Limitations Guidelines for the Leather Tanning and Finishing Point Source Category.
PB93-207934/REB 93-04 PC **A06/MF A02**

Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (1991).
PB93-205854/REB 93-04 PC **A03/MF A01**

Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-228575/REB 93-04 PC **A03/MF A01**

Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
PB93-101160/REB 93-01 PC **A06/MF A02**

Surface Water Treatment Rule. Implementation Manual (Including Appendix D).
PB93-186641/REB 93-01 PC **A07/MF A02**

Surface Waters Component of the Environmental Monitoring and Assessment Program (EMAP): An Overview.
PB93-121267/REB 93-01 PC **A02/MF A01**

Surfactants and Subsurface Remediation.
PB93-149854/REB 93-01 PC **A02**/MF **A01**

Survey of Data from the Continuous Sites of the 1990 Atlanta Ozone Precursor Study.
PB93-124618/REB 93-01 PC **A04**/MF **A01**

Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

Survey of Portable Analyzers for the Measurement of Gaseous Fugitive Emissions.
PB93-126589/REB 93-01 PC **A05**/MF **A01**

Survey of Protocols for Conducting Indoor Air Quality Investigations in Large Buildings.
PB93-119865/REB 93-01 PC **A03**/MF **A01**

Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC **A02**/MF **A01**

Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

Sustainable Agriculture and the Environment in the Humid Tropics.
PB93-173920/REB 93-01 PC **A99**/MF **A06**

Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC **A03**/MF **A01**

Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC **A02**/MF **A01**

Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
PB93-141257/REB 93-01 PC **A02**/MF **A01**

Synopses of Federal Demonstrations of Innovative Site Remediation Technologies.
PB93-144111/REB 93-01 PC **A11**/MF **A03**

Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC **A07**/MF **A02**

Synthesis of Basic Life Histories of Tampa Bay Species.
PB93-196012/REB 93-01 PC **A12**/MF **A03**

Synthesis of Ectomycorrhizae on Northern Red Oak Seedlings in a Michigan Nursery.
PB93-212678/REB 93-04 PC **A02**/MF **A01**

Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03**/MF **A01**

Tagged Species Engineering Model (TSEM).
PB93-229417/REB 93-04 PC **A03**/MF **A01**

Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02**/MF **A01**

Taxonomic Level Sufficient for Assessing a Moderate Impact on Macrobenthic Communities in Puget Sound, Washington, USA.
PB93-185858/REB 93-01 PC **A02**/MF **A01**

Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells.
PB93-115897/REB 93-01 PC **A04**/MF **A01**

Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.
PB93-205508/REB 93-04 PC **A99**/MF **A06**

Technical Guidance Document: Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems.
PB93-105625/REB 93-01 PC **A05**/MF **A02**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03**/MF **A01**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

Technical Information Document for Residential Wood Combustion Best Available Control Measures.
PB93-122224/REB 93-01 PC **A05**/MF **A01**

Technical Issues on Long-Term Performance of Solidified/Stabilized Waste Forms.
PB93-106680/REB 93-01 PC **A03**/MF **A01**

Technical Resource Document: Solidification/Stabilization and Its Application to Waste Materials.
PB93-237535/REB 93-04 PC **A16**/MF **A03**

Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

Technical Support Document for the Surface Disposal of Sewage Sludge.
PB93-110591/REB 93-01 PC **A15**/MF **A03**

Technical Support for the Incineration of Sewage Sludge.
PB93-110617/REB 93-01 PC **A11**/MF **A03**

Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC **A03**/MF **A01**

Technological Considerations for Planning the Global Carbon Future.
PB93-222008/REB 93-04 PC **A03**/MF **A01**

Technological Options for Acid Rain Control.
PB93-173094/REB 93-01 PC **A03**/MF **A01**

Technologies and Costs for Control of Disinfection By-Products: Executive Summary.
PB93-134922/REB 93-01 PC **A03**/MF **A01**

Technologies and Options for UST Corrective Actions: Overview of Current Practice.
PB93-145589/REB 93-01 PC **A05**/MF **A01**

Technologies Options for Acid Rain Control.
PB93-106854/REB 93-01 PC **A03**/MF **A01**

Technology Assessment of Soil Vapor Extraction and Air Sparging.
PB93-100154/REB 93-01 PC **A04**/MF **A01**

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 1.
PB93-115160/REB 93-01 PC **A09**/MF **A02**

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 2.
PB93-115178/REB 93-01 PC **A15**/MF **A03**

Technology Evaluation Report: Pilot-Scale Demonstration of a Slurry-Phase Biological Reactor for Creosote-Contaminated Soil. Volume 1.
PB93-205532/REB 93-04 PC **A09**/MF **A02**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana.
PB93-227114/REB 93-04 PC **E99**/MF **E99**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 1.
PB93-227122/REB 93-04 PC **A06**/MF **A02**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 1.
PB93-227130/REB 93-04 PC **A24**/MF **A04**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 3.
PB93-227155/REB 93-04 PC **A11**/MF **A03**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grant Calumet River, Gary, Indiana. Volume 2. Part 2.
PB93-227148/REB 93-04 PC **A99**/MF **A06**

Technology Evaluation Report: Site Program Demonstration Test. Accutech Pneumatic Fracturing Extraction and Hot Gas Injection, Phase 1. Volume 1.
PB93-216596/REB 93-04 PC **A06**/MF **A02**

Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
PB93-216067/REB 93-04 PC **A07**/MF **A02**

Technology for Reduction of CO2 Emissions from the Transportation Sector.
PB93-106967/REB 93-01 PC **A02**/MF **A01**

Technology Needs and Emerging Technologies (Joint Environmental Restoration and Waste Management Activities).
PB93-111052/REB 93-01 PC **A10**/MF **A03**

Technology Selection Guide for Wood Treater Sites.
PB93-963329/REB 93-04 PC **A02**/MF **A01**

Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03**/MF **A01**

Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC **A03**/MF **A01**

Test Car List, 1992. Passenger Cars.
PB93-111185/REB 93-01 PC **A05**/MF **A01**

Test Car List, 1993. Passenger Cars.
PB93-164531/REB 93-01 PC **A05**/MF **A02**

Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC **A05**/MF **A01**

Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03**/MF **A01**

Thermal Degradation Characteristics of Environmentally Sensitive Pesticide Products.
PB93-201127/REB 93-01 PC **A04**/MF **A01**

Thermal Influences on Nervous System Function.
PB93-107159/REB 93-01 PC **A03**/MF **A01**

Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
PB93-106821/REB 93-01 PC **A03**/MF **A01**

Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC **A03**/MF **A01**

Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC **A02**/MF **A01**

Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electrodeposition of Organic Coatings.
PB93-205987/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electroplating Operations.
PB93-206027/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Formulation of Aqueous Solutions.
PB93-206019/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Leather Tanning and Finishing.
PB93-206076/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Monofilament Fiber Manufacturing.
PB93-205961/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Paper and Paperboard Production.
PB93-206068/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Presswood and Laminated Wood Products Manufacturing.
PB93-206043/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Printing Operations.
PB93-205979/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Roller, Knife, and Gravure Coating Operations.
PB93-206050/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Rubber Production and Compounding.
PB93-206092/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Semiconductor Manufacturing.
PB93-206001/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Spray Application of Organic Coatings.
PB93-205995/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Textile Dyeing.
PB93-206035/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Wood Preserving Operations.
PB93-206084/REB 93-04 PC **A03**/MF **A01**

Total Coliform Rule: Implementation Manual (Including Appendix D).
PB93-186658/REB 93-01 PC **A05**/MF **A02**

Total Volatile Organic Concentrations in 2700 Personal, Indoor, and Outdoor Air Samples Collected in the US EPA Team Studies.
PB93-229730/REB 93-04 PC **A03**/MF **A01**

Town of Edinburg Landfill Reclamation Demonstration Project.
PB93-198976/REB 93-01 PC **A12**/MF **A03**

Toxic and Hazardous Chemicals, Title III and Communities: An Outreach Manual for Community Groups.
PB93-200806/REB 93-01 PC **A08**/MF **A02**

Toxic Chemical Release Inventory Magnetic Media Submission Instructions. Section 313 of the Emergency Planning and Community Right-to-Know Act (Revised 1990 Version).
PB93-116127/REB 93-01 PC **A03**/MF **A01**

Toxic Chemical Release Inventory Reporting Form R and Instructions. Revised 1992 Version. Section 313 of the Emergency Planning and Community Right-to-Know Act.
PB93-194140/REB 93-01 PC **A06**/MF **A02**

Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-183440/REB 93-04 PC **A05**/MF **A01**
PB93-192755/REB 93-04 PC **A05**/MF **A01**

Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16**/MF **A03**

Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC **A06**/MF **A02**

Toxic Release Inventory (TRI), 1987.
PB93-506004/REB 93-04 CP **T16**

Toxic Release Inventory (TRI), 1987-1990 (on CD-ROM).
PB93-500742/REB 93-01 CD-ROM$45.00

Toxic Release Inventory (TRI), 1988.
PB93-506012/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1989.
PB93-506020/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1990.
PB93-506038/REB 93-04 CP **T14**

Toxic Release Inventory, (TRI), 1991.
PB93-505873/REB 93-04 CP **T14**

Toxic Release Inventory, 1991 Reporting Facilities Names and Addresses.
PB93-505881/REB 93-04 CP **T02**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, January 1993, Documentation.
PB93-155166/REB 93-01 PC **A03**/MF **A01**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, June 1992.
PB93-500197/REB 93-01 CP **T05**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, January 1993.
PB93-504595/REB 93-01 CP **T05**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, June 1992. Record and Data Element Description.
PB93-100261/REB 93-01 PC **A03**/MF **A01**

Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

Toxics Release Inventory. Public Data Release. State Fact Sheets, 1991.
PB93-208668/REB 93-04 PC **A06**/MF **A02**

Toxics Release Inventory: Public Release Data, 1991.
PB93-219968/REB 93-04 PC **A16**/MF **A03**

Trace elements in agricultural soils. Fluxes, balances and background values.
DE93778470/REB 93-01 PC **A03**/MF **A01**

Trace Organic Contaminants in Anthropogenically Acidified Surface Waters.
PB93-135689/REB 93-01 PC **A03**/MF **A01**

Training Manual for NPDES Permit Writers.
PB93-217644/REB 93-04 PC **A09**/MF **A02**

Transformation of Carbon Tetrachloride in the Presence of Sulfide, Biotite, and Vermiculite.
PB93-135713/REB 93-01 PC **A02**/MF **A01**

Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
PB93-131761/REB 93-01 PC **A02**/MF **A01**

Transport of Low-Level Radioactive Soil at Deep-Ocean Disposal Site.
PB93-199487/REB 93-01 PC **A03**/MF **A01**

Treatability Studies for the Inorganic Chemicals Manufacturing Point Source Category.
PB93-206480/REB 93-04 PC **A11**/MF **A03**

Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.
PB93-236438/REB 93-04 PC **A03**/MF **A01**

Trends in Nitrogen in the Chesapeake Bay, 1984-1990.
PB93-122174/REB 93-01 PC **A04**/MF **A01**

Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
PB93-234508/REB 93-04 PC **A03**/MF **A01**

Tribal Water Utility Management.
PB93-190908/REB 93-01 PC **A09**/MF **A02**

TSCA Confidential Business Information Security Manual.
PB93-184844/REB 93-01 PC **A07**/MF **A02**

Turning the Tide on Trash: A Learning Guide on Marine Debris.
PB93-216992/REB 93-04 PC **A05**/MF **A01**

Twenty-Four Hour Rhythms of Selected Ambient Temperature in Rat and Hamster.
PB93-175727/REB 93-01 PC **A02**/MF **A01**

Two New Gas Standards Programs at the National Institute of Standards and Technology.
PB93-191427/REB 93-01 PC **A02**/MF **A01**

U.S. Environmental Protection Agency Advisory Committees Charters, Rosters and Accomplishments.
PB93-130094/REB 93-01 PC **A05**/MF **A01**

U.S. EPA NPDES: Basic Permit Writers' Course. Workbook.
PB93-185619/REB 93-01 PC **A17**/MF **A03**

U.S. EPA's QA/QC Program for Waste Management Facilities. Proceedings of the GRI Seminar (6th), MQC/MQA and CQC/CQA of Geosynthetics. Held in Philadelphia, Pennsylvania on December 10-11, 1992.
PB93-149219/REB 93-01 PC **A02**/MF **A01**

UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

Uncertainties in Countrywide Forest Biomass Estimates.
PB93-149250/REB 93-01 PC **A03**/MF **A01**

Underground Injection Control Program.
PB93-115905/REB 93-01 PC **A03**/MF **A01**

Understanding Bioremediation: A Guidebook for Citizens.
PB93-205870/REB 93-04 PC **A03**/MF **A01**

Urban Runoff Management Information/Education Products. Version 1.
PB93-190932/REB 93-01 PC **A09**/MF **A03**

Use of a Novel Plasmid to Monitor the Fate of a Genetically Engineered 'Pseudomonas putida' Strain.
PB93-169001/REB 93-01 PC **A02**/MF **A01**

Use of Alternative Materials for Daily Cover at Municipal Solid Waste Landfills.
PB93-227197/REB 93-04 PC **A08**/MF **A02**

Use of Analytically Defined Estimates of Aerosol Respirable Fraction to Predict Lung Deposition Patterns.
PB93-175743/REB 93-01 PC **A02**/MF **A01**

Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
PB93-205078/REB 93-04 PC **A02**/MF **A01**

Use of Ecoregions in Biological Monitoring.
PB93-106730/REB 93-01 PC **A03**/MF **A01**

Use of Expert System in a Water Utility.
PB93-123081/REB 93-01 PC **A04**/MF **A01**

Use of Inoculation in Bioremediation.
PB93-121150/REB 93-01 PC **A03**/MF **A01**

Use of Microbial Risk Assessment in Setting U.S. Drinking Water Standards.
PB93-134930/REB 93-01 PC **A03**/MF **A01**

Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.
PB93-236446/REB 93-04 PC **A03**/MF **A01**

Use of Surface-Coating-Free Materials for Reduction of Volatile Organic Compound Emissions from Coating Operations.
PB93-106839/REB 93-01 PC **A03**/MF **A01**

Use of the Black Creek Database to Analyze Techniques for Estimating Nonpoint Source Loadings from Small Watersheds (May 1988).
PB93-128072/REB 93-01 PC **A03**/MF **A01**

Use of Time and Materials and Cost Reimbursement Subcontracts for Remedial Actions under the Alternative Remedial Contracting Strategy Contracts.
PB93-963282/REB 93-01 PC **A02**/MF **A01**

User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC **A99**/MF **A06**

User's Guide: Strategic Waste Minimization Initiative (SWAMI) Version 2.0: A Software Tool to Aid in Process Analysis for Pollution Prevention.
PB93-116291/REB 93-01 PC **A05**/MF **A01**

User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections.
PB93-210250/REB 93-04 PC **A05**/MF **A02**

User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

User's Manual for the BLIS BBS.
PB93-122422/REB 93-01 PC **A07**/MF **A02**

User's Manual for the Plume Visibility Model PLUVUE II (Revised).
PB93-188233/REB 93-01 PC **A06**/MF **A02**

Using a Neural Network to Estimate Solvent Consumption.
PB93-173110/REB 93-01 PC **A02**/MF **A01**

Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC **A02**/MF **A01**

Using Method 301 to Validate Sampling and Analytical Methods for Selected CAAA Compounds.
PB93-191419/REB 93-01 PC **A03**/MF **A01**

Using Neuroblastoma Cell Lines to Examine Organophosphate Neurotoxicity.
PB93-229508/REB 93-04 PC **A02**/MF **A01**

Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
PB93-229599/REB 93-04 PC **A03**/MF **A01**

Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC **A03**/MF **A01**

Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
PB93-229714/REB 93-04 PC **A02**/MF **A01**

UV Monitoring Program at US EPA.
PB93-212272/REB 93-04 PC **A03**/MF **A01**

V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

Validation of Source and Sink Models: Problems and Possible Solutions.
PB93-106789/REB 93-01 PC **A03**/MF **A01**

Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02**/MF **A01**

Vertical Diffusion in Small Stratified Lake: Data and Error Analysis.
PB93-149185/REB 93-01 PC **A03**/MF **A01**

Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03**/MF **A01**

Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03**/MF **A01**

Video Teleconference on Emergency Planning for Potable Water Suppliers. Held on October 30-31, 1985.
PB93-184455/REB 93-01 PC **A10**/MF **A03**

Virginian Province Demonstration Report. EMAP-Estuaries, 1990.
PB93-229854/REB 93-04 PC **A11**/MF **A03**

VIRTUS, a Model of Virus Transport in Unsaturated Soils.
PB93-185890/REB 93-01 PC **A02**/MF **A01**

Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC **A03**/MF **A01**

VOC/HAP Emissions from Marine Vessel Loading Operations. Technical Support Document for Proposed Standards.
PB93-193910/REB 93-01 PC **A13**/MF **A03**

VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC **A02**/MF **A01**

Volatile Organic Compound Model Quality Assurance and Sensitivity Testing (Version 1.8).
PB93-223022/REB 93-04 PC **A01**/MF **A01**

Volatile Organic Compound/Particulate Matter Speciation Data Base Management System (SPECIATE), Version 1.5 (for Microcomputers).
PB93-505238/REB 93-01 CP **D02**

Volatile Organic Sampling Train Soot Interference Report.
PB93-144145/REB 93-01 PC **A04**/MF **A01**

Volunteer Lake Monitoring Program, 1991. Volume 3. Northeastern Illinois Region.
PB93-113538/REB 93-01 PC **A07**/MF **A02**

Volunteer Lake Monitoring Program, 1991. Volume 5. East-Central Illinois Region.
PB93-102234/REB 93-01 PC **A04**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 1: Statewide Summary.
PB93-216927/REB 93-04 PC **A06**/MF **A02**

Volunteer Lake Monitoring Program, 1992. Volume 2: Northwestern Illinois Region.
PB93-217214/REB 93-04 PC **A04**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 4. West Central Illinois Region.
PB93-219111/REB 93-04 PC **A04**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 5. East-Central Illinois Region.
PB93-223162/REB 93-04 PC **A05**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 6. Southwestern Illinois Region.
PB93-234128/REB 93-04 PC **A03**/MF **A01**

Volunteer Water Monitoring: A Guide for State Managers.
PB93-202596/REB 93-01 PC **A05**/MF **A01**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEA, Engine: B230F.
PB93-233831/REB 93-04 PC **A09**/MF **A02**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEB, Engine: B230FT.
PB93-233823/REB 93-04 PC **A10**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEA, Engine: B5254S.
PB93-233864/REB 93-04 PC **A09**/MF **A02**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEB, Engine: B6304S.
PB93-233898/REB 93-04 PC **A11**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAFA, Engine: B230FS4.
PB93-233849/REB 93-04 PC **A11**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GEEA, Engine: B230FT4.
PB93-233906/REB 93-04 PC **A13**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3VHGFEK, Engine: B5234T.
PB93-233872/REB 93-04 PC **A17**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEB, Engine: B5254S EGR.
PB93-233815/REB 93-04 PC **A13**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGFEA, Engine: B5254S AIR.
PB93-233880/REB 93-04 PC **A15**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEA, Engine: B6304S EGR.
PB93-233856/REB 93-04 PC **A13**/MF **A03**

Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
PB93-123024/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Penny Blanks and Zinc Products.
PB93-123107/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
PB93-123016/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer Producing Printed Circuit Boards.
PB93-126621/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
PB93-123164/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Fossil Fuel Fired Electrical Generating Station.
PB93-126233/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
PB93-126290/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Artists Supply Paints.
PB93-123172/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Dry Cleaning Equipment.
PB93-126225/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
PB93-123198/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
PB93-123214/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplating Chemical Products.
PB93-126258/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fine Chemicals Using Batch Processes.
PB93-126308/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
PB93-123115/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
PB93-123248/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of General Purpose Paints and Painting Supplies.
PB93-126316/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Hardened Steel Gears.
PB93-126282/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Orthopedic Implants.
PB93-126217/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
PB93-123123/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Plastic Containers by Injection Molding.
PB93-126241/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
PB93-123149/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
PB93-123222/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Wire Stock Used for Production of Metal Items.
PB93-123180/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
PB93-123131/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Printing Plate Preparation Section of a Newspaper.
PB93-126563/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
PB93-123230/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Scrap Metal Recovery Facility.
PB93-126266/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
PB93-123206/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for an Autobody Repair Facility.
PB93-123156/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for an Electrical Utility Transmission System Monitoring and Maintenance Facility.
PB93-126639/REB 93-01 PC **A02**/MF **A01**

Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC **A03**/MF **A01**

Water Employees Together with America's Youth (WET WAY). Celebration of the 20th Anniversary of the Clean Water Act and Promotion of National Geography Awareness Week.
PB93-222941/REB 93-04 PC **A07**/MF **A02**

Water Quality in Illinois, 1990-1991.
PB93-210193/REB 93-04 PC **A03**/MF **A01**

Water Temperature Characteristics of Lakes Subjected to Climate Change.
PB93-135648/REB 93-01 PC **A09**/MF **A02**

Water Treatment Plant Simulation Program, Version 1.21, User's Manual.
PB93-134948/REB 93-01 PC **A06**/MF **A02**

Waterfowl Workgroup Living Resources Subcommittee: Annual Progress Report.
PB93-112704/REB 93-01 PC **A03**/MF **A01**

Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC **A04**/MF **A01**

Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC **A08**/MF **A02**

Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC **A03**/MF **A01**

Watts Nickel and Rinse Water Recovery via an Advanced Reverse Osmosis System.
PB93-229011/REB 93-04 PC **A05**/MF **A01**

Weatherability of Enhanced-Degradable Plastics.
PB93-229789/REB 93-04 PC **A14**/MF **A03**

Wellhead Protection: A Guide for Small Communities.
PB93-215580/REB 93-04 PC **A08**/MF **A02**

Wellhead Protection Programs: Tools for Local Governments.
PB93-101111/REB 93-01 PC **A04**/MF **A01**

Wellhead Protection Strategies for Confined-Aquifer Settings.
PB93-115913/REB 93-01 PC **A05**/MF **A01**

Wet Deposition and Snowpack Monitoring. Final Project Report, Project Summary.
PB93-228500/REB 93-04 PC **A02**/MF **A01**

Wetland Plant Communities, Galveston Bay System.
PB93-205730/REB 93-04 PC **A07**/MF **A02**

Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC **A03**/MF **A01**

What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.
PB93-211985/REB 93-04 PC **A21**/MF **A04**

What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC **A03**/MF **A01**

Who Will Speak for Biodiversity.
PB93-135762/REB 93-01 PC **A01**/MF **A01**

Why do Wellhead Protection. Issues and Answers in Protecting Public Drinking Water Supply Systems.
PB93-115921/REB 93-01 PC **A03**/MF **A01**

Wildlife Critena Portions of the Proposed Water Quality Guidance for the Great Lakes System.
PB93-227866/REB 93-04 PC **A05**/MF **A01**

Wind-Tunnel Measurements of Flow Fields in the Vicinity of Buildings.
PB93-236594/REB 93-04 PC **A03**/MF **A01**

Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 1.
PB93-198950/REB 93-01 PC **A17**/MF **A04**

Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 2, Appendices.
PB93-198968/REB 93-01 PC **A07**/MF **A02**

Workbook for Plume Visual Impact Screening and Analysis (Revised).
PB93-223592/REB 93-04 PC **A08**/MF **A02**

Workbook of Screening Techniques for Assessing Impacts of Toxic Air Pollutants (Revised).
PB93-210367/REB 93-04 PC **A14**/MF **A03**

Workshop Report: Identification of Performance Parameters for Portable X-ray Fluorescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.
PB93-216612/REB 93-04 PC **A05**/MF **A02**

Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.
PB93-216604/REB 93-04 PC **A06**/MF **A02**

X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.
PB93-203156/REB 93-04 PC **A03**/MF **A01**

Xeriscape Landscaping: Preventing Pollution and Using Resources Efficiently.
PB93-210219/REB 93-04 PC **A03**/MF **A01**

# KEYWORD INDEX

Index entries in this section are selected to indicate important ideas and concepts presented in a report. When using the keyword index, be sure to look under terms narrower, broader, or related to a particular topic. Although some of the keywords are not selected from a controlled vocabulary of terms, most of them have been selected from the DoD, DoE, NASA, of NTIS controlled vocabularies. The entries are arranged by keyword and then by the NTIS order number.

## SAMPLE ENTRY

| | |
|---|---|
| **Use: Keywords Term** | **GLOBAL ASPECTS** |
| Title | Sensitivity of Ecological Landscapes and Regions to Global Climatic Change |
| NTIS Order Number/Media Code Price Codes | PB90-120072/HSU PC A09/MF A01 |

# KEYWORD INDEX


Evaluation of the Potential Carcinogenicity of 1,3-Propane Sultone (1120-71-4).
PB93-196582/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Propylenimine (75-55-8).
PB93-196590/REB 93-01 PC **A03**/MF **A01**

**1-NAPHTHYLAMINE**
Evaluation of the Potential Carcinogenicity of 1-Naphthylamine (134-32-7).
PB93-196384/REB 93-01 PC **A03**/MF **A01**

**1-NAPTHYLAMINE**
Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

**16S RIBOSOMAL RNA**
Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
PB93-121184/REB 93-01 PC **A02**/MF **A01**

**2-4-5-TRICHLOROPHENOXYACETIC ACID**
Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC **A03**/MF **A01**

Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
PB93-204972/REB 93-04 PC **A03**/MF **A01**

Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC **A02**/MF **A01**

**2-4-DICHLOROPHENOXYACETIC ACID**
Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC **A02**/MF **A01**

**2-NAPHTHYLAMINE**
Evaluation of the Potential Carcinogenicity of 2-Naphthylamine (91-59-8).
PB93-196392/REB 93-01 PC **A03**/MF **A01**

**2-NITROFLUORANTHENE**
In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02**/MF **A01**

**3-CHLOROCATECHOL**
Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC **A03**/MF **A01**

**3-METHYLCHOLANTHRENE**
Evaluation of the Potential Carcinogenicity of 3-Methylcholanthrene (59-49-5).
PB93-196327/REB 93-01 PC **A03**/MF **A01**

**4-NITROQUINOLINE-1-OXIDE**
Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
PB93-141463/REB 93-01 PC **A02**/MF **A01**

**6-CHLOROPICOLINIC ACID**
Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium 'Nitrosomonas europaea'.
PB93-169076/REB 93-01 PC **A02**/MF **A01**

**A-68930**
Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Industion of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC **A03**/MF **A01**

**ABSORBERS (EQUIPMENT)**
OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC **A04**/MF **A01**

**ABSORPTION (BIOLOGY)**
Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
PB93-141356/REB 93-01 PC **A03**/MF **A01**

**ACCIDENT INVESTIGATIONS**
National Transportation Safety Board Highway Accident Report: Charter Bus Loss of Control, Overturn, and Fire, Vernon, New Jersey, July 26, 1992.
PB93-916202/REB 93-04 PC **A05**/MF **A01**

**ACCIDENT PREVENTION**
Guiding Principles for Chemical Accident Prevention, Preparedness and Response.
PB93-217560/REB 93-04 PC **A07**/MF **A02**

**ACCIDENTS**
Guidance on the Application of Refined Dispersion Models for Hazardous/Toxic Air Releases.
PB93-210359/REB 93-04 PC **A20**/MF **A04**

**ACCURACY**
Comparison of Systematic and Random Sampling for Estimating the Accuracy of Maps Generated from Remotely Sensed Data.
PB93-191443/REB 93-01 PC **A02**/MF **A01**

**ACETAMIDE/N-FLUOREN-2-YL**
Evaluation of the Potential Carcinogenicity of Acetamide, N-Fluoren-2-yl (53-96-3).
PB93-181626/REB 93-01 PC **A03**/MF **A01**

**ACETAMIDES**
Pesticide Fact Sheet Number 240: Dimethenamid. SAN 582H/Frontier (Trade Name) Herbicide.
PB93-198695/REB 93-01 PC **A03**/MF **A01**

**ACETIC ACID/MONOCHLOROACETIC**
Ninety-Day Toxicity Study of Sodium Monochloroacetate in Sprague-Dawley Rats.
PB93-107100/REB 93-01 PC **A03**/MF **A01**

**ACETIC ACID/TRIBROMO**
Determination of Nine Haloacetic Acids in Finished Drinking Water.
PB93-204121/REB 93-01 PC **A03**/MF **A01**

**ACETIC ACIDS**
Analysis of DNA Strand Breaks Induced in Rodent Liver In vivo, Hepatocytes in Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC **A03**/MF **A01**

**ACETYLCHOLINESTERASE**
Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

**ACETYLENE BLOCK TECHNIQUE**
Inhibition of Alkylbenzene Biodegradation under Denitrifying Conditions by Using Acetylene Block Technique.
PB93-121242/REB 93-01 PC **A02**/MF **A01**

**ACID-ALUMINUM LEACHATE**
Evaluation of Mitigation for Acid Aluminum Leachate from a Highway Fill in Garrett County, Maryland.
PB93-180321/REB 93-01 PC **A04**/MF **A01**

**ACID MINE DRAINAGE**
Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
PB93-233914/REB 93-04 PC **A12**/MF **A03**

**ACID NEUTRALIZING CAPACITY**
Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC **A03**/MF **A01**

**ACID RAIN**
Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC **A02**/MF **A01**

Design of the Clean Air Act Deposition Monitoring Network.
PB93-120947/REB 93-01 PC **A03**/MF **A01**

Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC **A02**/MF **A01**

Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
PB93-121069/REB 93-01 PC **A02**/MF **A01**

Analysis of Acid Precipitation Samples Collected by State Agencies. Sampling Period: January-December 1990.
PB93-144152/REB 93-01 PC **A12**/MF **A03**

Technological Options for Acid Rain Control.
PB93-173094/REB 93-01 PC **A03**/MF **A01**

Volatile Organic Compound Model Quality Assurance and Sensitivity Testing (Version 1.8).
PB93-223022/REB 93-04 PC **A01**/MF **A01**

Acid Precipitation in North America: 1986 Annual and Seasonal Data Summaries from Acid Deposition System Data Base.
PB93-223154/REB 93-04 PC **A04**/MF **A01**

**ACID STREAMS**
Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC **A02**/MF **A01**

**ACID VOLATILE SULFIDES**
Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

**ACIDIFICATION**
Technologies Options for Acid Rain Control.
PB93-106854/REB 93-01 PC **A03**/MF **A01**

Modelling Epicodic Acidification of Surface Waters: The State of Science.
PB93-106920/REB 93-01 PC **A03**/MF **A01**

Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC **A02**/MF **A01**

MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC **A02**/MF **A01**

Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
PB93-135671/REB 93-01 PC **A01**/MF **A01**

Trace Organic Contaminants in Anthropogenically Acidified Surface Waters.
PB93-135689/REB 93-01 PC **A03**/MF **A01**

Recent Sulfur Enrichment in the Sediments of Little Rock Lake, Wisconsin.
PB93-135721/REB 93-01 PC **A03**/MF **A01**

Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC **A03**/MF **A01**

Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC **A02**/MF **A01**

Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC **A02**/MF **A01**

Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC **A03**/MF **A01**

Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC **A02**/MF **A01**

Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC **A04**/MF **A01**

Role of Nitrate in the Acidification of Streams in the Catskill Mountains of New York.
PB93-150167/REB 93-01 PC **A03**/MF **A01**

Dry Deposition Flux Calculations for the National Dry Deposition Network.
PB93-178242/REB 93-01 PC **A05**/MF **A02**

Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC **A02**/MF **A01**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC **A18**/MF **A04**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC **A14**/MF **A03**

Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).
PB93-222586/REB 93-04 PC **A01**/MF **A01**

Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-228500/REB 93-04 PC **A02**/MF **A01**

Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC **A07**/MF **A02**

Reactions That Modify Chemistry in Lakes of the National Surface Water Survey.
PB93-229672/REB 93-04 PC **A02**/MF **A01**

Longterm Response of Lakes to Acidic Deposition.
PB93-229722/REB 93-04 PC **A02**/MF **A01**

Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.
PB93-236438/REB 93-04 PC **A03**/MF **A01**

Inter-Regional Comparison of Patterns and Trends in Surface Water Acidification Across the United States.
PB93-236453/REB 93-04 PC **A03**/MF **A01**

Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC **A03**/MF **A01**

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC **A08**/MF **A02**

**ACIDITY**
Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC **A03**/MF **A01**

Comparison of Aerosol Acidity in Urban and Semi-Rural Environments.
PB93-131712/REB 93-01 PC A03/MF A01

Determination of the Strong Acidity of Atmospheric Fine-Particles (< 2.5 mum) Using Annular Denuder Technology. Standard Method, Enhanced Method.
PB93-178234/REB 93-01 PC A07/MF A02

Indoor Concentration Modeling of Aerosol Strong Acidity.
PB93-204071/REB 93-01 PC A02/MF A01

**ACIDS**

Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC A02/MF A01

Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC A02/MF A01

**ACOUSTIC DETECTORS**

Location of Leaks in Pressurized Petroleum Pipelines by Means of Passive-Acoustic Sensing Methods.
PB93-185783/REB 93-01 PC A03/MF A01

**ACRYLONITRILES**

Evaluation of the Potential Carcinogenicity of Acrylonitrile (107-13-1).
PB93-181634/REB 93-01 PC A03/MF A01

**ACTINOMYCETALES**

Isolation and Diversity of Actinomycetes in the Chesapeake Bay.
PB93-205060/REB 93-01 PC A02/MF A01

**ACTIVATED CARBON**

Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC A02/MF A01

**ACTIVATED CARBON PROCESS**

Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC A03/MF A01

**ACTIVATED CARBON TREATMENT**

Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
PB93-105518/REB 93-01 PC A06/MF A02

**ADDITIVES**

Methods for Assessing Exposure to Chemical Substances. Volume 11. Methodology for Estimating the Migration of Additives and Impurities from Polymeric Materials.
PB93-134096/REB 93-01 PC A09/MF A02

**ADENOCARCINOMA**

Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC A02/MF A01

**ADHESIVES**

Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
PB93-123248/REB 93-01 PC A02/MF A01

**ADL MIGRATION ESTIMATION MODEL**

ADL Migration Estimation Model (for Microcomputers) (Release Number 1).
PB93-500684/REB 93-01 CP D02

**ADMINISTRATIVE PROCEDURES**

Office of Wastewater Enforcement and Compliance (OWEC): Primer.
PB93-226736/REB 93-04 PC A05/MF A01

Reregistration Eligibility Document (RED) 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-234755/REB 93-04 PC A07/MF A02

Reregistration Eligibility Document (RED) Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-234763/REB 93-04 PC A07/MF A02

Presumptive Remedies: Policy and Procedures.
PB93-963345/REB 93-04 PC A02/MF A01

**ADSORBENTS**

Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC A03/MF A01

**ADVACATE PROCESS**

Advacate-Low-Cost Process for SO2 Control.
PB93-141117/REB 93-01 PC A02/MF A01

**ADVANCED INSULATION COMPONENTS**

Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC A03/MF A01

**ADVANCED INSULATION PANELS**

Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC A03/MF A01

**ADVANCED VERY HIGH RESOLUTION RADIOMETERS**

Rice Field Inventory Using AVHRR Data.
PB93-135697/REB 93-01 PC A03/MF A01

**ADVECTION**

Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
PB93-131845/REB 93-01 PC A03/MF A01

**ADVISORY COMMITTEES**

U.S. Environmental Protection Agency Advisory Committees Charters, Rosters and Accomplishments.
PB93-130094/REB 93-01 PC A05/MF A01

**AERIAL PHOTOGRAPHY**

Shoreline Survey for Unpermitted Discharges to Galveston Bay.
PB93-205706/REB 93-04 PC A03/MF A01

**AERODYNAMICS**

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-229185/REB 93-04 PC A02/MF A01

**AEROS (AEROMETRIC AND EMISSIONS REPORTING SYSTEM)**

Aeros Manual Series. Volume 5. Aeros Manual of Codes. Update Number 9.
PB93-200798/REB 93-01 PC A10/MF A03

**AEROSOL MONITORING**

Aerosol Measurement: Principles, Techniques, and Applications.
PB93-212827/REB 93-04 PC A03/MF A01

**AEROSOLS**

Effect of Aerosolization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC A02/MF A01

Airborne Particle Sizes and Sources Found in Indoor Air.
PB93-107019/REB 93-01 PC A03/MF A01

Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC A03/MF A01

Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
PB93-121069/REB 93-01 PC A02/MF A01

Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
PB93-121127/REB 93-01 PC A03/MF A01

Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC A03/MF A01

Comparison of Aerosol Acidity in Urban and Semi-Rural Environments.
PB93-131712/REB 93-01 PC A03/MF A01

Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC A03/MF A01

Use of Analytically Defined Estimates of Aerosol Respirable Fraction to Predict Lung Deposition Patterns.
PB93-175743/REB 93-01 PC A02/MF A01

Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC A02/MF A01

Extrapolation Modeling of Aerosol Deposition in Human and Laboratory Rat Lungs.
PB93-181097/REB 93-01 PC A03/MF A01

Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212538/REB 93-04 PC A03/MF A01

Particle-Size-Dependent Efficiency of Air Cleaners.
PB93-221976/REB 93-04 PC A01/MF A01

Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-228864/REB 93-04 PC A02/MF A01

Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC A02/MF A01

**AFTERBURNERS**

Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC A03/MF A01

**AFTERBURNING**

Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-228450/REB 93-04 PC A02/MF A01

Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC A03/MF A01

**AGGLUTINATION**

Genetic Analysis of the aggA Locus Involved in Agglutination and Adherence of 'Pseudomonas putida', a Beneficial Fluorescent Pseudomonad.
PB93-205029/REB 93-04 PC A03/MF A01

**AGGLUTININS**

Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC A03/MF A01

**AGING (BIOLOGY)**

Age-Related Changes in Disposition and Metabolism of Benzene in Male C57BL/6N Mice.
PB93-107191/REB 93-01 PC A02/MF A01

**AGRICULTURAL CHEMICALS**

Agricultural Pesticide Emissions Associated with Common Crops in the United States.
PB93-173136/REB 93-01 PC A03/MF A01

**AGRICULTURAL ECONOMICS**

News Notes, Number 22: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-126183/REB 93-01 PC A03/MF A01

**AGRICULTURAL PRODUCTS**

Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC A02/MF A01

**AGRICULTURAL RUNOFF**

STREAM: An Exposure Assessment Methodology for Agricultural Pesticide Runoff.
PB93-106888/REB 93-01 PC A03/MF A01

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
PB93-128015/REB 93-01 PC A04/MF A01

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC A04/MF A01

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
PB93-128031/REB 93-01 PC A06/MF A02

Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC A05/MF A01

**AGRICULTURAL WASTES**

Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC A05/MF A01

Design and Construction of Demonstration/Research Wetlands for Treatment of Dairy Farm Wastewater.
PB93-202836/REB 93-01 PC A03/MF A01

**AGRICULTURAL WORKER'S DISEASES**

NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC A02/MF A01

**AGRICULTURE**

Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC A12/MF A03

Proceedings of National Integrated Pest Management Forum. Held in Arlington, VA., on June 17-19, 1992.
PB93-124675/REB 93-01 PC A07/MF A02

Precollege Education: A Vital Component if Sustainable Agriculture is to Take Root.
PB93-168870/REB 93-01 PC A03/MF A01

Integrating Sustainable Agriculture, Ecology, and Environmental Policy. Conference Proceedings.
PB93-191492/REB 93-01 PC A02/MF A01

Future Context of Sustainable Agriculture: Planning for Uncertainty.
PB93-191518/REB 93-01 PC A03/MF A01

**AGROBACTERIUM**

Engineered Plants in the Environment.
PB93-234532/REB 93-04 PC A03/MF A01

**AIR ACTION LEVELS**

Air/Superfund National Technical Guidance Study Series: Evaluation of Short-Term Air Action Levels for Superfund Sites.
PB93-200913/REB 93-01 PC A14/MF A03

**AIR AND ENERGY ENGINEERING RESEARCH LABORATORY**

Pollution Prevention for Cleaner Air: EPA's Air and Energy Engineering Research Laboratory.
PB93-173730/REB 93-01 PC A03/MF A01

**AIR CIRCULATION**

Evaluation of Ventilation Performance for Indoor Space.
PB93-212751/REB 93-04 PC A02/MF A01

**AIR CLEANERS**

Particle-Size-Dependent Efficiency of Air Cleaners.
PB93-221976/REB 93-04 PC A01/MF A01

Removal Efficiencies in Terms of Particle Size and Concentration in a Suburban Home of Console Air Cleaners.
PB93-222016/REB 93-04 PC A03/MF A01

Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC A02/MF A01

**AIR CONDITIONERS**

Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
PB93-123149/REB 93-01 PC A02/MF A01

**AIR DRYING**

Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
PB93-141554/REB 93-01 PC A02/MF A01

**AIR FILTERS**

Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC A02/MF A01

**AIR FLOW**

Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC A03/MF A01

IAQPC: An Indoor Air Quality Simulator.
PB93-212397/REB 93-04 PC A03/MF A01

Gasoline and Methanol Exposures from Automobiles within Residences and Attached Garages.
PB93-222222/REB 93-04 PC A02/MF A01

**AIR POLLUTANT CONCENTRATION PROFILES**

Comparison of Modeled Concentration Profiles Using Site-Specific and Constant-Condition Meteorological Data for the ISCLT and PAL Models.
PB93-120921/REB 93-01 PC A02/MF A01

**AIR POLLUTANTS**

National Performance Audit Program (NPAP).
PB93-212322/REB 93-04 PC **A02**/MF **A01**

Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-228864/REB 93-04 PC **A02**/MF **A01**

**AIR POLLUTION**

Risk assessment, Health-Environment. A research programme during the period 1992/93-1994/95.
DE93711214/REB 93-01 PC **A03**/MF **A01**

Greenhouse gases. Emissions and countermeasures in an international perspective.
DE93721674/REB 93-01 PC **A07**/MF **A02**

Air pollutants in urban areas. A bibliography 1985-1991.
DE93769990/REB 93-01 PC **A04**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Measurements of Hydrocarbon Emissions and Ambient Air Concentrations at the Amoco Yorktown Refinery. Air Quality Data. Volume 1.
PB92-228592/REB 93-01 PC **A12**/MF **A03**

Evaluation of Two Methods for the Measurement of Mercury Emissions in Exhaust Gases from a Municipal Waste Combustor.
PB93-105542/REB 93-01 PC **A05**/MF **A01**

Forest Management in Russia: Challenges and Opportunities in the Era of Perestroika.
PB93-106961/REB 93-01 PC **A02**/MF **A01**

Global Inventory of Volatile Organic Compound Emissions from Anthropogenic Sources.
PB93-107001/REB 93-01 PC **A03**/MF **A01**

CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 1. Technical Formulations.
PB93-107076/REB 93-01 PC **A03**/MF **A01**

CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 2. Performance Characteristics.
PB93-107084/REB 93-01 PC **A03**/MF **A01**

Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC **A03**/MF **A01**

Development of an Improved Urban Airshed Modeling System.
PB93-120889/REB 93-01 PC **A03**/MF **A01**

Stagnation Diffusion Observed in a Deeply Pooling Valley during STAGMAP.
PB93-120897/REB 93-01 PC **A02**/MF **A01**

Model Calculations of the Annual Atmospheric Deposition of Toxic Metals to Lake Michigan.
PB93-120905/REB 93-01 PC **A03**/MF **A01**

Comparison of Modeled Concentration Profiles Using Site-Specific and Constant-Condition Meteorological Data for the ISCLT and PAL Models.
PB93-120921/REB 93-01 PC **A02**/MF **A01**

Atmospheric Deposition of Toxic Metals to Lake Michigan: Preliminary Annual Model Calculations.
PB93-120954/REB 93-01 PC **E02**/MF **A01**

Geographical Distribution and Source Type Analysis of Toxic Metal Emissions.
PB93-121036/REB 93-01 PC **A02**/MF **A01**

Evaluation of a Sorbent-Based Preconcentrated for Analysis of VOCs in Air Using Gas Chromatography-Atomic Emission Detection.
PB93-121077/REB 93-01 PC **A02**/MF **A01**

Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
PB93-121127/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound.
PB93-122206/REB 93-01 PC **A09**/MF **A02**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound, Appendices.
PB93-122216/REB 93-01 PC **A16**/MF **A03**

Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 1.
PB93-122331/REB 93-01 PC **A99**/MF **A06**

Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 2.
PB93-122349/REB 93-01 PC **A99**/MF **A06**

Guidance on the Adjusted Base Year Emissions Inventory and the 1996 Target for the 15 Percent Rate of Progress Plans.
PB93-122356/REB 93-01 PC **A04**/MF **A01**

User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0, Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC **A99**/MF **A06**

Application of a Data-Assimilating Prognostic Meteorological Model to Two Urban Areas.
PB93-126571/REB 93-01 PC **A05**/MF **A01**

Survey of Portable Analyzers for the Measurement of Gaseous Fugitive Emissions.
PB93-126589/REB 93-01 PC **A05**/MF **A01**

Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127801/REB 93-01 PC **A06**/MF **A02**

Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
PB93-135663/REB 93-01 PC **A07**/MF **A02**

Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03**/MF **A01**

Determination of Rates of Reaction in the Gas-Phase in the Troposphere. Theory and Practice. 5. Rate of Indirect Photoreaction.
PB93-149334/REB 93-01 PC **A08**/MF **A02**

Compilation of Air Pollutant Emission Factors. Volume 1. Stationary Point and Area Sources. Supplement E.
PB93-157105/REB 93-01 PC **A10**/MF **A03**

Evaluation of Portable Gas Chromatographs.
PB93-168813/REB 93-01 PC **A03**/MF **A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit.
PB93-168839/REB 93-01 PC **A02**/MF **A01**

Feasibility of Including Fugitive PM-10 Emissions Estimates in the EPA Emissions Trends Report.
PB93-169084/REB 93-01 PC **A03**/MF **A01**

Regional Modeling Analysis of the Dependencies of Atmospheric Oxidants to Perturbations in NOx and Hydrocarbon Emissions.
PB93-180925/REB 93-01 PC **A02**/MF **A01**

Evaluation of the Potential Carcinogenicity of Asbestos (1332-21-4).
PB93-184865/REB 93-01 PC **A03**/MF **A01**

Protecting Visibility in National Parks and Wilderness Areas.
PB93-186393/REB 93-01 PC **A20**/MF **A04**

Nonroad Mobile Source Sales and Attrition Study: Identification and Evaluation of Available Data Sources.
PB93-190098/REB 93-01 PC **A11**/MF **A03**

Methane Emissions from Wetland Rice Areas of Asia.
PB93-191468/REB 93-01 PC **A03**/MF **A01**

Conservation Tillage Impacts on National Soil and Atmospheric Carbon Levels.
PB93-191500/REB 93-01 PC **A03**/MF **A01**

Issues and Approaches to Improving Transportation Modeling for Air Quality Analysis.
PB93-194066/REB 93-01 PC **A05**/MF **A02**

Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 1.
PB93-198950/REB 93-01 PC **A17**/MF **A04**

Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 2, Appendices.
PB93-198968/REB 93-01 PC **A07**/MF **A02**

Compliance Data System Quality Assurance Manual, June 1984.
PB93-199339/REB 93-01 PC **A10**/MF **A03**

Aeros Manual Series. Volume 5. Aeros Manual of Codes. Update Number 9.
PB93-200798/REB 93-01 PC **A10**/MF **A03**

Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.
PB93-205102/REB 93-04 PC **A02**/MF **A01**

Possible Influence of Hydrogen Concentration on Microbial Methane Stable Hydrogen Isotopic Composition.
PB93-205128/REB 93-04 PC **A03**/MF **A01**

National Air Toxics Information Clearinghouse: Ongoing Research and Regulatory Development Projects, July 1992.
PB93-206563/REB 93-04 PC **A14**/MF **A03**

National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Index, 1992.
PB93-206571/REB 93-04 PC **A99**/MF **A06**

National Air Toxics Information Clearinghouse: NATICH Data Base Report of Federal, State, Local and EPA Air Toxics Activities.
PB93-206589/REB 93-04 PC **A99**/MF **E06**

Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Volume 6. Citations, 1992.
PB93-207652/REB 93-04 PC **A10**/MF **A03**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.
PB93-212686/REB 93-04 PC **A03**/MF **A01**

Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03**/MF **A01**

Downwash of Plumes in the Vicinity of Buildings: A Wind-Tunnel Study.
PB93-212819/REB 93-04 PC **A03**/MF **A01**

Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC **A08**/MF **A02**

Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.
PB93-216604/REB 93-04 PC **A06**/MF **A02**

Workshop Report: Identification of Performance Parameters for Portable X-ray Fluorescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.
PB93-216612/REB 93-04 PC **A05**/MF **A02**

Reactive Plume Model IV (RPM-IV) User's Guide.
PB93-217412/REB 93-04 PC **A23**/MF **A04**

Climate Change Impacts on Net Primary Production in China.
PB93-222271/REB 93-04 PC **A03**/MF **A01**

Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC **A02**/MF **A01**

Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02**/MF **A01**

Role of Ozone Precursors in Tropospheric Ozone Formation and Control: A Report to Congress.
PB93-226694/REB 93-04 PC **A04**/MF **A01**

Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

Human Health Effects of Air Pollution.
PB93-231843/REB 93-04 PC **A03**/MF **A01**

Development of Conversion Factors for Heavy-Duty Bus Engines G/BHP-HR to G/Mile.
PB93-232932/REB 93-04 PC **A03**/MF **A01**

Chemical Emergency Preparedness and Prevention Advisory: Hydrogen Fluoride, Series 8, No. 3.
PB93-234797/REB 93-04 PC **A02**/MF **A01**

Regional Interim Emission Inventories (1987-1991). Volume 1. Development Methodologies.
PB93-236107/REB 93-04 PC **A07**/MF **A02**

Regional Interim Emission Inventories (1987-1991). Volume 2. Emission Summaries.
PB93-236115/REB 93-04 PC **A06**/MF **A02**

Heavy-Duty Engine Testing Report Non-Road Engine Configurations Injection Timing Effects Test Results, 1992.
PB93-236164/REB 93-04 PC **A05**/MF **A01**

Heavy-Duty Engine Testing Report Cummins/EPA/Taiwan Correlation Test Results, 1993.
PB93-236172/REB 93-04 PC **A03**/MF **A01**

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC **A03**/MF **A01**

New Mathematical Model of Pollutant Dispersion Near a Building.
PB93-236529/REB 93-04 PC **A03**/MF **A01**

Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.
PB93-236586/REB 93-04 PC **A03**/MF **A01**

Wind-Tunnel Measurements of Flow Fields in the Vicinity of Buildings.
PB93-236594/REB 93-04 PC **A03**/MF **A01**

Industrial Source Complex Short Term (ISCST) (for Microcomputers).
PB93-500221/REB 93-01 CP **D03**

Industrial Source Complex LongTerm (ISCLT) (for Microcomputers).
PB93-500239/REB 93-01 CP **D03**

MESOPUFF (for Microcomputers).
PB93-500247/REB 93-01 CP **D02**

CALINE: California Line Source Model (for Microcomputers).
PB93-500254/REB 93-01 CP **D02**

COMPLEX1 (for Microcomputers).
PB93-504538/REB 93-01 CP **D05**

Crosswalk/Air Toxic Emission Factor Data Base Management System (XATEF) Version 2.0 (for Microcomputers).
PB93-504793/REB 93-01 CP **D02**

EPA (Environmental Protection Agency) Publications Bibliography, Quarterly Abstract Bulletin.
PB93-904200/REB 93-01 Subscription

**AIR POLLUTION ABATEMENT**

Impact of fuels on diesel exhaust emissions. A chemical and biological characterization.
DE92563058/REB 93-01 PC **A08**/MF **A02**

# KEYWORD INDEX


Phasing out of CFCs in the electronics and engineering industries in Sweden.
DE93711212/REB 93-01 PC **A03**/MF **A01**

New technology for refrigeration and heating plants.
DE93721673/REB 93-01 PC **A03**/MF **A01**

Aatgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC **A14**/MF **A03**

Recovery of CFCs from refrigeration equipment. Current processes.
DE93778476/REB 93-01 PC **A04**/MF **A01**

ARARs Fact Sheet: Compliance with the Clean Air Act and Associated Air Quality Requirements.
PB92-963282/REB 93-01 PC **A03**/MF **A01**

Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
PB93-101160/REB 93-01 PC **A06**/MF **A02**

Air Toxics: The Research Challenge of the 1990 Clean Air Act Amendments.
PB93-106664/REB 93-01 PC **A02**/MF **A01**

Use of Surface-Coating-Free Materials for Reduction of Volatile Organic Compound Emissions from Coating Operations.
PB93-106839/REB 93-01 PC **A03**/MF **A01**

Technology for Reduction of CO2 Emissions from the Transportation Sector.
PB93-106987/REB 93-01 PC **A02**/MF **A01**

Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107043/REB 93-01 PC **A02**/MF **A01**

Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC **A15**/MF **A03**

Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
PB93-122307/REB 93-01 PC **A03**/MF **A01**

Guide to Performing Reinspections under the Asbestos Hazard Emergency Response Act (AHERA).
PB93-128007/REB 93-01 PC **A06**/MF **A02**

Atmospheric Chemistry and Physical Fate of HCFCs and HFCs and Their Degradation Products.
PB93-131449/REB 93-01 PC **A03**/MF **A01**

Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC **A03**/MF **A01**

Development of Good Combustion Practice for Municipal Waste Combustors.
PB93-131613/REB 93-01 PC **A03**/MF **A01**

Applications of Pulse Combustion in Industrial and Incineration Processes.
PB93-131639/REB 93-01 PC **A03**/MF **A01**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131686/REB 93-01 PC **A03**/MF **A01**

Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC **A02**/MF **A01**

Formation and Control of Combustion Pollutants from Gasoline-Fueled Spark-Ignition Motor Vehicle Engines. (Revised November 1992).
PB93-141042/REB 93-01 PC **A04**/MF **A01**

Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC **A02**/MF **A01**

Technological Options for Acid Rain Control.
PB93-173094/REB 93-01 PC **A03**/MF **A01**

Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
PB93-173102/REB 93-01 PC **A03**/MF **A01**

R-245ca: A Potential Far-Term Alternative for R-11.
PB93-173144/REB 93-01 PC **A02**/MF **A01**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
PB93-173664/REB 93-01 PC **A02**/MF **A01**

Pollution Prevention for Cleaner Air: EPA's Air and Energy Engineering Research Laboratory.
PB93-173730/REB 93-01 PC **A03**/MF **A01**

Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-190966/REB 93-01 PC **A03**/MF **A01**

Coprocessing of Fossil Fuels and Biomass for CO2 Emission Reduction in the Transportation Sector.
PB93-194165/REB 93-01 PC **A02**/MF **A01**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

Federal Test Procedure Review Project: Status Report.
PB93-197903/REB 93-01 PC **A03**/MF **A01**

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel - Final Report.
PB93-197929/REB 93-01 PC **A03**/MF **A01**

Reporting and Recordkeeping Requirements for Waste Disposal: A Field Guide.
PB93-199115/REB 93-01 PC **A03**/MF **A01**

Alternative Control Technology Document: Control of VOC Emissions from the Application of Agricultural Pesticides.
PB93-199131/REB 93-01 PC **A12**/MF **A03**

Standards of Performance for New Stationary Sources. Volume 1. Introduction, Summary and Standards: A Compilation as of December 31, 1985.
PB93-199297/REB 93-01 PC **A08**/MF **A02**

Guidance on the Relationship between the 15 Percent Rate-of-Progress Plans and Other Provisions of the Clean Air Act.
PB93-200525/REB 93-01 PC **A04**/MF **A01**

Marine Industry Characterization Report.
PB93-216174/REB 93-04 PC **A10**/MF **A03**

Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.
PB93-216869/REB 93-04 PC **A03**/MF **A01**

Technological Considerations for Planning the Global Carbon Future.
PB93-222008/REB 93-04 PC **A03**/MF **A01**

EPA's Indoor Air/Pollution Prevention Workshop.
PB93-222065/REB 93-04 PC **A03**/MF **A01**

Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.
PB93-229144/REB 93-04 PC **A03**/MF **A01**

Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC **A03**/MF **A01**

EPA Evaluation of the Fuelon Power Gasoline Fuel Additive under Section 511 of the Motor Vehicle Information and Cost Savings Act.
PB93-236693/REB 93-04 PC **A03**/MF **A01**

Emissions and Fuel Economy Effects of the Fuelon Power Gasoline Fuel Additive.
PB93-236701/REB 93-04 PC **A03**/MF **A01**


## AIR POLLUTION CONTROL


Demonstration of a Trial Excavation at the McColl Superfund Site.
PB93-100121/REB 93-01 PC **A04**/MF **A01**

Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03**/MF **A01**

Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03**/MF **A01**

Airborne Particle Sizes and Sources Found in Indoor Air.
PB93-107019/REB 93-01 PC **A03**/MF **A01**

Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107043/REB 93-01 PC **A02**/MF **A01**

Measurement and Distribution of Radon and Radon Progeny: An Overview of Indoor Radon Risk Reduction in the United States.
PB93-107092/REB 93-01 PC **A02**/MF **A01**

Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

Technical Support for the Incineration of Sewage Sludge.
PB93-110617/REB 93-01 PC **A11**/MF **A03**

Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04**/MF **A01**

Formaldehyde-Contaminated Fog Effects on Plant Growth.
PB93-121101/REB 93-01 PC **A02**/MF **A01**

Technical Information Document for Residential Wood Combustion Best Available Control Measures.
PB93-122224/REB 93-01 PC **A05**/MF **A01**

Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC **A15**/MF **A03**

Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures.
PB93-122273/REB 93-01 PC **A09**/MF **A03**

Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
PB93-122307/REB 93-01 PC **A03**/MF **A01**

State Air Pollution Control Programs: A Profile Report.
PB93-122364/REB 93-01 PC **A03**/MF **A01**

User's Manual for the BLIS BBS.
PB93-122422/REB 93-01 PC **A07**/MF **A02**

Carbon Disulfide Emission Control Options.
PB93-124667/REB 93-01 PC **A03**/MF **A01**

Guidelines for Estimating and Applying Rule Effectiveness for Ozone CO State Implementation Plan Base Year Inventories.
PB93-131498/REB 93-01 PC **A05**/MF **A01**

Column Vapor Extraction Experiments on Gasoline Contaminated Soil.
PB93-131514/REB 93-01 PC **A03**/MF **A01**

Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC **A03**/MF **A01**

Dry Flue Gas Cleaning Processes for Achieving Air Pollutant Emissions Requirements.
PB93-131605/REB 93-01 PC **A03**/MF **A01**

Evaluating Materials for Healthy Buildings.
PB93-131621/REB 93-01 PC **A03**/MF **A01**

Analysis of IAQ Control Options and the Effects of Sources and Sinks.
PB93-131647/REB 93-01 PC **A02**/MF **A01**

Inventory of Methane Losses from the Natural Gas Industry.
PB93-131720/REB 93-01 PC **A03**/MF **A01**

Reaction Kinetics of Ca-Based Sorbents with HC1.
PB93-131860/REB 93-01 PC **A03**/MF **A01**

Advacate-Low-Cost Process for SO2 Control.
PB93-141117/REB 93-01 PC **A02**/MF **A01**

Evaluation and Costing of NOx Controls for Existing Utility Boilers in the NESCAUM Region.
PB93-142016/REB 93-01 PC **A18**/MF **A04**

Characterization of Organic Emission from a Wood Finishing Product-Wood Stain.
PB93-150100/REB 93-01 PC **A02**/MF **A01**

Pilot-Scale Evlauation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02**/MF **A01**

Control Techniques for Volatile Organic Compound Emissions from Stationary Sources, December 1992.
PB93-150258/REB 93-01 PC **A20**/MF **A04**

Highlights of the EPA Innovative Regulatory Strategies Workshop: Market-Based Incentives and other Innovations for Air Pollution Control. Summary of Workshop Discussion Sessions. Held in Washington, DC. on January 15-17, 1992.
PB93-150290/REB 93-01 PC **A05**/MF **A01**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1A. National Impacts Assessment.
PB93-156552/REB 93-01 PC **A08**/MF **A02**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1B. Control Technologies.
PB93-156560/REB 93-01 PC **A13**/MF **A03**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1C. Model Emission Sources.
PB93-156578/REB 93-01 PC **A11**/MF **A03**

Alternative Control Techniques Document. NOx Emissions from Stationary Gas Turbines.
PB93-156586/REB 93-01 PC **A11**/MF **A03**

Contingency Analysis Modeling for Superfund Sites and Other Sources.
PB93-169126/REB 93-01 PC **A13**/MF **A03**

Characterization of Emissions from the Simulated Open-Burning of Non-Metallic Automobile Shredder Residue.
PB93-172914/REB 93-01 PC **A05**/MF **A01**

Evaluation of Emissions from Masonry Heaters and Masonry Fireplaces in Homes.
PB93-173078/REB 93-01 PC **A03**/MF **A01**

Technological Options for Acid Rain Control.
PB93-173094/REB 93-01 PC **A03**/MF **A01**

Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC **A02**/MF **A01**

Indoor Radon Reduction in Crawl-Space Houses: A Review of Alternative Approaches.
PB93-173177/REB 93-01 PC **A03**/MF **A01**

Pollution Prevention for Cleaner Air: EPA's Air and Energy Engineering Research Laboratory.
PB93-173730/REB 93-01 PC **A03**/MF **A01**

What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC **A03**/MF **A01**

Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC **A03**/MF **A01**

Simulation of Performance of Chlorine-Free Fluorinated Ethers and Fluorinated Hydrocarbons to Replace CFC-11 and CFC-114 in Chillers.
PB93-175511/REB 93-01 PC **A03**/MF **A01**

Procedures for Identifying Reasonably Available Control Technology for Stationary Sources of PM-10.
PB93-175776/REB 93-01 PC **A08**/MF **A02**

Alternative Control Technology Document: Carbon Reactivation Processes.
PB93-180826/REB 93-01 PC **A06**/MF **A02**

Guidelines for MACT Determinations under Section 112(j) (Proposal).
PB93-183283/REB 93-04 PC **A08**/MF **A02**

Air/Superfund National Technical Guidance Study Series. Models for Estimating Air Emission Rates from Superfund Remedial Actions.
PB93-186807/REB 93-01 PC **A08**/MF **A02**

Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 1. Technical Report and Appendices A-F.
PB93-191302/REB 93-01 PC **A13**/MF **A03**

Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 2. Appendices G-N.
PB93-191310/REB 93-01 PC **A15**/MF **A03**

VOC/HAP Emissions from Marine Vessel Loading Operations. Technical Support Document for Proposed Standards.
PB93-193910/REB 93-01 PC **A13**/MF **A03**

Proceedings: 1991 SO2 Control Symposium. Volume 1. Opening Session and Sessions 1-3.
PB93-196095/REB 93-01 PC **A19**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 2. Sessions 4 and 5A.
PB93-196103/REB 93-01 PC **A22**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 3. Sessions 5B and 6.
PB93-196111/REB 93-01 PC **A20**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 4. Session 7.
PB93-196129/REB 93-01 PC **A15**/MF **A03**

Proceedings: 1991 SO2 Control Symposium. Volume 5. Session 8.
PB93-196137/REB 93-01 PC **A13**/MF **A03**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

Benzene Equipment Leak Inspection Manual.
PB93-199123/REB 93-01 PC **A06**/MF **A02**

Summary of Factors Affecting Compliance by Ferrous Foundaries. Volume 1. Text.
PB93-199347/REB 93-01 PC **A05**/MF **A02**

Guideline for Graphic Arts Calculations.
PB93-199370/REB 93-01 PC **A05**/MF **A01**

Regulatory Impact Analysis: Control of Sulfur and Aromatics Contents of on-Highway Diesel Fuel.
PB93-207660/REB 93-04 PC **A12**/MF **A03**

National Radon Contractor Proficiency (RCP) Program. Proficiency Report, July 1993.
PB93-209997/REB 93-04 PC **A11**/MF **A03**

Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

Guidance on the Application of Refined Dispersion Models for Hazardous/Toxic Air Releases.
PB93-210359/REB 93-04 PC **A20**/MF **A04**

EPA's Information Management System for Tracking Reasonable Further Progress.
PB93-212389/REB 93-04 PC **A03**/MF **A01**

Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991.
PB93-212835/REB 93-04 PC **E99**/MF **E99**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 1. Sessions 1-3.
PB93-212843/REB 93-04 PC **A15**/MF **A03**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 2. Sessions 4 and 5.
PB93-212850/REB 93-04 PC **A20**/MF **A04**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 3. Sessions 6-8.
PB93-212868/REB 93-04 PC **A19**/MF **A04**

Preliminary Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease.
PB93-214344/REB 93-04 PC **A05**/MF **A02**

Organic Air Emissions from Waste Management Facilities.
PB93-215598/REB 93-04 PC **A07**/MF **A02**

Simultaneous Control of PM-10 and Hazardous Air Pollutants: Rationale for Selection of Hazardous Air Pollutants as Potential Particulate Matter or Associated with Particulate Matter at Source Conditions.
PB93-216380/REB 93-04 PC **A05**/MF **A01**

Evaluation of Three Cleaning Methods for Removing Asbestos from Carpet: Determination of Airborne Asbestos Concentrations Associated with Each Method.
PB93-218568/REB 93-04 PC **A05**/MF **A01**

Organic Combustion Fingerprints of Three Common Home Heating Fuels.
PB93-222123/REB 93-04 PC **A02**/MF **A01**

Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02**/MF **A01**

Industrial Boiler Furnace Sorbent Injection Algorithm Development.
PB93-222438/REB 93-04 PC **A01**/MF **A01**

Preliminary Diagnostic Procedures for Radon Control. Project Summary.
PB93-222545/REB 93-04 PC **A01**/MF **A01**

Clinton, New Jersey, Radon Mitigation Follow-Up and Long-Term Monitoring. Project Summary.
PB93-222594/REB 93-04 PC **A02**/MF **A01**

Volatile Organic Compound Model Quality Assurance and Sensitivity Testing (Version 1.8).
PB93-223022/REB 93-04 PC **A01**/MF **A01**

Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC **A06**/MF **A02**

Sewage Treatment Plant NSPS: Responses to Comments on April 1986 Proposed Revisions.
PB93-223584/REB 93-04 PC **A03**/MF **A01**

General Provisions for 40 CFR Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories. Background Information for Proposed Regulation.
PB93-226090/REB 93-04 PC **A06**/MF **A02**

Summary of Public Comments and EPA Responses on the Draft Report: The Role of Ozone Precursors in Tropospheric Ozone Formation and Control.
PB93-226702/REB 93-04 PC **A03**/MF **A01**

Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.
PB93-227205/REB 93-04 PC **A04**/MF **A01**

Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-228450/REB 93-04 PC **A02**/MF **A01**

Evaluation of FGD Dry Injection Sorbents and Additives. Volume 1. Development of High Reactivity Sorbents. Project Summary.
PB93-228484/REB 93-04 PC **A02**/MF **A01**

Pilot Project for Vehicle Scrapping in Illinois.
PB93-232890/REB 93-04 PC **A08**/MF **A02**

Report to Congress on Implementation of Section 112 of the Clean Air Act Amendments of 1990.
PB93-236008/REB 93-04 PC **A05**/MF **A01**

Foam Scrubbing (Chapter 9).
PB93-236560/REB 93-04 PC **A03**/MF **A01**

Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC **A02**/MF **A01**

**AIR POLLUTION CONTROL AGENCIES**

Directory of OAQPS Information Services, May 1993.
PB93-196624/REB 93-01 PC **A03**/MF **A01**

**AIR POLLUTION CONTROL EQUIPMENT**

Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

Development of Size-Specific Data from Particulate Control Technology Research Reports.
PB93-131456/REB 93-01 PC **A03**/MF **A01**

OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC **A04**/MF **A01**

Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03**/MF **A01**

Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC **A02**/MF **A01**

Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC **A02**/MF **A01**

Proceedings: 1991 SO2 Control Symposium. Volume 1. Opening Session and Sessions 1-3.
PB93-196095/REB 93-01 PC **A19**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 2. Sessions 4 and 5A.
PB93-196103/REB 93-01 PC **A22**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 3. Sessions 5B and 6.
PB93-196111/REB 93-01 PC **A20**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 4. Session 7.
PB93-196129/REB 93-01 PC **A15**/MF **A03**

Proceedings: 1991 SO2 Control Symposium. Volume 5. Session 8.
PB93-196137/REB 93-01 PC **A13**/MF **A03**

Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.
PB93-205383/REB 93-04 PC **A03**/MF **A01**

Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

Relating Air Cleaner Efficiency to Indoor Air Quality.
PB93-212405/REB 93-04 PC **A03**/MF **A01**

Control of Air Emissions from Superfund Sites.
PB93-215614/REB 93-04 PC **A08**/MF **A02**

Particle-Size-Dependent Efficiency of Air Cleaners.
PB93-221976/REB 93-04 PC **A01**/MF **A01**

Industrial Boiler Low NOx Combustion Retrofit Cost Algorithm Development. Project Summary.
PB93-222578/REB 93-04 PC **A01**/MF **A01**

Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.
PB93-228468/REB 93-04 PC **A02**/MF **A01**

International Trade in Environmental Protection Equipment: An Assessment of Existing Data.
PB93-236206/REB 93-04 PC **A04**/MF **A01**

**AIR POLLUTION DETECTION**

On-Line Measurement of Nitrous Oxide from Combustion Sources by Automated Gas Chromatography.
PB93-106847/REB 93-01 PC **A03**/MF **A01**

Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC **A03**/MF **A01**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC **A02**/MF **A01**

Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
PB93-131704/REB 93-01 PC **A03**/MF **A01**

Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
PB93-131761/REB 93-01 PC **A02**/MF **A01**

Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC **A04**/MF **A01**

Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC **A02**/MF **A01**

Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC **A03**/MF **A01**

Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC **A03**/MF **A01**

Analysis of Atmospheric Deposition Samples from Easton, Pennsylvania.
PB93-181600/REB 93-01 PC **A04**/MF **A01**

Development of Sampling and Analytical Methods for the Measurement of Nitrous Oxide from Fossil Fuel Combustion Sources.
PB93-194330/REB 93-01 PC **A07**/MF **A02**

Development and Validation of a Source Test Method for 2,4-Toluene Diisocyanate.
PB93-204055/REB 93-01 PC **A03**/MF **A01**

Locating and Estimating Air Emissions from Sources of Styrene.
PB93-207520/REB 93-04 PC **A08**/MF **A02**

Locating and Estimating Air Emissions from Sources of Methylene Chloride.
PB93-207579/REB 93-04 PC **A10**/MF **A03**

Field Test of a Generic Method for Halogenated Hydrocarbons.
PB93-212181/REB 93-04 PC **A13**/MF **A03**

Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-214419/REB 93-04 PC **A05**/MF **A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit (May 1993).
PB93-221869/REB 93-04 PC **A03**/MF **A01**

Summary of the 1987 EPA National Performance Audit Program on Source Measurements.
PB93-223444/REB 93-04 PC **A03**/MF **A01**

Development and Evaluation of a Transportable Fast Gas Chromatograph for the Monitoring of Organic Vapors in Air.
PB93-228526/REB 93-04 PC A02/MF A01

Protocol for Equipment Leak Emission Estimates.
PB93-229219/REB 93-04 PC A12/MF A03

Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.
PB93-229383/REB 93-04 PC A03/MF A01

Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.
PB93-229425/REB 93-04 PC A03/MF A01

Initial Assessment of Emissions from Heat Setting Carpet Yarn.
PB93-229862/REB 93-04 PC A04/MF A01

**AIR POLLUTION DISPERSION**

SCREEN2 Model User's Guide.
PB93-216885/REB 93-04 PC A04/MF A01

Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised.
PB93-219095/REB 93-04 PC A05/MF A01

Protocol for Determining the Best Performing Model.
PB93-226082/REB 93-04 PC A03/MF A01

Modeling Protocol for Applying MESOPUFF II to Long Range Transport Problems.
PB93-226108/REB 93-04 PC A04/MF A01

Comparison of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model and Wind Tunnel Data.
PB93-226751/REB 93-04 PC A08/MF A02

Sensitivity Analysis of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model.
PB93-226769/REB 93-04 PC A05/MF A01

Development and Evaluation of a Revised Area Source Algorithm for the Industrial Source Complex Long Term Model.
PB93-226777/REB 93-04 PC A06/MF A02

Tagged Species Engineering Model (TSEM).
PB93-229417/REB 93-04 PC A03/MF A01

**AIR POLLUTION ECONOMICS**

OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC A04/MF A01

Economic Growth Analysis System: Reference Manual.
PB93-183408/REB 93-04 PC A12/MF A03

Economic Growth Analysis System: User's Guide.
PB93-183416/REB 93-04 PC A04/MF A01

Advanced Utility Simulation Model. Project Summary.
PB93-222636/REB 93-04 PC A02/MF A01

Economic Growth Analysis System (E-GAS) for all EPA Regions (I through X) (for Microcomputers).
PB93-505469/REB 93-04 CP D18

Economic Growth Analysis System (E-GAS) for EPA Region I - New England States (for Microcomputers).
PB93-505477/REB 93-04 CP D03

Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
PB93-505485/REB 93-04 CP D03

Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).
PB93-505493/REB 93-04 CP D03

Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).
PB93-505501/REB 93-04 CP D03

Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).
PB93-505519/REB 93-04 CP D03

Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).
PB93-505527/REB 93-04 CP D03

Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP D03

Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).
PB93-505543/REB 93-04 CP D03

**AIR POLLUTION EFFECTS**

Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC A03/MF A01

Workbook of Screening Techniques for Assessing Impacts of Toxic Air Pollutants (Revised).
PB93-210367/REB 93-04 PC A14/MF A03

Bioresponse Testing of Sources of Indoor Air Contaminants.
PB93-222032/REB 93-04 PC A02/MF A01

Workbook for Plume Visual Impact Screening and Analysis (Revised).
PB93-223592/REB 93-04 PC A08/MF A02

**AIR POLLUTION EFFECTS (ANIMALS)**

Animal Models for Assessing the Neurobehavioral Impact of Airborne Pollutants.
PB93-107233/REB 93-01 PC A03/MF A01

Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC A03/MF A01

Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC A02/MF A01

Mechanisms of Aldehyde-Induced Bronchial Reactivity: Role of Airway Epithelium.
PB93-179927/REB 93-01 PC A04/MF A01

Role of Ozone in Tracheal Cell Transformation.
PB93-179935/REB 93-01 PC A03/MF A01

Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
PB93-179950/REB 93-01 PC A03/MF A01

Extrapolation Modeling of Aerosol Deposition in Human and Laboratory Rat Lungs.
PB93-181097/REB 93-01 PC A03/MF A01

Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
PB93-236321/REB 93-04 PC A03/MF A01

Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC A03/MF A01

**AIR POLLUTION EFFECTS (HUMAN)**

Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC A24/MF A04

**AIR POLLUTION EFFECTS (HUMANS)**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Tetranitromethane (TNM).
PB93-116994/REB 93-01 PC A03/MF A01

Air Quality Criteria for Carbon Monoxide.
PB93-167492/REB 93-01 PC A99/MF A06

Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC A03/MF A01

Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC A03/MF A01

Importance of Experimenter-Blind Procedure in Neurotoxicology (Mini-Review).
PB93-175628/REB 93-01 PC A02/MF A01

Carbon Monoxide Exposure of Subjects with Documented Cardiac Arrhythmias.
PB93-179943/REB 93-01 PC A03/MF A01

Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
PB93-179950/REB 93-01 PC A03/MF A01

Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC A02/MF A01

Human Upper Respiratory Tract Responses to Inhaled Pollutants with Emphasis on Nasal Lavage.
PB93-181089/REB 93-01 PC A02/MF A01

Extrapolation Modeling of Aerosol Deposition in Human and Laboratory Rat Lungs.
PB93-181097/REB 93-01 PC A03/MF A01

Comments on Recent Data for Particle Deposition in Human Nasal Passages.
PB93-181105/REB 93-01 PC A02/MF A01

Interspecies Modeling of Inhaled Particle Deposition Patterns.
PB93-181121/REB 93-01 PC A03/MF A01

Multiple Chemical Sensitivities. Addendum to Biologic Markers in Immunotoxicology.
PB93-222990/REB 93-04 PC A09/MF A03

Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-226815/REB 93-04 PC A02/MF A01

Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.
PB93-231835/REB 93-04 PC A02/MF A01

DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC A02/MF A01

Deposition of Sulfate Acid Aerosols in the Developing Human Lung.
PB93-236388/REB 93-04 PC A03/MF A01

Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC A02/MF A01

**AIR POLLUTION EFFECTS (MATERIALS)**

Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC A02/MF A01

Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC A02/MF A01

Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
PB93-120970/REB 93-01 PC A02/MF A01

Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC A02/MF A01

Analysis of Atmospheric Deposition Samples from Easton, Pennsylvania.
PB93-181600/REB 93-01 PC A04/MF A01

**AIR POLLUTION EFFECTS (PLANTS)**

Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC A04/MF A01

Biologic Markers of Air-Pollution Stress and Damage in Forests.
PB93-110187/REB 93-01 PC A17/MF A03

Influence of Elevated CO2 and Temperature on Wetland Rice Root Dynamics.
PB93-141141/REB 93-01 PC A02/MF A01

Effects of CO2 and Temperature on Five Rice Cultivars.
PB93-141158/REB 93-01 PC A02/MF A01

Impacts of Climate Change on Rice Yield: A Comparison of Four Model Performances.
PB93-191526/REB 93-01 PC A03/MF A01

Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.
PB93-212637/REB 93-04 PC A03/MF A01

Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.
PB93-212785/REB 93-04 PC A03/MF A01

**AIR POLLUTION EMISSION FACTORS**

EVAP3.0 CRC Evaporative Emission Model: User's Manual.
PB93-213916/REB 93-04 PC A03/MF A01

Evaporative Emission Model (EVAP 3.0) (for Microcomputers).
PB93-506301/REB 93-04 CP D02

**AIR POLLUTION MONITORING**

Measurements of total ozone.
DE92563059/REB 93-01 PC A04/MF A01

Air monitoring in the Arctic: 1980-90.
DE92563060/REB 93-01 PC A03/MF A01

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Air Quality Data. Volume 2.
PB92-228600/REB 93-04 PC A16/MF A03

Evaluation of CO Intersection Modeling Techniques Using a New York City Database.
PB93-105559/REB 93-01 PC A10/MF A03

Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC A02/MF A01

Design of the Clean Air Act Deposition Monitoring Network.
PB93-120947/REB 93-01 PC A03/MF A01

Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC A02/MF A01

Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
PB93-121069/REB 93-01 PC A02/MF A01

Proceedings of the EPA/A and WMA International Symposium (1992), Measurement of Toxic and Related Air Pollutants. Held in Durham, North Carolina on May 4-9, 1992.
PB93-121093/REB 93-01 PC A01/MF A01

Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
PB93-121259/REB 93-01 PC A02/MF A01

Assessing Potential Indoor Air Impacts for Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-122257/REB 93-01 PC A09/MF A03

Survey of Data from the Continuous Sites of the 1990 Atlanta Ozone Precursor Study.
PB93-124618/REB 93-01 PC A04/MF A01

Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
PB93-131704/REB 93-01 PC A03/MF A01

Air/Superfund National Technical Guidance Study Series. Volume 1. Overview of Air Pathway Assessments for Superfund Sites (Revised).
PB93-173987/REB 93-01 PC A05/MF A01

Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
PB93-175503/REB 93-01 PC A03/MF A01

Study of Highway Vehicle Emission Inventory Procedures for Selected Urban Areas.
PB93-185577/REB 93-01 PC A04/MF A01

Multiple Metals Stack Emission Measurement Methodology for Stationary Sources, Current Status.
PB93-185734/REB 93-01 PC A02/MF A01

Spatiotemporal Variability of Non-Urban Ozone Concentrations Over the Eastern United States and Its Potential Replication by Satellite Data.
PB93-191326/REB 93-01 PC A03/MF A01

Using Method 301 to Validate Sampling and Analytical Methods for Selected CAAA Compounds.
PB93-191419/REB 93-01 PC A03/MF A01

Potential Bias from Non-Continuous Monitoring of Ambient Ozone Concentrations for Characterizing Hourly and Daily 7- and 12-Hour Average Concentrations.
PB93-191534/REB 93-01 PC **A02**/MF **A01**

Guide to Effective Inspection Reports for Air Pollution Violations. Stationary Source Compliance Training Series.
PB93-199107/REB 93-01 PC **A04**/MF **A01**

Air/Superfund National Technical Guidance Study Series. Volume 4. Guidance for Ambient Air Monitoring at Superfund Sites (Revised).
PB93-199214/REB 93-01 PC **A08**/MF **A02**

Empirical Model of Vehicle Emissions.
PB93-199602/REB 93-01 PC **A02**/MF **A01**

Air/Superfund National Technical Guidance Study Series: Evaluation of Short-Term Air Action Levels for Superfund Sites.
PB93-200913/REB 93-01 PC **A14**/MF **A03**

Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03**/MF **A01**

Illinois Annual Air Quality Report, 1992.
PB93-208759/REB 93-04 PC **A05**/MF **A01**

Illinois Annual Air Quality Report, 1991.
PB93-208775/REB 93-04 PC **A05**/MF **A01**

National Radon Measurement Proficiency Program: Individual Proficiency Report.
PB93-209989/REB 93-04 PC **A16**/MF **A03**

User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections.
PB93-210250/REB 93-04 PC **A05**/MF **A02**

Guideline for Modeling Carbon Monoxide from Roadway Intersections.
PB93-210391/REB 93-04 PC **A04**/MF **A01**

National Performance Audit Program (NPAP).
PB93-212322/REB 93-04 PC **A02**/MF **A01**

Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC **A02**/MF **A01**

EPA's Information Management System for Tracking Reasonable Further Progress.
PB93-212389/REB 93-04 PC **A03**/MF **A01**

Guideline on Air Quality Models (Revised): Appendix W of 40 CFR Part 51 (Supplement B).
PB93-213213/REB 93-04 PC **A03**/MF **A01**

Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.
PB93-218501/REB 93-04 PC **A07**/MF **A02**

Guidelines for Stack Testing at Municipal Waste Combustion Facilities. Project Summary.
PB93-222610/REB 93-04 PC **A02**/MF **A01**

Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
PB93-228534/REB 93-04 PC **A02**/MF **A01**

Optical Remote Measurement of Toxic Gases.
PB93-229409/REB 93-04 PC **A03**/MF **A01**

Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
PB93-234508/REB 93-04 PC **A03**/MF **A01**

Contribution to Indoor Ozone Levels of an Ozone Generator.
PB93-234557/REB 93-04 PC **A03**/MF **A01**

**AIR POLLUTION MONITORS**

Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC **A03**/MF **A01**

Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03**/MF **A01**

Air/Superfund National Technical Guidance Study Series: Applicability of Open Path Monitors for Superfund.
PB93-138154/REB 93-01 PC **A07**/MF **A02**

Determination of the Strong Acidity of Atmospheric Fine-Particles (< 2.5 mum) Using Annular Denuder Technology. Standard Method, Enhanced Method.
PB93-178234/REB 93-01 PC **A07**/MF **A02**

Relationships between Ozone Precursor Levels and Response to Emissions Reductions: Analysis of Regional Oxidant Model Results for the Northeastern United States.
PB93-186294/REB 93-01 PC **A07**/MF **A02**

Two New Gas Standards Programs at the National Institute of Standards and Technology.
PB93-191427/REB 93-01 PC **A02**/MF **A01**

EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02**/MF **A01**

Air/Superfund National Technical Guidance Study Series: Compilation of Information on Real-Time Air Monitoring for Use at Superfund Sites.
PB93-199222/REB 93-04 PC **A05**/MF **A02**

Recommended Quality Assurance Procedures for Opacity Continuous Emission Monitoring Systems.
PB93-199263/REB 93-01 PC **A05**/MF **A01**

Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.
PB93-222628/REB 93-04 PC **A01**/MF **A01**

Personal Air Sampling and Air Monitoring Requirements under 29 CFR 1910.120.
PB93-963420/REB 93-04 PC **A03**/MF **A01**

**AIR POLLUTION SAMPLING**

Modeling of the Fast Organic Emissions from a Wood-Finishing Product: Floor Wax.
PB93-107027/REB 93-01 PC **A02**/MF **A01**

Evaluation of Para-Dichlorobenzene Emissions from Solid Moth Repellant as a Source of Indoor Air Pollution.
PB93-107035/REB 93-01 PC **A02**/MF **A01**

Test Car List, 1992. Passenger Cars.
PB93-111185/REB 93-01 PC **A05**/MF **A01**

Federal Certification Test Results for 1992 Model Year. Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines.
PB93-111219/REB 93-01 PC **A13**/MF **A03**

Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02**/MF **A01**

Atmopheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC **A02**/MF **A01**

Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC **A03**/MF **A01**

Comparison of Aerosol Acidity in Urban and Semi-Rural Environments.
PB93-131712/REB 93-01 PC **A03**/MF **A01**

Evaluation of Nitrogen Oxide Emissions Data from TVA Coal-Fired Boilers.
PB93-138865/REB 93-01 PC **A06**/MF **A02**

Quantification of Nitro- and Hydroxylated Nitro-Aromatic/Polycyclic Aromatic Hydrocarbons in Selected Ambient Air Daytime Winter Samples.
PB93-141190/REB 93-01 PC **A03**/MF **A01**

Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC **A03**/MF **A01**

Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC **A03**/MF **A01**

Volatile Organic Sampling Train Soot Interference Report.
PB93-144145/REB 93-01 PC **A04**/MF **A01**

Analysis of Acid Precipitation Samples Collected by State Agencies. Sampling Period: January-December 1990.
PB93-144152/REB 93-01 PC **A12**/MF **A03**

Characterization of PM-10 Emissions from Antiskid Materials Applied to Ice- and Snow-Covered Roadways.
PB93-150209/REB 93-01 PC **A05**/MF **A01**

Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines. Federal Certification Test Results for 1993 Model Year.
PB93-164523/REB 93-01 PC **A15**/MF **A03**

Test Car List, 1993. Passenger Cars.
PB93-164531/REB 93-01 PC **A05**/MF **A02**

Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC **A03**/MF **A01**

Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC **A02**/MF **A01**

Commercial Marine Vessel Contributions to Emission Inventories.
PB93-173961/REB 93-01 PC **A07**/MF **A02**

Air/Superfund National Technical Guidance Study Series. Air Emissions from Area Sources: Estimating Soil and Soil-Gas Sample Number Requirements.
PB93-173995/REB 93-01 PC **A04**/MF **A01**

Methodology to Estimate Nonroad Equipment Populations by Nonattainment Areas.
PB93-174332/REB 93-01 PC **A05**/MF **A01**

Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC **A03**/MF **A01**

Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC **A03**/MF **A01**

Dry Deposition Flux Calculations for the National Dry Deposition Network.
PB93-178242/REB 93-01 PC **A05**/MF **A02**

Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
PB93-180875/REB 93-01 PC **A06**/MF **A02**

Measurement of Biogenic Emissions from Corn.
PB93-180883/REB 93-01 PC **A02**/MF **A01**

Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC **A03**/MF **A01**

Air Emissions Testing.
PB93-180933/REB 93-01 PC **A02**/MF **A01**

Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC **A06**/MF **A02**

Field-Deployable Monitors for Volatile Organic Compounds in Air. (Essential Capabilities of a Portable Gas Chromatograph).
PB93-185700/REB 93-01 PC **A03**/MF **A01**

Source Apportionment of Air Pollution in China: Extending the Usefulness of Receptor Modeling by Combining Multivariate and Chemical Mass Balance Models.
PB93-185726/REB 93-01 PC **A03**/MF **A01**

Experimental Investigation of PIC Formation in CFC-12 Incineration.
PB93-191294/REB 93-01 PC **A07**/MF **A02**

Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03**/MF **A01**

Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC **A03**/MF **A01**

Development of Sampling and Analytical Methods for the Measurement of Nitrous Oxide from Fossil Fuel Combustion Sources.
PB93-194330/REB 93-01 PC **A07**/MF **A02**

Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC **A02**/MF **A01**

Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC **A07**/MF **A02**

Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC **A02**/MF **A01**

Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or Inhalable Particulate Data (Draft).
PB93-200640/REB 93-01 PC **A04**/MF **A01**

Indoor Concentration Modeling of Aerosol Strong Acidity.
PB93-204071/REB 93-01 PC **A02**/MF **A01**

Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02**/MF **A01**

Characterization of the Organic Emissions from the Thermal Destruction of CFCs.
PB93-205557/REB 93-04 PC **A10**/MF **A03**

Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC **A03**/MF **A01**

Estimate of Global Methane Emissions from Coal Mines.
PB93-212553/REB 93-04 PC **A03**/MF **A01**

Comparison of Methods for Estimating Global Methane Emissions from Landfills.
PB93-212561/REB 93-04 PC **A03**/MF **A01**

Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.
PB93-212579/REB 93-04 PC **A02**/MF **A01**

Aerosol Measurement: Principles, Techniques, and Applications.
PB93-212827/REB 93-04 PC **A03**/MF **A01**

Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC **A02**/MF **A01**

VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC **A02**/MF **A01**

Acid Aerosol Measurement Methods: A Summary of U.S. EPA Intercomparisons.
PB93-221885/REB 93-04 PC **A02**/MF **A01**

Replacement of Charcoal Sorbent in the VOST.
PB93-221893/REB 93-04 PC **A03**/MF **A01**

International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.
PB93-222073/REB 93-04 PC **A02**/MF **A01**

Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC **A02**/MF **A01**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
PB93-227163/REB 93-04 PC **A11**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
PB93-227171/REB 93-04 PC **A12**/MF **A03**

Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
PB93-227551/REB 93-04 PC **A06**/MF **A02**

Exposure Modeling of Acid Aerosols.
PB93-228559/REB 93-04 PC **A02**/MF **A01**

Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.
PB93-229193/REB 93-04 PC **A02**/MF **A01**

Total Volatile Organic Concentrations in 2700 Personal, Indoor, and Outdoor Air Samples Collected in the US EPA Team Studies.
PB93-229730/REB 93-04 PC **A03**/MF **A01**

**AIR POLLUTION SOURCES**

Guidelines for MACT Determinations under Section 112(j) (Proposal).
PB93-183283/REB 93-04 PC **A08**/MF **A02**

Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC **A13**/MF **A03**

Method for the Determination of Asbestos in Bulk Building Materials. (Test Method).
PB93-218576/REB 93-04 PC **A05**/MF **A02**

**AIR POLLUTION STANDARDS**

ASHRAE Standard 62: Ventilation for Acceptable Indoor Air Quality.
PB93-106797/REB 93-01 PC **A03**/MF **A01**

Federal Certification Test Results for 1992 Model Year. Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines.
PB93-111219/REB 93-01 PC **A13**/MF **A03**

Calciners and Dryers in Mineral Industries: Background Information for Promulgated Standards.
PB93-122448/REB 93-01 PC **A04**/MF **A01**

Enabling Document for New Source Performance Standards for Calciners and Dryers in Mineral Industries.
PB93-122455/REB 93-01 PC **A04**/MF **A01**

Regulatory Impact Analysis for the National Emissions Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Seven Other Processes.
PB93-143972/REB 93-01 PC **A09**/MF **A02**

National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC **A07**/MF **A02**

Enabling Document for Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants.
PB93-147007/REB 93-01 PC **A07**/MF **A02**

National Emission Standards for Hazardous Air Pollutants Compliance Extensions for Early Reductions: Background Information for Promulgated Standards.
PB93-149425/REB 93-01 PC **A08**/MF **A02**

Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines. Federal Certification Test Results for 1993 Model Year.
PB93-164523/REB 93-01 PC **A15**/MF **A03**

Air Quality Criteria for Carbon Monoxide.
PB93-167492/REB 93-01 PC **A99**/MF **A06**

Guidelines for MACT Determinations under Section 112(j) (Proposal).
PB93-183283/REB 93-04 PC **A08**/MF **A02**

Guidance for Growth Factors, Projections, and Control Strategies for the 15 Percent Rate-of-Progress Plans.
PB93-186476/REB 93-01 PC **A09**/MF **A03**

VOC/HAP Emissions from Marine Vessel Loading Operations. Technical Support Document for Proposed Standards.
PB93-193910/REB 93-01 PC **A13**/MF **A03**

Report on the EPA/Manufacturer Cooperative I/M Testing Program.
PB93-206015/REB 93-04 PC **A10**/MF **A03**

National Performance Audit Program (NPAP).
PB93-212322/REB 93-04 PC **A02**/MF **A01**

Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.
PB93-212785/REB 93-04 PC **A03**/MF **A01**

VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC **A02**/MF **A01**

Status of ASHRAE Standard 62. Ventilation for Acceptable Indoor Air Quality.
PB93-222040/REB 93-04 PC **A02**/MF **A01**

Ethylene Oxide Emissions from Commercial Sterilization/Fumigation Operations: Background Information for Proposed Standards.
PB93-226744/REB 93-04 PC **A13**/MF **A03**

**AIR QUALITY**

Modeling of Indoor Air Quality for a Personal Computer.
PB93-106771/REB 93-01 PC **A03**/MF **A01**

Validation of Source and Sink Models: Problems and Possible Solutions.
PB93-106789/REB 93-01 PC **A03**/MF **A01**

ASHRAE Standard 62: Ventilation for Acceptable Indoor Air Quality.
PB93-106797/REB 93-01 PC **A03**/MF **A01**

Modeling Individual Exposure from Indoor Sources.
PB93-119840/REB 93-01 PC **A03**/MF **A01**

Survey of Protocols for Conducting Indoor Air Quality Investigations in Large Buildings.
PB93-119665/REB 93-01 PC **A03**/MF **A01**

Analysis of IAQ Control Options and the Effects of Sources and Sinks.
PB93-131647/REB 93-01 PC **A02**/MF **A01**

National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC **A07**/MF **A02**

Air Quality Criteria for Carbon Monoxide.
PB93-167492/REB 93-01 PC **A99**/MF **A06**

Pollution Prevention for Cleaner Air: EPA's Air and Energy Engineering Research Laboratory.
PB93-173730/REB 93-01 PC **A03**/MF **A01**

Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC **A03**/MF **A01**

Issues and Approaches to Improving Transportation Modeling for Air Quality Analysis.
PB93-194066/REB 93-01 PC **A05**/MF **A02**

Status of ASHRAE Standard 62. Ventilation for Acceptable Indoor Air Quality.
PB93-222040/REB 93-04 PC **A02**/MF **A01**

Stochastic Methodology for Regional Wind-Field Modeling.
PB93-229391/REB 93-04 PC **A03**/MF **A01**

**AIR QUALITY DATA**

Survey of Data from the Continuous Sites of the 1990 Atlanta Ozone Precursor Study.
PB93-124618/REB 93-01 PC **A04**/MF **A01**

Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or Inhalable Particulate Data (Draft).
PB93-200640/REB 93-01 PC **A04**/MF **A01**

Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03**/MF **A01**

Illinois Annual Air Quality Report, 1992.
PB93-208759/REB 93-04 PC **A05**/MF **A01**

Illinois Annual Air Quality Report, 1991.
PB93-208775/REB 93-04 PC **A05**/MF **A01**

**AIR QUALITY DISPLAY MODEL**

CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 1. Technical Formulations.
PB93-107076/REB 93-01 PC **A03**/MF **A01**

CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 2. Performance Characteristics.
PB93-107084/REB 93-01 PC **A03**/MF **A01**

**AIR QUALITY MANAGEMENT**

Federal Test Procedure Review Project: Status Report.
PB93-197903/REB 93-01 PC **A03**/MF **A01**

**AIR SAMPLERS**

Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02**/MF **A01**

Evaluation of a Sorbent-Based Preconcentrated for Analysis of VOCs in Air Using Gas Chromatography-Atomic Emission Detection.
PB93-121077/REB 93-01 PC **A02**/MF **A01**

Volatile Organic Sampling Train Soot Interference Report.
PB93-144145/REB 93-01 PC **A04**/MF **A01**

Evaluation of Portable Multisorbent Air Samplers for Use with an Automated Multitube Analyzer.
PB93-172930/REB 93-01 PC **A05**/MF **A01**

**AIR SPARGING**

Technology Assessment of Soil Vapor Extraction and Air Sparging.
PB93-100154/REB 93-01 PC **A04**/MF **A01**

Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC **A03**/MF **A01**

**AIR WATER INTERACTIONS**

Model Calculations of the Annual Atmospheric Deposition of Toxic Metals to Lake Michigan.
PB93-120905/REB 93-01 PC **A03**/MF **A01**

Atmospheric Deposition of Toxic Metals to Lake Michigan: Preliminary Annual Model Calculations.
PB93-120954/REB 93-01 PC **E02**/MF **A01**

Atmospheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC **A02**/MF **A01**

Water Temperature Characteristics of Lakes Subjected to Climate Change.
PB93-135648/REB 93-01 PC **A09**/MF **A02**

Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC **A03**/MF **A01**

Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Atmospheric Deposition of Critical Issue Forum. Held in Annapolis, Maryland on November 5, 1992.
PB93-193738/REB 93-01 PC **A03**/MF **A01**

Proceeding of the Workshop on the Sea-Surface Microlayer in Relation to Ocean Disposal. Held in Airlie, Virginia on December 18-19, 1985.
PB93-206993/REB 93-04 PC **A06**/MF **A02**

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

**ALABAMA**

National Priorities List Sites: Alabama, 1992.
PB93-963201/REB 93-01
*see individual report for order number and price*

**ALASKA**

National Priorities List Sites: Alaska, 1992.
PB93-963202/REB 93-01 PC **A04**/MF **A01**

**ALCALIGENES**

Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC **A02**/MF **A01**

**ALCOHOL DRINKING**

Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02**/MF **A01**

**ALDEHYDES**

Mechanisms of Aldehyde-Induced Bronchial Reactivity: Role of Airway Epithelium.
PB93-179927/REB 93-01 PC **A04**/MF **A01**

Analysis of DNA Strand Breaks Induced in Rodent Liver In vivo, Hepatocytes in Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC **A03**/MF **A01**

**ALDRIN**

Evaluation of the Potential Carcinogenicity of Aldrin (309-00-2).
PB93-181642/REB 93-01 PC **A03**/MF **A01**

**ALGAE**

Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03**/MF **A01**

Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC **A03**/MF **A01**

**ALGORITHMS**

Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
PB93-131845/REB 93-01 PC **A03**/MF **A01**

Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC **A08**/MF **A02**

Comparison of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model and Wind Tunnel Data.
PB93-226751/REB 93-04 PC **A08**/MF **A02**

Sensitivity Analysis of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model.
PB93-226769/REB 93-04 PC **A05**/MF **A01**

Development and Evaluation of a Revised Area Source Algorithm for the Industrial Source Complex Long Term Model.
PB93-226777/REB 93-04 PC **A06**/MF **A02**

**ALIPHATIC ACID ESTERS**

RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED) Soap Salts.
PB93-101673/REB 93-01 PC **A13**/MF **A03**

**ALKANES**

Characterization of the Alkane-Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis': Identification of a New P450 Gene Family.
PB93-229268/REB 93-04 PC **A03**/MF **A01**

Isolation of the Alkane Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis'.
PB93-229284/REB 93-04 PC **A02**/MF **A01**

Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
PB93-229458/REB 93-04 PC **A03**/MF **A01**

**ALLERGIES**

Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02**/MF **A01**

**ALLYL ALCOHOLS**

Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC **A03**/MF **A01**

**ALOSIDS**

Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans, December 1992.
PB93-226058/REB 93-04 PC **A04**/MF **A01**

**ALPHA-NAPHTHYLAMINE**

Evaluation of the Potential Carcinogenicity of 1-Naphthylamine (134-32-7).
PB93-196384/REB 93-01 PC **A03**/MF **A01**

**ALTERNATIVE FUELS**

Technology for Reduction of CO2 Emissions from the Transportation Sector.
PB93-106987/REB 93-01 PC **A02**/MF **A01**

**ALTERNATIVE REMEDIAL CONTRACTING STRATEGY**
Initiatives to Streamline the Alternative Remedial Contracting Strategy (ARCS) Contracts' Award Fee Process.
PB93-963275/REB 93-01 PC **A03**/MF **A01**

Performance Tracking under ARCS Contracts.
PB93-963276/REB 93-01 PC **A01**/MF **A01**

**ALTRNATIVE REMEDIAL CONTRACTING STRATEGY**
Use of Time and Materials and Cost Reimbursement Subcontracts for Remedial Actions under the Alternative Remedial Contracting Strategy Contracts.
PB93-963282/REB 93-01 PC **A02**/MF **A01**

**ALUMINUM**
Economic Analysis of Pretreatment Standards: The Secondary Copper and Aluminum Subcategories of the Nonferrous Metals Manufacturing Point Source Category.
PB93-167757/REB 93-01 PC **A07**/MF **A02**

Markets for Recovered Aluminum.
PB93-170132/REB 93-01 PC **A03**/MF **A01**

**ALUMINUM INDUSTRY**
Cost Effectiveness Analysis of Effluent Guidelines and Standards for the Aluminum Forming Category.
PB93-156107/REB 93-01 PC **A03**/MF **A01**

Development Document for Effluent Limitations Guidelines and Standards for the Aluminum Forming Point Source Category.
PB93-208213/REB 93-04 PC **A99**/MF **A06**

Supplemental for Pretreatment to the Interim Final Development Document for the Secondary Aluminum Segment of the Nonferrous Metals Manufacturing. Point Source Category.
PB93-232122/REB 93-04 PC **A07**/MF **A02**

**ALVEOLAR MACROPHAGES**
Cytokine (Tumor Necrosis Factor, IL-6, and IL-8) Production by Respiratory Syncytial Virus-Infected Human Alveolar Macrophages.
PB93-181006/REB 93-01 PC **A02**/MF **A01**

**ALVEOLAR MAROPHAGES**
Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC **A02**/MF **A01**

**AMBIENT AIR QUALITY**
Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC **A02**/MF **A01**

Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215622/REB 93-04 PC **A04**/MF **A01**

Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215630/REB 93-04 PC **A04**/MF **A01**

Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.
PB93-215648/REB 93-04 PC **A03**/MF **A01**

Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215655/REB 93-04 PC **A04**/MF **A01**

**AMERICAN INDIANS**
Tribal Water Utility Management.
PB93-190908/REB 93-01 PC **A09**/MF **A02**

**AMERICAN SAMOA**
National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC **A04**/MF **A01**

**AMIDES**
Evaluation of the Potential Carcinogenicity of Thioacetamide (62-55-5).
PB93-201226/REB 93-01 PC **A03**/MF **A01**

**AMINE/N-NITROSODI-N-PROPYL**
Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Propylamine (621-64-7).
PB93-196467/REB 93-01 PC **A03**/MF **A01**

**AMINO ACID SEQUENCE**
Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
PB93-229441/REB 93-04 PC **A03**/MF **A01**

**AMINO ACID SEQUENCE HOMOLOGY**
Proteins from Eight Eukaryotic Cytochrome P-450 Families Share a Segmented Region of Sequence Similarity.
PB93-229235/REB 93-04 PC **A02**/MF **A01**

**AMITROLE**
Pesticide Fact Sheet Number 20.2: Amitrole.
PB93-144368/REB 93-01 PC **A02**/MF **A01**

Pesticide Fact Sheet Number 20.1: Amitrole.
PB93-149680/REB 93-01 PC **A02**/MF **A01**

Evaluation of the Potential Carcinogenicity of Amitrole (61-82-5).
PB93-181659/REB 93-01 PC **A03**/MF **A01**

**AMMONIA**
Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium 'Nitrosomonas europaea'.
PB93-169076/REB 93-01 PC **A02**/MF **A01**

Ammonia Abatement System for Whole-Body Small Animal Inhalation Exposures to Acid Aerosols.
PB93-229516/REB 93-04 PC **A03**/MF **A01**

**AMMONIUM COMPOUNDS**
RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED) Soap Salts.
PB93-101673/REB 93-01 PC **A13**/MF **A03**

**AMMONIUM GLUFOSINATE**
Pesticide Fact Sheet: Glufosinate Ammonium.
PB93-219830/REB 93-04 PC **A03**/MF **A01**

**AMMONIUM SULFATE**
Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
PB93-135671/REB 93-01 PC **A01**/MF **A01**

**AMMUNITION**
Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC **A03**/MF **A01**

**AMOCO**
Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Project Summary.
PB92-228527/REB 93-01 PC **A08**/MF **A02**

**AMPHETAMINES**
Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02**/MF **A01**

**ANACOSTIA RIVER**
Restoration of the Anacostia River.
PB93-136364/REB 93-01 PC **A05**/MF **A01**

**ANAEROBIC BACTERIA**
Anaerobic Dehalogenation and Its Environmental Implications. Abstracts of 1992 American Society for Microbiology Conference. Held in Athens, Georgia on August 30-September 4, 1992.
PB93-217792/REB 93-04 PC **A04**/MF **A01**

**ANAEROBIC PROCESSES**
Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

**ANALYTIC TECHNIQUES**
Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC **A02**/MF **A01**

**ANALYTICAL CHEMISTRY**
Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 3) (for Microcomputers).
PB93-500270/REB 93-01 CP **D02**

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 2) (for Microcomputers).
PB93-500288/REB 93-01 CP **D02**

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 3) (for Microcomputers).
PB93-505352/REB 93-04 CP **D02**

**ANALYTICAL TECHNIQUES**
Analytical Methods for the National Sewage Sludge Survey.
PB93-236024/REB 93-04 PC **A12**/MF **A03**

Proceedings of Annual Analytical Symposium (7th). Held in Norfolk, Virginia on March 28-29, 1984.
PB93-237519/REB 93-04 PC **A99**/MF **A06**

**ANEUPLOIDY**
Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
PB93-141463/REB 93-01 PC **A02**/MF **A01**

**ANILINE**
Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

**ANIMAL BEHAVIOR**
Animal Models for Assessing the Neurobehavioral Impact of Airborne Pollutants.
PB93-107233/REB 93-01 PC **A03**/MF **A01**

**ANIMAL DISEASE MODELS**
Animal Models for Assessing the Neurobehavioral Impact of Airborne Pollutants.
PB93-107233/REB 93-01 PC **A03**/MF **A01**

**ANIMAL DISEASES**
Importance of Fish Diseases: An Overview.
PB93-204113/REB 93-01 PC **A03**/MF **A01**

**ANIMAL ECOLOGY**
Landscape-Scale Effects of Toxic Events for Ecological Risk Assessment.
PB93-236628/REB 93-04 PC **A03**/MF **A01**

**ANIMAL MIGRATIONS**
Implementation Plan for Removing Impediments to Migratory Fishes in the Chesapeake Bay Watershed (January-December 1991).
PB93-116572/REB 93-01 PC **A03**/MF **A01**

**ANIMAL SEX BEHAVIOR**
Effects of Kraft Mill Effluent on the Sexuality of Fishes: An Environmental Early Warning.
PB93-168847/REB 93-01 PC **A03**/MF **A01**

**ANIMAL TESTING ALTERNATIVES**
Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC **A02**/MF **A01**

**ANIMAL WASTES**
Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

**ANION EXCHANGING**
Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
PB93-185759/REB 93-01 PC **A03**/MF **A01**

**ANNULAR DENUDER SAMPLERS**
Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02**/MF **A01**

**ANQUILLA ROSTRATA**
Chesapeake Bay American Eel Fishery Management Plan. Agreement Commitment Report 1991.
PB93-226017/REB 93-04 PC **A03**/MF **A01**

**ANTENNAS**
Measurements of electric and magnetic fields in the Waianae, Hawaii area.
DE92019891/REB 93-01 PC **A03**/MF **A01**

**ANTHRACENE**
Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC **A02**/MF **A01**

**ANTI-INFECTIVE AGENTS**
Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC **A03**/MF **A01**

**ANTIBIOTICS**
Evaluation of the Potential Carcinogenicity of Streptozotocin (18883-66-4).
PB93-201275/REB 93-01 PC **A03**/MF **A01**

**ANTIBODY FORMATION**
Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC **A03**/MF **A01**

**ANTIMONY**
Ambient Aquatic Life Water Quality Criteria for Antimony (III).
PB93-202778/REB 93-01 PC **A03**/MF **A01**

**ANTIOXIDANTS**
Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
PB93-236321/REB 93-04 PC **A03**/MF **A01**

**AQUATIC ANIMALS**
Waterfowl Workgroup Living Resources Subcommittee: Annual Progress Report.
PB93-112704/REB 93-01 PC **A03**/MF **A01**

Synthesis of Basic Life Histories of Tampa Bay Species.
PB93-196012/REB 93-01 PC **A12**/MF **A03**

Stress Proteins in Aquatic Organisms: An Environmental Perspective.
PB93-199578/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Hexachlorobenzene.
PB93-202760/REB 93-01 PC **A03**/MF **A01**

Chemically Induced Histopathology in Aquatic Invertebrates (Chapter 14).
PB93-222263/REB 93-04 PC **A03**/MF **A01**

**AQUATIC BIOLOGY**
Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC **A03**/MF **A01**

Performance of an Aquatic Multispecies System in Evaluating the Effects of a Model Microbial Pest Control Agent on Nontarget Organisms.
PB93-131803/REB 93-01 PC **A03**/MF **A01**

Trace Organic Contaminants in Anthropogenically Acidified Surface Waters.
PB93-135689/REB 93-01 PC **A03**/MF **A01**

Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC **A07**/MF **A02**

Ambient Aquatic Life Water Quality Criteria for Di-2-Ethylhexyl Phthalate.
PB93-202752/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Antimony (III).
PB93-202778/REB 93-01 PC **A03**/MF **A01**

Guidelines for Deriving Ambient Aquatic Life Advisory Concentrations.
PB93-236057/REB 93-04 PC **A03**/MF **A01**

Cholinesterases of Aquatic Animals.
PB93-236222/REB 93-04 PC **A03**/MF **A01**

**AQUATIC ECOSYSTEMS**
Radioecology in Nordic limnic systems - present knowledge and future prospects.
DE92643948/REB 93-01 PC **A04**/MF **A01**

Sediment Classification Methods Compendium.
PB93-115186/REB 93-01 PC **A11**/MF **A03**

Surface Waters Component of the Environmental Monitoring and Assessment Program (EMAP): An Overview.
PB93-121267/REB 93-01 PC **A02/MF A01**

Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-126060/REB 93-01 PC **A12/MF A03**

Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC **A03/MF A01**

Cell Density and Non-Equilibrium Sorption Effects on Bacterial Dispersal in Groundwater Microcosms.
PB93-141505/REB 93-01 PC **A03/MF A01**

Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
PB93-143709/REB 93-01 PC **A08/MF A02**

Dynamic River Basin Water Quality Model.
PB93-190890/REB 93-01 PC **A05/MF A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02/MF A01**

Stream Indicator and Design Workshop.
PB93-222321/REB 93-04 PC **A05/MF A01**

Role of Ecological Sample Surveys in the Implementation of Biocriteria.
PB93-234524/REB 93-04 PC **A03/MF A01**

Microbial Trophic Interactions in Aquatic Microcosms Designed for Testing Genetically Engineered Microorganisms: A Field Comparison.
PB93-236248/REB 93-04 PC **A03/MF A01**

**AQUATIC HABITATS**

Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC **A10/MF A03**

**AQUATIC MICROBIOLOGY**

Fate of 'Bacillus sphaericus' and 'Bacillus thuringiensis' Serovar 'israelensis' in the Aquatic Environment.
PB93-121143/REB 93-01 PC **A02/MF A01**

Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
PB93-121176/REB 93-01 PC **A02/MF A01**

Application of DNA Probes to Analysis of Bacteriophage Distribution Patterns in the Environment.
PB93-121200/REB 93-01 PC **A02/MF A01**

Cell Density and Non-Equilibrium Sorption Effects on Bacterial Dispersal in Groundwater Microcosms.
PB93-141505/REB 93-01 PC **A03/MF A01**

Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02/MF A01**

Isolation and Diversity of Actinomycetes in the Chesapeake Bay.
PB93-205060/REB 93-01 PC **A02/MF A01**

Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
PB93-205078/REB 93-04 PC **A02/MF A01**

Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.
PB93-234490/REB 93-04 PC **A03/MF A01**

Long-Term Survival and Plasmid Maintenance of 'Escherichia coli' in Marine Microcosms.
PB93-236230/REB 93-04 PC **A02/MF A01**

Microbial Trophic Interactions in Aquatic Microcosms Designed for Testing Genetically Engineered Microorganisms: A Field Comparison.
PB93-236248/REB 93-04 PC **A03/MF A01**

**AQUATIC ORGANISMS**

Ambient Aquatic Life Water Quality Criteria for Hexachlorobenzene.
PB93-202760/REB 93-01 PC **A03/MF A01**

**AQUATIC PLANTS**

Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and Chincoteague Bay, 1991.
PB93-191120/REB 93-01 PC **A13/MF A03**

Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC **A12/MF A03**

Ambient Aquatic Life Water Quality Criteria for Hexachlorobenzene.
PB93-202760/REB 93-01 PC **A03/MF A01**

**AQUEOUS SOLUTIONS**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Formulation of Aqueous Solutions.
PB93-206019/REB 93-04 PC **A02/MF A01**

Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC **A02/MF A01**

**AQUIFER SYSTEMS**

Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-226575/REB 93-04 PC **A03/MF A01**

**AQUIFERS**

Wellhead Protection Strategies for Confined-Aquifer Settings.
PB93-115913/REB 93-01 PC **A05/MF A01**

Inhibition of Alkylbenzene Biodegradation under Denitrifying Conditions by Using Acetylene Block Technique.
PB93-121242/REB 93-01 PC **A02/MF A01**

Laboratory Studies on the Stability and Transport of Inorganic Colloids Through Natural Aquifer Material (Chapter 49).
PB93-175537/REB 93-01 PC **A02/MF A01**

Program to Analyze Aquifer Test Data and Check for Validity with the Jacob Method.
PB93-181154/REB 93-01 PC **A02/MF A01**

Passive Sampling of Groundwater Monitoring Wells without Purging: Multilevel Well Chemistry and Tracer Disappearance.
PB93-181170/REB 93-01 PC **A03/MF A01**

Development and Application of Borehole Flowmeters for Environmental Assessment.
PB93-185817/REB 93-01 PC **A03/MF A01**

Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.
PB93-212363/REB 93-04 PC **A02/MF A01**

**AQUIRE DATA BASE**

Aquatic Toxicity Information Retrieval Data Base: A Technical Support Document. (Revised July 1992).
PB93-192631/REB 93-04 PC **A03/MF A01**

Aquatic Toxicity Information Retrieval Data Base (AQUIRE).
PB93-505725/REB 93-04 CP **T02**

Aquatic Toxicity Information on VAX VMS Backup (AQUIRE for VMS).
PB93-505733/REB 93-01 CP **T02**

**ARCTIC CONTAMINANTS RESEARCH PROGRAM**

Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08/MF A02**

**ARCTIC REGIONS**

Air monitoring in the Arctic: 1980-90.
DE92563060/REB 93-01 PC **A03/MF A01**

Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08/MF A02**

**AREA AND MOBILE SOURCE SUBSYSTEM**

Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127801/REB 93-01 PC **A06/MF A02**

**AREA SOURCES**

Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127801/REB 93-01 PC **A06/MF A02**

**ARGOPECTEN IRRADIANS**

Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC **A02/MF A01**

**ARID LAND**

Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13/MF A03**

**ARID LANDS**

Environmental Monitoring and Assessment Program: EMAP-Arid Colorado Plateau Pilot Study, 1992. Implementation Plan.
PB93-181618/REB 93-01 PC **A08/MF A02**

**ARIZONA**

National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC **A04/MF A01**

**ARKANSAS**

National Priorities List Sites: Arkansas, 1992.
PB93-963205/REB 93-01 PC **A04/MF A01**

**AROCLORS**

Evaluation of the Potential Carcinogenicity of Polychlorinated Biphenyls (1336-36-3) Including Specific Aroclors.
PB93-196574/REB 93-01 PC **A03/MF A01**

Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.
PB93-236347/REB 93-04 PC **A02/MF A01**

Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03/MF A01**

**AROMATIC COMPOUNDS**

Quantification of Nitro- and Hydroxylated Nitro-Aromatic/Polycyclic Aromatic Hydrocarbons in Selected Ambient Air Daytime Winter Samples.
PB93-141190/REB 93-01 PC **A03/MF A01**

Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC **A02/MF A01**

**AROMATIC HYDROCARBONS**

Regulatory Impact Analysis: Control of Sulfur and Aromatics Contents of on-Highway Diesel Fuel.
PB93-207660/REB 93-04 PC **A12/MF A03**

Aromatic Hydrocarbon Degradation: A Molecular Approach.
PB93-229433/REB 93-04 PC **A03/MF A01**

**AROMATIC POLYCYCLIC HYDROCARBONS**

Quantification of Nitro- and Hydroxylated Nitro-Aromatic/Polycyclic Aromatic Hydrocarbons in Selected Ambient Air Daytime Winter Samples.
PB93-141190/REB 93-01 PC **A03/MF A01**

DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02/MF A01**

Biodegradation of Polycyclic Aromatic Hydrocarbons by 'Phanerochaete chrysosporium'.
PB93-191591/REB 93-01 PC **A02/MF A01**

Evaluation of the Bioremediation of a Contaminated Soil with Phytotoxicity Tests.
PB93-191625/REB 93-01 PC **A03/MF A01**

Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC **A02/MF A01**

Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02/MF A01**

Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02/MF A01**

Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC **A02/MF A01**

**ARRHYTHMIA**

Carbon Monoxide Exposure of Subjects with Documented Cardiac Arrhythmias.
PB93-179943/REB 93-01 PC **A03/MF A01**

**ARSENATES**

Laboratory Studies on the Stability and Transport of Inorganic Colloids Through Natural Aquifer Material (Chapter 49).
PB93-175537/REB 93-01 PC **A02/MF A01**

**ARSENIC**

Health Effects of Arsenic in Drinking Water: Research Needs.
PB93-141331/REB 93-01 PC **A02/MF A01**

Evaluation of the Potential Carcinogenicity of Arsenic and Inorganic Arsenic Compounds.
PB93-181667/REB 93-01 PC **A03/MF A01**

**ARSENIC ACID**

Pesticide Fact Sheet: Arsenic Acid (H3AsO4).
PB93-198711/REB 93-01 PC **A02/MF A01**

**ARSENIC INORGANIC COMPOUNDS**

Metabolism and Disposition of Inorganic Arsenic in Laboratory Animals and Humans.
PB93-107183/REB 93-01 PC **A02/MF A01**

Evaluation of the Potential Carcinogenicity of Arsenic and Inorganic Arsenic Compounds.
PB93-181667/REB 93-01 PC **A03/MF A01**

Pesticide Fact Sheet: Arsenic Acid (H3AsO4).
PB93-198711/REB 93-01 PC **A02/MF A01**

**ARSENIC ORGANIC COMPOUNDS**

Evaluation of the Potential Carcinogenicity of Diethylarsine (692-42-2).
PB93-184877/REB 93-01 PC **A03/MF A01**

**ARTEMIA**

Characterization of Reference Artemia III for Marine Toxicological Studies.
PB93-212595/REB 93-04 PC **A03/MF A01**

**ARTIFICIAL WETLANDS**

Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).
PB93-212470/REB 93-04 PC **A03/MF A01**

**ARYL HYDROCARBON RECEPTOR**

Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03/MF A01**

**ASBESTOS**

Guide to Performing Reinspections under the Asbestos Hazard Emergency Response Act (AHERA).
PB93-126007/REB 93-01 PC **A06/MF A02**

Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
PB93-131761/REB 93-01 PC **A02/MF A01**

Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Asbestos (1332-21-4).
PB93-184885/REB 93-01 PC **A03/MF A01**

Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC **A02/MF A01**

Comparison of the Efficiency of Polycarbonate and Mixed Cellulose Ester Filters for Use in the Filtration of Water Samples.
PB93-194363/REB 93-01 PC **A02/MF A01**

Reporting and Recordkeeping Requirements for Waste Disposal: A Field Guide.
PB93-199115/REB 93-01 PC **A03/MF A01**

Guide to the Asbestos NESHAP as Revised November 1990.
PB93-199362/REB 93-01 PC **A04/MF A01**

Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC **A02/MF A01**

National List of Asbestos Landfills.
PB93-200517/REB 93-01 PC **A10**/MF **A03**

Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.
PB93-218501/REB 93-04 PC **A07**/MF **A02**

Evaluation of Three Cleaning Methods for Removing Asbestos from Carpet: Determination of Airborne Asbestos Concentrations Associated with Each Method.
PB93-218568/REB 93-04 PC **A05**/MF **A01**

Method for the Determination of Asbestos in Bulk Building Materials. (Test Method).
PB93-218576/REB 93-04 PC **A05**/MF **A02**

Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
PB93-227551/REB 93-04 PC **A06**/MF **A02**

Course 1. Model Curriculum for Training Asbestos Abatement Contractors and Supervisors (Training Manual).
PB93-780773/REB 93-01 PC**$182.00**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Student Notebook. Course 1 (Training Manual).
PB93-780781/REB 93-01 PC **A21**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Instructor's Course Syllabus. Course 1 (Training Manual).
PB93-780799/REB 93-01 PC **A09**

Course 2. Model Curriculum for School Building Inspectors (Training Manual).
PB93-780823/REB 93-01 PC**$136.00**

Model EPA Curriculum for Training Building Inspectors. Student Notebook. Course 2 (Training Manual).
PB93-780831/REB 93-01 PC **A17**

Model EPA Curriculum for Training Building Inspectors. Instructor's Course Syllabus. Course 2 (Training Manual).
PB93-780849/REB 93-01 PC **A07**

Course 3. Model Curriculum for School Asbestos Management Planners (Training Manual).
PB93-780872/REB 93-01 PC**$81.00**

Model EPA Curriculum for Training Management Planners. Student Notebook. Course 3 (Training Manual).
PB93-780880/REB 93-01 PC **A07**

Model EPA Curriculum for Training Management Planners. Instructor's Course Syllabus. Course 3 (Training Manual).
PB93-780898/REB 93-01 PC **A04**

Course 4. Model Curriculum for Asbestos Abatement Workers (English Version) (Training Manual).
PB93-780922/REB 93-01 PC**$235.00**

EPA Model Asbestos Worker Training Manual. Course 4 (English Version).
PB93-780930/REB 93-01 PC **A14**

EPA Model Asbestos Worker Training Course. Instructor's Manual. Course 4 (English Version) (Training Manual).
PB93-780948/REB 93-01 PC **A15**

EPA Model Asbestos Worker Training Instructor's Resources. Course 4 (English Version) (Training Manual).
PB93-780955/REB 93-01 PC **A09**

Course 5. Presentation to Accompany 'Guidance for Controlling Asbestos-Containing Materials in Buildings' (Training Manual).
PB93-780971/REB 93-01 PC**$41.00**

**ASBESTOS HAZARD EMERGENCY RESPONSE ACT**

Guide to Performing Reinspections under the Asbestos Hazard Emergency Response Act (AHERA).
PB93-128007/REB 93-01 PC **A06**/MF **A02**

**ASSAYING**

Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

**ASSESSMENTS**

PA Review Checklist.
PB93-963342/REB 93-04 PC **A03**/MF **A01**

**ASTHMA**

Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02**/MF **A01**

**ASYMMETRICAL CONVECTION MODEL**

Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.
PB93-212686/REB 93-04 PC **A03**/MF **A01**

**ATLANTA (GEORGIA)**

Survey of Data from the Continuous Sites of the 1990 Atlanta Ozone Precursor Study.
PB93-124618/REB 93-01 PC **A04**/MF **A01**

**ATLANTIC COAST REGION (UNITED STATES)**

Chesapeake Bay Atlantic Croaker and Spot Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226629/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Summer Flounder Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226637/REB 93-04 PC **A03**/MF **A01**

**ATMOSPHERIC BOUNDARY LAYER**

Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.
PB93-212686/REB 93-04 PC **A03**/MF **A01**

**ATMOSPHERIC CHEMISTRY**

Atmospheric Chemistry and Physical Fate of HCFCs and HFCs and Their Degradation Products.
PB93-131449/REB 93-01 PC **A03**/MF **A01**

Determination of Rates of Reaction in the Gas-Phase in the Troposphere. Theory and Practice. 5. Rate of Indirect Photoreaction.
PB93-149334/REB 93-01 PC **A08**/MF **A02**

Regional Modeling Analysis of the Dependencies of Atmospheric Oxidants to Perturbations in NOx and Hydrocarbon Emissions.
PB93-180925/REB 93-01 PC **A02**/MF **A01**

**ATMOSPHERIC CIRCULATION**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

Statistical Analyses of COADS Wind Data in Coastal Regions of the United States.
PB93-212777/REB 93-04 PC **A03**/MF **A01**

**ATMOSPHERIC COMPOSITION**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

**ATMOSPHERIC DIFFUSION**

Final Results of the Condors Convective Diffusion Experiment.
PB93-212728/REB 93-04 PC **A03**/MF **A01**

Guideline on Air Quality Models (Revised): Appendix W of 40 CFR Part 51 (Supplement B).
PB93-213213/REB 93-04 PC **A03**/MF **A01**

Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC **A08**/MF **A02**

Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC **A06**/MF **A02**

Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.
PB93-236586/REB 93-04 PC **A03**/MF **A01**

MESOPUFF (for Microcomputers).
PB93-500247/REB 93-01 CP **D02**

**ATMOSPHERIC EFFECTS**

Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
PB93-120970/REB 93-01 PC **A02**/MF **A01**

Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.
PB93-229649/REB 93-04 PC **A03**/MF **A01**

**ATMOSPHERIC MODELS**

Comparison of Modeled Concentration Profiles Using Site-Specific and Constant-Condition Meteorological Data for the ISCLT and PAL Models.
PB93-120921/REB 93-01 PC **A02**/MF **A01**

Application of a Data-Assimilating Prognostic Meteorological Model to Two Urban Areas.
PB93-126571/REB 93-01 PC **A05**/MF **A01**

**ATMOSPHERIC TEMPERATURE**

Relationship between Water Temperatures and Air Temperatures for Central U.S. Streams.
PB93-135655/REB 93-01 PC **A07**/MF **A02**

Influence of Elevated CO2 and Temperature on Wetland Rice Root Dynamics.
PB93-141141/REB 93-01 PC **A02**/MF **A01**

Effects of CO2 and Temperature on Five Rice Cultivars.
PB93-141158/REB 93-01 PC **A02**/MF **A01**

Statistical Analyses of COADS Wind Data in Coastal Regions of the United States.
PB93-212777/REB 93-04 PC **A03**/MF **A01**

**AURAMINE**

Evaluation of the Potential Carcinogenicity of Auramine (492-80-8).
PB93-184893/REB 93-01 PC **A03**/MF **A01**

**AUTOCLAVING**

Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

**AUTOMOBILE ENGINES**

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel - Final Report.
PB93-197929/REB 93-01 PC **A03**/MF **A01**

Cold Starting an Alcohol-Fueled Engine with Ultrasonic Fuel Atomization.
PB93-206597/REB 93-04 PC **A03**/MF **A01**

**AUTOMOBILE EXHAUST**

Federal Test Procedure Review Project: Status Report.
PB93-197903/REB 93-01 PC **A03**/MF **A01**

Report on the EPA/Manufacturer Cooperative I/M Testing Program.
PB93-208015/REB 93-04 PC **A10**/MF **A03**

Dynamometer Testing of On-Road Vehicles from the Los Angeles in-Use Emissions Study.
PB93-222297/REB 93-04 PC **A03**/MF **A01**

**AUTOMOBILE RADIATORS**

Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
PB93-123230/REB 93-01 PC **A02**/MF **A01**

**AUTOMOBILES**

Waste Reduction Activities and Options for an Autobody Repair Facility.
PB93-123156/REB 93-01 PC **A01**/MF **A01**

EVAP3.0 CRC Evaporative Emission Model: User's Manual.
PB93-213916/REB 93-04 PC **A03**/MF **A01**

Pilot Project for Vehicle Scrapping in Illinois.
PB93-232890/REB 93-04 PC **A08**/MF **A02**

Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
PB93-234508/REB 93-04 PC **A03**/MF **A01**

Evaporative Emission Model (EVAP 3.0) (for Microcomputers).
PB93-506301/REB 93-04 CP **D02**

**AUTOMOTIVE FUELS**

Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC **A24**/MF **A04**

Cold Starting an Alcohol-Fueled Engine with Ultrasonic Fuel Atomization.
PB93-206597/REB 93-04 PC **A03**/MF **A01**

Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC **A03**/MF **A01**

Emissions and Fuel Economy Results 1992 Car Models (for Microcomputers).
PB93-504546/REB 93-01 CP **D02**

Emissions and Fuel Economy Results 1993 Car Models (for Microcomputers).
PB93-504553/REB 93-01 CP **D02**

**AUTOMOUSE SYSTEM**

AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
PB93-100113/REB 93-01 PC **A10**/MF **A03**

AutoMOUSE (Modular Oriented Uncertainty SystEm) - An Improvement to the MOUSE Computerized Uncertainty Analysis Program (for Microcomputers).
PB93-500007/REB 93-01 CP **D03**

**AUTORADIOGRAPHY**

Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
PB93-205078/REB 93-04 PC **A02**/MF **A01**

**AVIATION FUELS**

Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC **A02**/MF **A01**

**AVIATION GASOLINE**

LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

Performance of Pilot Scale Bioventing at an Aviation Gasoline Spill Site.
PB93-221943/REB 93-04 PC **A02**/MF **A01**

Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.
PB93-221968/REB 93-04 PC **A02**/MF **A01**

Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.
PB93-222370/REB 93-04 PC **A02**/MF **A01**

**AXON**

Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC **A02**/MF **A01**

**AXONAL TRANSPORT**

Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03**/MF **A01**

**AXONS**

Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03**/MF **A01**

Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC **A02**/MF **A01**

**AZASERINE**

Evaluation of the Potential Carcinogenicity of Azaserine (115-02-6).
PB93-184901/REB 93-01 PC **A03**/MF **A01**

**AZIRIDINES**

Evaluation of the Potential Carcinogenicity of Aziridine (151-56-4).
PB93-184919/REB 93-01 PC **A03**/MF **A01**

**AZO DYES**

Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Bensidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC **A02**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trypan Blue (72-57-1).
PB93-202273/REB 93-01 PC A03/MF A01

**B AND W CYCLONE FURNACE**
Babcock and Wilcox Cyclone Furnace Vitrification. Technology Demonstration Summary.
PB93-145621/REB 93-01 PC A02/MF A01

**BACILLUS SPHAERICUS**
Fate of 'Bacillus sphaericus' and 'Bacillus thuringiensis' Serovar 'Israelensis' in the Aquatic Environment.
PB93-121143/REB 93-01 PC A02/MF A01

Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC A02/MF A01

**BACILLUS THURINGIENS**
Fate of 'Bacillus sphaericus' and 'Bacillus thuringiensis' Serovar 'Israelensis' in the Aquatic Environment.
PB93-121143/REB 93-01 PC A02/MF A01

**BACILLUS THURINGIENSIS**
Bacillus thuringiensis var. kurstaki Affects a Beneficial Insect, the Cinnabar Moth (Lepidoptera: Arctidae).
PB93-199651/REB 93-01 PC A02/MF A01

**BACKFILLS**
Evaluation of Mitigation for Acid Aluminum Leachate from a Highway Fill in Garrett County, Maryland.
PB93-180321/REB 93-01 PC A04/MF A01

**BACTERIA**
Effect of Aerosolization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC A02/MF A01

Cell Density and Non-Equilibrium Sorption Effects on Bacterial Dispersal in Groundwater Microcosms.
PB93-141505/REB 93-01 PC A03/MF A01

Isolation and Purification of Bacterial DNA from Soil.
PB93-149276/REB 93-01 PC A04/MF A01

Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.
PB93-212645/REB 93-04 PC A02/MF A01

Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.
PB93-222370/REB 93-04 PC A02/MF A01

Recovery of DNA from Soils and Sediments.
PB93-222834/REB 93-04 PC A02/MF A01

Sequence Similarities in the Genes Encoding Polychlorinated Biphenyl Degradation by 'Pseudomonas' Strain LB400 and 'Alcaligenes eutrophus' H850.
PB93-229201/REB 93-04 PC A01/MF A01

Cloning and Expression in 'Escherichia coli' of Pseudomonas Strain LB400 Genes Encoding Polychlorinated Biphenyl Degradation.
PB93-229227/REB 93-04 PC A02/MF A01

Aromatic Hydrocarbon Degradation: A Molecular Approach.
PB93-229433/REB 93-04 PC A03/MF A01

Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
PB93-229474/REB 93-04 PC A02/MF A01

Genetic and Cell-Free Studies of PCB Biodegradation in 'Pseudomonas putida' LB400.
PB93-229748/REB 93-04 PC A03/MF A01

Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC A03/MF A01

**BACTERIA DNA**
Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
PB93-204972/REB 93-04 PC A03/MF A01

**BACTERIAL ADHESION**
Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
PB93-205011/REB 93-04 PC A02/MF A01

**BACTERIAL DNA**
Repeated Sequences Including RS1100 'Pseudomonas cepacia' AC1100 Function as IS Elements.
PB93-205177/REB 93-04 PC A02/MF A01

**BACTERIAL GENES**
Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC A03/MF A01

Genetic Analysis of the aggA Locus Involved in Agglutination and Adherence of 'Pseudomonas putida', a Beneficial Fluorescent Pseudomonad.
PB93-205029/REB 93-04 PC A03/MF A01

**BACTERIAL SPORES**
Fate of 'Bacillus sphaericus' and 'Bacillus thuringiensis' Serovar 'Israelensis' in the Aquatic Environment.
PB93-121143/REB 93-01 PC A02/MF A01

Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC A02/MF A01

**BACTERIOLOGICAL TECHNIQUES**
Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC A01/MF A01

**BACTERIOPHAGES**
Application of DNA Probes to Analysis of Bacteriophage Distribution Patterns in the Environment.
PB93-121200/REB 93-01 PC A02/MF A01

Ecologically Acceptable Strategy for the Use of Genetically Engineered Baculovirus Pesticides.
PB93-149243/REB 93-01 PC A02/MF A01

**BACTERIOPLANKTON**
Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
PB93-121184/REB 93-01 PC A02/MF A01

**BACULOVIRIDAE**
Genetically Engineered Baculoviruses as Agents for Pest Control.
PB93-150175/REB 93-01 PC A03/MF A01

Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
PB93-168946/REB 93-01 PC A02

Rapid Efficient Production of Baculovirus Expression Vectors.
PB93-226898/REB 93-04 PC A03/MF A01

**BARRIERS**
Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC A02/MF A01

**BASS**
Chesapeake Bay Striped Bass Fishery Management Plan: Chesapeake Bay Program. Annual Progress Report (April 1992).
PB93-114585/REB 93-01 PC A03/MF A01

**BAY SCALLOPS**
Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC A02/MF A01

**BEACHES**
Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC A02/MF A01

Bioremediation as a Technology: Experiences with the Exxon Valdez Oil Spill.
PB93-121226/REB 93-01 PC A03/MF A01

**BEAN PLANTS**
Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
PB93-205037/REB 93-04 PC A02/MF A01

Influence of Root Colonizing Bacteria on the Defense Responses of Bean.
PB93-205045/REB 93-04 PC A03/MF A01

**BEAR BROOK**
MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC A02/MF A01

Mineral Dissolution Rates: A Comparison of Laboratory and Field Studies.
PB93-141182/REB 93-01 PC A01/MF A01

**BEHAVIOR**
Behavioral Development Following Daily Episodes of Mother-Infant Separation in the Rat.
PB93-141406/REB 93-01 PC A01/MF A01

International Validation of a Neurobehavioral Screening Battery: The IPCS/WHO Collaborative Study.
PB93-175594/REB 93-01 PC A02

**BELTSVILLE AGRICULTURAL RESEARCH CENTER**
Pollution Prevention Opportunity Assessment: USDA Beltsville Agricultural Research Center.
PB93-146843/REB 93-01 PC A04/MF A01

**BENOMYL**
Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. aeschynomene' Transformants with Benomyl Resistance.
PB93-212629/REB 93-04 PC A02/MF A01

**BENTHIC SAMPLING LOCATIONS**
Database of Benthic Sampling Locations in Tampa Bay.
PB93-191211/REB 93-01 PC A05/MF A01

**BENTHOS**
Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC A03/MF A01

Proceedings of the 1989 Midwest Pollution Control Biologists Meeting. Held in Chicago, Illinois on February 14-17, 1989.
PB93-143691/REB 93-01 PC A06/MF A02

Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173696/REB 93-01 PC A02/MF A01

Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC A03/MF A01

Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC A03/MF A01

Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC A03/MF A01

Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC A01/MF A01

**BENZ (C)ACRIDINE**
Evaluation of the Potential Carcinogenicity of Benz(c)acridine (225-51-4).
PB93-184927/REB 93-01 PC A03/MF A01

**BENZANTHRACENE/DIMETHYL**
Evaluation of the Potential Carcinogenicity of 7,12-Dimethylbenz(a)anthracene (57-97-6).
PB93-185346/REB 93-01 PC A03/MF A01

**BENZANTHRACENES**
Evaluation of the Potential Carcinogenicity of Benz(a)anthracene (00056-55-3).
PB93-184935/REB 93-01 PC A03/MF A01

**BENZENE**
Age-Related Changes in Disposition and Metabolism of Benzene in Male C57BL/6N Mice.
PB93-107191/REB 93-01 PC A02/MF A01

Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC A02/MF A01

Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC A02/MF A01

Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC A02/MF A01

Evaluation of the Potential Carcinogenicity of Benzene (71-43-2).
PB93-184943/REB 93-01 PC A03/MF A01

Benzene Equipment Leak Inspection Manual.
PB93-199123/REB 93-01 PC A06/MF A02

**BENZENE/DICHLORO**
Evaluation of Para-Dichlorobenzene Emissions from Solid Moth Repellant as a Source of Indoor Air Pollution.
PB93-107035/REB 93-01 PC A02/MF A01

**BENZENE HEXACHLORIDE**
Evaluation of the Potential Carcinogenicity of Gamma-Hexachlorocyclohexane (Lindane) (58-89-9).
PB93-185064/REB 93-01 PC A03/MF A01

**BENZENE/HEXACHLORO**
Ambient Aquatic Life Water Quality Criteria for Hexachlorobenzene.
PB93-202760/REB 93-01 PC A03/MF A01

**BENZIDINE**
Evaluation of the Potential Carcinogenicity of Benzidine and Its Salt (92-87-5).
PB93-184976/REB 93-01 PC A03/MF A01

**BENZIDINE/DICHLORO**
Evaluation of the Potential Carcinogenicity of 3,3'-Dichlorobenzidine (91-94-1).
PB93-194256/REB 93-01 PC A03/MF A01

**BENZIDINES**
Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Benzidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC A02/MF A01

Evaluation of the Potential Carcinogenicity of 3,3'-Dichlorobenzidine (91-94-1).
PB93-194256/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 3,3'-Dimethoxybenzidine (119-90-4).
PB93-194314/REB 93-01 PC A03/MF A01

**BENZO (A)PYRENE**
Evaluation of the Potential Carcinogenicity of Benzo(a)Pyrene (50-32-8).
PB93-185007/REB 93-01 PC A03/MF A01

Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC A02/MF A01

**BENZO (B)FLUORANTHENE**
DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC A02/MF A01

**BENZOFURANS**
Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.
PB93-229193/REB 93-04 PC A02/MF A01

**BENZOIC ACID**
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC A03/MF A01

**BENZOIC ACIDS**
Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC A02/MF A01

**BENZOTRICHLORIDE**
Evaluation of the Potential Carcinogenicity of Benzotrichloride (97-07-7).
PB93-185015/REB 93-01 PC A03/MF A01

**BENZYL CHLORIDE**
Evaluation of the Potential Carcinogenicity of Benzyl Chloride (100-44-7).
PB93-185023/REB 93-01 PC **A03**/MF **A01**

**BERYLLIUM**
Removal of Beryllium from Drinking Water by Chemical Coagulation and Lime Softening.
PB93-150134/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
PB93-185031/REB 93-01 PC **A03**/MF **A01**

Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC **A02**/MF **A01**

Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.
PB93-228492/REB 93-04 PC **A02**/MF **A01**

**BERYLLIUM CHLORIDES**
Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
PB93-185031/REB 93-01 PC **A03**/MF **A01**

**BERYLLIUM FLUORIDES**
Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
PB93-185031/REB 93-01 PC **A03**/MF **A01**

**BERYLLIUM NITRATES**
Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
PB93-185031/REB 93-01 PC **A03**/MF **A01**

**BEST AVAILABLE TECHNOLOGY**
Technologies and Costs for Control of Disinfection By-Products: Executive Summary.
PB93-134922/REB 93-01 PC **A03**/MF **A01**

**BEST PROFESSIONAL JUDGEMENT**
Process for Regional Assessment of Wetland Risk.
PB93-146793/REB 93-01 PC **A09**/MF **A02**

**BEST TECHNOLOGY**
Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC **A15**/MF **A03**

**BETA ADRENERGIC RECEPTORS**
Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-228864/REB 93-04 PC **A02**/MF **A01**

**BETA-NAPHTHYLAMINE**
Evaluation of the Potential Carcinogenicity of 2-Naphthylamine (91-59-8).
PB93-196392/REB 93-01 PC **A03**/MF **A01**

**BIBLIOGRAPHIES**
Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.
DE93014387/REB 93-04 PC **A03**/MF **A01**

Air pollutants in urban areas. A bibliography 1985-1991.
DE93769990/REB 93-01 PC **A04**/MF **A01**

Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC **A03**/MF **A01**

Municipal Water Pollution Prevention Bibliography: 1992, the Year of Clean Water. Celebration and Commitment.
PB93-141083/REB 93-01 PC **A03**/MF **A01**

OSWER Source Book. Volume 1. Training and Technology Transfer Resources, 1992-1993.
PB93-143980/REB 93-01 PC **A10**/MF **A03**

OSWER Source Book. Volume 2. Training and Technology Transfer Resources, 1992-1993.
PB93-144129/REB 93-01 PC **A11**/MF **A03**

Pollution Prevention for the Kraft Pulp and Paper Industry.
PB93-145613/REB 93-01 PC **A04**/MF **A01**

Protection of Pome Fruits, March 1985-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149904/REB 93-01 PC **A13**/MF **A03**

Methylbromide and Its Alternatives as Fumigants, 1979-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149912/REB 93-01 PC **A09**/MF **A03**

Publications Office of Science and Technology: Catalog.
PB93-152577/REB 93-01 PC **A06**/MF **A02**

EPA Bibliography on Surface Contamination.
PB93-168904/REB 93-01 PC **A02**/MF **A01**

Urban Runoff Management Information/Education Products. Version 1.
PB93-190932/REB 93-01 PC **A09**/MF **A03**

Pesticide Safety and Training Materials Catalog (Catalogo de Materiales Educativos y Proteccion Sobre Pesticidas).
PB93-200814/REB 93-01 PC **A07**/MF **A02**

Drinking Water Training Resources Directory: A National Training Coalition Directory of Current Training Materials. First Edition.
PB93-202802/REB 93-01 PC **A07**/MF **A02**

National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Index, 1992.
PB93-206571/REB 93-04 PC **A99**/MF **A06**

National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Volume 6. Citations, 1992.
PB93-207652/REB 93-04 PC **A10**/MF **A03**

Opportunities and Challenges for Local Emergency Planning Committees: Bestseller in EPCRA.
PB93-234789/REB 93-04 PC **A02**/MF **A01**

EPA (Environmental Protection Agency) Publications Bibliography, Quarterly Abstract Bulletin.
PB93-904200/REB 93-01 Subscription

**BIO-PATH**
Pesticide Fact Sheet: 'Metarhizium anisopliae' Strain ESF1.
PB93-206787/REB 93-01 PC **A01**/MF **A01**

**BIOACCUMULATION**
Proceedings: Tiered Testing Issues for Freshwater and Marine Sediments. Held in Washington, DC. on September 16-18, 1992.
PB93-152619/REB 93-01 PC **A22**/MF **A04**

Ambient Aquatic Life Water Quality Criteria for Silver.
PB93-202604/REB 93-01 PC **A06**/MF **A02**

Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03**/MF **A01**

Guidelines for Deriving Ambient Aquatic Life Advisory Concentrations.
PB93-236057/REB 93-04 PC **A03**/MF **A01**

**BIOASSAY**
Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC **A02**/MF **A01**

Physical and Chemical Parameters of Sediment Extraction and Fractionation That Influence Toxicity, as Evaluated by Microtox (Trade Name).
PB93-185882/REB 93-01 PC **A03**/MF **A01**

Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02**/MF **A01**

Characterization of Reference Artemia III for Marine Toxicological Studies.
PB93-212595/REB 93-04 PC **A03**/MF **A01**

Bioresponse Testing of Sources of Indoor Air Contaminants.
PB93-222032/REB 93-04 PC **A02**/MF **A01**

Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1. Fish Sampling and Analysis.
PB93-237899/REB 93-04 PC **A16**/MF **A03**

**BIOCHEMISTRY**
Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC **A01**/MF **A01**

Molecular Basis of Biodegradation of Chloroaromatic Compounds.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 2. Mechanisms of Toxic Actions.
PB93-222669/REB 93-04 PC **A03**/MF **A01**

Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02**/MF **A01**

**BIOCONVERSION**
Transformation of Carbon Tetrachloride in the Presence of Sulfide, Biotite, and Vermiculite.
PB93-135713/REB 93-01 PC **A02**/MF **A01**

**BIODEGRADATION**
Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC **A03**/MF **A01**

Nutrient Movement through Beach Media: Problems and Field Results Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191344/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Bioremediation of a Contaminated Soil with Phytotoxicity Tests.
PB93-191625/REB 93-01 PC **A03**/MF **A01**

Oxidative Degradation of Phenanthrene by the Ligninolytic Fungus 'Phanerochaete chrysosposium'.
PB93-199511/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Chlorinated Organic Compounds by 'Phanerochaete chrysosporium', a Wood-Rotting Fungus.
PB93-204147/REB 93-01 PC **A03**/MF **A01**

Molecular Basis of Biodegradation of Chloroaromatic Compounds.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC **A03**/MF **A01**

Bioremediation of Chlorinated Solvents in the Vadose Zone.
PB93-221935/REB 93-04 PC **A02**/MF **A01**

Microcosm and In situ Field Studies of Enhanced Biotransformation of Trichloroethylene by Phenol-Utilizing Microorganisms.
PB93-222867/REB 93-04 PC **A02**/MF **A01**

Sequence Similarities in the Genes Encoding Polychlorinated Biphenyl Degradation by 'Pseudomonas' Strain LB400 and 'Alcaligenes eutrophus' H850.
PB93-229201/REB 93-04 PC **A01**/MF **A01**

Cloning and Expression in 'Escherichia coli' of Pseudomonas Strain LB400 Genes Encoding Polychlorinated Biphenyl Degradation.
PB93-229227/REB 93-04 PC **A02**/MF **A01**

Aromatic Hydrocarbon Degradation: A Molecular Approach.
PB93-229433/REB 93-04 PC **A03**/MF **A01**

Biotransformation and Mineralization of Alkylbenzenes under Denitrifying Conditions.
PB93-229623/REB 93-04 PC **A03**/MF **A01**

Genetic and Cell-Free Studies of PCB Biodegradation in 'Pseudomonas putida' LB400.
PB93-229748/REB 93-04 PC **A03**/MF **A01**

Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC **A03**/MF **A01**

**BIODETERIORATION**
Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC **A02**/MF **A01**

Use of Inoculation in Bioremediation.
PB93-121150/REB 93-01 PC **A03**/MF **A01**

Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02**/MF **A01**

UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

Inhibition of Alkylbenzene Biodegradation under Denitrifying Conditions by Using Acetylene Block Technique.
PB93-121242/REB 93-01 PC **A02**/MF **A01**

Bioremediation.
PB93-149193/REB 93-01 PC **A03**/MF **A01**

Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

Selection of a 'Pseudomonas cepacia' Strain Constitutive for the Degradation of Trichloroethylene.
PB93-169027/REB 93-01 PC **A02**/MF **A01**

Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium 'Nitrosomonas europaea'.
PB93-169076/REB 93-01 PC **A02**/MF **A01**

Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC **A03**/MF **A01**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191351/REB 93-01 PC **A02**/MF **A01**

Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC **A02**/MF **A01**

Biodegradation of 2,4,5-Trichlorophenoxyacetic Acid in Liquid Culture and in Soil by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191542/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191559/REB 93-01 PC **A02**/MF **A01**

Effects of Culture Parameters on DDT (1,1,1-Trichloro-2,2-BIS(4-Chlorophenyl)Ethane) Biodegradation by 'Phanerochaete chrysosporium'.
PB93-191567/REB 93-01 PC **A03**/MF **A01**

Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
PB93-191575/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium': Involvement of the Lignin Degrading System.
PB93-191583/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Polycyclic Aromatic Hydrocarbons by 'Phanerochaete chrysosporium'.
PB93-191591/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Crystal Violet by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191609/REB 93-01 PC **A02**/MF **A01**

Biodegradation of DDT (1,1,1-Trichloro-2,2-Bis(4-Chlorophenyl)Ethane) by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191617/REB 93-01 PC **A02**/MF **A01**

Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
PB93-194223/REB 93-01 PC **A03**/MF **A01**

Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC **A02**/MF **A01**

Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC **A02**/MF **A01**

Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC A03/MF A01

Mineralization of Recalcitrant Environmental Pollutants by a White Rot Fungus. Proceedings of the National Conference on Hazardous Wastes and Hazardous Materials. Held in Washington, DC. on March 16-18, 1987.
PB93-204154/REB 93-01 PC A02/MF A01

Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC A03/MF A01

Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC A02/MF A01

Anaerobic Dehalogenation and Its Environmental Implications. Abstracts of 1992 American Society for Microbiology Conference. Held in Athens, Georgia on August 30-September 4, 1992.
PB93-217792/REB 93-04 PC A04/MF A01

Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC A02/MF A01

Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
PB93-222909/REB 93-04 PC A03/MF A01

Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC A03/MF A01

Weatherability of Enhanced-Degradable Plastics.
PB93-229789/REB 93-04 PC A14/MF A03

Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC A02/MF A01

Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC A02/MF A01

**BIODIVERSITY**

Biodiversity and Management of Natural Resources: The Issues.
PB93-106912/REB 93-01 PC A01/MF A01

Who Will Speak for Biodiversity.
PB93-135762/REB 93-01 PC A01/MF A01

**BIOINDICATORS**

Proceedings and Summary of the Workshop on Finfish as Indicators of Toxic Contamination. Held in Airlie, Virginia on July 27-28, 1986.
PB93-208320/REB 93-04 PC A06/MF A02

Characterization of Reference Artemia III for Marine Toxicological Studies.
PB93-212595/REB 93-04 PC A03/MF A01

**BIOLOGICAL ACCUMULATION**

Field and Laboratory Studies of Chemical Contamination and Environmentally Related Diseases in Fish and Molluscs of New England.
PB93-199436/REB 93-01 PC A02/MF A01

Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.
PB93-212769/REB 93-04 PC A03/MF A01

**BIOLOGICAL COMMUNITIES**

Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-129080/REB 93-01 PC A12/MF A03

Taxonomic Level Sufficient for Assessing a Moderate Impact on Macrobenthic Communities in Puget Sound, Washington, USA.
PB93-185858/REB 93-01 PC A02/MF A01

**BIOLOGICAL CRITERIA**

Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC A07/MF A02

**BIOLOGICAL DOSEMETERS**

Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC A03/MF A01

**BIOLOGICAL EFFECTS**

Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC A12/MF A03

Habitat Quality Assessment of Two Wetland Treatment Systems in Mississippi: A Pilot Study.
PB93-135614/REB 93-01 PC A06/MF A02

Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC A02/MF A01

Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC A03/MF A01

Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC A03/MF A01

Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC A07/MF A02

Habitat Quality Assessment of Two Wetland Treatment Systems in the Arid West: A Pilot Study.
PB93-222305/REB 93-04 PC A06/MF A02

EPA's Reassessment of Dioxin Risk: Directed Health Research.
PB93-226922/REB 93-04 PC A02/MF A01

Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC A02/MF A01

Health Effects Assessment Summary Tables.
PB93-921100/REB 93-01 Standing Order

**BIOLOGICAL INDICATORS**

Bladder-wrack (Fucus vesiculosus L) as an indicator for radionuclides in the environment of Swedish nuclear power plants.
DE93603681/REB 93-01 PC A03/MF A01

Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC A04/MF A01

Environmental Monitoring and Assessment Program: Gulf Coast Salt Marsh Pilot Study.
PB93-122398/REB 93-01 PC A03/MF A01

Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC A07/MF A02

Proceedings of the Midwest Pollution Control Biologists Meeting, 1991. Environmental Indicators: Measurement and Assessment Endpoints. Held in Lincolnwood, Illinois on March 19-22, 1991.
PB93-145712/REB 93-01 PC A06/MF A02

Development of Index of Biotic Integrity Expectations for the Ecoregions of Indiana. I. Central Corn Belt Plain.
PB93-149383/REB 93-01 PC A06/MF A02

Collection and Chemical Analysis of Lichens for Biomonitoring.
PB93-149862/REB 93-01 PC A03/MF A01

Sampling and Assessment Issues in Using Fish as Indicators of Ecological Condition in Lakes: A Workshop Report. (3rd Draft Report).
PB93-186278/REB 93-01 PC A03/MF A01

Comparing Sampling Designs for Monitoring Ecological Status and Trends: Impact of Temporal Patterns (Chapter 3).
PB93-222289/REB 93-04 PC A03/MF A01

**BIOLOGICAL INSECT CONTROL**

Development of Genetically Enhanced Baculovirus Pesticides (Chapter 5).
PB93-149235/REB 93-01 PC A02/MF A01

Genetically Engineered Baculoviruses as Agents for Pest Control.
PB93-150175/REB 93-01 PC A03/MF A01

**BIOLOGICAL MARKERS**

Biologic Markers in Reproductive Toxicology.
PB93-100960/REB 93-01 PC A18/MF A04

Biologic Markers of Air-Pollution Stress and Damage in Forests.
PB93-110187/REB 93-01 PC A17/MF A03

Physiological and Nonspecific Biomarkers.
PB93-119632/REB 93-01 PC A05/MF A01

Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC A02/MF A01

Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC A02/MF A01

EPA Priorities for Biologic Markers Research in Environmental Health.
PB93-181113/REB 93-01 PC A02/MF A01

NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC A02/MF A01

DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC A03/MF A01

DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC A02/MF A01

**BIOLOGICAL MONITORING**

Region 10 In-Stream Biological Monitoring Handbook: For Wadable Streams in the Pacific Northwest.
PB93-226611/REB 93-04 PC A05/MF A01

**BIOLOGICAL PEST CONTROL**

Interim Protocol for Testing the Effects of Microbial Pathogens on Subterranean Termites ('Isoptera: rhinotermitidae').
PB93-124634/REB 93-01 PC A03/MF A01

Performance of an Aquatic Multispecies System in Evaluating the Effects of a Model Microbial Pest Control Agent on Nontarget Organisms.
PB93-131803/REB 93-01 PC A03/MF A01

Ecologically Acceptable Strategy for the Use of Genetically Engineered Baculovirus Pesticides.
PB93-149243/REB 93-01 PC A02/MF A01

Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC A02/MF A01

Competition Potentials of Environmentally Applied Bacteria with Human Fecal Microbiota.
PB93-181147/REB 93-01 PC A02/MF A01

Bacillus thuringiensis var. kurstaki Affects a Beneficial Insect, the Cinnabar Moth (Lepidoptera: Arctidae).
PB93-199651/REB 93-01 PC A02/MF A01

**BIOLOGICAL PRODUCTIVITY**

What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.
PB93-211985/REB 93-04 PC A21/MF A04

**BIOLOGICAL RADIATION EFFECTS**

Radiation- and Chemically-Induced Chromosome Aberrations in Mouse Oocytes: A Comparison with Effects in Males.
PB93-194462/REB 93-01 PC A02/MF A01

Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
PB93-212454/REB 93-04 PC A03/MF A01

Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC A07/MF A02

**BIOLOGICAL TRANSPORT**

Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC A02/MF A01

**BIOLOGICAL TREATMENT**

Use of Inoculation in Bioremediation.
PB93-121150/REB 93-01 PC A03/MF A01

Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC A02/MF A01

Bioremediation as a Technology: Experiences with the Exxon Valdez Oil Spill.
PB93-121226/REB 93-01 PC A03/MF A01

Bioremediation: An Information Update on Applying Bioremediation to Site Cleanup.
PB93-126175/REB 93-01 PC A03/MF A01

Applied Geologic, Microbiological, and Engineering Constraints of In-situ BTEX Bioremediation.
PB93-141513/REB 93-01 PC A03/MF A01

In-situ Bioremediation of Ground Water.
PB93-146850/REB 93-01 PC A01/MF A01

Bioremediation.
PB93-149193/REB 93-01 PC A03/MF A01

Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC A03/MF A01

Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
PB93-194223/REB 93-01 PC A03/MF A01

In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC A03/MF A01

Technology Evaluation Report: Pilot-Scale Demonstration of a Slurry-Phase Biological Reactor for Creosote-Contaminated Soil. Volume 1.
PB93-205532/REB 93-04 PC A09/MF A02

Understanding Bioremediation: A Guidebook for Citizens.
PB93-205870/REB 93-04 PC A03/MF A01

Bioremediation in the Field: Number 1, November 1990.
PB93-206340/REB 93-04 PC A03/MF A01

Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC A05/MF A01

Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
PB93-216067/REB 93-04 PC A07/MF A02

Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.
PB93-221950/REB 93-04 PC A01/MF A01

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC A10/MF A03

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC A15/MF A03

Recent Developments in Cleanup Technologies.
PB93-236289/REB 93-04 PC A03/MF A01

**BIOLOGICALLY BASED MODELS**

Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC A02/MF A01

**BIOMARKERS**
EPA Priorities for Biologic Markers Research in Environmental Health.
PB93-181113/REB 93-01 PC **A02**/MF **A01**

**BIOMASS**
Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC **A03**/MF **A01**

Uncertainties in Countrywide Forest Biomass Estimates.
PB93-149250/REB 93-01 PC **A03**/MF **A01**

Biomass Combustion in Gas-Turbine-Based Systems.
PB93-185742/REB 93-01 PC **A02**/MF **A01**

Forest Sector Carbon Budget of the United States: Carbon Pools and Flux under Alternative Policy Options.
PB93-196996/REB 93-01 PC **A10**/MF **A03**

Evaluation of Carbon Black Slurries as Clean Burning Fuels.
PB93-222057/REB 93-04 PC **A03**/MF **A01**

Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC **A02**/MF **A01**

Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02**/MF **A01**

Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.
PB93-229144/REB 93-04 PC **A03**/MF **A01**

**BIOREACTORS**
On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC **A09**/MF **A02**

Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02**/MF **A01**

**BIOREMEDIATION**
Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC **A03**/MF **A01**

Nutrient Movement through Beach Media: Problems and Field Results Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191344/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Bioremediation of a Contaminated Soil with Phytotoxicity Tests.
PB93-191625/REB 93-01 PC **A03**/MF **A01**

Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02**/MF **A01**

In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC **A12**/MF **A03**

Retrospective Performance Evaluation on In situ Bioremediation: Site Characterization.
PB93-221919/REB 93-04 PC **A03**/MF **A01**

Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC **A03**/MF **A01**

In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC **A03**/MF **A01**

**BIORESPONSE**
Bioresponse Testing of Sources of Indoor Air Contaminants.
PB93-222032/REB 93-04 PC **A02**/MF **A01**

**BIOSPHERE**
Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC **A03**/MF **A01**

**BIOTECHNOLOGY**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 2.
PB93-174779/REB 93-01 PC **A25**/MF **A06**

**BIOVENTING**
Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215655/REB 93-04 PC **A04**/MF **A01**

**BIPHENYL DIOXYGENASE**
Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
PB93-222909/REB 93-04 PC **A03**/MF **A01**

**BIRDS**
Glossary for Avian Conservation Biology.
PB93-106656/REB 93-01 PC **A03**/MF **A01**

EMAP and Other Tools for Measuring Biodiversity, Habitat Conditions, and Environmental Trends.
PB93-106748/REB 93-01 PC **A03**/MF **A01**

Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC **A02**/MF **A01**

Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC **A03**/MF **A01**

Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC **A03**/MF **A01**

Irrigated Wetlands of the Colorado Plateau: Information Synthesis and Habitat Evaluation Method.
PB93-186260/REB 93-01 PC **A05**/MF **A02**

Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

Ecotoxicological Principles for Avian Field Studies Using Radiotelemetry or Remote Sensing.
PB93-212793/REB 93-04 PC **A02**/MF **A01**

Adding a Landscape Ecology Perspective to Conservation and Management Planning.
PB93-234516/REB 93-04 PC **A03**/MF **A01**

**BIS (2-CHLOROETHYL)ETHER**
Evaluation of the Potential Carcinogenicity of Bis(2-Chloroethyl)Ether (111-44-4).
PB93-185072/REB 93-01 PC **A03**/MF **A01**

**BIS (CHLOROMETHYL)ETHER**
Evaluation of the Potential Carcinogenicity of Bis(Chloromethyl)Ether (542-88-1).
PB93-185080/REB 93-01 PC **A03**/MF **A01**

**BITERTANOL**
Bitertanol, a Triazole Fungicide, Increases Operant Responding but Not Motor Activity.
PB93-236370/REB 93-04 PC **A02**/MF **A01**

**BLACK CREEK WATERSHED PROJECT**
Use of the Black Creek Database to Analyze Techniques for Estimating Nonpoint Source Loadings from Small Watersheds (May 1988).
PB93-128072/REB 93-01 PC **A03**/MF **A01**

**BLEOMYCINS**
Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03**/MF **A01**

**BLIS SYSTEM**
User's Manual for the BLIS BBS.
PB93-122422/REB 93-01 PC **A07**/MF **A02**

**BLOOD CHEMICAL ANALYSIS**
Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC **A03**/MF **A01**

Effects of Chemical Contaminants on Blood Chemistry of Teleost Fish: A Bibliography and Synopsis of Selected Effects.
PB93-168961/REB 93-01 PC **A03**/MF **A01**

Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02**/MF **A01**

**BODY BURDEN**
Recent Advances in Measuring Exhaled Breath and Estimating Exposure and Body Burden for Volatile Organic Compounds (VOCS).
PB93-212314/REB 93-04 PC **A03**/MF **A01**

**BODY TEMPERATURE**
Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC **A03**/MF **A01**

Relationship between Serum Cholinesterase Activity and the Change in Body Temperature and Motor Activity in the Rat: A Dose-Response Study of Diisopropyl Fluorophosphate.
PB93-175644/REB 93-01 PC **A02**/MF **A01**

Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC **A03**/MF **A01**

Acute and Delayed Effects of Diisopropyl Fluorophosphate on Body Temperature, Heart Rate and Motor Activity in the Awake, Unrestrained Rat.
PB93-228971/REB 93-04 PC **A03**/MF **A01**

**BODY TEMPERATURE REGULATION**
Twenty-Four Hour Rhythms of Selected Ambient Temperature in Rat and Hamster.
PB93-175727/REB 93-01 PC **A02**/MF **A01**

**BOILERS**
Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC **A03**/MF **A01**

Evaluation of Nitrogen Oxide Emissions Data from TVA Coal-Fired Boilers.
PB93-138865/REB 93-01 PC **A06**/MF **A02**

Evaluation and Costing of NOx Controls for Existing Utility Boilers in the NESCAUM Region.
PB93-142016/REB 93-01 PC **A18**/MF **A04**

Industrial Boiler Furnace Sorbent Injection Algorithm Development.
PB93-222438/REB 93-04 PC **A01**/MF **A01**

Industrial Boiler Low NOx Combustion Retrofit Cost Algorithm Development. Project Summary.
PB93-222576/REB 93-04 PC **A01**/MF **A01**

Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.
PB93-228468/REB 93-04 PC **A02**/MF **A01**

Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC **A03**/MF **A01**

**BOREHOLES**
Development and Application of Borehole Flowmeters for Environmental Assessment.
PB93-185817/REB 93-01 PC **A03**/MF **A01**

**BOUNDARY LAYER FLOW**
Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03**/MF **A01**

**BRAIN**
Repeated Maternal Separation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC **A03**/MF **A01**

**BRAINSTEM AUDITORY EVOKED POTENTIALS**
Summary of Workshop III: Evoked Potentials.
PB93-175610/REB 93-01 PC **A01**/MF **A01**

**BRANT (NEW YORK)**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Wide Beach Section of Brant, New York).
PB92-963628/REB 93-01 PC **A02**/MF **A01**

**BREATH TESTS**
Recent Advances in Measuring Exhaled Breath and Estimating Exposure and Body Burden for Volatile Organic Compounds (VOCS).
PB93-212314/REB 93-04 PC **A03**/MF **A01**

**BROMOHYDROQUINONE**
Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02**/MF **A01**

**BRONCHI**
Mechanisms of Aldehyde-Induced Bronchial Reactivity: Role of Airway Epithelium.
PB93-179927/REB 93-01 PC **A04**/MF **A01**

**BROWN CELLS**
Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03**/MF **A01**

Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02**/MF **A01**

**BUDGETING**
State and Local Funding of Nonpoint Source Control Programs.
PB93-228146/REB 93-04 PC **A09**/MF **A02**

**BUFFERS**
Electrophoresis Gel Buffer Recirculator for under Twenty Dollars.
PB93-181014/REB 93-01 PC **A01**/MF **A01**

Role and Function of Forest Buffers in the Chesapeake Bay Basin for Nonpoint Source Management.
PB93-207405/REB 93-04 PC **A03**/MF **A01**

**BUFFING**
Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
PB93-227551/REB 93-04 PC **A06**/MF **A02**

**BUILDING CODES**
Recommended Performance Standard of the Florida Radon Research Program.
PB93-122281/REB 93-01 PC **A03**/MF **A01**

**BUILDING MATERIALS**
Method for the Determination of Asbestos in Bulk Building Materials. (Test Method).
PB93-218576/REB 93-04 PC **A05**/MF **A02**

**BUILDINGS**
Survey of Protocols for Conducting Indoor Air Quality Investigations in Large Buildings.
PB93-119865/REB 93-01 PC **A03**/MF **A01**

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119873/REB 93-01 PC **A02**/MF **A01**

Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119881/REB 93-01 PC **A03**/MF **A01**

Evaluating Materials for Healthy Buildings.
PB93-131621/REB 93-01 PC **A03**/MF **A01**

Analysis of IAQ Control Options and the Effects of Sources and Sinks.
PB93-131647/REB 93-01 PC **A02**/MF **A01**

U.S. EPA's QA/QC Program for Waste Management Facilities. Proceedings of the GRI Seminar (6th), MQC/MQA and CQC/CQA of Geosynthetics. Held in Philadelphia, Pennsylvania on December 10-11, 1992.
PB93-149219/REB 93-01 PC **A02**/MF **A01**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 1.
PB93-174803/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 2.
PB93-174811/REB 93-01 PC **A99**/MF **A06**

Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC **A03**/MF **A01**

Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC **A03**/MF **A01**

Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC **A02**/MF **A01**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC **A02**/MF **A01**

Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
PB93-222024/REB 93-04 PC **A02**/MF **A01**

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-229185/REB 93-04 PC **A02**/MF **A01**

Wind-Tunnel Measurements of Flow Fields in the Vicinity of Buildings.
PB93-236594/REB 93-04 PC **A03**/MF **A01**

Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC **A02**/MF **A01**

Model EPA Curriculum for Training Building Inspectors. Student Notebook. Course 2 (Training Manual).
PB93-780831/REB 93-01 PC **A17**

Model EPA Curriculum for Training Building Inspectors. Instructor's Course Syllabus. Course 2 (Training Manual).
PB93-780849/REB 93-01 PC **A07**

Model EPA Curriculum for Training Management Planners. Student Notebook. Course 3 (Training Manual).
PB93-780880/REB 93-01 PC **A07**

Model EPA Curriculum for Training Management Planners. Instructor's Course Syllabus. Course 3 (Training Manual).
PB93-780898/REB 93-01 PC **A04**

**BULLETIN BOARD SYSTEM**

User's Manual for the BLIS BBS.
PB93-122422/REB 93-01 PC **A07**/MF **A02**

**BULLITT COUNTY (KENTUCKY)**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Valley of the Drums, Bullitt County, Kentucky).
PB92-963618/REB 93-01 PC **A02**/MF **A01**

**BURLINGTON COUNTY (NEW JERSEY)**

Superfund Record of Decision (EPA Region 2): Cosden Chemical Coatings, City of Beverly, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963818/REB 93-04 PC **A04**/MF **A01**

**BUS ACCIDENTS**

National Transportation Safety Board Highway Accident Report: Charter Bus Loss of Control, Overturn, and Fire, Vernon, New Jersey, July 26, 1992.
PB93-916202/REB 93-04 PC **A05**/MF **A01**

**BUSES (VEHICLES)**

Development of Conversion Factors for Heavy-Duty Bus Engines G/BHP-HR to G/Mile.
PB93-232932/REB 93-04 PC **A03**/MF **A01**

**BUTANE/DIEPOXY**

Evaluation of the Potential Carcinogenicity of 1,2:3,4-Diepoxybutane (1464-53-5).
PB93-194260/REB 93-01 PC **A03**/MF **A01**

**BUTANES**

Evaluation of the Potential Carcinogenicity of 1,2:3,4-Diepoxybutane (1464-53-5).
PB93-194260/REB 93-01 PC **A03**/MF **A01**

**BYPRODUCTS**

Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC **A07**/MF **A02**

Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

Status Report on Development of Regulations for Disinfectants and Disinfection By-Products.
PB93-134914/REB 93-01 PC **A03**/MF **A01**

Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.
PB93-222214/REB 93-04 PC **A10**/MF **A03**

**C57BL INBRED MICE**

Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-228906/REB 93-04 PC **A01**/MF **A01**

**CACODYLIC ACID**

Evaluation of the Potential Carcinogenicity of Cacodylic Acid (75-60-5).
PB93-184851/REB 93-01 PC **A03**/MF **A01**

**CADMIUM**

Evaluation of the Potential Carcinogenicity of Cadmium (7740-43-9), Cadium Acetate (543-90-8), Cadmium Bromide (7789-42-6), Cadmium Chloride (10108-64-2).
PB93-185106/REB 93-01 PC **A03**/MF **A01**

Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02**/MF **A01**

Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03**/MF **A01**

**CADMIUM ACETATE**

Evaluation of the Potential Carcinogenicity of Cadmium (7740-43-9), Cadium Acetate (543-90-8), Cadmium Bromide (7789-42-6), Cadmium Chloride (10108-64-2).
PB93-185106/REB 93-01 PC **A03**/MF **A01**

**CADMIUM HALIDES**

Evaluation of the Potential Carcinogenicity of Cadmium (7740-43-9), Cadium Acetate (543-90-8), Cadmium Bromide (7789-42-6), Cadmium Chloride (10108-64-2).
PB93-185106/REB 93-01 PC **A03**/MF **A01**

**CALCIUM CARBONATES**

Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC **A02**/MF **A01**

**CALCIUM COMPOUNDS**

Reaction Kinetics of Ca-Based Sorbents with HC1.
PB93-131860/REB 93-01 PC **A03**/MF **AC1**

**CALIBRATION**

Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
PB93-115806/REB 93-01 PC **A05**/MF **A01**

**CALIFORNIA**

National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC **A12**/MF **A03**

**CANADA**

Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC **A03**/MF **A01**

Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC **A03**/MF **A01**

**CANDIDA ALBICANS**

Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
PB93-229607/REB 93-04 PC **A02**/MF **A01**

**CANDIDA TROPICALIS**

Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC **A02**/MF **A01**

Characterization of the Alkane-Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis': Identification of a New P450 Gene Family.
PB93-229268/REB 93-04 PC **A03**/MF **A01**

Isolation of the Alkane Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis'.
PB93-229284/REB 93-04 PC **A02**/MF **A01**

Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC **A03**/MF **A01**

Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
PB93-229441/REB 93-04 PC **A03**/MF **A01**

Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
PB93-229458/REB 93-04 PC **A03**/MF **A01**

**CAPACITY ASSURANCE PLANS**

Guidance for Capacity Assurance Planning. Capacity Planning Pursuant to CERCLA Section 104(c)(9).
PB93-209898/REB 93-04 PC **A09**/MF **A02**

**CAPE COD (MASSACHUSETTS)**

Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3. Hydraulic Conductivity Variability and Calculated Macrodispersivities.
PB93-107050/REB 93-01 PC **A03**/MF **A01**

**CAPSAICIN**

RED Facts: Capsaicin.
PB93-100311/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED): Capsaicin. (List D, Case 4018).
PB93-101434/REB 93-01 PC **A08**/MF **A02**

**CAPSID**

Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
PB93-168946/REB 93-01 PC **A02**

**CAPTAN**

Dermal Penetration of ((14)C)Captan in Young and Adult Rats.
PB93-107142/REB 93-01 PC **A03**/MF **A01**

**CARBACHOL**

Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC **A02**/MF **A01**

**CARBON**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC **A02**/MF **A01**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-214419/REB 93-04 PC **A05**/MF **A01**

Technological Considerations for Planning the Global Carbon Future.
PB93-222008/REB 93-04 PC **A03**/MF **A01**

Dissolved Organic Carbon and Sulfate Sorption by Spodosol Mineral Horizons.
PB93-229631/REB 93-04 PC **A02**/MF **A01**

Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.
PB93-234490/REB 93-04 PC **A03**/MF **A01**

**CARBON BLACK**

Evaluation of Carbon Black Slurries as Clean Burning Fuels.
PB93-222057/REB 93-04 PC **A03**/MF **A01**

**CARBON CYCLE**

Uncertainties in Countrywide Forest Biomass Estimates.
PB93-149250/REB 93-01 PC **A03**/MF **A01**

Equilibrium Analysis of Carbon Pools and Fluxes of Forest Biomes in the Former Soviet Union.
PB93-191484/REB 93-01 PC **A02**/MF **A01**

Proceedings of the International Workshop on Carbon Cycling in Boreal Forest and Sub-Arctic Ecosystems: Biospheric Responses and Feedbacks to Global Climate Change.
PB93-205540/REB 93-04 PC **A13**/MF **A03**

**CARBON DIOXIDE**

Air monitoring in the Arctic: 1980-90.
DE92563060/REB 93-01 PC **A03**/MF **A01**

Aatgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC **A14**/MF **A03**

Technology for Reduction of CO2 Emissions from the Transportation Sector.
PB93-106987/REB 93-01 PC **A02**/MF **A01**

Influence of Elevated CO2 and Temperature on Wetland Rice Root Dynamics.
PB93-141141/REB 93-01 PC **A02**/MF **A01**

Effects of CO2 and Temperature on Five Rice Cultivars.
PB93-141158/REB 93-01 PC **A02**/MF **A01**

Impacts of Climate Change on Rice Yield: A Comparison of Four Model Performances.
PB93-191526/REB 93-01 PC **A03**/MF **A01**

Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.
PB93-212637/REB 93-04 PC **A03**/MF **A01**

Technological Considerations for Planning the Global Carbon Future.
PB93-222008/REB 93-04 PC **A03**/MF **A01**

Effects of CO2 and Climate Change on Forest Trees.
PB93-222339/REB 93-04 PC **A07**/MF **A02**

Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.
PB93-229144/REB 93-04 PC **A03**/MF **A01**

Conservation and Sequestration of Carbon: The Potential of Forest and Agroforest Management Practices.
PB93-229656/REB 93-04 PC **A03**/MF **A01**

Forest Fires in Russia: Carbon Dioxide Emissions to the Atmosphere.
PB93-229664/REB 93-04 PC **A02**/MF **A01**

**CARBON DISULFIDE**

Carbon Disulfide Emission Control Options.
PB93-124667/REB 93-01 PC **A03**/MF **A01**

**CARBON MONOXIDE**

Evaluation of CO Intersection Modeling Techniques Using a New York City Database.
PB93-105559/REB 93-01 PC **A10**/MF **A03**

Guidelines for Estimating and Applying Rule Effectiveness for Ozone CO State Implementation Plan Base Year Inventories.
PB93-131498/REB 93-01 PC **A05**/MF **A01**

Air Quality Criteria for Carbon Monoxide.
PB93-167492/REB 93-01 PC **A99**/MF **A06**

Carbon Monoxide Exposure of Subjects with Documented Cardiac Arrhythmias.
PB93-179943/REB 93-01 PC **A03**/MF **A01**

Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.
PB93-205102/REB 93-04 PC **A02**/MF **A01**

Guideline for Modeling Carbon Monoxide from Roadway Intersections.
PB93-210391/REB 93-04 PC **A04**/MF **A01**

Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02**/MF **A01**

Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone. Volume 2. Emission Inventory Requirements for Photochemical Air Quality Simulation Models (Revised).
PB93-234375/REB 93-04 PC **A11**/MF **A03**

Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
PB93-234508/REB 93-04 PC **A03**/MF **A01**

CALINE: California Line Source Model (for Microcomputers).
PB93-500254/REB 93-01 CP **D02**

**CARBON POOLS**

Equilibrium Analysis of Carbon Pools and Fluxes of Forest Biomes in the Former Soviet Union.
PB93-191484/REB 93-01 PC **A02**/MF **A01**

**CARBON SINKS**

Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.
PB93-229680/REB 93-04 PC **A03**/MF **A01**

**CARBON TETRACHLORIDE**

Transformation of Carbon Tetrachloride in the Presence of Sulfide, Biotite, and Vermiculite.
PB93-135713/REB 93-01 PC **A02**/MF **A01**

Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC **A03**/MF **A01**

Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02**/MF **A01**

Evaluation of the Potential Carcinogenicity of Carbon Tetrachloride (56-23-5).
PB93-185114/REB 93-01 PC **A03**/MF **A01**

**CARBOXYLIC ACIDS**

Determination of Carboxylic Acids by Ion-Exclusion Chromatography with Non-Suppressed Conductivity and Optical Detectors.
PB93-181212/REB 93-01 PC **A02**/MF **A01**

**CARCINOGENCITY**

Evaluation of the Potential Carcinogenicity of Thiourea (62-56-6).
PB93-201218/REB 93-01 PC **A03**/MF **A01**

**CARCINOGENESIS**

DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: A Field Test in Snuff Users.
PB93-141448/REB 93-01 PC **A03**/MF **A01**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC **A03**/MF **A01**

In vitro Mammalian Mutagenesis as a Model for Genetic Lesions in Human Cancer.
PB93-141471/REB 93-01 PC **A02**/MF **A01**

**CARCINOGENICITY**

Evaluation of the Potential Carcinogenicity of Aziridine (151-56-4).
PB93-184919/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzene (71-43-2).
PB93-184943/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzidine and Its Salt (92-87-5).
PB93-184976/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzo(b)fluoranthene (00205-99-2).
PB93-184984/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzo(k)fluoranthene (207-08-9).
PB93-184992/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzotrichloride (97-07-7).
PB93-185015/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzyl Chloride (100-44-7).
PB93-185023/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
PB93-185031/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Alpha-Hexachlorocyclohexane (319-84-6).
PB93-185049/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Beta-Hexachlorocyclohexane (319-85-7).
PB93-185056/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(2-Chloroethyl)Ether (111-44-4).
PB93-185072/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(2-Ethylhexyl)Phthalate (117-81-7).
PB93-185098/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 4-Chloro-o-Toluidine Hydrochloride (3165-93-3).
PB93-185130/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chrysene (218-01-9).
PB93-185155/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Coke Oven Emissions.
PB93-185163/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Daunomycin (20830-81-3).
PB93-185197/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDD (72-54-8).
PB93-185205/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlorambucil (305-03-3).
PB93-185213/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlordane (57-74-9).
PB93-185221/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDE (72-55-9).
PB93-185247/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDT (50-29-3).
PB93-185254/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diaminotoluene (Mixed) (95-80-7).
PB93-185270/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dibromo-3-Chloropropane (96-12-8).
PB93-185304/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dihydrosafrole (94-58-6).
PB93-185312/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachloroethane (76-01-7).
PB93-185320/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethylaminoazobenzene (60-11-7).
PB93-185338/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dimethylhydrazine (540-73-8).
PB93-185387/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dinitrotoluene (Mixture) (25321-14-6).
PB93-185395/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,4-Dinitrotoluene (121-14-2).
PB93-185403/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,6-Dinitrotoluene (606-20-2).
PB93-185411/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,4-Dioxane (123-91-1).
PB93-185429/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Heptachlor (76-44-8).
PB93-190478/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Heptachlor Epoxide (1024-57-3).
PB93-190486/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachlorobenzene (118-74-1).
PB93-190494/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachloroethane (67-72-1).
PB93-190510/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hydrazine (302-01-2).
PB93-190528/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Indeno(1,2,3-CD)Pyrene (193-39-5).
PB93-190536/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Isosafrole (120-58-1).
PB93-190544/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Kepone Chlordecone (143-50-0).
PB93-190569/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Diphenylhydrazine (122-66-7).
PB93-192326/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Epichlorohydrin (106-89-8).
PB93-192334/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl Carbamate (Urethane) (51-79-6).
PB93-192342/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl 4,4'-Dichlorobenzilate (510-15-6).
PB93-192359/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylene Dibromide (106-93-4).
PB93-192367/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylene Oxide (75-21-8).
PB93-192375/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylenethiourea (96-45-7).
PB93-193589/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl Methanesulfonate (62-50-0).
PB93-193597/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Formaldehyde (50-00-0).
PB93-193605/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Glycidylaldehyde (765-34-4).
PB93-193613/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chloroform (67-66-3).
PB93-194249/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3,3'-Dichlorobenzidine (91-94-1).
PB93-194256/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dichloroethane (107-06-2).
PB93-194264/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2:3,4-Diepoxybutane (1464-53-5).
PB93-194280/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Diethylhydrazine (1615-80-1).
PB93-194298/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diethylstilbestrol (56-53-1).
PB93-194306/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3,3'-Dimethoxybenzidine (119-90-4).
PB93-194314/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethyl Sulfate (77-78-1).
PB93-194322/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Melphalan (148-82-3).
PB93-196301/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methyl Chloride (74-87-3).
PB93-196319/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3-Methylcholanthrene (59-49-5).
PB93-196327/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methyl Iodide (74-88-4).
PB93-196343/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methylthiouracil (56-04-2).
PB93-196368/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Mitomycin C (50-07-7).
PB93-196376/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1-Naphthylamine (134-32-7).
PB93-196384/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2-Naphthylamine (91-59-8).
PB93-196392/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Nickel (7740-02-0).
PB93-196400/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2-Nitropropane (79-46-9).
PB93-196418/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Butylamine (924-16-3).
PB93-196426/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodiethanolamine (1116-54-7).
PB93-196434/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodiethylamine (55-18-5).
PB93-196442/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodimethylamine (62-75-9).
PB93-196459/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Ethylurea (759-73-9).
PB93-196475/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurea (684-93-5).
PB93-196483/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurethane (165-53-2).
PB93-196491/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosomethylvinylamine (4549-40-0).
PB93-196509/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosopiperidine (100-75-4).
PB93-196517/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosopyrrolidine.
PB93-196525/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 5-Nitro-O-Toluidine (99-55-8).
PB93-196533/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachloronitrobenzene (82-68-8).
PB93-196541/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachlorophenol (87-86-5).
PB93-196558/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Phenacetin (62-44-2).
PB93-196566/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Polychlorinated Biphenyls (1336-36-3) Including Specific Aroclors.
PB93-196574/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,3-Propane Sultone (1120-71-4).
PB93-196582/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Propylenimine (75-55-8).
PB93-196590/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity Saccharin (81-07-2).
PB93-196608/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of p-Toluidine (106-49-0).
PB93-201192/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of o-Toluidine (95-53-4).
PB93-201200/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Thioacetamide (62-55-5).
PB93-201226/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Tetrachloroethylene (127-18-4).
PB93-201234/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1,2,2-Tetrachloroethane (79-34-5).
PB93-201242/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1,1,2-Tetrachloroethane (630-20-6).
PB93-201259/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (1746-01-6).
PB93-201267/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Streptozotocin (18883-66-4).
PB93-201275/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Selenium Sulfide (Selenium Disulfide) (7488-56-4).
PB93-201283/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Safrole (94-59-7).
PB93-201291/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Vinyl Chloride (75-01-4).
PB93-202257/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Uracil Mustard (66-75-1).
PB93-202265/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trypan Blue (72-57-1).
PB93-202273/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Tris(2,3-Dibromopropyl) Phosphate (126-72-7).
PB93-202281/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,4,6-Trichlorophenol (88-06-2).
PB93-202299/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,4,5-Trichlorophenol (95-95-4).
PB93-202307/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trichlorophenol (Mixed) (2516-78-22).
PB93-202315/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trichloroethylene (79-01-6).
PB93-202323/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Toxaphene (8001-35-2).
PB93-202331/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of o-Toluidine Hydrochloride (636-21-5).
PB93-202349/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1,2-Trichloroethane (79-00-5).
PB93-204584/REB 93-01 PC **A03**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 6. Carcinogenicity of TCDD in Animals.
PB93-222701/REB 93-04 PC **A04**/MF **A01**

**CARCINOGENICITY TESTS**

Evaluation of the Potential Carcinogenicity of Azaserine (115-02-6).
PB93-184901/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chloromethyl Methyl Ether (Technical Grade) (107-30-2).
PB93-185122/REB 93-01 PC **A03**/MF **A01**

**CARCINOGENS**

Metabolism and Disposition of Inorganic Arsenic in Laboratory Animals and Humans.
PB93-107183/REB 93-01 PC **A02**/MF **A01**

Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC **A24**/MF **A04**

Genetic Toxicology of Putative Nongenotoxic Carcinogens.
PB93-175636/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Acetamide, N-Fluoren-2-yl (53-96-3).
PB93-181626/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Acrylonitrile (107-13-1).
PB93-181634/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Aldrin (309-00-2).
PB93-181642/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Amitrole (61-82-5).
PB93-181659/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Arsenic and Inorganic Arsenic Compounds.
PB93-181667/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Cacodylic Acid (75-60-5).
PB93-184851/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dichlorophenylarsine (696-28-6).
PB93-184869/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diethylarsine (692-42-2).
PB93-184877/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Auramine (492-80-8).
PB93-184893/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benz(c)acridine (225-51-4).
PB93-184927/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benz(a)anthracene (00056-55-3).
PB93-184935/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzo(a)Pyrene (50-32-8).
PB93-185007/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Gamma-Hexachlorocyclohexane (Lindane) (58-89-9).
PB93-185064/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(Chloromethyl)Ether (542-88-1).
PB93-185080/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Cadmium (7740-43-9), Cadium Acetate (543-90-8), Cadmium Bromide (7789-42-6), Cadmium Chloride (10108-64-2).
PB93-185106/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Carbon Tetrachloride (56-23-5).
PB93-185114/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chromium and Hexavalent Chromium Compounds.
PB93-185148/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Creosote (8001-58-9).
PB93-185171/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Cyclophosphamide (50-18-0).
PB93-185189/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlornaphazine (494-03-1).
PB93-185239/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diallate (2303-16-4).
PB93-185262/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dibenz(a,h)Anthracene (53-70-3).
PB93-185288/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2:7,8-Dibenzopyrene (189-55-9).
PB93-185296/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 7,12-Dimethylbenz(a)anthracene (57-97-6).
PB93-185346/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3,3'-Dimethylbenzidine (119-93-7).
PB93-185353/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethylcarbamoyl Chlo.
PB93-185361/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1 Dimethylhydrazine (57-14-7).
PB93-185379/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachlorobutadiene (87-68-3).
PB93-190502/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Lasiocarpine (303-34-4).
PB93-190577/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dieldrin (60-57-1).
PB93-194272/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 4,4'-Methylenebis (1-Chloroaniline) (101-14-4).
PB93-196335/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Methyl-N'-Nitro-N-Nitrosoguanidine (70-25-7).
PB93-196350/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Propylamine (621-64-7).
PB93-196467/REB 93-01 PC **A03**/MF **A01**

Armitage-Doll Two-Stage Model: Implications and Extension.
PB93-222842/REB 93-04 PC **A02**/MF **A01**

Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
PB93-228534/REB 93-04 PC **A02**/MF **A01**

Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03**/MF **A01**

Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02**/MF **A01**

Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC **A02**/MF **A01**

**CARGO TRANSPORTATION**

Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
PB93-123206/REB 93-01 PC **A02**/MF **A01**

**CARPETS**

Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC **A02**/MF **A01**

Evaluation of Three Cleaning Methods for Removing Asbestos from Carpet: Determination of Airborne Asbestos Concentrations Associated with Each Method.
PB93-218568/REB 93-04 PC **A05**/MF **A01**

Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
PB93-229151/REB 93-04 PC **A03**/MF **A01**

Initial Assessment of Emissions from Heat Setting Carpet Yarn.
PB93-229862/REB 93-04 PC **A04**/MF **A01**

**CARVER-GREENFIELD DRYING PROCESS**

Summary of the 1987 Carver-Greenfield Sludge Drying Technology Workshop: Problems and Solutions. Held in Los Angeles, California on March 10-11, 1987.
*PB93-174506/REB 93-01 PC* **A04**/MF **A01**

**CARVER-GREENFIELD PROCESS**

Carver-Greenfield Process (Trade Name) Dehydro-Tech Corporation. Applications Analysis Report.
PB93-101152/REB 93-01 PC **A03**/MF **A01**

**CASE STUDIES**

Portraits of Our Coastal Waters. Supplement to the National Water Quality Inventory. Report from the EPA Regions.
PB93-207546/REB 93-04 PC **A03**/MF **A01**

**CASTINGS**

Guides to Pollution Prevention: Metal Casting and Heat Treating Industry.
*PB93-127793/REB 93-01 PC* **A05**/MF **A01**

**CATALASE**

Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
PB93-205037/REB 93-04 PC **A02**/MF **A01**

Characterization of Catalase Activities in a Root-Colonizing Isolate of 'Pseudomonas putida' (Revised).
PB93-205052/REB 93-04 PC **A02**/MF **A01**

**CATALOGS**

Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC **A13**/MF **A03**

**CATALOGS (PUBLICATIONS)**

Publications Office of Science and Technology: Catalog.
PB93-152577/REB 93-01 PC **A06**/MF **A02**

Manual of Federal Geographic Data Products.
PB93-236503/REB 93-04 PC **A17**/MF **A03**

**CATALYSTS**

Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.
PB93-216869/REB 93-04 PC **A03**/MF **A01**

**CATALYTIC CONVERTERS**
Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03**/MF **A01**

**CATALYTIC FLAME IONIZATION DETECTORS**
Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC **A02**/MF **A01**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-214419/REB 93-04 PC **A05**/MF **A01**

**CATALYTIC REACTORS (EXHAUST SYSTEMS)**
Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03**/MF **A01**

**CEEL (COMMUNITY EMERGENCY EXPOSURE LEVELS)**
Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances.
PB93-206449/REB 93-04 PC **A06**/MF **A02**

**CEILINGS (ARCHITECTURE)**
Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
PB93-222024/REB 93-04 PC **A02**/MF **A01**

**CELL DIVISION**
Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC **A01**/MF **A01**

**CELL TRANSFORMATION**
Role of Ozone in Tracheal Cell Transformation.
PB93-179935/REB 93-01 PC **A03**/MF **A01**

**CELL VOLUME**
Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC **A02**/MF **A01**

**CELLS (BIOLOGY)**
Genetic Damage in vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04**/MF **A01**

Recovery of DNA from Soils and Sediments.
PB93-222834/REB 93-04 PC **A02**/MF **A01**

**CEMENTS**
Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC **A05**/MF **A01**

**CEMS (CONTINUOUS EMISSION MONITORING SYSTEMS)**
Recommended Quality Assurance Procedures for Opacity Continuous Emission Monitoring Systems.
PB93-199263/REB 93-01 PC **A05**/MF **A01**

**CERAMICS**
Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC **A02**/MF **A01**

**CERTIFICATION**
Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEB, Engine: B5254S EGR.
PB93-233815/REB 93-04 PC **A13**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEB, Engine: B230FT.
PB93-233823/REB 93-04 PC **A10**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEA, Engine: B230F.
PB93-233831/REB 93-04 PC **A09**/MF **A02**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAFA, Engine: B230FS4.
PB93-233849/REB 93-04 PC **A11**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEA, Engine: B6304S EGR.
PB93-233856/REB 93-04 PC **A13**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEA, Engine: B5254S.
PB93-233864/REB 93-04 PC **A09**/MF **A02**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3VHGFEK, Engine: B5234T.
PB93-233872/REB 93-04 PC **A17**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGFEA, Engine: B5254S AIR.
PB93-233880/REB 93-04 PC **A15**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEB, Engine: B6304S.
PB93-233898/REB 93-04 PC **A11**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GEEA, Engine: B230FT4.
PB93-233906/REB 93-04 PC **A13**/MF **A03**

**CESIUM 137**
Radioecology in Nordic limnic systems - present knowledge and future prospects.
DE92643948/REB 93-01 PC **A04**/MF **A01**

**CHARLOTTE (NORTH CAROLINA)**
Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03**/MF **A01**

**CHEMICAL ANALYSIS**
Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
PB93-131761/REB 93-01 PC **A02**/MF **A01**

Rapid Measurement of Aqueous Hydroxyl Radical Concentrations in Steady-State HO Flux Systems.
PB93-131779/REB 93-01 PC **A03**/MF **A01**

Collection and Chemical Analysis of Lichens for Biomonitoring.
PB93-149862/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Annual EPA Conference on Analysis of Pollutants in the Environment (15th). Held in Norfolk, Virginia on May 6-7, 1992.
PB93-152601/REB 93-01 PC **A99**/MF **A06**

Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC **A03**/MF **A01**

Development of a Field Test Method for the Determination of Lead in Paint and Paint-Contaminated Dust and Soil.
PB93-173128/REB 93-01 PC **A03**/MF **A01**

Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC **A02**/MF **A01**

Analysis of Atmospheric Deposition Samples from Easton, Pennsylvania.
PB93-181600/REB 93-01 PC **A04**/MF **A01**

Methods for the Determination of Chemical Substances in Marine and Estuarine Environmental Samples.
PB93-182913/REB 93-01 PC **A05**/MF **A01**

Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC **A02**/MF **A01**

Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03**/MF **A01**

Determination of Nine Haloacetic Acids in Finished Drinking Water.
PB93-204121/REB 93-01 PC **A03**/MF **A01**

Pesticide Fact Sheet: 'Pseudomonas cepacia' Type Wisconsin.
PB93-206746/REB 93-04 PC **A02**/MF **A01**

Pesticide Fact Sheet: Streptomyces sp. Strain K61.
PB93-206761/REB 93-04 PC **A02**/MF **A01**

Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

Chesapeake Bay Coordinated Split Sample Program Annual Report, 1990-1991: Analytical Methods and Quality Assurance Workgroup of the Chesapeake Bay Program Monitoring Subcommittee.
PB93-208270/REB 93-04 PC **A06**/MF **A02**

Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants (Revised).
PB93-212025/REB 93-04 PC **A05**/MF **A01**

PR Notice 92-5. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219509/REB 93-04 PC **A01**/MF **A01**

Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.
PB93-221653/REB 93-04 PC **A07**/MF **A02**

Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.
PB93-222354/REB 93-04 PC **A03**/MF **A01**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
PB93-227163/REB 93-04 PC **A11**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
PB93-227171/REB 93-04 PC **A12**/MF **A03**

Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.
PB93-228492/REB 93-04 PC **A02**/MF **A01**

Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.
PB93-229177/REB 93-04 PC **A03**/MF **A01**

Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.
PB93-231835/REB 93-04 PC **A02**/MF **A01**

Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.
PB93-234490/REB 93-04 PC **A03**/MF **A01**

Proceedings of Annual Analytical Symposium (10th). U.S. Environmental Protection Agency, Office of Water, Industrial Technology Division. Held in Norfolk, Virginia on May 13-14, 1987.
PB93-234771/REB 93-04 PC **A99**/MF **E08**

Analytical Methods for the National Sewage Sludge Survey.
PB93-236024/REB 93-04 PC **A12**/MF **A03**

**CHEMICAL COMPOSITION**
Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (1991).
PB93-205854/REB 93-04 PC **A03**/MF **A01**

**CHEMICAL COMPOUNDS**
Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, June 1992. Record and Data Element Description.
PB93-100261/REB 93-01 PC **A03**/MF **A01**

Framework for Ecological Risk Assessment.
PB93-102192/REB 93-01 PC **A04**/MF **A01**

Report on the Ecological Risk Assessment Guidelines Strategic Planning Workshop. Held in Miami, Florida on April 30-May 2, 1991.
PB93-102200/REB 93-01 PC **A05**/MF **A01**

Toxic Chemical Release Inventory Magnetic Media Submission Instructions. Section 313 of the Emergency Planning and Community Right-to-Know Act (Revised 1990 Version).
PB93-116127/REB 93-01 PC **A03**/MF **A01**

Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC **A08**/MF **A02**

Successful Practices in Title III Implementation. Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Cameron County, Texas; Bucks County, Pennsylvania; Harford County, Maryland; Dallas County, Texas. Series 6, Number 7.
PB93-130086/REB 93-01 PC **A03**/MF **A01**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, January 1993, Documentation.
PB93-155166/REB 93-01 PC **A03**/MF **A01**

Estimation of the Cost of Using Chemical Protective Clothing.
PB93-168805/REB 93-01 PC **A03**/MF **A01**

FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC **A02**/MF **A01**

Emergency Planning and Community Right-to-Know Act: Section 313 Release Reporting Requirements (August 1991).
PB93-205847/REB 93-04 PC **A03**/MF **A01**

Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (1991).
PB93-205854/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Monofilament Fiber Manufacturing.
PB93-205961/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Printing Operations.
PB93-205979/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electrodeposition of Organic Coatings.
PB93-205987/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Spray Application of Organic Coatings.
PB93-205995/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Semiconductor Manufacturing.
PB93-206001/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Formulation of Aqueous Solutions.
PB93-206019/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electroplating Operations.
PB93-206027/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Textile Dyeing.
PB93-206035/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Presswood and Laminated Wood Products Manufacturing.
PB93-206043/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Roller, Knife, and Gravure Coating Operations.
PB93-206050/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Paper and Paperboard Production.
PB93-206068/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Leather Tanning and Finishing.
PB93-206076/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Wood Preserving Operations.
PB93-206084/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Rubber Production and Compounding.
PB93-206092/REB 93-04 PC **A03/MF A01**

Toxics Release Inventory: Public Release Data, 1991.
PB93-219988/REB 93-04 PC **A16/MF A03**

Environmental Fate Constants for Organic Chemicals under Consideration for EPA's Hazardous Waste Identification Projects.
PB93-221646/REB 93-04 PC **A09/MF A02**

DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03/MF A01**

Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC **A02/MF A01**

Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.
PB93-228948/REB 93-04 PC **A03/MF A01**

Status of Pesticides in Reregistration and Special Review (Rainbow Report), June 1993.
PB93-230829/REB 93-04 PC **A17/MF A03**

EPANET Water Quality Model.
PB93-236552/REB 93-04 PC **A03/MF A01**

Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1. Fish Sampling and Analysis.
PB93-237899/REB 93-04 PC **A16/MF A03**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, June 1992.
PB93-500197/REB 93-01 CP **T05**

Toxic Release Inventory (TRI), 1987-1990 (on CD-ROM).
PB93-500742/REB 93-01 CD-ROM$45.00

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, January 1993.
PB93-504595/REB 93-01 CP **T05**

Environmental Fate Data Base (EFDB) Complete: XREF, CASLST, DATALOG, BIOLOG, CHEMFATE, and BIODEG. (Date of Coverage 1993).
PB93-506426/REB 93-04 CP **T05**

Health Effects Assessment Summary Tables.
PB93-921100/REB 93-01 Standing Order

**CHEMICAL EFFLUENTS**

Supplement to the OCPSF Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category.
PB93-186096/REB 93-04 PC **A11/MF A03**

Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-192755/REB 93-04 PC **A05/MF A01**

Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards, and Pretreatment Standards for the Paint Formulating Point Source Category.
PB93-206472/REB 93-04 PC **A21/MF A04**

Treatability Studies for the Inorganic Chemicals Manufacturing Point Source Category.
PB93-206480/REB 93-04 PC **A11/MF A03**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 1.
PB93-206498/REB 93-04 PC **A24/MF A04**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 2.
PB93-206506/REB 93-04 PC **A22/MF A04**

Development Document for Effluent Limitations Guidelines and Standards for the Porcelain Enameling. Point Source Category.
PB93-206514/REB 93-04 PC **A21/MF A04**

Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category (Proposed).
PB93-206522/REB 93-04 PC **A23/MF A04**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Inorganic Chemicals Manufacturing Point Source Category, Phase 2 (Proposed).
PB93-206530/REB 93-04 PC **A24/MF A04**

Development Document for Effluent Limitations Guidelines and Standards for the Pharmaceuticals Manufacturing. Point Source Category.
PB93-206969/REB 93-04 PC **A04/MF A01**

Supplementary Development Document for Effluent Limitations Guidelines for the Leather Tanning and Finishing Point Source Category.
PB93-207934/REB 93-04 PC **A06/MF A02**

Development Document for Effluent Limitations Guidelines and Standards for the Aluminum Forming Point Source Category.
PB93-208213/REB 93-04 PC **A09/MF A06**

Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Pharmaceutical Manufacturing Point Source Category.
PB93-208221/REB 93-04 PC **A22/MF A04**

Toxic Release Inventory (TRI), 1987.
PB93-506004/REB 93-04 CP **T16**

Toxic Release Inventory (TRI), 1988.
PB93-506012/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1989.
PB93-506020/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1990.
PB93-506038/REB 93-04 CP **T14**

**CHEMICAL INDUSTRY**

Waste Reduction Activities and Options for a Manufacturer of Fine Chemicals Using Batch Processes.
PB93-126306/REB 93-01 PC **A02/MF A01**

Treatability Studies for the Inorganic Chemicals Manufacturing Point Source Category.
PB93-206480/REB 93-04 PC **A11/MF A03**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Inorganic Chemicals Manufacturing Point Source Category, Phase 2 (Proposed).
PB93-206530/REB 93-04 PC **A24/MF A04**

**CHEMICAL INFORMATION FACT SHEET**

RED Facts: Capsaicin.
PB93-100311/REB 93-01 PC **A02/MF A01**

RED Facts: 'Noserna locustae'.
PB93-100352/REB 93-01 PC **A02/MF A01**

RED Facts: Streptomycin and Streptomycin Sulfate.
PB93-100378/REB 93-01 PC **A02/MF A01**

RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC **A02/MF A01**

RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02/MF A01**

EPA Pesticide RED FACTS Sheets: Indole-3-Butyric Acid.
PB93-107282/REB 93-01 PC **A02/MF A01**

RED Facts: Sodium Hydroxide.
PB93-124683/REB 93-01 PC **A02/MF A01**

Pesticide Fact Sheet Number 236: Pyridate.
PB93-130441/REB 93-01 PC **A03/MF A01**

Pesticide Fact Sheet Number 20.2: Amitrole.
PB93-144368/REB 93-01 PC **A02/MF A01**

Pesticide Fact Sheet Number 20.1: Amitrole.
PB93-149680/REB 93-01 PC **A02/MF A01**

Pesticide Fact Sheet Number 239: Cimectacarb.
PB93-206753/REB 93-04 PC **A02/MF A01**

**CHEMICAL PLANTS**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1B. Control Technologies.
PB93-156560/REB 93-01 PC **A13/MF A03**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1C. Model Emission Sources.
PB93-156578/REB 93-01 PC **A11/MF A03**

**CHEMICAL PROPERTIES**

National Study of Chemical Residues in Fish. Volume 2.
PB93-114999/REB 93-01 PC **E11/MF A04**

Pesticide Fact Sheet: 1-Indole-3-Butanethioic Acid, S-Phenyl Ester.
PB93-219822/REB 93-04 PC **A02/MF A01**

Pesticide Fact Sheet: Glufosinate Ammonium.
PB93-219830/REB 93-04 PC **A03/MF A01**

Pesticide Fact Sheet: GY-81/Enzone.
PB93-219848/REB 93-04 PC **A03/MF A01**

**CHEMICAL REACTION MECHANISMS**

Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC **A02/MF A01**

**CHEMICAL RELEASES**

Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (1991).
PB93-205854/REB 93-04 PC **A03/MF A01**

**CHEMICAL RESIDUES**

National Study of Chemical Residues in Fish. Volume 1.
PB93-114981/REB 93-01 PC **E09/MF A01**

**CHEMICAL RESISTANCE**

FLEX: An Expert System for Reviewing the Chemical Resistance of Flexible Membrane Liners for Waste Management.
PB93-106706/REB 93-01 PC **A03/MF A01**

**CHEMICAL SENSITIVITY**

Multiple Chemical Sensitivities. Addendum to Biologic Markers in Immunotoxicology.
PB93-222990/REB 93-04 PC **A09/MF A03**

**CHEMICAL SUBSTANCES INVENTORY**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, June 1992. Record and Data Element Description.
PB93-100261/REB 93-01 PC **A03/MF A01**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, January 1993, Documentation.
PB93-155166/REB 93-01 PC **A03/MF A01**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, June 1992.
PB93-500197/REB 93-01 CP **T05**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, January 1993.
PB93-504595/REB 93-01 CP **T05**

**CHEMICAL TESTS**

Replacement of Charcoal Sorbent in the VOST.
PB93-221893/REB 93-04 PC **A03/MF A01**

**CHEMICAL TRANSPORT**

Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport.
PB93-141497/REB 93-01 PC **A02/MF A01**

**CHEMICAL TREATMENT**

Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
PB93-216067/REB 93-04 PC **A07/MF A02**

**CHEMICAL WATER POLLUTANTS**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Diethylene Glycol Dinitrate (DEGDN).
PB93-117000/REB 93-01 PC **A03/MF A01**

Drinking Water Toxicity Profiles.
PB93-122406/REB 93-01 PC **A09/MF A02**

Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport.
PB93-141497/REB 93-01 PC **A02/MF A01**

Effects of Chemical Contaminants on Blood Chemistry of Teleost Fish: A Bibliography and Synopsis of Selected Effects.
PB93-168961/REB 93-01 PC **A03/MF A01**

Biodegradation of 2,4,5-Trichlorophenoxyacetic Acid in Liquid Culture and in Soil by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191542/REB 93-01 PC **A02/MF A01**

Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC **A02/MF A01**

Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02/MF A01**

**CHEMICALS INDUSTRY**

Economic Analysis of Interim Final Effluent Guidelines for the Gum and Wood Chemicals Industry. Group 2.
PB93-167740/REB 93-01 PC **A04/MF A01**

**CHEMIGATION**

PR Notice 87-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-141687/REB 93-01 PC **A03/MF A01**

**CHEMUNG COUNTY (NEW YORK)**

Superfund Record of Decision (EPA Region 2): Facet Enterprises, *Village of Elmira Heights, Chemung County*, NY. (First Remedial Action), September 1992.
PB93-963822/REB 93-04 PC **A07/MF A02**

**CHERNOBYLSK-4 REACTOR**

Radioecology in Nordic limnic systems - present knowledge and future prospects.
DE92643948/REB 93-01 PC **A04/MF A01**

**CHESAPEAKE BAY**

Living Resources Subcommittee: Annual Summary.
PB93-112506/REB 93-01 PC **A03/MF A01**

Waterfowl Workgroup Living Resources Subcommittee: Annual Progress Report.
PB93-112704/REB 93-01 PC **A03/MF A01**

Chesapeake Bay Striped Bass Fishery Management Plan: Chesapeake Bay Program. Annual Progress Report (April 1992).
PB93-114585/REB 93-01 PC **A03/MF A01**

Implementation Plan for Removing Impediments to Migratory Fishes in the Chesapeake Bay Watershed (January-December 1991).
PB93-116572/REB 93-01 PC **A03/MF A01**

Living Resources Monitoring Plan: Annual Progress Report.
PB93-116580/REB 93-01 PC **A03/MF A01**

Trends in Nitrogen in the Chesapeake Bay, 1984-1990.
PB93-122174/REB 93-01 PC **A04/MF A01**

Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans.
PB93-122182/REB 93-01 PC **A03/MF A01**

Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and Chincoteague Bay, 1991.
PB93-191120/REB 93-01 PC **A13/MF A03**

Baseline Point Source Load Inventory, 1985. 1991 Reevaluation Report No. 2.
PB93-193761/REB 93-01 PC **A03/MF A01**

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Contaminated Sediments Critical Issue Forum. Held in Annapolis, Maryland on December 10, 1992.
PB93-194017/REB 93-01 PC **A03/MF A01**

Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC **A12**/MF **A03**

Isolation and Diversity of Actinomycetes in the Chesapeake Bay.
PB93-205060/REB 93-01 PC **A02**/MF **A01**

Guide to Using Chesapeake Bay Program Water Quality Monitoring Data.
PB93-205888/REB 93-04 PC **A07**/MF **A02**

Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
PB93-207561/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Coordinated Split Sample Program Annual Report, 1990-1991: Analytical Methods and Quality Assurance Workgroup of the Chesapeake Bay Program Monitoring Subcommittee.
PB93-208270/REB 93-04 PC **A06**/MF **A02**

Comparison of Mid-Bay and Lateral Station Water Quality Data in the Chesapeake Bay Mainstem: Chesapeake Bay Program.
PB93-208288/REB 93-04 PC **A05**/MF **A01**

Chesapeake Bay American Eel Fishery Management Plan. Agreement Commitment Report 1991.
PB93-226017/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans, December 1992.
PB93-226058/REB 93-04 PC **A04**/MF **A01**

Chesapeake Bay Atlantic Croaker and Spot Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226629/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Summer Flounder Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226637/REB 93-04 PC **A03**/MF **A01**

**CHESAPEAKE BAY BASIN**

Role and Function of Forest Buffers in the Chesapeake Bay Basin for Nonpoint Source Management.
PB93-207405/REB 93-04 PC **A03**/MF **A01**

**CHESAPEAKE BAY PROGRAM**

Restoration of the Anacostia River.
PB93-136364/REB 93-01 PC **A05**/MF **A01**

Chesapeake Bay Program Annual Progress Report, Wetlands Workgroup, December 1991.
PB93-136893/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Atmospheric Deposition of Critical Issue Forum. Held in Annapolis, Maryland on November 5, 1992.
PB93-193738/REB 93-01 PC **A03**/MF **A01**

**CHILDREN**

Pilot Study to Evaluate Methods for the Assessment of Exposure of Small Children to Pesticides in the Residential Environment.
PB93-119899/REB 93-01 PC **A03**/MF **A01**

Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03**/MF **A01**

**CHINA**

Source Apportionment of Air Pollution in China: Extending the Usefulness of Receptor Modeling by Combining Multivariate and Chemical Mass Balance Models.
PB93-185726/REB 93-01 PC **A03**/MF **A01**

Methane Emissions from Wetland Rice Areas of Asia.
PB93-191468/REB 93-01 PC **A03**/MF **A01**

Climate Change Impacts on Net Primary Production in China.
PB93-222271/REB 93-04 PC **A03**/MF **A01**

**CHLORAL HYDRATE**

Ninety-Day Toxicity Study of Chloral Hydrate in the Sprague-Dawley Rat.
PB93-107118/REB 93-01 PC **A03**/MF **A01**

**CHLORAMBUCIL**

Evaluation of the Potential Carcinogenicity of Chlorambucil (305-03-3).
PB93-185213/REB 93-01 PC **A03**/MF **A01**

**CHLORDAN**

Evaluation of the Potential Carcinogenicity of Chlordane (57-74-9).
PB93-185221/REB 93-01 PC **A03**/MF **A01**

**CHLORINATED AROMATIC HYDROCARBONS**

Molecular Basis of Biodegradation of Chloroaromatic Compounds.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

**CHLORINATED HYDROCARBONS**

Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC **A02**/MF **A01**

**CHLORINATION**

Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC **A03**/MF **A01**

Determination of Nine Haloacetic Acids in Finished Drinking Water.
PB93-204121/REB 93-01 PC **A03**/MF **A01**

**CHLORINE ORGANIC COMPOUNDS**

Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC **A02**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chloromethyl Methyl Ether (Technical Grade) (107-30-2).
PB93-185122/REB 93-01 PC **A03**/MF **A01**

Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC **A03**/MF **A01**

Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows ('Cyprinodon variegatus').
PB93-204998/REB 93-04 PC **A03**/MF **A01**

**CHLORNAPHAZINE**

Evaluation of the Potential Carcinogenicity of Chlornaphazine (494-03-1).
PB93-185239/REB 93-01 PC **A03**/MF **A01**

**CHLOROACETAMIDES**

Pesticide Fact Sheet Number 240: Dimethenamid. SAN 582H/Frontier (Trade Name) Herbicide.
PB93-198695/REB 93-01 PC **A03**/MF **A01**

**CHLOROFLUOROCARBONS**

Phasing out of CFCs in the electronics and engineering industries in Sweden.
DE93711212/REB 93-01 PC **A03**/MF **A01**

Recovery of CFCs from refrigeration equipment. Current processes.
DE93778476/REB 93-01 PC **A04**/MF **A01**

Investigation of Possible Uses of Surplus CFC/Halon Chemicals.
PB93-229771/REB 93-04 PC **A07**/MF **A02**

**CHLOROFORM**

Evaluation of the Potential Carcinogenicity of Chloroform (67-66-3).
PB93-194249/REB 93-01 PC **A03**/MF **A01**

**CHLOROHYDROCARBONS**

Analysis of DNA Strand Breaks Induced in Rodent Liver In vivo, Hepatocytes in Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC **A03**/MF **A01**

**CHLORPYRIFOS**

Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
PB93-229151/REB 93-04 PC **A03**/MF **A01**

**CHOLESTEROL**

Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03**/MF **A01**

**CHOLINERGIC RECEPTORS**

Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-228880/REB 93-04 PC **A03**/MF **A01**

**CHOLINESTERASE**

Relationship between Serum Cholinesterase Activity and the Change in Body Temperature and Motor Activity in the Rat: A Dose-Response Study of Diisopropyl Fluorophosphate.
PB93-175644/REB 93-01 PC **A02**/MF **A01**

Cholinesterases of Aquatic Animals.
PB93-236222/REB 93-04 PC **A03**/MF **A01**

**CHOLINESTERASE INHIBITORS**

Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02**/MF **A01**

Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC **A02**/MF **A01**

Strain Comparisons of DFP Neurotoxicity in Rats.
PB93-228609/REB 93-04 PC **A03**/MF **A01**

**CHROMATED COPPER ARSENATE**

Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.
PB93-212801/REB 93-04 PC **A03**/MF **A01**

**CHROMATIN**

Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence In situ Hybridization.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

Cytoplasmic Microtubular Dynamics and Chromatin Organization during Mammalian Oogenesis and Oocyte Maturation.
PB93-194413/REB 93-01 PC **A03**/MF **A01**

**CHROMATOGRAPHIC ANALYSIS**

Evaluation of Commercially-Available Portable Gas Chromatographs.
PB93-121051/REB 93-01 PC **A02**/MF **A01**

Determination of Carboxylic Acids by Ion-Exclusion Chromatography with Non-Suppressed Conductivity and Optical Detectors.
PB93-181212/REB 93-01 PC **A02**/MF **A01**

**CHROMIUM**

Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
PB93-175503/REB 93-01 PC **A03**/MF **A01**

Rapid Phase Indentification of Mixed Crystalline Solids.
PB93-212355/REB 93-04 PC **A03**/MF **A01**

**CHROMIUM INORGANIC COMPOUNDS**

Evaluation of the Potential Carcinogenicity of Chromium and Hexavalent Chromium Compounds.
PB93-185148/REB 93-01 PC **A03**/MF **A01**

**CHROMOSOME ABERRATIONS**

Radiation- and Chemically-Induced Chromosome Aberrations in Mouse Oocytes: A Comparison with Effects in Males.
PB93-194462/REB 93-01 PC **A02**/MF **A01**

Genetic Damage In vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04**/MF **A01**

Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03**/MF **A01**

**CHROMOSOME DELETION**

V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02**/MF **A01**

**CHROMOSOME MAPPING**

Frequency and Nature of Specific-Locus Mutations Induced in Female Mice by Radiations and Chemicals: A Review.
PB93-194447/REB 93-01 PC **A03**/MF **A01**

**CHRYSENE**

Evaluation of the Potential Carcinogenicity of Chrysene (218-01-9).
PB93-185155/REB 93-01 PC **A03**/MF **A01**

**CIMECTACARB**

Pesticide Fact Sheet Number 239: Cimectacarb.
PB93-206753/REB 93-04 PC **A02**/MF **A01**

**CINCINNATI (OHIO)**

Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC **A03**/MF **A01**

**CIRCADIAN RHYTHM**

Twenty-Four Hour Rhythms of Selected Ambient Temperature in Rat and Hamster.
PB93-175727/REB 93-01 PC **A02**/MF **A01**

**CITIZEN PARTICIPATION**

Superfund: Report of the EPA Superfund Revitalization Public Meeting Held on June 24, 1992. Volumes 1 and 2.
PB92-963288/REB 93-01 PC **A06**/MF **A02**

Citizen's Guide to Ground-Water Protection.
PB93-115814/REB 93-01 PC **A03**/MF **A01**

Proceedings of the National Citizens' Volunteer Water Monitoring Conference (3rd). Held in Annapolis, Maryland on March 29-April 2, 1992. Building Partnerships in the Year of Clean Water.
PB93-207108/REB 93-04 PC **A09**/MF **A02**

National Directory of Citizen Volunteer Environmental Monitoring Programs (Third Edition).
PB93-207496/REB 93-04 PC **A03**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 1: Statewide Summary.
PB93-216927/REB 93-04 PC **A06**/MF **A02**

Volunteer Lake Monitoring Program, 1992. Volume 2: Northwestern Illinois Region.
PB93-217214/REB 93-04 PC **A04**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 4. West Central Illinois Region.
PB93-219111/REB 93-04 PC **A04**/MF **A01**

RCRA Public Involvement Manual.
PB93-231066/REB 93-04 PC **A11**/MF **A03**

**CLARK FORK RIVER**

Clark-Fork-Pend Oreille Basin Water Quality Study: A Summary of Findings and a Management Plan.
PB93-208148/REB 93-04 PC **A08**/MF **A02**

**CLAY MINERALS**

Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02**/MF **A01**

**CLEAN AIR ACT**

Air Toxics: The Research Challenge of the 1990 Clean Air Act Amendments.
PB93-106664/REB 93-01 PC **A02**/MF **A01**

**CLEAN AIR ACT AMENDMENTS OF 1990**

Report to Congress on Implementation of Section 112 of the Clean Air Act Amendments of 1990.
PB93-236008/REB 93-04 PC **A05**/MF **A01**

**CLEAN WATER ACT**

Clean Water Act (Section 319): An Evaluation of Program Implementation in Region 10.
PB93-145654/REB 93-01 PC **A05**/MF **A01**

**CLEANING**

Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC **A02**/MF **A01**

**CLEANING AGENTS**

Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203693/REB 93-04 PC **A07**/MF **A02**

Chemical Shoreline Cleaning Agents for Oil Spills: Update State-of-the-Art on Mechanisms of Action and Factors Influencing Performance.
PB93-203701/REB 93-04 PC A04/MF A01

**CLEANUP**

National Priorities List Sites: Alabama, 1992.
PB93-963201/REB 93-01
see individual report for order number and price

National Priorities List Sites: Alaska, 1992.
PB93-963202/REB 93-01 PC A04/MF A01

National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC A04/MF A01

National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC A04/MF A01

National Priorities List Sites: Arkansas, 1992.
PB93-963205/REB 93-01 PC A04/MF A01

National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC A12/MF A03

National Priorities List Sites: Colorado, 1992.
PB93-963207/REB 93-01 PC A05/MF A01

National Priorities List Sites: Connecticut, 1992.
PB93-963208/REB 93-01 PC A04/MF A01

National Priorities List Sites: Delaware, 1992.
PB93-963209/REB 93-01 PC A05/MF A01

National Priorities List Sites: Florida, 1992.
PB93-963210/REB 93-01 PC A08/MF A02

National Priorities List Sites: Georgia, 1992.
PB93-963211/REB 93-01 PC A04/MF A01

National Priorities List Sites: Idaho, 1992.
PB93-963212/REB 93-01 PC A04/MF A01

National Priorities List Sites: Illinois, 1992.
PB93-963213/REB 93-01 PC A08/MF A02

National Priorities List Sites: Indiana, 1992.
PB93-963214/REB 93-01 PC A08/MF A02

National Priorities List Sites: Iowa, 1992.
PB93-963215/REB 93-01 PC A05/MF A01

National Priorities List Sites: Kansas, 1992.
PB93-963216/REB 93-01 PC A04/MF A01

National Priorities List Sites: Kentucky, 1992.
PB93-963217/REB 93-01 PC A05/MF A01

National Priorities List Sites: Louisiana, 1992.
PB93-963218/REB 93-01 PC A04/MF A01

National Priorities List Sites: Maine, 1992.
PB93-963219/REB 93-01 PC A04/MF A01

National Priorities List Sites: Maryland, 1992.
PB93-963220/REB 93-01 PC A04/MF A01

National Priorities List Sites: Massachusetts, 1992.
PB93-963221/REB 93-01 PC A08/MF A02

National Priorities List Sites: Michigan, 1992.
PB93-963222/REB 93-01 PC A10/MF A03

National Priorities List Sites: Minnesota, 1992.
PB93-963223/REB 93-01 PC A07/MF A02

National Priorities List Sites: Mississippi, 1992.
PB93-963224/REB 93-01 PC A03/MF A01

National Priorities List Sites: Missouri, 1992.
PB93-963225/REB 93-01 PC A05/MF A02

National Priorities List Sites: Montana, 1992.
PB93-963226/REB 93-01 PC A04/MF A01

National Priorities List Sites: Nebraska, 1992.
PB93-963227/REB 93-01 PC A04/MF A01

National Priorities List Sites: New Hampshire, 1992.
PB93-963228/REB 93-01 PC A05/MF A01

National Priorities List Sites: New Jersey, 1992.
PB93-963229/REB 93-01 PC A14/MF A03

National Priorities List Sites: New Mexico, 1992.
PB93-963230/REB 93-01 PC A04/MF A01

National Priorities List Sites: New York, 1992.
PB93-963231/REB 93-01 PC A11/MF A03

National Priorities List Sites: North Carolina, 1992.
PB93-963232/REB 93-01 PC A05/MF A01

National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC A04/MF A01

National Priorities List Sites: Ohio, 1992.
PB93-963234/REB 93-01 PC A08/MF A02

National Priorities List Sites: Oklahoma, 1992.
PB93-963235/REB 93-01 PC A04/MF A01

National Priorities List Sites: Oregon, 1992.
PB93-963236/REB 93-01 PC A04/MF A01

National Priorities List Sites: Pennsylvania, 1992.
PB93-963237/REB 93-01 PC A12/MF A03

National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC A04/MF A01

National Priorities List Sites: Rhode Island, 1992.
PB93-963239/REB 93-01 PC A04/MF A01

National Priorities List Sites: South Carolina, 1992.
PB93-963240/REB 93-01 PC A05/MF A01

National Priorities List Sites: Tennessee, 1992.
PB93-963241/REB 93-01 PC A04/MF A01

National Priorities List Sites: Texas, 1992.
PB93-963242/REB 93-01 PC A06/MF A02

National Priorities List Sites: Utah, 1992.
PB93-963243/REB 93-01 PC A04/MF A01

National Priorities List Sites: Vermont, 1992.
PB93-963244/REB 93-01 PC A04/MF A01

National Priorities List Sites: Virginia, 1992.
PB93-963245/REB 93-01 PC A05/MF A01

National Priorities List Sites: Washington, 1992.
PB93-963246/REB 93-01 PC A08/MF A02

National Priorities List Sites: West Virginia, 1992.
PB93-963247/REB 93-01 PC A04/MF A01

National Priorities List Sites: Wisconsin, 1992.
PB93-963248/REB 93-01 PC A07/MF A02

National Priorities List Sites: Wyoming, 1992.
PB93-963249/REB 93-01 PC A03/MF A01

Superfund Accelerated Cleanup Model (SACM) Coordination Strategy.
PB94-963201/REB 93-04 PC A01/MF A01

**CLEANUP OPERATIONS**

Superfund Accelerated Cleanup Model (SACM). Volume 1, Number 4, November 1992.
PB92-963287/REB 93-01 PC A01/MF A01

Superfund: Report of the EPA Superfund Revitalization Public Meeting Held on June 24, 1992. Volumes 1 and 2.
PB92-963288/REB 93-01 PC A06/MF A02

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Valley of the Drums, Bullitt County, Kentucky).
PB92-963618/REB 93-01 PC A02/MF A01

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (American Thermostat Corporation, New York).
PB92-963627/REB 93-01 PC A02/MF A01

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Wide Beach Section of Brant, New York).
PB92-963628/REB 93-01 PC A02/MF A01

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Krysowaty Farm, Hillsborough, New Jersey).
PB92-963629/REB 93-01 PC A02/MF A01

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Ciba-Geigy Corporation, McIntosh, Alabama).
PB92-963630/REB 93-01 PC A02/MF A01

Bioremediation: An Information Update on Applying Bioremediation to Site Cleanup.
PB93-126175/REB 93-01 PC A03/MF A01

Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC A04/MF A01

Commencement Bay Nearshore/Tideflats Feasibility Study. Executive Summary.
PB93-181220/REB 93-01 PC A06/MF A02

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
PB93-181238/REB 93-01 PC A25/MF A06

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 2. Appendices.
PB93-181246/REB 93-01 PC A18/MF A04

Commencement Bay Nearshore/Tideflats Feasibility Study. Development of Sediment Cleanup Goals.
PB93-181253/REB 93-01 PC A05/MF A01

Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC A05/MF A01

**CLEARWATER LAKE**

Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC A03/MF A01

**CLEFT PALATE**

Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC A02/MF A01

**CLIMATE CHANGE**

Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC A03/MF A01

Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.
PB93-229649/REB 93-04 PC A03/MF A01

**CLIMATE CHANGES**

Effects of CO2 and Climate Change on Forest Trees.
PB93-222339/REB 93-04 PC A07/MF A02

**CLIMATIC CHANGE**

Aatgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC A14/MF A03

Global Climates: Past, Present, and Future. Activities for Integrated Science Education.
PB93-222313/REB 93-04 PC A06/MF A02

**CLIMATIC CHANGES**

Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC A03/MF A01

General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC A04/MF A01

Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC A03/MF A01

Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC A05/MF A01

Water Temperature Characteristics of Lakes Subjected to Climate Change.
PB93-135648/REB 93-01 PC A09/MF A02

Methods for Analyzing Extreme Events Under Climate Change.
PB93-146827/REB 93-01 PC A03/MF A01

Impacts of Climate Change on Rice Yield: A Comparison of Four Model Performances.
PB93-191526/REB 93-01 PC A03/MF A01

Statistical Analyses of COADS Wind Data in Coastal Regions of the United States.
PB93-212777/REB 93-04 PC A03/MF A01

Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC A07/MF A02

Technological Considerations for Planning the Global Carbon Future.
PB93-222008/REB 93-04 PC A03/MF A01

Climate Change Impacts on Net Primary Production in China.
PB93-222271/REB 93-04 PC A03/MF A01

**CLOSTRIDIUM PERFRINGENS**

Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC A01/MF A01

**CLOUDS (METEOROLOGY)**

Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC A03/MF A01

**CNG (COMPRESSED NATURAL GAS)**

Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC A03/MF A01

**COAL**

Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-228450/REB 93-04 PC A02/MF A01

**COAL GAS**

Evaluation of the Potential Carcinogenicity of Coke Oven Emissions.
PB93-185163/REB 93-01 PC A03/MF A01

**COAL MINES**

Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.
PB93-236586/REB 93-04 PC A03/MF A01

**COAL MINING**

Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC A03/MF A01

Estimate of Global Methane Emissions from Coal Mines.
PB93-212553/REB 93-04 PC A03/MF A01

Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.
PB93-212579/REB 93-04 PC A02/MF A01

**COASTAL NONPOINT PROGRAMS**

Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance.
PB93-193795/REB 93-01 PC A05/MF A01

**COASTAL REGIONS**

Potential Intertidal Habitat Restoration Sites in the Duwamish River Estuary.
PB93-122190/REB 93-01 PC A05/MF A02

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC A03/MF A01

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC A03/MF A01

Summary of Implementation and Demonstration Projects in Bays and Estuaries.
PB93-194637/REB 93-01 PC A07/MF A02

Portraits of Our Coastal Waters. Supplement to the National Water Quality Inventory. Report from the EPA Regions.
PB93-207546/REB 93-04 PC A03/MF A01

Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters.
PB93-234672/REB 93-04 PC A99/MF E08

**COASTAL ZONE MANAGEMENT**

Near Coastal Program Plan for 1991: Estuaries.
PB93-116176/REB 93-01 PC A12/MF A03

Strategic Assessment of Near Coastal Waters: Northeast Case Study.
PB93-136521/REB 93-01 PC A06/MF A02

Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance.
PB93-193795/REB 93-01 PC **A05**/MF **A01**

Proceedings: Galveston Bay Characterization Workshop. Held on February 21-23, 1991.
PB93-205672/REB 93-04 PC **A11**/MF **A03**

Regulatory Effectiveness Study for the Armand Bayou Coastal Preserve.
PB93-205680/REB 93-04 PC **A08**/MF **A02**

Regulatory Effectiveness Study for the Christmas Bay Coastal Preserve.
PB93-205698/REB 93-04 PC **A09**/MF **A03**

Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1. Technical Report.
PB93-205722/REB 93-04 PC **A11**/MF **A03**

Segmentation Development for Galveston Bay.
PB93-205748/REB 93-04 PC **A07**/MF **A02**

Environmental Management Inventory of Galveston Bay.
PB93-205797/REB 93-04 PC **A06**/MF **A02**

**COASTS**

Protecting Coastal and Wetlands Resources: A Guide for Local Governments.
PB93-105567/REB 93-01 PC **A09**/MF **A03**

Marine and Estuarine Protection: Programs and Activities.
PB93-179000/REB 93-01 PC **A03**/MF **A01**

Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03**/MF **A01**

National Estuary Program Guidance. Comprehensive Conservation and Management Plans: Content and Approval Requirements.
PB93-217172/REB 93-04 PC **A03**/MF **A01**

Guidance Manual for the Review of Permitted and Civil Works Projects for the Ocean Disposal of Dredged Material.
PB93-223048/REB 93-04 PC **A14**/MF **A03**

Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.
PB93-234540/REB 93-04 PC **A04**/MF **A01**

Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC **A01**/MF **A01**

Establishing Quantitative Performance Criteria for Wetland Restoration.
PB93-236610/REB 93-04 PC **A01**/MF **A01**

**COATING PROCESSES**

Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
PB93-101160/REB 93-01 PC **A06**/MF **A02**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Roller, Knife, and Gravure Coating Operations.
PB93-206050/REB 93-04 PC **A03**/MF **A01**

**COATINGS**

Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC **A02**/MF **A01**

Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC **A02**/MF **A01**

Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.
PB93-210383/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 2): Cosden Chemical Coatings, City of Beverly, Burlington County, NJ, (First Remedial Action), September 1992.
PB93-963818/REB 93-04 PC **A04**/MF **A01**

**COCHLEA**

Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02**/MF **A01**

**COKE OVENS**

Evaluation of the Potential Carcinogenicity of Coke Oven Emissions.
PB93-185163/REB 93-01 PC **A03**/MF **A01**

**COKING**

Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 1. Technical Report and Appendices A-F.
PB93-191302/REB 93-01 PC **A13**/MF **A03**

Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 2. Appendices G-N.
PB93-191310/REB 93-01 PC **A15**/MF **A03**

**COLIFORM BACTERIA**

Total Coliform Rule: Implementation Manual (Including Appendix D).
PB93-186658/REB 93-01 PC **A05**/MF **A02**

**COLLECTING METHODS**

Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-228500/REB 93-04 PC **A02**/MF **A01**

Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
PB93-229151/REB 93-04 PC **A03**/MF **A01**

**COLLETOTRICHUM GLOEOSPORIOIDES**

Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. aeschynomene' Transformants with Benomyl Resistance.
PB93-212629/REB 93-04 PC **A02**/MF **A01**

**COLLOIDS**

Laboratory Studies on the Stability and Transport of Inorganic Colloids Through Natural Aquifer Material (Chapter 49).
PB93-175537/REB 93-01 PC **A02**/MF **A01**

Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-228575/REB 93-04 PC **A03**/MF **A01**

**COLORADO**

National Priorities List Sites: Colorado, 1992.
PB93-963207/REB 93-01 PC **A05**/MF **A01**

**COLORADO PLATEAU PILOT STUDY**

Environmental Monitoring and Assessment Program: EMAP-Arid Colorado Plateau Pilot Study, 1992. Implementation Plan.
PB93-181618/REB 93-01 PC **A08**/MF **A02**

**COMBINED SEWERS**

Storm and Combined Sewer Overflow: An Overview of EPA's Research Program.
PB93-185957/REB 93-01 PC **A03**/MF **A01**

Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC **A02**/MF **A01**

**COMBUSTION**

Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC **A05**/MF **A01**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 1. Sessions P, 0, 1A, 2A, 3A, 4A, 6A, 6B, 9C and 10B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124170/REB 93-01 PC **A20**/MF **A04**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 2. Sessions 1B, 2B, 3B, 4B, 7A, 7B, 8A, 8B and 9B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124188/REB 93-01 PC **A21**/MF **A04**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 3. Sessions 1C, 2C, 3C, 4C, 6C, 7C, 8C, 9A, and 10A/C. Held in Tampa, Florida on April 16-19, 1991.
PB93-124196/REB 93-01 PC **A21**/MF **A04**

**COMBUSTION CHAMBERS**

Development of Good Combustion Practice for Municipal Waste Combustors.
PB93-131613/REB 93-01 PC **A03**/MF **A01**

**COMBUSTION EFFICIENCY**

Development of Good Combustion Practice for Municipal Waste Combustors.
PB93-131613/REB 93-01 PC **A03**/MF **A01**

Applications of Pulse Combustion in Industrial and Incineration Processes.
PB93-131639/REB 93-01 PC **A03**/MF **A01**

Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC **A04**/MF **A01**

Pilot-Scale Evlauation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02**/MF **A01**

Experimental Investigation of PIC Formation in CFC-12 Incineration.
PB93-191294/REB 93-01 PC **A07**/MF **A02**

Characterization of the Organic Emissions from the Thermal Destruction of CFCs.
PB93-205557/REB 93-04 PC **A10**/MF **A03**

Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

**COMBUSTION PRODUCTS**

On-Line Measurement of Nitrous Oxide from Combustion Sources by Automated Gas Chromatography.
PB93-106647/REB 93-01 PC **A03**/MF **A01**

Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC **A03**/MF **A01**

Technical Information Document for Residential Wood Combustion Best Available Control Measures.
PB93-122224/REB 93-01 PC **A05**/MF **A01**

Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127801/REB 93-01 PC **A06**/MF **A02**

Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
PB93-135663/REB 93-01 PC **A07**/MF **A02**

Formation and Control of Combustion Pollutants from Gasoline-Fueled Spark-Ignition Motor Vehicle Engines. (Revised November 1992).
PB93-141042/REB 93-01 PC **A04**/MF **A01**

Alternative Control Techniques Document. NOx Emissions from Stationary Gas Turbines.
PB93-156586/REB 93-01 PC **A11**/MF **A03**

Characterization of Emissions from the Simulated Open-Burning of Non-Metallic Automobile Shredder Residue.
PB93-172914/REB 93-01 PC **A05**/MF **A01**

Biomass Combustion in Gas-Turbine-Based Systems.
PB93-185742/REB 93-01 PC **A02**/MF **A01**

Development of Sampling and Analytical Methods for the Measurement of Nitrous Oxide from Fossil Fuel Combustion Sources.
PB93-194330/REB 93-01 PC **A07**/MF **A02**

Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 1.
PB93-198950/REB 93-01 PC **A17**/MF **A04**

Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 2, Appendices.
PB93-198968/REB 93-01 PC **A07**/MF **A02**

Organic Combustion Fingerprints of Three Common Home Heating Fuels.
PB93-222123/REB 93-04 PC **A02**/MF **A01**

Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-228450/REB 93-04 PC **A02**/MF **A01**

Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.
PB93-229870/REB 93-04 PC **A25**/MF **A06**

**COMBUSTORS**

Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC **A02**/MF **A01**

Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC **A02**/MF **A01**

Guidelines for Stack Testing at Municipal Waste Combustion Facilities. Project Summary.
PB93-222610/REB 93-04 PC **A02**/MF **A01**

**COMMENCEMENT BAY**

Commencement Bay Nearshore/Tideflats Feasibility Study. Executive Summary.
PB93-181220/REB 93-01 PC **A06**/MF **A02**

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
PB93-181238/REB 93-01 PC **A25**/MF **A06**

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 2. Appendices.
PB93-181246/REB 93-01 PC **A18**/MF **A04**

Commencement Bay Nearshore/Tideflats Feasibility Study. Development of Sediment Cleanup Goals.
PB93-181253/REB 93-01 PC **A05**/MF **A01**

**COMMENTS**

Proposed Revisions to Ocean Dumping Criteria: Final Environmental Impact Statement. Volume 2.
PB93-206548/REB 93-04 PC **A99**/MF **A06**

**COMMERCIAL BUILDINGS**

Building and HVAC Characterization for Commercial Building Indoor Air Quality Investigations.
PB93-198844/REB 93-01 PC **A07**/MF **A02**

**COMMERCIAL FISHING**

Chesapeake Bay American Eel Fishery Management Plan. Agreement Commitment Report 1991.
PB93-226017/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans, December 1992.
PB93-226058/REB 93-04 PC **A04**/MF **A01**

Chesapeake Bay Atlantic Croaker and Spot Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226629/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Summer Flounder Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226637/REB 93-04 PC **A03**/MF **A01**

**COMMUNICATIONS MANAGEMENT**

Risk Communication About Chemicals in Your Community. Facilitator's Manual and Guide.
PB93-200541/REB 93-01 PC **A05**/MF **A02**

Toxic and Hazardous Chemicals, Title III and Communities: An Outreach Manual for Community Groups.
PB93-200806/REB 93-01 PC **A08**/MF **A02**

**COMMUNITY RELATIONS**

Toxic and Hazardous Chemicals, Title III and Communities: An Outreach Manual for Community Groups.
PB93-200806/REB 93-01 PC **A08**/MF **A02**

Guide to Community Involvement for Site Assessment Managers.
PB93-963348/REB 93-04 PC **A02**/MF **A01**

**COMPLEMENT**

Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

**COMPLEX TERRAIN DISPERSION MODEL**

CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 1. Technical Formulations.
PB93-107076/REB 93-01 PC **A03**/MF **A01**

CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 2. Performance Characteristics.
PB93-107084/REB 93-01 PC **A03**/MF **A01**

**COMPLIANCE**

Status Report on Analytical Methods to Support the Disinfectant/Disinfection By-Products Regulation.
PB93-134898/REB 93-01 PC **A03**/MF **A01**

Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources. March 1991 Edition.
PB93-222933/REB 93-04 PC A24/MF A04

**COMPLIANCE DATA SYSTEM**
Compliance Data System Quality Assurance Manual, June 1984.
PB93-199339/REB 93-01 PC A10/MF A03

**COMPONENTS**
Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC A02/MF A01

**COMPOSITE CORRECTION PROGRAM**
Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC A10/MF A03

**COMPOSTS**
Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC A03/MF A01

**COMPUTATIONAL FLUID DYNAMICS**
Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119873/REB 93-01 PC A02/MF A01

Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119881/REB 93-01 PC A03/MF A01

Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
PB93-131845/REB 93-01 PC A03/MF A01

**COMPUTER ARCHITECTURE**
Information Technology Architecture.
PB93-122430/REB 93-01 PC A03/MF A01

**COMPUTER NETWORKS**
Information Technology Architecture.
PB93-122430/REB 93-01 PC A03/MF A01

**COMPUTER PROGRAMS**
Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC A02/MF A01

**COMPUTERIZED SIMULATION**
Modeling of Indoor Air Quality for a Personal Computer.
PB93-106771/REB 93-01 PC A03/MF A01

CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 1. Technical Formulations.
PB93-107076/REB 93-01 PC A03/MF A01

CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 2. Performance Characteristics.
PB93-107084/REB 93-01 PC A03/MF A01

Modeling Individual Exposure from Indoor Sources.
PB93-119840/REB 93-01 PC A03/MF A01

Development of an Improved Urban Airshed Modeling System.
PB93-120889/REB 93-01 PC A03/MF A01

Simplified Cycle Simulation Model for the Performance Rating of Refrigerants and Refrigerant Mixtures.
PB93-130383 93-01 Not available NTIS

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
PB93-131688/REB 93-01 PC A03/MF A01

Water Temperature Characteristics of Lakes Subjected to Climate Change.
PB93-135648/REB 93-01 PC A09/MF A02

Subjective-Probability-Based Scenarios for Uncertain Input Parameters: Stratospheric Ozone Depletion, December 1990.
PB93-143741/REB 93-01 PC A03/MF A01

Contingency Analysis Modeling for Superfund Sites and Other Sources.
PB93-169126/REB 93-01 PC A13/MF A03

PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
PB93-174027/REB 93-01 PC A17/MF A04

User's Manual for the Plume Visibility Model PLUVUE II (Revised).
PB93-188233/REB 93-01 PC A06/MF A02

IAQPC: An Indoor Air Quality Simulator.
PB93-212397/REB 93-04 PC A03/MF A01

Workbook for Plume Visual Impact Screening and Analysis (Revised).
PB93-223592/REB 93-04 PC A06/MF A02

Protocol for Determining the Best Performing Model.
PB93-226082/REB 93-04 PC A03/MF A01

Modeling Protocol for Applying MESOPUFF II to Long Range Transport Problems.
PB93-226106/REB 93-04 PC A04/MF A01

Stochastic Methodology for Regional Wind-Field Modeling.
PB93-229391/REB 93-04 PC A03/MF A01

EPANET Water Quality Model.
PB93-236552/REB 93-04 PC A03/MF A01

**CONCENTRATION (COMPOSITION)**
CALINE: California Line Source Model (for Microcomputers).
PB93-500254/REB 93-01 CP D02

**CONCRETE SLABS**
Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
PB93-199388/REB 93-01 PC A03/MF A01

**CONCRETES**
Measurement of the Surface Permeability of Basement Concretes.
PB93-232114/REB 93-04 PC A03/MF A01

**CONDENSED AROMATICS**
Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC A03/MF A01

**CONDORS PROJECT**
Final Results of the Condors Convective Diffusion Experiment.
PB93-212728/REB 93-04 PC A03/MF A01

**CONFIDENTIALITY**
Protecting Confidentiality in Establishment Surveys.
PB93-180958/REB 93-01 PC A03/MF A01

TSCA Confidential Business Information Security Manual.
PB93-184844/REB 93-01 PC A07/MF A02

Discussion: Response to Internal Reviews of My Paper, 1993 Census Bureau Annual Research Conference.
PB93-191385/REB 93-01 PC A02/MF A01

Setting an Agenda for Research in the Federal Statistical System: Needs for Statistical Disclosure Limitation Procedures.
PB93-204097/REB 93-04 PC A03/MF A01

**CONGENITAL ABNORMALITIES**
Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC A03/MF A01

Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC A02/MF A01

**CONGO RED**
Gonadal Effects of Fetal Exposure to the Azo Dye Congo Red in Mice: Infertility in Female but Not Male Offspring.
PB93-181071/REB 93-01 PC A03/MF A01

**CONNECTICUT**
National Priorities List Sites: Connecticut, 1992.
PB93-963208/REB 93-01 PC A04/MF A01

**CONSERVATION**
Living Resources Subcommittee: Annual Summary.
PB93-112506/REB 93-01 PC A03/MF A01

News Notes, Number 22: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-126183/REB 93-01 PC A03/MF A01

Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.
PB93-212637/REB 93-04 PC A03/MF A01

Conservation and Sequestration of Carbon: The Potential of Forest and Agroforest Management Practices.
PB93-229656/REB 93-04 PC A03/MF A01

**CONSERVATION TILLAGE DEMONSTRATION PROJECT**
Northeast Indiana Conservation Tillage Demonstration Project. Final Report (1981-1985).
PB93-128056/REB 93-01 PC A03/MF A01

**CONSTRUCTION**
Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC A09/MF A02

Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
PB93-212462/REB 93-04 PC A03/MF A01

Storm Water Management for Construction Activities. Developing Pollution Prevention Plans and Best Management Practices. Summary Guidance.
PB93-223550/REB 93-04 PC A03/MF A01

NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC A01/MF A01

**CONSTRUCTION EQUIPMENT**
Heavy-Duty Engine Testing Report Non-Road Engine Configurations Injection Timing Effects Test Results, 1992.
PB93-236164/REB 93-04 PC A05/MF A01

**CONSTRUCTION MANAGEMENT**
U.S. EPA's QA/QC Program for Waste Management Facilities. Proceedings of the GRI Seminar (6th), MQC/MQA and CQC/CQA of Geosynthetics. Held in Philadelphia, Pennsylvania on December 10-11, 1992.
PB93-149219/REB 93-01 PC A02/MF A01

**CONSTRUCTION MATERIALS**
Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC A03/MF A01

Proceedings: Interagency Symposium (2nd) on Stabilization of Soils and Other Materials. Held in Metairie, Louisiana on November 2-5, 1992.
PB93-131977/REB 93-01 PC A17/MF A04

Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC A03/MF A01

Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC A13/MF A03

International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.
PB93-222073/REB 93-04 PC A02/MF A01

**CONSUMER PROTECTION**
Assessing the Environmental Consumer Market.
PB93-116028/REB 93-01 PC A03/MF A01

**CONTAINERS**
Waste Reduction Activities and Options for a Manufacturer of Plastic Containers by Injection Molding.
PB93-126241/REB 93-01 PC A02/MF A01

On-Board Corrosion Analysis of a Recovered Nuclear Waste Container.
PB93-202927/REB 93-01 PC A03/MF A01

Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC A03/MF A01

**CONTAINMENT**
Engineering Bulletin: Slurry Walls.
PB93-105575/REB 93-01 PC A02/MF A01

Technical Guidance Document: Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems.
PB93-105625/REB 93-01 PC A05/MF A02

**CONTAMINATED SEDIMENTS**
Contaminated Sediments News: Number 5, April, 1992.
PB93-207413/REB 93-04 PC A02/MF A01

**CONTAMINATION**
Managing Ground Water Contamination Sources in Wellhead Protection Areas: A Priority Setting Approach.
PB93-115863/REB 93-01 PC A12/MF A03

EPA Bibliography on Surface Contamination.
PB93-168904/REB 93-01 PC A02/MF A01

**CONTINGENCY PLANNING**
Contingency Analysis Modeling for Superfund Sites and Other Sources.
PB93-169126/REB 93-01 PC A13/MF A03

**CONTINUOUS FLOW CULTURE**
Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC A02/MF A01

**CONTINUOUS SAMPLING**
Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
PB93-131704/REB 93-01 PC A03/MF A01

Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC A07/MF A02

**CONTRACT ADMINISTRATION**
Mentor-Protege Program.
PB93-963251/REB 93-01 PC A02/MF A01

Superfund Response Action Contracts.
PB93-963292/REB 93-01 PC A01/MF A01

**CONTRACT MANAGEMENT**
Required Contracts Management Training for Regional Superfund Personnel.
PB93-963258/REB 93-01 PC A01/MF A01

Obligation of Funds under Superfund State Contracts.
PB93-963326/REB 93-04 PC A01/MF A01

Ensuring the Adequacy of Cost Share Provisions in Superfund State Contracts.
PB93-963336/REB 93-01 PC A03/MF A01

**CONVECTION**
Laboratory Simulation of Turbulent Convection Over an Urban Heat Island.
PB93-120871/REB 93-01 PC A02/MF A01

Final Results of the Condors Convective Diffusion Experiment.
PB93-212728/REB 93-04 PC A03/MF A01

**CONVECTION CURRENTS**
Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.
PB93-212686/REB 93-04 PC A03/MF A01

**CONVERSION**
Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel - Final Report.
PB93-197929/REB 93-01 PC A03/MF A01

**COOLING SYSTEMS**
Simplified Cycle Simulation Model for the Performance Rating of Refrigerants and Refrigerant Mixtures.
PB93-130383 93-01 Not available NTIS

**COOLING TOWERS**
Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC A06/MF A02

**COPPER**
Lead and Copper Rule Guidance Manual. Volume 2. Corrosion Control Treatment.
PB93-101533/REB 93-01 PC **A10**/MF **A03**

Economic Analysis of Pretreatment Standards: The Secondary Copper and Aluminum Subcategories of the Nonferrous Metals Manufacturing Point Source Category.
PB93-167757/REB 93-01 PC **A07**/MF **A02**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 50,001 to 100,000 Persons.
PB93-174514/REB 93-01 PC **A04**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 101 to 500 Persons.
PB93-174522/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 501 to 3,300 Persons.
PB93-174530/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 3,301 to 10,000 Persons.
PB93-174548/REB 93-01 PC **A03**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 10,001 to 50,000 Persons.
PB93-174555/REB 93-01 PC **A04**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving > 100,000 Persons.
PB93-174563/REB 93-01 PC **A04**/MF **A01**

Fact Sheet: National Primary Drinking Water Regulations for Lead and Copper.
PB93-193746/REB 93-01 PC **A03**/MF **A01**

Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194181/REB 93-01 PC **A03**/MF **A01**

Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03**/MF **A01**

Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03**/MF **A01**

**COPPER INDUSTRY**
Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category (Proposed).
PB93-206522/REB 93-04 PC **A23**/MF **A04**

**COPROCESSING**
Coprocessing of Fossil Fuels and Biomass for CO2 Emission Reduction in the Transportation Sector.
PB93-194165/REB 93-01 PC **A02**/MF **A01**

**CORA (COST OF REMEDIAL ACTION)**
Cost of Remedial Action Model.
PB93-963304/REB 93-04 PC **A01**/MF **A01**

**CORN**
Measurement of Biogenic Emissions from Corn.
PB93-180883/REB 93-01 PC **A02**/MF **A01**

**CORN PLANTS**
Cost Effective Corn and Soybean Production Without Tillage: Fact or Fiction (May 1988).
PB93-157568/REB 93-01 PC **A03**/MF **A01**

**CORONA DESTRUCTION REACTORS**
Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC **A02**/MF **A01**

**CORROSION**
Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells.
PB93-115897/REB 93-01 PC **A04**/MF **A01**

Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194181/REB 93-01 PC **A03**/MF **A01**

**CORROSION CONTROL**
Lead and Copper Rule Guidance Manual. Volume 2. Corrosion Control Treatment.
PB93-101533/REB 93-01 PC **A10**/MF **A03**

**CORROSION PREVENTION**
Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03**/MF **A01**

Corrosion Control Principles and Strategies for Reducing Lead and Copper in Drinking Water Systems.
PB93-199420/REB 93-01 PC **A03**/MF **A01**

Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC **A02**/MF **A01**

**CORROSION TESTS**
Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
PB93-120970/REB 93-01 PC **A02**/MF **A01**

**COST ANALYSIS**
Technologies and Costs for Control of Disinfection By-Products: Executive Summary.
PB93-134922/REB 93-01 PC **A03**/MF **A01**

OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC **A04**/MF **A01**

Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Guidance.
PB93-154730/REB 93-01 PC **A10**/MF **A03**

Economic Impacts of RCRA Regulations on the Plating and Polishing Industry.
PB93-158988/REB 93-01 PC **A07**/MF **A02**

Report to the United States Congress on Radionuclides in Drinking Water: Multimedia Risk and Cost Assessment of Radon in Drinking Water.
PB93-209427/REB 93-04 PC **A08**/MF **A02**

Industrial Boiler Furnace Sorbent Injection Algorithm Development.
PB93-222438/REB 93-04 PC **A01**/MF **A01**

**COST EFFECTIVENESS**
Cost Effectiveness Analysis of Effluent Guidelines and Standards for the Aluminum Forming Category.
PB93-156107/REB 93-01 PC **A03**/MF **A01**

**COST ESTIMATES**
Estimation of the Cost of Using Chemical Protective Clothing.
PB93-168805/REB 93-01 PC **A03**/MF **A01**

Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.
PB93-205508/REB 93-04 PC **A99**/MF **A06**

Cost of Remedial Actions (CORA) Model: Overview and Applications.
PB93-963318/REB 93-04 PC **A03**/MF **A01**

**COST FACTORS**
Identification of Cost Factors for the Ocean Disposal Alternative for Low-Level Radioactive Waste.
PB93-203917/REB 93-04 PC **A03**/MF **A01**

**COVERINGS**
Landfill Containment and Cover Systems.
PB93-106698/REB 93-01 PC **A03**/MF **A01**

Resistance of Membranes in Cover Systems to Root Penetration by Grass and Trees.
PB93-106714/REB 93-01 PC **A02**/MF **A01**

Use of Alternative Materials for Daily Cover at Municipal Solid Waste Landfills.
PB93-227197/REB 93-04 PC **A08**/MF **A02**

**CRACKING (FRACTURING)**
Stress Cracking Behavior of HDPE Geomembranes and Its Prevention.
PB93-196616/REB 93-01 PC **A06**/MF **A02**

**CRADLE-TO-GRAVE STUDIES**
Broad-Based Environmental Life Cycle Assessment.
PB93-199495/REB 93-01 PC **A02**/MF **A01**

**CRASSOSTREA VIRGINICA**
Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02**/MF **A01**

**CRAWFORD COUNTY (ILLINOIS)**
Biological and Water Quality Survey of Sugar Creek and Tributaries Crawford County, Illinois, August and September 1992.
PB93-217180/REB 93-04 PC **A04**/MF **A01**

**CRAWLSPACE SUBMEMBRANE DEPRESSURIZATION SYSTEMS**
Indoor Radon Reduction in Crawl-Space Houses: A Review of Alternative Approaches.
PB93-173177/REB 93-01 PC **A03**/MF **A01**

**CREATED WETLANDS**
Constructed Wetland Design: the First Generation.
PB93-131753/REB 93-01 PC **A02**/MF **A01**

Habitat Quality Assessment of Two Wetland Treatment Systems in Mississippi: A Pilot Study.
PB93-135614/REB 93-01 PC **A06**/MF **A02**

Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
PB93-233914/REB 93-04 PC **A12**/MF **A03**

**CREOSOTE**
On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC **A09**/MF **A02**

Evaluation of the Potential Carcinogenicity of Creosote (8001-58-9).
PB93-185171/REB 93-01 PC **A03**/MF **A01**

Technology Evaluation Report: Pilot-Scale Demonstration of a Slurry-Phase Biological Reactor for Creosote-Contaminated Soil. Volume 1.
PB93-205532/REB 93-04 PC **A09**/MF **A02**

**CRITERIA**
Criteria for Review of Hazardous Materials Emergency Plans.
PB93-207348/REB 93-04 PC **A03**/MF **A01**

Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
PB93-217784/REB 93-04 PC **A07**/MF **A02**

**CRITERIA DOCUMENT**
Air Quality Criteria for Carbon Monoxide.
PB93-167492/REB 93-01 PC **A99**/MF **A06**

**CRITICAL LOADS**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

**CROSS REACTIONS**
Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC **A03**/MF **A01**

**CULTIVATED LANDS**
Rice Field Inventory Using AVHRR Data.
PB93-135697/REB 93-01 PC **A03**/MF **A01**

**CULTIVATION**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
PB93-128031/REB 93-01 PC **A06**/MF **A02**

Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

Northeast Indiana Conservation Tillage Demonstration Project. Final Report (1981-1985).
PB93-128056/REB 93-01 PC **A03**/MF **A01**

Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
PB93-128114/REB 93-01 PC **A04**/MF **A01**

Sustainable Agriculture and the Environment in the Humid Tropics.
PB93-173920/REB 93-01 PC **A99**/MF **A06**

Conservation Tillage Impacts on National Soil and Atmospheric Carbon Levels.
PB93-191500/REB 93-01 PC **A03**/MF **A01**

**CUTTING FLUIDS**
Mobile On-Site Recycling of Metalworking Fluids.
PB93-216562/REB 93-04 PC **A04**/MF **A01**

**CUTTING MACHINES**
Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC **A02**/MF **A01**

**CYCLOHEXANE/ALPHA-HEXACHLORO**
Evaluation of the Potential Carcinogenicity of Alpha-Hexachlorocyclohexane (319-84-6).
PB93-185049/REB 93-01 PC **A03**/MF **A01**

**CYCLOHEXANE/BETA-HEXACHLORO**
Evaluation of the Potential Carcinogenicity of Beta-Hexachlorocyclohexane (319-85-7).
PB93-185056/REB 93-01 PC **A03**/MF **A01**

**CYCLONE COMBUSTORS**
Babcock and Wilcox Cyclone Furnace Vitrification Technology: Applications Analysis Report.
PB93-122315/REB 93-01 PC **A03**/MF **A01**

Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC **A03**/MF **A01**

**CYCLOPHOSPHAMIDE**
Evaluation of the Potential Carcinogenicity of Cyclophosphamide (50-18-0).
PB93-185189/REB 93-01 PC **A03**/MF **A01**

**CYPERMETHRIN**
Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
PB93-229599/REB 93-04 PC **A03**/MF **A01**

**CYPRINODON VARIEGATUS**
Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows ('Cyprinodon variegatus').
PB93-204998/REB 93-04 PC **A03**/MF **A01**

**CYTOCHROME P-450**
Molecular Regulation of the Induction of Cytochrome P-450E in the Estuarine Fish Fundulus Heteroclitus.
AD-A258 623/8/REB 93-01 PC **A11**/MF **A03**

Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02**/MF **A01**

Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

Proteins from Eight Eukaryotic Cytochrome P-450 Families Share a Segmented Region of Sequence Similarity.
PB93-229235/REB 93-04 PC **A02**/MF **A01**

Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
PB93-229243/REB 93-04 PC **A03**/MF **A01**

Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC **A02**/MF **A01**

Characterization of the Alkane-Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis': Identification of a New P450 Gene Family.
PB93-229268/REB 93-04 PC **A03/MF A01**

Isolation of the Alkane Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis'.
PB93-229284/REB 93-04 PC **A02/MF A01**

Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC **A03/MF A01**

**CYTOCHROME P450**

Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
PB93-229482/REB 93-04 PC **A03/MF A01**

**CYTOCHROME P450 LANOSTEROL 14 ALPHA-DEMETHYLASE**

Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
PB93-229441/REB 93-04 PC **A03/MF A01**

**CYTOKINES**

Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
PB93-175677/REB 93-01 PC **A02/MF A01**

Cytokine (Tumor Necrosis Factor, IL-6, and IL-8) Production by Respiratory Syncytial Virus-Infected Human Alveolar Macrophages.
PB93-181006/REB 93-01 PC **A02/MF A01**

**CYTOMEGALIC INCLUSION DISEASE**

Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomegalovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC **A03/MF A01**

**CYTOPLASM**

Cytoplasmic Microtubular Dynamics and Chromatin Organization during Mammalian Oogenesis and Oocyte Maturation.
PB93-194413/REB 93-01 PC **A03/MF A01**

**DAPHNIA**

Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.
PB93-222404/REB 93-04 PC **A02/MF A01**

**DATA ANALYSIS**

SCOUT: A Data Analysis Program (Version 1.40) (for Microcomputers).
PB93-505303/REB 93-01 CP **D02**

**DATA BASE MANAGEMENT SYSTEMS**

Data Management Strategy for the Tampa Bay National Estuary Program: Recommendations and Implementation Plan.
PB93-191633/REB 93-01 PC **A09/MF A03**

Information Management Guidelines for the Wetlands Research Program.
PB93-202844/REB 93-01 PC **A04/MF A01**

Crosswalk/Air Toxic Emission Factor Data Base Management System (XATEF) Version 2.0 (for Microcomputers).
PB93-504793/REB 93-01 CP **D02**

**DATA BASES**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Diethylene Glycol Dinitrate (DEGDN).
PB93-117000/REB 93-01 PC **A03/MF A01**

Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. User's Guide. Volume 1. NGDC Key to Geophysical Records Documentation No. 26.
PB93-146082/REB 93-01 PC **A07/MF A02**

Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. Documentation Manual, DISC-A. Volume 1. NGDC Key to Geophysical Records Documentation No. 27.
PB93-146090/REB 93-01 PC **A11/MF A03**

Aquatic Toxicity Information Retrieval Data Base: A Technical Support Document. (Revised July 1992).
PB93-192631/REB 93-04 PC **A03/MF A01**

Volatile Organic Compound/Particulate Matter Speciation Data Base Management System (SPECIATE), Version 1.5 (for Microcomputers).
PB93-505236/REB 93-01 CP **D02**

Aquatic Toxicity Information Retrieval Data Base (AQUIRE).
PB93-505725/REB 93-04 CP **T02**

Site Assessment Information Directory (SAID) Region 1 (for Microcomputers). Date of Coverage: October 1991.
PB93-506111/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 2 (for Microcomputers). Date of Coverage: October 1991.
PB93-506129/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 3 (for Microcomputers). Date of Coverage: October 1991.
PB93-506137/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 4 (for Microcomputers). Date of Coverage: October 1991.
PB93-506145/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 5 (for Microcomputers). Date of Coverage: 1991.
PB93-506152/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 6 (for Microcomputers). Date of Coverage: October 1991.
PB93-506160/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 7 (for Microcomputers). Date of Coverage: October 1991.
PB93-506178/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 8 (for Microcomputers). Date of Coverage: 1991.
PB93-506186/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 9 (for Microcomputers). Date of Coverage: October 1991.
PB93-506194/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 10 (for Microcomputers). Date of Coverage: October 1991.
PB93-506202/REB 93-04 CP **D03**

Resource Conservation and Recovery Information System (RCRIS) Extract Tapes.
PB93-592570/REB 93-04 SubscriptionPC**$2540.00**

**DATA COLLECTION**

Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03/MF A01**

**DATA CONVERSION**

Exploring the Effects of Vector to Raster and Raster to Vector Conversion.
PB93-122166/REB 93-01 PC **A04/MF A01**

**DATA FILE**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, June 1992.
PB93-500197/REB 93-01 CP **T05**

Preamble and Final Sludge Rule (for Microcomputers).
PB93-500478/REB 93-01 CP **D01**

Oil and Hazardous Materials, Technical Assistance Data System (OHM-TADS) (for Microcomputers).
PB93-500577/REB 93-01 CP **D06**

Toxic Release Inventory (TRI), 1987-1990 (on CD-ROM).
PB93-500742/REB 93-01 CD-ROM**$45.00**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, January 1993.
PB93-504595/REB 93-01 CP **T05**

Toxic Release Inventory, (TRI), 1991.
PB93-505873/REB 93-04 CP **T14**

Environmental Fate Data Base (EFDB) Complete: XREF, CASLST, DATALOG, BIOLOG, CHEMFATE, and BIODEG. (Date of Coverage 1993).
PB93-506426/REB 93-04 CP **T05**

Biennial Reporting System (BRS) 1989 (Date of Coverage: 1989).
PB93-507044/REB 93-04 CP **T04**

**DATA INTEGRITY**

ASSESS User's Guide.
PB93-163251/REB 93-01 PC **A03/MF A01**

ASESS 1.01A (3 1/2 Inch Diskette) (for Microcomputers).
PB93-505154/REB 93-01 CP **D02**

ASSESS 1.01A (5 1/4 Inch Diskette) (for Microcomputers).
PB93-505295/REB 93-01 CP **D02**

**DATA REQUIREMENTS**

Engineering Bulletin: Technology Preselection Data Requirements.
PB93-105591/REB 93-01 PC **A02/MF A01**

**DATA TRANSMISSION**

Toxic Chemical Release Inventory Magnetic Media Submission Instructions. Section 313 of the Emergency Planning and Community Right-to-Know Act (Revised 1990 Version).
PB93-116127/REB 93-01 PC **A03/MF A01**

**DATABASES**

Database of Benthic Sampling Locations in Tampa Bay.
PB93-191211/REB 93-01 PC **A05/MF A01**

Aquatic Toxicity Information on VAX VMS Backup (AQUIRE for VMS).
PB93-505733/REB 93-01 CP **T02**

**DATAFILE**

Regulatory Impact Analysis (RIA) for the Proposed Great Lakes Water Quality Guidance (for Microcomputers).
PB93-505386/REB 93-04 CP **D02**

Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Initiative Guidance (for Microcomputers).
PB93-505394/REB 93-04 CP **D02**

Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study Technical Background Document (for Microcomputers).
PB93-505402/REB 93-04 CP **D04**

Toxic Release Inventory, 1991 Reporting Facilities Names and Addresses.
PB93-505881/REB 93-04 CP **T02**

Toxic Release Inventory (TRI), 1987.
PB93-506004/REB 93-04 CP **T16**

Toxic Release Inventory (TRI), 1988.
PB93-506012/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1989.
PB93-506020/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1990.
PB93-506038/REB 93-04 CP **T14**

**DAUNOMYCIN**

Evaluation of the Potential Carcinogenicity of Daunomycin (20830-81-3).
PB93-185197/REB 93-01 PC **A03/MF A01**

**DAUNORUBICIN**

Evaluation of the Potential Carcinogenicity of Daunomycin (20830-81-3).
PB93-185197/REB 93-01 PC **A03/MF A01**

**DBA INBRED MICE**

Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-228906/REB 93-04 PC **A01/MF A01**

**DBCP (DIBROMO-3-CHLOROPROPANE/1-2)**

Evaluation of the Potential Carcinogenicity of 1,2-Dibromo-3-Chloropropane (96-12-8).
PB93-185304/REB 93-01 PC **A03/MF A01**

**DDD INSECTICIDE**

Evaluation of the Potential Carcinogenicity of DDD (72-54-8).
PB93-185205/REB 93-01 PC **A03/MF A01**

**DDE INSECTICIDE**

Evaluation of the Potential Carcinogenicity of DDE (72-55-9).
PB93-185247/REB 93-01 PC **A03/MF A01**

**DDT**

Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport.
PB93-141497/REB 93-01 PC **A02/MF A01**

Evaluation of the Potential Carcinogenicity of DDT (50-29-3).
PB93-185254/REB 93-01 PC **A03/MF A01**

Effects of Culture Parameters on DDT (1,1,1-Trichloro-2,2-BIS(4-Chlorophenyl)Ethane) Biodegradation by 'Phanerochaete chrysosporium'.
PB93-191567/REB 93-01 PC **A03/MF A01**

Biodegradation of DDT (1,1,1-Trichloro-2,2-Bis(4-Chlorophenyl)Ethane) by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191617/REB 93-01 PC **A02/MF A01**

**DEBRIS**

Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04/MF A01**

**DECHLORINATION**

Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02/MF A01**

**DECONTAMINATION**

Evaluation of Laboratory Tests to Determine the Effectiveness of Chemical Surface Washing Agents.
PB93-194215/REB 93-01 PC **A02/MF A01**

**DEGRADATION**

Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC **A03/MF A01**

Weatherability of Enhanced-Degradable Plastics.
PB93-229789/REB 93-04 PC **A14/MF A03**

**DEHYDROHALOGENATION**

Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC **A03/MF A01**

**DEICERS**

Characterization of PM-10 Emissions from Antiskid Materials Applied to Ice- and Snow-Covered Roadways.
PB93-150209/REB 93-01 PC **A05/MF A01**

**DELAWARE**

National Priorities List Sites: Delaware, 1992.
PB93-963209/REB 93-01 PC **A05/MF A01**

**DELAYED HYPERSENSITIVITY**

Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175651/REB 93-01 PC **A03/MF A01**

**DELISTING PETITIONS**

Petitions to Delist Hazardous Wastes: A Guidance Manual. Second Edition.
PB93-169365/REB 93-01 PC **A08/MF A02**

**DEMAND (ECONOMICS)**

Public Access: A How To Guide.
PB93-111029/REB 93-01 PC **A09/MF A03**

**DEMOLITION**

Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC **A02/MF A01**

**DEMONSTRATION WATERSHEDS**

Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
PB93-128114/REB 93-01 PC **A04/MF A01**

**DENITRIFICATION**
Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC **A03**/MF **A01**

Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.
PB93-212363/REB 93-04 PC **A02**/MF **A01**

**DENSE NONAQUEOUS PHASE LIQUIDS**
DNAPL Site Evaluation.
PB93-150217/REB 93-01 PC **A16**/MF **A03**

**DEOXYGUANOSINE**
Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC **A02**/MF **A01**

**DEOXYRIBONUCLEIC ACID**
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC **A03**/MF **A01**

**DEOXYRIBONUCLEIC ACIDS**
Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
PB93-121176/REB 93-01 PC **A02**/MF **A01**

Isolation and Purification of Bacterial DNA from Soil.
PB93-149276/REB 93-01 PC **A04**/MF **A01**

DNA Isolation from Small Tissue Samples Using Salt and Spermine.
PB93-181048/REB 93-01 PC **A01**/MF **A01**

Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. aeschynomene' Transformants with Benomyl Resistance.
PB93-212629/REB 93-04 PC **A02**/MF **A01**

Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.
PB93-222354/REB 93-04 PC **A03**/MF **A01**

Simple Mini-Method to Extract DNA Directly from Soil for Use with Polymerase Chain Reaction Amplification.
PB93-222792/REB 93-04 PC **A02**/MF **A01**

Recovery of DNA from Soils and Sediments.
PB93-222834/REB 93-04 PC **A02**/MF **A01**

Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC **A02**/MF **A01**

Short Communication: Improved Thin-Layer Chromatographic Separation of 32P-Postlabeled DNA Adducts.
PB93-229615/REB 93-04 PC **A02**/MF **A01**

Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC **A03**/MF **A01**

**DEPOSITION**
Model Calculations of the Annual Atmospheric Deposition of Toxic Metals to Lake Michigan.
PB93-120905/REB 93-01 PC **A03**/MF **A01**

Atmospheric Deposition of Toxic Metals to Lake Michigan: Preliminary Annual Model Calculations.
PB93-120954/REB 93-01 PC **E02**/MF **A01**

Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
PB93-120970/REB 93-01 PC **A02**/MF **A01**

Atmospheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC **A02**/MF **A01**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound.
PB93-122208/REB 93-01 PC **A09**/MF **A02**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound, Appendices.
PB93-122216/REB 93-01 PC **A16**/MF **A03**

Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC **A03**/MF **A01**

Dry Deposition Flux Calculations for the National Dry Deposition Network.
PB93-178242/REB 93-01 PC **A05**/MF **A02**

Analysis of Atmospheric Deposition Samples from Easton, Pennsylvania.
PB93-181600/REB 93-01 PC **A04**/MF **A01**

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Atmospheric Deposition of Critical Issue Forum. Held in Annapolis, Maryland on November 5, 1992.
PB93-193738/REB 93-01 PC **A03**/MF **A01**

Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC **A02**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC **A08**/MF **A02**

**DERMAL**
Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
PB93-105534/REB 93-01 PC **A04**/MF **A01**

**DESORPTION**
Sorption and Reemission of Formaldehyde by Gypsum Wallboard.
PB93-180917/REB 93-01 PC **A03**/MF **A01**

**DETECTION**
Geophysics Advisor Expert System, Version 2.0.
PB93-163285/REB 93-01 PC **A03**/MF **A01**

Geophysics Advisor Expert System (Version 2.0) (for Microcomputers).
PB93-505162/REB 93-01 CP **D02**

**DETERGENTS**
Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC **A07**/MF **A02**

**DEWATERING**
Summary of the 1987 Carver-Greenfield Sludge Drying Technology Workshop: Problems and Solutions. Held in Los Angeles, California on March 10-11, 1987.
PB93-174506/REB 93-01 PC **A04**/MF **A01**

**DIALLATE**
Evaluation of the Potential Carcinogenicity of Diallate (2303-16-4).
PB93-185262/REB 93-01 PC **A03**/MF **A01**

**DIAMIDINO-2-PHENYLINDOLE**
Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
PB93-121184/REB 93-01 PC **A02**/MF **A01**

**DIATOMS**
Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC **A02**/MF **A01**

**DIBENZANTHRACENES**
Evaluation of the Potential Carcinogenicity of Dibenz(a,h)Anthracene (53-70-3).
PB93-185288/REB 93-01 PC **A03**/MF **A01**

**DIBENZODIOXIN/TETRACHLORO**
Evaluation of the Potential Carcinogenicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (1746-01-6).
PB93-201267/REB 93-01 PC **A03**/MF **A01**

**DIBENZOPYRENES**
Evaluation of the Potential Carcinogenicity of 1,2:7,8-Dibenzopyrene (189-55-9).
PB93-185296/REB 93-01 PC **A03**/MF **A01**

**DICHLOROBENZENES**
Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02**/MF **A01**

**DICHLOROBENZILATE/ETHYL**
Evaluation of the Potential Carcinogenicity of Ethyl 4,4'-Dichlorobenzilate (510-15-6).
PB93-192359/REB 93-01 PC **A03**/MF **A01**

**DICHLOROPHENYLARSINE**
Evaluation of the Potential Carcinogenicity of Dichlorophenylarsine (696-28-6).
PB93-184869/REB 93-01 PC **A03**/MF **A01**

**DICTIONARIES**
Glossary for Avian Conservation Biology.
PB93-106656/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Glossary.
PB93-115970/REB 93-01 PC **A02**/MF **A01**

Resource Conservation and Recovery Information System (RCRIS) Data Element Dictionary.
PB93-192656/REB 93-04 PC **A24**/MF **A04**

**DIELDRIN**
Evaluation of the Potential Carcinogenicity of Dieldrin (60-57-1).
PB93-194272/REB 93-01 PC **A03**/MF **A01**

**DIESEL ENGINE EXHAUST**
Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.
PB93-222081/REB 93-04 PC **A03**/MF **A01**

**DIESEL ENGINES**
Impact of fuels on diesel exhaust emissions. A chemical and biological characterization.
DE92563058/REB 93-01 PC **A08**/MF **A02**

**DIESEL FUELS**
Regulatory Impact Analysis: Control of Sulfur and Aromatics Contents of on-Highway Diesel Fuel.
PB93-207660/REB 93-04 PC **A12**/MF **A03**

Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02**/MF **A01**

**DIETHANOLAMINE/N-NITROSO**
Evaluation of the Potential Carcinogenicity of N-Nitrosodiethanolamine (1116-54-7).
PB93-196434/REB 93-01 PC **A03**/MF **A01**

**DIETHYLARSINE**
Evaluation of the Potential Carcinogenicity of Diethylarsine (692-42-2).
PB93-184877/REB 93-01 PC **A03**/MF **A01**

**DIETHYLENE GLYCOL DINITRATE**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Diethylene Glycol Dinitrate (DEGDN).
PB93-117000/REB 93-01 PC **A03**/MF **A01**

**DIETHYLHEXYL PHTHALATES**
Evaluation of the Potential Carcinogenicity of Bis(2-Ethylhexyl)Phthalate (117-81-7).
PB93-185098/REB 93-01 PC **A03**/MF **A01**

**DIETHYLNITROSAMINE**
Evaluation of the Potential Carcinogenicity of N-Nitrosodiethylamine (55-18-5).
PB93-196442/REB 93-01 PC **A03**/MF **A01**

**DIETHYLSTILBESTROL**
Evaluation of the Potential Carcinogenicity of Diethylstilbestrol (56-53-1).
PB93-194306/REB 93-01 PC **A03**/MF **A01**

**DIFFUSION**
Fundamental Mass Transfer Models for Indoor Air Pollution Sources.
PB93-221992/REB 93-04 PC **A02**/MF **A01**

ADL Migration Estimation Model (for Microcomputers) (Release Number 1).
PB93-500664/REB 93-01 CP **D02**

**DIFFUSION MODELING**
New Mathematical Model of Pollutant Dispersion Near a Building.
PB93-236529/REB 93-04 PC **A03**/MF **A01**

**DIHYDROXYNAPHTHALENES**
Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

**DIISOCYANATE/TOLUENE**
Development and Validation of a Source Test Method for 2,4-Toluene Diisocyanate.
PB93-204055/REB 93-01 PC **A03**/MF **A01**

**DIMETHENAMID**
Pesticide Fact Sheet Number 240: Dimethenamid. SAN 582H/Frontier (Trade Name) Herbicide.
PB93-198695/REB 93-01 PC **A03**/MF **A01**

**DIMETHOATE**
Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC **A02**/MF **A01**

**DIMETHOXYBENZIDINE**
Evaluation of the Potential Carcinogenicity of 3,3'-Dimethoxybenzidine (119-90-4).
PB93-194314/REB 93-01 PC **A03**/MF **A01**

**DIMETHYL SULFATE**
Evaluation of the Potential Carcinogenicity of Dimethyl Sulfate (77-78-1).
PB93-194322/REB 93-01 PC **A03**/MF **A01**

**DIMETHYLAMINOAZOBENZENE**
Evaluation of the Potential Carcinogenicity of Dimethylaminoazobenzene (60-11-7).
PB93-185338/REB 93-01 PC **A03**/MF **A01**

**DIMETHYLBENZIDINES**
Evaluation of the Potential Carcinogenicity of 3,3'-Dimethylbenzidine (119-93-7).
PB93-185353/REB 93-01 PC **A03**/MF **A01**

**DIMETHYLCARBAMOYL CHLORIDE**
Evaluation of the Potential Carcinogenicity of Dimethylcarbamoyl Chlo.
PB93-185361/REB 93-01 PC **A03**/MF **A01**

**DIMETHYLHYDRAZINES**
Evaluation of the Potential Carcinogenicity of 1,1 Dimethylhydrazine (57-14-7).
PB93-185379/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dimethylhydrazine (540-73-8).
PB93-185387/REB 93-01 PC **A03**/MF **A01**

**DIMETHYLNITROSAMINE**
Evaluation of the Potential Carcinogenicity of N-Nitrosodimethylamine (62-75-9).
PB93-196459/REB 93-01 PC **A03**/MF **A01**

**DINITROPHENOLS**

Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
PB93-141356/REB 93-01 PC **A03**/MF **A01**

**DINITROTOLUENES**

Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03**/MF **A01**

**DIOCTYL PHTHALATE**

Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.
PB93-221950/REB 93-04 PC **A01**/MF **A01**

**DIOXANES**

Evaluation of the Potential Carcinogenicity of 1,4-Dioxane (123-91-1).
PB93-185429/REB 93-01 PC **A03**/MF **A01**

**DIOXIN**

EPA's Reassessment of Dioxin Risk: Directed Health Research.
PB93-228922/REB 93-04 PC **A02**/MF **A01**

Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.
PB93-229193/REB 93-04 PC **A02**/MF **A01**

**DIOXINS**

Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202828/REB 93-01 PC **A06**/MF **A02**

Biodegradation of Chlorinated Organic Compounds by 'Phanerochaete chrysosporium', a Wood-Rotting Fungus.
PB93-204147/REB 93-01 PC **A03**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. (Chapters 1 through 8).
PB93-222644/REB 93-04 PC **E99**/MF **E99**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 1. Disposition and Pharmacokinetics.
PB93-222651/REB 93-04 PC **A07**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 2. Mechanisms of Toxic Actions.
PB93-222669/REB 93-04 PC **A03**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 3. Acute, Subchronic, and Chronic Toxicity.
PB93-222677/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 4. Immunotoxic Effects.
PB93-222685/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.
PB93-222693/REB 93-04 PC **A06**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 6. Carcinogenicity of TCDD in Animals.
PB93-222701/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 7. Epidemiology/Human Data.
PB93-222719/REB 93-04 PC **A07**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 8. Dose-Response Relationships.
PB93-222727/REB 93-04 PC **A11**/MF **A03**

**DIPHENYLAMINE**

Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC **A05**/MF **A01**

**DIRECT/DELAYED RESPONSE PROGRAM**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC **A18**/MF **A04**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC **A14**/MF **A03**

**DIRECTIVES**

NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC **A01**/MF **A01**

Discussions with the Public Concerning NPL Listings.
PB93-963338/REB 93-01 PC **A03**/MF **A01**

Superfund Accelerated Cleanup Model (SACM) Coordination Strategy.
PB94-963201/REB 93-04 PC **A01**/MF **A01**

**DIRECTORIES**

OSWER Superfund Telephone Directory.
PB92-963289/REB 93-01 PC **A03**/MF **A01**

Directory of OAQPS Information Services, May 1993.
PB93-196624/REB 93-01 PC **A03**/MF **A01**

Drinking Water Training Resources Directory: A National Training Coalition Directory of Current Training Materials. First Edition.
PB93-202802/REB 93-01 PC **A07**/MF **A02**

Global Oceans Directory. A Compendium of Organizations Dedicated to Marine Conservation.
PB93-206555/REB 93-04 PC **A06**/MF **A02**

National Directory of Citizen Volunteer Environmental Monitoring Programs (Third Edition).
PB93-207496/REB 93-04 PC **A03**/MF **A01**

**DISCHARGE (WATER)**

State Clean Water Strategies: Meeting the Challenges of the Future.
PB93-217628/REB 93-04 PC **A03**/MF **A01**

**DISEASES**

Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC **A23**/MF **A04**

**DISINFECTANTS**

Drinking Water and Health: Disinfectants and Disinfectant By-Products. Volume 7.
PB93-112290/REB 93-01 PC **A06**/MF **A02**

Occurrence Assessment for Disinfectants and Disinfection By-Products (Phase 6a) in Public Drinking Water.
PB93-134377/REB 93-01 PC **A04**/MF **A01**

Status Report on Analytical Methods to Support the Disinfectant/Disinfection By-Products Regulation.
PB93-134898/REB 93-01 PC **A03**/MF **A01**

Status Report on the Development of Draft MCLGs for Disinfectants and By-Products.
PB93-134906/REB 93-01 PC **A05**/MF **A01**

Status Report on Development of Regulations for Disinfectants and Disinfection By-Products.
PB93-134914/REB 93-01 PC **A03**/MF **A01**

RED Facts: Oxalic Acid.
PB93-173953/REB 93-01 PC **A02**/MF **A01**

Reactions of Potential Organic Water Contaminants with Aqueous Chlorine and Monochloramine.
PB93-175040/REB 93-01 PC **A04**/MF **A01**

Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.
PB93-222214/REB 93-04 PC **A10**/MF **A03**

Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
PB93-229565/REB 93-04 PC **A02**/MF **A01**

**DISINFECTION**

Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC **A07**/MF **A02**

Draft Ground-Water Disinfection Rule.
PB93-134351/REB 93-01 PC **A05**/MF **A01**

Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC **A05**/MF **A01**

Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

Status Report on Development of Regulations for Disinfectants and Disinfection By-Products.
PB93-134914/REB 93-01 PC **A03**/MF **A01**

Water Treatment Plant Simulation Program, Version 1.21, User's Manual.
PB93-134948/REB 93-01 PC **A06**/MF **A02**

Emergency Disinfection of Drinking Water.
PB93-223188/REB 93-04 PC **A01**/MF **A01**

**DISPERSANTS**

Evaluation of Three Oil Spill Laboratory Dispersant Effectiveness Tests.
PB93-191377/REB 93-01 PC **A02**/MF **A01**

Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203693/REB 93-04 PC **A07**/MF **A02**

Chemical Shoreline Cleaning Agents for Oil Spills: Update State-of-the-Art on Mechanisms of Action and Factors Influencing Performance.
PB93-203701/REB 93-04 PC **A04**/MF **A01**

Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.
PB93-236578/REB 93-04 PC **A04**/MF **A01**

**DISPERSING**

Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03**/MF **A01**

**DISSOLVED ORGANIC CARBON**

Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC **A02**/MF **A01**

Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC **A02**/MF **A01**

Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC **A03**/MF **A01**

**DISSOLVED ORGANIC MATTER**

Dissolved Organic Carbon and Sulfate Sorption by Spodosol Mineral Horizons.
PB93-229631/REB 93-04 PC **A02**/MF **A01**

**DISSOLVED OXYGEN**

Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03**/MF **A01**

**DISSOLVING**

Mineral Dissolution Rates: A Comparison of Laboratory and Field Studies.
PB93-141182/REB 93-01 PC **A01**/MF **A01**

Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02**/MF **A01**

**DISTRIBUTION SYSTEMS**

Effect of the Distribution System on Drinking-Water Quality.
PB93-173722/REB 93-01 PC **A03**/MF **A01**

Institutional Solutions to Drinking Water Problems: Maine Case Studies.
PB93-180834/REB 93-01 PC **A03**/MF **A01**

Medium Systems That Failed to Conduct Required Initial Lead Tap Monitoring and Reporting.
PB93-196632/REB 93-01 PC **A03**/MF **A01**

Modeling Contaminant Propagation in Drinking-Water Distribution Systems.
PB93-205136/REB 93-04 PC **A03**/MF **A01**

EPANET Water Quality Model.
PB93-236552/REB 93-04 PC **A03**/MF **A01**

**DISTRICT OF COLUMBIA**

Association of Personal and Workplace Characteristics with Reported Health Symptoms of 6771 Government Employees in Washington, DC.
PB93-212264/REB 93-04 PC **A02**/MF **A01**

**DISULFOTON**

Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC **A02**/MF **A01**

**DITHIANE**

Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

**DIURNAL VARIATIONS**

Distribution of Cardiac Output during Diurnal Changes of Activity in Rats.
PB93-180982/REB 93-01 PC **A02**/MF **A01**

**DIZOCILPINE MALEATE**

Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02**/MF **A01**

**DNA ADDUCTS**

Macromolecular Adduction by Trichloroacetonitrile in the Fischer 344 Rat Following Oral Gavage.
PB93-107134/REB 93-01 PC **A03**/MF **A01**

DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-228831/REB 93-04 PC **A03**/MF **A01**

Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02**/MF **A01**

Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-228906/REB 93-04 PC **A01**/MF **A01**

DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC **A02**/MF **A01**

**DNA-BINDING PROTEINS**

Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC **A01**/MF **A01**

**DNA DAMAGE**

Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC **A03**/MF **A01**

DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

Analysis of DNA Strand Breaks Induced in Rodent Liver In vivo, Hepatocytes in Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC **A03**/MF **A01**

Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

Genetic Damage In vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04**/MF **A01**

In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02**/MF **A01**

Short Communication: Improved Thin-Layer Chromatographic Separation of 32P-Postlabeled DNA Adducts.
PB93-229615/REB 93-04 PC **A02**/MF **A01**

**DNA PROBES**

Application of DNA Probes to Analysis of Bacteriophage Distribution Patterns in the Environment.
PB93-121200/REB 93-01 PC **A02**/MF **A01**

**DNA REPLICATION**

Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03**/MF **A01**

**DNA SEQUENCE ANALYSIS**

Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
PB93-222909/REB 93-04 PC **A03**/MF **A01**

**DNT (DINITROTOLUENE)**

Evaluation of the Potential Carcinogenicity of 2,4-Dinitrotoluene (121-14-2).
PB93-185403/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,6-Dinitrotoluene (606-20-2).
PB93-185411/REB 93-01 PC **A03**/MF **A01**

**DNT (DINITROTOLUENES)**

Evaluation of the Potential Carcinogenicity of Dinitrotoluene (Mixture) (25321-14-6).
PB93-185395/REB 93-01 PC **A03**/MF **A01**

**DOCUMENTATION**

Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-192755/REB 93-04 PC **A05**/MF **A01**

Pesticide Compact Label File - 1990 Updates.
PB93-911600/REB 93-01 Subscription

**DOCUMENTS**

Dredged Material Ocean Dumping Reference Document.
PB93-223568/REB 93-04 PC **A04**/MF **A01**

**DOMINANT GENES**

Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03**/MF **A01**

**DOPAMINE RECEPTORS**

Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Induction of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC **A03**/MF **A01**

**DOPAMINERGIC AGENTS**

Effects of Dopaminergic Drugs on Working and Reference Memory in Rats.
PB93-236412/REB 93-04 PC **A03**/MF **A01**

**DOSE-RESPONSE RELATIONSHIPS**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 8. Dose-Response Relationships.
PB93-222727/REB 93-04 PC **A11**/MF **A03**

Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC **A02**/MF **A01**

**DOVER (NEW JERSEY)**

Superfund Record of Decision (EPA Region 2): Dover Municipal Well 4, Morris County, Dover, NJ. (First Remedial Action), September 1992.
PB93-963819/REB 93-04 PC **A04**/MF **A01**

**DOWN SYNDROME**

Maternal Age Effect: The Enigma of Down Syndrome and Other Trisomic Conditions.
PB93-194421/REB 93-01 PC **A03**/MF **A01**

**DOWNWASH**

Downwash of Plumes in the Vicinity of Buildings: A Wind-Tunnel Study.
PB93-212819/REB 93-04 PC **A03**/MF **A01**

**DREDGED MATERIALS**

Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
PB93-229714/REB 93-04 PC **A02**/MF **A01**

**DREDGING**

Guidance Manual for the Review of Permitted and Civil Works Projects for the Ocean Disposal of Dredged Material.
PB93-223048/REB 93-04 PC **A14**/MF **A03**

Dredged Material Ocean Dumping Reference Document.
PB93-223568/REB 93-04 PC **A04**/MF **A01**

**DRILLING FLUIDS**

Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC **A03**/MF **A01**

**DRINKING WATER**

Compendium of Federal Financial Assistance Programs: Targeting Programs for State and Local Ground-Water Protection.
PB93-116069/REB 93-01 PC **A06**/MF **A02**

Guide for Conducting Contaminant Source Inventories for Public Drinking Water Supplies. Technical Assistance Document.
PB93-126407/REB 93-01 PC **A06**/MF **A02**

Occurrence Assessment for Disinfectants and Disinfection By-Products (Phase 6a) in Public Drinking Water.
PB93-134377/REB 93-01 PC **A04**/MF **A01**

Simulation of Microbial Occurrence, Exposure and Health Risks after Drinking Water Treatment Processes.
PB93-134393/REB 93-01 PC **A05**/MF **A02**

Status Report on the Development of Draft MCLGs for Disinfectants and By-Products.
PB93-134906/REB 93-01 PC **A05**/MF **A01**

EPA's Ground Water and Drinking Water Program: Making a Difference.
PB93-136612/REB 93-01 PC **A03**/MF **A01**

Removal of Beryllium from Drinking Water by Chemical Coagulation and Lime Softening.
PB93-150134/REB 93-01 PC **A03**/MF **A01**

Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

Institutional Solutions to Drinking Water Problems: Maine Case Studies.
PB93-180834/REB 93-01 PC **A03**/MF **A01**

National Public Water System Supervision Program. FY 1992 Compliance Report.
PB93-180867/REB 93-01 PC **A04**/MF **A01**

Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC **A02**/MF **A01**

Drinking Water Regulations under the Safe Drinking Water Act.
PB93-194033/REB 93-01 PC **A03**/MF **A01**

Radionuclides in Drinking Water. National Primary Drinking Water Regulations for Radionuclides. Proposed Rules.
PB93-194058/REB 93-01 PC **A03**/MF **A01**

Comparison of the Efficiency of Polycarbonate and Mixed Cellulose Ester Filters for Use in the Filtration of Water Samples.
PB93-194363/REB 93-01 PC **A02**/MF **A01**

Drinking Water Training Resources Directory: A National Training Coalition Directory of Current Training Materials. First Edition.
PB93-202802/REB 93-01 PC **A07**/MF **A02**

Report to the United States Congress on Radionuclides in Drinking Water: Multimedia Risk and Cost Assessment of Radon in Drinking Water.
PB93-209427/REB 93-04 PC **A08**/MF **A02**

Comparative Health Effects Assessment of Drinking Water Treatment Technologies: Report to Congress.
PB93-216950/REB 93-04 PC **A03**/MF **A01**

Drinking Water Information Guide.
PB93-222958/REB 93-04 PC **A06**/MF **A02**

Emergency Disinfection of Drinking Water.
PB93-223168/REB 93-04 PC **A01**/MF **A01**

Drinking Water Handbook for Public Officials.
PB93-226595/REB 93-04 PC **A04**/MF **A01**

Drinking Water State Revolving Fund: Ensuring Safe Drinking Water for America.
PB93-227858/REB 93-04 PC **A02**/MF **A01**

Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC **A02**/MF **A01**

**DRIVER BEHAVIOR RESEARCH**

Federal Test Procedure Review Project: Preliminary Technical Report.
PB93-207975/REB 93-04 PC **A11**/MF **A03**

**DRUG ADMINISTRATION ROUTES**

Use of Analytically Defined Estimates of Aerosol Respirable Fraction to Predict Lung Deposition Patterns.
PB93-175743/REB 93-01 PC **A02**/MF **A01**

**DRUG INDUSTRY**

Development Document for Effluent Limitations Guidelines and Standards for the Pharmaceuticals Manufacturing. Point Source Category.
PB93-206969/REB 93-04 PC **A04**/MF **A01**

Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Pharmaceutical Manufacturing Point Source Category.
PB93-208221/REB 93-04 PC **A22**/MF **A04**

**DRUG SYNERGISM**

Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03**/MF **A01**

**DRUGS**

Use of Analytically Defined Estimates of Aerosol Respirable Fraction to Predict Lung Deposition Patterns.
PB93-175743/REB 93-01 PC **A02**/MF **A01**

**DRUMS (CONTAINERS)**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Valley of the Drums, Bullitt County, Kentucky).
PB92-963618/REB 93-01 PC **A02**/MF **A01**

**DRY METHODS**

Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC **A08**/MF **A02**

**DRYING APPARATUS**

Calciners and Dryers in Mineral Industries: Background Information for Promulgated Standards.
PB93-122448/REB 93-01 PC **A04**/MF **A01**

Enabling Document for New Source Performance Standards for Calciners and Dryers in Mineral Industries.
PB93-122455/REB 93-01 PC **A04**/MF **A01**

**DUCKS**

Pathogenicity of 'Salmonella pullorum' in Northern Bobwhite Quail and Mallard Ducks.
PB93-135739/REB 93-01 PC **A03**/MF **A01**

Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC **A03**/MF **A01**

**DURSBAN**

Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC **A02**/MF **A01**

**DUST**

Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures.
PB93-122273/REB 93-01 PC **A09**/MF **A03**

Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02**/MF **A01**

Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02**/MF **A01**

Chemical Contaminants in House Dust: Occurrences and Sources.
PB93-228542/REB 93-04 PC **A02**/MF **A01**

Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.
PB93-229177/REB 93-04 PC **A03**/MF **A01**

Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.
PB93-236586/REB 93-04 PC **A03**/MF **A01**

**DUST MITE ANTIGENS**

Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02**/MF **A01**

**DYEING**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Textile Dyeing.
PB93-206035/REB 93-04 PC **A02**/MF **A01**

**DYNAMICS**

Dynamic River Basin Water Quality Model.
PB93-190890/REB 93-01 PC **A05**/MF **A01**

**DYNAMOMETERS**

Dynamometer Testing of On-Road Vehicles from the Los Angeles in-Use Emissions Study.
PB93-222297/REB 93-04 PC **A03**/MF **A01**

**E-SOX PROCESS**

Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

**EARLY REDUCTION PROGRAM**

Enabling Document for Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants.
PB93-147007/REB 93-01 PC **A07**/MF **A02**

**EARTH FILLS**

Landfill Containment and Cover Systems.
PB93-106698/REB 93-01 PC **A03**/MF **A01**

Resistance of Membranes in Cover Systems to Root Penetration by Grass and Trees.
PB93-106714/REB 93-01 PC **A02**/MF **A01**

Landfill Containment Systems Regulations.
PB93-106722/REB 93-01 PC **A03**/MF **A01**

Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC **A04**/MF **A01**

Hydraulic Conductivity of Three Geosynthetic Clay Liners.
PB93-131746/REB 93-01 PC **A02**/MF **A01**

LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC **A05**/MF **A01**

Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
PB93-185536/REB 93-01 PC **A11**/MF **A03**

Town of Edinburg Landfill Reclamation Demonstration Project.
PB93-198976/REB 93-01 PC **A12**/MF **A03**

National List of Asbestos Landfills.
PB93-200517/REB 93-01 PC **A10**/MF **A03**

Comparison of Methods for Estimating Global Methane Emissions from Landfills.
PB93-212561/REB 93-04 PC **A03**/MF **A01**

Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.
PB93-212579/REB 93-04 PC **A02**/MF **A01**

Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
PB93-217784/REB 93-04 PC **A07**/MF **A02**

Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC **A02**/MF **A01**

**EASTERN REGION (UNITED STATES)**

Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC **A03**/MF **A01**

Spatiotemporal Variability of Non-Urban Ozone Concentrations Over the Eastern United States and Its Potential Replication by Satellite Data.
PB93-191328/REB 93-01 PC **A03**/MF **A01**

**ECHINODERMATA**

Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-196988/REB 93-01 PC **A03**/MF **A01**

**ECHINOIDEA**

Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

**ECOLOGY**

Framework for Ecological Risk Assessment.
PB93-102192/REB 93-01 PC **A04**/MF **A01**

Report on the Ecological Risk Assessment Guidelines Strategic Planning Workshop. Held in Miami, Florida on April 30-May 2, 1991.
PB93-102200/REB 93-01 PC **A05**/MF **A01**

Use of Ecoregions in Biological Monitoring.
PB93-106730/REB 93-01 PC **A03**/MF **A01**

Near Coastal Program Plan for 1991: Estuaries.
PB93-116176/REB 93-01 PC **A12**/MF **A03**

Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02**/MF **A01**

Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC **A03**/MF **A01**

Quality Assurance Plan for 1991 Pilot Study of the Ecological Condition of Municipal Wastewater Constructed Wetland Treatment Systems.
PB93-134674/REB 93-01 PC **A05**/MF **A01**

Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

Process for Regional Assessment of Wetland Risk.
PB93-146793/REB 93-01 PC **A09**/MF **A02**

Integrating Sustainable Agriculture, Ecology, and Environmental Policy. Conference Proceedings.
PB93-191492/REB 93-01 PC **A02**/MF **A01**

Soil Biology and Ecology.
PB93-199453/REB 93-01 PC **A03**/MF **A01**

Adding a Landscape Ecology Perspective to Conservation and Management Planning.
PB93-234516/REB 93-04 PC **A03**/MF **A01**

Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.
PB93-234540/REB 93-04 PC **A04**/MF **A01**

**ECONOMIC ANALYSIS**

Saving Bays and Estuaries: A Primer for Establishing and Managing Estuary Programs. Appendices G, H, and I.
PB93-116077/REB 93-01 PC **A06**/MF **A02**

Environmental Pollution Control Alternatives: Reducing Water Pollution Control Costs in the Electroplating Industry. (Revised).
PB93-122240/REB 93-01 PC **A04**/MF **A01**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants, July 1986.
PB93-156503/REB 93-01 PC **A05**/MF **A01**

Estimation of the Cost of Using Chemical Protective Clothing.
PB93-168805/REB 93-01 PC **A03**/MF **A01**

Regulatory Impact Analysis: Control of Sulfur and Aromatics Contents of on-Highway Diesel Fuel.
PB93-207660/REB 93-04 PC **A12**/MF **A03**

**ECONOMIC ASSISTANCE**

Compendium of Federal Financial Assistance Programs: Targeting Programs for State and Local Ground-Water Protection.
PB93-116069/REB 93-01 PC **A06**/MF **A02**

Overview of Existing State Alternative Financing Programs: Financing Drinking Water System Capital Needs in the 1990's.
PB93-132637/REB 93-01 PC **A05**/MF **A01**

**ECONOMIC DEVELOPMENT**

Economic Growth Analysis System: Reference Manual.
PB93-183408/REB 93-04 PC **A12**/MF **A03**

Economic Growth Analysis System: User's Guide.
PB93-183416/REB 93-04 PC **A04**/MF **A01**

Economic Growth Analysis System (E-GAS) for all EPA Regions (I through X) (for Microcomputers).
PB93-505469/REB 93-04 CP **D18**

Economic Growth Analysis System (E-GAS) for EPA Region I - New England States (for Microcomputers).
PB93-505477/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
PB93-505485/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).
PB93-505493/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).
PB93-505501/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).
PB93-505519/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).
PB93-505527/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).
PB93-505543/REB 93-04 CP **D03**

**ECONOMIC FORECASTING**

Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC **A03**/MF **A01**

**ECONOMIC GROWTH ANALYSIS SYSTEM**

Economic Growth Analysis System: Reference Manual.
PB93-183408/REB 93-04 PC **A12**/MF **A03**

Economic Growth Analysis System: User's Guide.
PB93-183416/REB 93-04 PC **A04**/MF **A01**

Economic Growth Analysis System (E-GAS) for all EPA Regions (I through X) (for Microcomputers).
PB93-505469/REB 93-04 CP **D18**

Economic Growth Analysis System (E-GAS) for EPA Region I - New England States (for Microcomputers).
PB93-505477/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
PB93-505485/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).
PB93-505493/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).
PB93-505501/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).
PB93-505519/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).
PB93-505527/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).
PB93-505543/REB 93-04 CP **D03**

**ECONOMIC IMPACT**

Economic Assessment of Reducing Fluoride in Drinking Water.
PB93-115830/REB 93-01 PC **A05**/MF **A01**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants.
PB93-156495/REB 93-01 PC **A04**/MF **A01**

Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC **A07**/MF **A02**

Economic Analysis of Interim Final Effluent Guidelines for the Gum and Wood Chemicals Industry, Group 2.
PB93-167740/REB 93-01 PC **A04**/MF **A01**

Economic Analysis of Pretreatment Standards: The Secondary Copper and Aluminum Subcategories of the Nonferrous Metals Manufacturing Point Source Category.
PB93-167757/REB 93-01 PC **A07**/MF **A02**

Economic Analysis of Effluent Guidelines: Mineral Mining and Processing Industry.
PB93-167765/REB 93-01 PC **A14**/MF **A03**

Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Plastics Molding and Forming Industry.
PB93-167773/REB 93-01 PC **A05**/MF **A01**

Economic Impact Analysis of Effluent Limitations and Standards for the Nonferrous Metals Smelting and Refining Industry. Phase 2.
PB93-167781/REB 93-01 PC **A09**/MF **A03**

Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
PB93-173979/REB 93-01 PC **A22**/MF **A04**

Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry Using Revised Compliance Costs. (Revised January 1992).
PB93-186104/REB 93-01 PC **A03**/MF **A01**

Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Gold Placer Mining Industry.
PB93-203990/REB 93-04 PC **A07**/MF **A02**

Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry.
PB93-214328/REB 93-04 PC **A03**/MF **A01**

**ECONOMIC MODELS**

Economic Growth Analysis System: Reference Manual.
PB93-183408/REB 93-04 PC **A12**/MF **A03**

Economic Growth Analysis System: User's Guide.
PB93-183416/REB 93-04 PC **A04**/MF **A01**

Economic Growth Analysis System (E-GAS) for all EPA Regions (I through X) (for Microcomputers).
PB93-505469/REB 93-04 CP **D18**

Economic Growth Analysis System (E-GAS) for EPA Region I - New England States (for Microcomputers).
PB93-505477/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
PB93-505485/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).
PB93-505493/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).
PB93-505501/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).
PB93-505519/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).
PB93-505527/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).
PB93-505543/REB 93-04 CP **D03**

**ECOSYSTEMS**

Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC **A12**/MF **A03**

Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13**/MF **A03**

Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08**/MF **A02**

Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. User's Guide. Volume 1. NGDC Key to Geophysical Records Documentation No. 26.
PB93-146082/REB 93-01 PC **A07**/MF **A02**

Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. Documentation Manual, DISC-A. Volume 1. NGDC Key to Geophysical Records Documentation No. 27.
PB93-146090/REB 93-01 PC **A11**/MF **A03**

Review of EPA's Environmental Monitoring and Assessment Program (EMAP). Interim Report.
PB93-146348/REB 93-01 PC **A03**/MF **A01**

Environmental Monitoring and Assessment Program: EMAP-Arid Colorado Plateau Pilot Study, 1992. Implementation Plan.
PB93-181618/REB 93-01 PC **A08**/MF **A02**

Statistical Evaluation of the EMAP-Wetlands Classification.
PB93-199446/REB 93-01 PC **A03**/MF **A01**

Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
PB93-202851/REB 93-04 PC **A06**/MF **A02**

Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC **A20**/MF **A04**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC **A01**/MF **A01**

Establishing Quantitative Performance Criteria for Wetland Restoration.
PB93-236610/REB 93-04 PC **A01**/MF **A01**

**ECOTOXICOLOGY**
Ecotoxicological Principles for Avian Field Studies Using Radiotelemetry or Remote Sensing.
PB93-212793/REB 93-04 PC **A02**/MF **A01**

**EDUCATION**
Precollege Education: A Vital Component if Sustainable Agriculture is to Take Root.
PB93-168870/REB 93-01 PC **A03**/MF **A01**

Always a River: Supplemental Environmental Education Curriculum on the Ohio River and Water Grades K-12.
PB93-200905/REB 93-01 PC **A14**/MF **A03**

Turning the Tide on Trash: A Learning Guide on Marine Debris.
PB93-216992/REB 93-04 PC **A05**/MF **A01**

Global Climates: Past, Present, and Future. Activities for Integrated Science Education.
PB93-222313/REB 93-04 PC **A06**/MF **A02**

Water Employees Together with America's Youth (WET WAY). Celebration of the 20th Anniversary of the Clean Water Act and Promotion of National Geography Awareness Week.
PB93-222941/REB 93-04 PC **A07**/MF **A02**

Course 1. Model Curriculum for Training Asbestos Abatement Contractors and Supervisors (Training Manual).
PB93-780773/REB 93-01 PC**$182.00**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Student Notebook. Course 1 (Training Manual).
PB93-780781/REB 93-01 PC **A21**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Instructor's Course Syllabus. Course 1 (Training Manual).
PB93-780799/REB 93-01 PC **A09**

Course 2. Model Curriculum for School Building Inspectors (Training Manual).
PB93-780823/REB 93-01 PC**$136.00**

Model EPA Curriculum for Training Building Inspectors. Student Notebook. Course 2 (Training Manual).
PB93-780831/REB 93-01 PC **A17**

Model EPA Curriculum for Training Building Inspectors. Instructor's Course Syllabus. Course 2 (Training Manual).
PB93-780849/REB 93-01 PC **A07**

Course 3. Model Curriculum for School Asbestos Management Planners (Training Manual).
PB93-780872/REB 93-01 PC**$81.00**

Model EPA Curriculum for Training Management Planners. Student Notebook. Course 3 (Training Manual).
PB93-780880/REB 93-01 PC **A07**

Model EPA Curriculum for Training Management Planners. Instructor's Course Syllabus. Course 3 (Training Manual).
PB93-780898/REB 93-01 PC **A04**

Course 4. Model Curriculum for Asbestos Abatement Workers (English Version) (Training Manual).
PB93-780922/REB 93-01 PC**$235.00**

EPA Model Asbestos Worker Training Manual. Course 4 (English Version).
PB93-780930/REB 93-01 PC **A14**

EPA Model Asbestos Worker Training Course. Instructor's Manual. Course 4 (English Version) (Training Manual).
PB93-780948/REB 93-01 PC **A15**

EPA Model Asbestos Worker Training Instructor's Resources. Course 4 (English Version) (Training Manual).
PB93-780955/REB 93-01 PC **A09**

Course 5. Presentation to Accompany 'Guidance for Controlling Asbestos-Containing Materials in Buildings' (Training Manual).
PB93-780971/REB 93-01 PC**$41.00**

**EDUCATIONAL MATERIALS**
Superfund: Environmental Response and Health and Safety (Training Materials).
PB93-963100/REB 93-01 Standing Order

**EELS**
Chesapeake Bay American Eel Fishery Management Plan. Agreement Commitment Report 1991.
PB93-226017/REB 93-04 PC **A03**/MF **A01**

**EFFLUENT TRADING**
Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC **A06**/MF **A02**

**EFFLUENTS**
Downwash of Plumes in the Vicinity of Buildings: A Wind-Tunnel Study.
PB93-212819/REB 93-04 PC **A03**/MF **A01**

Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry.
PB93-214328/REB 93-04 PC **A03**/MF **A01**

Supplement to the Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics and Synthetic Fibers Point Source Category.
PB93-214336/REB 93-04 PC **A08**/MF **A02**

**EIGHTH REMEDIAL ACTION**
Superfund Record of Decision (EPA Region 8): Denver Radium, Operable Unit 9, Denver, CO. (Eighth Remedial Action), December 1991.
PB93-964402/REB 93-04 PC **A04**/MF **A01**

**ELECTRIC CORONA**
Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC **A02**/MF **A01**

**ELECTRIC FIELDS**
Measurements of electric and magnetic fields in the Waianae, Hawaii area.
DE92019891/REB 93-01 PC **A03**/MF **A01**

Review of the Literature on Potential Reproductive and Developmental Toxicity of Electric and Magnetic Fields.
PB93-141307/REB 93-01 PC **A03**/MF **A01**

**ELECTRIC POWER GENERATION**
EPA's Photovoltaic Demand-Side Management Cost-Shared Demonstrations.
PB93-212413/REB 93-04 PC **A02**/MF **A01**

**ELECTRIC POWER PLANTS**
Downwash of Plumes in the Vicinity of Buildings: A Wind-Tunnel Study.
PB93-212819/REB 93-04 PC **A03**/MF **A01**

**ELECTRIC POWER TRANSMISSION**
Waste Reduction Activities and Options for an Electrical Utility Transmission System Monitoring and Maintenance Facility.
PB93-126639/REB 93-01 PC **A02**/MF **A01**

**ELECTRIC UTILITIES**
Advanced Utility Simulation Model. Project Summary.
PB93-222636/REB 93-04 PC **A02**/MF **A01**

**ELECTROCOAGULATION**
Alternating Current Electrocoagulation for Superfund Site Remediation.
PB93-205144/REB 93-04 PC **A02**/MF **A01**

**ELECTRODEPOSITED COATINGS**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electrodeposition of Organic Coatings.
PB93-205987/REB 93-04 PC **A02**/MF **A01**

**ELECTROKINETICS**
Removal of Radionuclides by Electrokinetic Soil Processing.
PB93-222875/REB 93-04 PC **A02**/MF **A01**

**ELECTRON ACCEPTORS**
Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC **A02**/MF **A01**

**ELECTRONIC BULLETIN BOARDS**
Control Technology Center FY92: A Summary of Program Accomplishments.
PB93-199230/REB 93-01 PC **A03**/MF **A01**

**ELECTROPHORESIS**
Electrophoresis Gel Buffer Recirculator for under Twenty Dollars.
PB93-181014/REB 93-01 PC **A01**/MF **A01**

Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC **A02**/MF **A01**

**ELECTROPHYSIOLOGY**
Olfactory Evoked Responses to Odorous Stimuli of Different Intensities.
PB93-141315/REB 93-01 PC **A02**/MF **A01**

**ELECTROPLATING**
Environmental Pollution Control Alternatives: Reducing Water Pollution Control Costs in the Electroplating Industry. (Revised).
PB93-122240/REB 93-01 PC **A04**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
PB93-123214/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplating Chemical Products.
PB93-126258/REB 93-01 PC **A02**/MF **A01**

Economic Impacts of RCRA Regulations on the Plating and Polishing Industry.
PB93-158988/REB 93-01 PC **A07**/MF **A02**

Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
PB93-175503/REB 93-01 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electroplating Operations.
PB93-206027/REB 93-04 PC **A02**/MF **A01**

**ELECTROSTATIC PRECIPITATORS**
Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

**EMAP (ENVIRONMENTAL MONITORING AND ASSESSMENT PROGRAM)**
Statistical Evaluation of the EMAP-Wetlands Classification.
PB93-199446/REB 93-01 PC **A03**/MF **A01**

**EMBRYO DEVELOPMENT**
Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03**/MF **A01**

Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC **A02**/MF **A01**

**EMBRYOS**
Gene Expression in Pre-Implantation Mammalian Embryos.
PB93-194397/REB 93-01 PC **A03**/MF **A01**

Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03**/MF **A01**

Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02**/MF **A01**

Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC **A01**/MF **A01**

**EMERGENCIES**
Video Teleconference on Emergency Planning for Potable Water Suppliers. Held on October 30-31, 1985.
PB93-184455/REB 93-01 PC **A10**/MF **A03**

Private Wells: Guidance for What to Do After the Flood.
PB93-226710/REB 93-04 PC **A02**/MF **A01**

**EMERGENCY PLANNING**
Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC **A09**/MF **A02**

Successful Practices in Title 3 Implementation Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Series 6, Number 8.
PB93-126126/REB 93-01 PC **A03**/MF **A01**

Successful Practices in Title III Implementation. Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Cameron County, Texas; Bucks County, Pennsylvania; Harford County, Maryland; Dallas County, Texas. Series 6, Number 7.
PB93-130086/REB 93-01 PC **A03**/MF **A01**

Criteria for Review of Hazardous Materials Emergency Plans.
PB93-207348/REB 93-04 PC **A03**/MF **A01**

Community Right-to-Know and Small Business: Understanding Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act of 1986.
PB93-207538/REB 93-04 PC **A03**/MF **A01**

Guiding Principles for Chemical Accident Prevention, Preparedness and Response.
PB93-217560/REB 93-04 PC **A07**/MF **A02**

Chemical Emergency Preparedness and Prevention Advisory: Hydrogen Fluoride, Series 8, No. 3.
PB93-234797/REB 93-04 PC **A02**/MF **A01**

**EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT**
Toxic Chemical Release Inventory Magnetic Media Submission Instructions. Section 313 of the Emergency Planning and Community Right-to-Know Act (Revised 1990 Version).
PB93-116127/REB 93-01 PC **A03**/MF **A01**

Successful Practices in Title III Implementation. Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Cameron County, Texas; Bucks County, Pennsylvania; Harford County, Maryland; Dallas County, Texas. Series 6, Number 7.
PB93-130086/REB 93-01 PC **A03**/MF **A01**

Toxics Release Inventory. Public Data Release. State Fact Sheets, 1991.
PB93-208668/REB 93-04 PC **A06**/MF **A02**

Opportunities and Challenges for Local Emergency Planning Committees: Bestseller in EPCRA.
PB93-234789/REB 93-04 PC **A02**/MF **A01**

Chemical Emergency Preparedness and Prevention Advisory: Hydrogen Fluoride, Series 8, No. 3.
PB93-234797/REB 93-04 PC **A02**/MF **A01**

Toxic Release Inventory, (TRI), 1991.
PB93-505873/REB 93-04 CP **T14**

**EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986**
Successful Practices in Title 3 Implementation Chemical Emergency Preparedness and Prevention Technical Assitance Bulletin. Series 6, Number 8.
PB93-126126/REB 93-01 PC **A03**/MF **A01**

**EMERGENCY PLANS**
Opportunities and Challenges for Local Emergency Planning Committees: Bestseller in EPCRA.
PB93-234789/REB 93-04 PC **A02**/MF **A01**

**EMISSION**
Characterization of Organic Emission from a Wood Finishing Product-Wood Stain.
PB93-150100/REB 93-01 PC **A02**/MF **A01**

Compilation of Air Pollutant Emission Factors. Volume 1. Stationary Point and Area Sources. Supplement E.
PB93-157105/REB 93-01 PC **A10**/MF **A03**

**EMISSION CONTROL**
Background Information Document to Support NESHAPS Rulemaking on Nuclear Power Reactors.
PB93-199321/REB 93-01 PC **A14**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEB, Engine: B5254S EGR.
PB93-233815/REB 93-04 PC **A13**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEB, Engine: B230FT.
PB93-233823/REB 93-04 PC **A10/MF A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEA, Engine: B230F.
PB93-233831/REB 93-04 PC **A09/MF A02**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAFA, Engine: B230FS4.
PB93-233849/REB 93-04 PC **A11/MF A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEA, Engine: B6304S EGR.
PB93-233856/REB 93-04 PC **A13/MF A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEA, Engine: B5254S.
PB93-233864/REB 93-04 PC **A09/MF A02**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3VHGFEK, Engine: B5234T.
PB93-233872/REB 93-04 PC **A17/MF A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGFEA, Engine: B5254S AIR.
PB93-233880/REB 93-04 PC **A15/MF A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEB, Engine: B6304S.
PB93-233898/REB 93-04 PC **A11/MF A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GEEA, Engine: B230FT4.
PB93-233906/REB 93-04 PC **A13/MF A03**

**EMISSION FACTORS**

Development of Size-Specific Data from Particulate Control Technology Research Reports.
PB93-131456/REB 93-01 PC **A03/MF A01**

Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC **A02/MF A01**

Evaluation of Nitrogen Oxide Emissions Data from TVA Coal-Fired Boilers.
PB93-138865/REB 93-01 PC **A06/MF A02**

National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC **A07/MF A02**

Characterization of PM-10 Emissions from Antiskid Materials Applied to Ice- and Snow-Covered Roadways.
PB93-150209/REB 93-01 PC **A05/MF A01**

Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC **A06/MF A02**

Methane Emissions from the Natural Gas Industry.
PB93-212421/REB 93-04 PC **A03/MF A01**

Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC **A03/MF A01**

Estimate of Global Methane Emissions from Coal Mines.
PB93-212553/REB 93-04 PC **A03/MF A01**

Comparison of Methods for Estimating Global Methane Emissions from Landfills.
PB93-212561/REB 93-04 PC **A03/MF A01**

Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.
PB93-212579/REB 93-04 PC **A02/MF A01**

Protocol for Equipment Leak Emission Estimates.
PB93-229219/REB 93-04 PC **A12/MF A03**

Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.
PB93-236586/REB 93-04 PC **A03/MF A01**

Emissions and Fuel Economy Results 1992 Car Models (for Microcomputers).
PB93-504546/REB 93-01 CP **D02**

Emissions and Fuel Economy Results 1993 Car Models (for Microcomputers).
PB93-504553/REB 93-01 CP **D02**

Crosswalk/Air Toxic Emission Factor Data Base Management System (XATEF) Version 2.0 (for Microcomputers).
PB93-504793/REB 93-01 CP **D02**

**EMISSION INVENTORIES**

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Air Quality Data. Volume 2.
PB92-228600/REB 93-04 PC **A16/MF A03**

Global Inventory of Volatile Organic Compound Emissions from Anthropogenic Sources.
PB93-107001/REB 93-01 PC **A03/MF A01**

Geographical Distribution and Source Type Analysis of Toxic Metal Emissions.
PB93-121036/REB 93-01 PC **A02/MF A01**

Guidelines for Estimating and Applying Rule Effectiveness for Ozone CO State Implementation Plan Base Year Inventories.
PB93-131498/REB 93-01 PC **A05/MF A01**

Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
PB93-135663/REB 93-01 PC **A07/MF A02**

National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC **A07/MF A02**

Commercial Marine Vessel Contributions to Emission Inventories.
PB93-173961/REB 93-01 PC **A07/MF A02**

Methodology to Estimate Nonroad Equipment Populations by Nonattainment Areas.
PB93-174332/REB 93-01 PC **A05/MF A01**

Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
PB93-180875/REB 93-01 PC **A06/MF A02**

Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC **A06/MF A02**

Nonroad Mobile Source Sales and Attrition Study: Identification and Evaluation of Available Data Sources.
PB93-190098/REB 93-01 PC **A11/MF A03**

Locating and Estimating Air Emissions from Sources of Styrene.
PB93-207520/REB 93-04 PC **A08/MF A02**

Locating and Estimating Air Emissions from Sources of Methylene Chloride.
PB93-207579/REB 93-04 PC **A10/MF A03**

Regional Interim Emission Inventories (1987-1991). Volume 1. Development Methodologies.
PB93-236107/REB 93-04 PC **A07/MF A02**

Regional Interim Emission Inventories (1987-1991). Volume 2. Emission Summaries.
PB93-236115/REB 93-04 PC **A06/MF A02**

**EMISSION INVENTORY**

Toxic Release Inventory (TRI), 1988.
PB93-506012/REB 93-04 CP **T14**

**EMISSION PREPROCESSOR SYSTEM**

User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC **A99/MF A06**

**EMISSION TESTS**

Final Regulatory Impact Analysis and Summary and Analysis of Comments: Control of Vehicular Evaporative Emissions.
PB93-228138/REB 93-04 PC **A07/MF A02**

**EMISSIONS**

Air/Superfund National Technical Guidance Study Series. Models for Estimating Air Emission Rates from Superfund Remedial Actions.
PB93-186807/REB 93-01 PC **A08/MF A02**

Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02/MF A01**

Baseline Emissions Forecasts for Industrial Non-Boiler Sources. Project Summary.
PB93-222560/REB 93-04 PC **A01/MF A01**

Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
PB93-228534/REB 93-04 PC **A02/MF A01**

Tagged Species Engineering Model (TSEM).
PB93-229417/REB 93-04 PC **A03/MF A01**

**EMISSIONS CONTROL**

Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19/MF A04**

**EMISSIONS INVENTORY**

Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-192755/REB 93-04 PC **A05/MF A01**

Toxic Release Inventory (TRI), 1987.
PB93-506004/REB 93-04 CP **T16**

Toxic Release Inventory (TRI), 1989.
PB93-506020/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1990.
PB93-506038/REB 93-04 CP **T14**

**EMITEC CATALYSTS**

Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03/MF A01**

**EMPIRICAL MODELS**

Empirical Model of Vehicle Emissions.
PB93-199602/REB 93-01 PC **A02/MF A01**

**EMS (ETHYL METHANESULFONATE)**

Evaluation of the Potential Carcinogenicity of Ethyl Methanesulfonate (62-50-0).
PB93-193597/REB 93-01 PC **A03/MF A01**

**ENERGY CONSERVATION**

Aatgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC **A14/MF A03**

**ENERGY CONSUMPTION**

Development of Residential Wood Consumption Estimation Models.
PB93-199248/REB 93-01 PC **A04/MF A01**

**ENERGY DEMAND**

EPA's Photovoltaic Demand-Side Management Cost-Shared Demonstrations.
PB93-212413/REB 93-04 PC **A02/MF A01**

**ENERGY METABOLISM**

Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03/MF A01**

**ENGINEERING**

Program for Providing Engineering Technical Assistance to Site Remediation Managers.
PB93-185809/REB 93-01 PC **A02/MF A01**

**ENHANCED TRICKLE-DOWN MODEL**

Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC **A02/MF A01**

**ENHYDRA LUTRIS**

Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03/MF A01**

**ENTEROCOCCUS FAECIUM**

Comparative Resistance of 'Escherichia coli' and *Enterococci* to Chlorination.
PB93-150126/REB 93-01 PC **A03/MF A01**

**ENVIRONMENT MANAGEMENT**

Pollution Prevention Opportunity Assessment and Implementation Plan. For Simpson Tacoma Kraft Company, Tacoma, Washington.
PB93-145670/REB 93-01 PC **A05/MF A01**

Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC **A14/MF A03**

Statistical Evaluation of the EMAP-Wetlands Classification.
PB93-199446/REB 93-01 PC **A03/MF A01**

**ENVIRONMENT POLLUTION**

Broad-Based Environmental Life Cycle Assessment.
PB93-199495/REB 93-01 PC **A02/MF A01**

EPA's Research in LCA Methodology.
PB93-212439/REB 93-04 PC **A03/MF A01**

Pollution Prevention Research Ongoing: EPA's Risk Reduction Engineering Laboratory.
PB93-212447/REB 93-04 PC **A02/MF A01**

**ENVIRONMENT TRANSPORT**

Protocol for Determining the Best Performing Model.
PB93-226082/REB 93-04 PC **A03/MF A01**

**ENVIRONMENTAL CHEMICAL SUBSTITUTES**

Phasing out of CFCs in the electronics and engineering industries in Sweden.
DE93711212/REB 93-01 PC **A03/MF A01**

Atmospheric Chemistry and Physical Fate of HCFCs and HFCs and Their Degradation Products.
PB93-131449/REB 93-01 PC **A03/MF A01**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131688/REB 93-01 PC **A03/MF A01**

Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC **A03/MF A01**

Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
PB93-173102/REB 93-01 PC **A03/MF A01**

R-245ca: A Potential Far-Term Alternative for R-11.
PB93-173144/REB 93-01 PC **A02/MF A01**

Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.
PB93-222214/REB 93-04 PC **A10/MF A03**

Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02/MF A01**

**ENVIRONMENTAL EFFECTS**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Public Perceptions. Report of Observations, Thoughtleader Interviews and Focus Groups Yorktown Refinery Public Perception Study.
PB92-228642/REB 93-01 PC **A99/MF A06**

Sediment Classification Methods Compendium.
PB93-115186/REB 93-01 PC **A11/MF A03**

Evaluating Materials for Healthy Buildings.
PB93-131621/REB 93-01 PC **A03/MF A01**

PR Notice 92-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219475/REB 93-04 PC **A01/MF A01**

PR Notice 92-3. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticide Products.
PB93-219483/REB 93-04 PC **A03/MF A01**

Global Climates: Past, Present, and Future. Activities for Integrated Science Education.
PB93-222313/REB 93-04 PC **A06/MF A02**

Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC **A03/MF A01**

Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02/MF A01**

Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
PB93-222776/REB 93-04 PC **A02/MF A01**

**ENVIRONMENTAL ENGINEERING**

AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
PB93-100113/REB 93-01 PC **A10**/MF **A03**

Survey of Protocols for Conducting Indoor Air Quality Investigations in Large Buildings.
PB93-119865/REB 93-01 PC **A03**/MF **A01**

AutoMOUSE (Modular Oriented Uncertainty SystEm) - An Improvement to the MOUSE Computerized Uncertainty Analysis Program (for Microcomputers).
PB93-500007/REB 93-01 CP **D03**

**ENVIRONMENTAL EXPOSURE**

Risk assessment, Health-Environment. A research programme during the period 1992/93-1994/95.
DE93711214/REB 93-01 PC **A03**/MF **A01**

Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC **A02**/MF **A01**

**ENVIRONMENTAL EXPOSURE PATHWAY**

Pilot Study to Evaluate Methods for the Assessment of Exposure of Small Children to Pesticides in the Residential Environment.
PB93-119899/REB 93-01 PC **A03**/MF **A01**

Air/Superfund National Technical Guidance Study Series. Volume 1. Overview of Air Pathway Assessments for Superfund Sites (Revised).
PB93-173987/REB 93-01 PC **A05**/MF **A01**

Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.
PB93-212306/REB 93-04 PC **A02**/MF **A01**

**ENVIRONMENTAL FATE**

Environmental Fate Constants for Organic Chemicals under Consideration for EPA's Hazardous Waste Identification Projects.
PB93-221646/REB 93-04 PC **A09**/MF **A02**

Environmental Fate Data Base (EFDB) Complete: XREF, CASLST, DATALOG, BIOLOG, CHEMFATE, and BIODEG. (Date of Coverage 1993).
PB93-506426/REB 93-04 CP **T05**

**ENVIRONMENTAL HEALTH**

Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

Strategy for Environmental Health Research at EPA.
PB93-116168/REB 93-01 PC **A06**/MF **A02**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Tetranitromethane (TNM).
PB93-116994/REB 93-01 PC **A03**/MF **A01**

Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders.
PB93-134419/REB 93-01 PC**$29.00**/MF **A04**

Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03**/MF **A01**

Summary of Workshop III: Evoked Potentials.
PB93-175610/REB 93-01 PC **A01**/MF **A01**

EPA Priorities for Biologic Markers Research in Environmental Health.
PB93-181113/REB 93-01 PC **A02**/MF **A01**

Characterization of Selected Public Health Issues in Galveston Bay.
PB93-205771/REB 93-04 PC **A08**/MF **A02**

Multiple Chemical Sensitivities. Addendum to Biologic Markers in Immunotoxicology.
PB93-222990/REB 93-04 PC **A09**/MF **A03**

**ENVIRONMENTAL IMPACT ASSESSMENTS**

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Project Summary.
PB92-228527/REB 93-01 PC **A08**/MF **A02**

AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
PB93-100113/REB 93-01 PC **A10**/MF **A03**

Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC **A07**/MF **A02**

Global Inventory of Volatile Organic Compound Emissions from Anthropogenic Sources.
PB93-107001/REB 93-01 PC **A03**/MF **A01**

Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC **A03**/MF **A01**

Assessing Potential Indoor Air Impacts for Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-122257/REB 93-01 PC **A09**/MF **A03**

Environmental Monitoring and Assessment Program: Gulf Coast Salt Marsh Pilot Study.
PB93-122398/REB 93-01 PC **A03**/MF **A01**

Review of EPA's Environmental Monitoring and Assessment Program (EMAP). Interim Report.
PB93-146348/REB 93-01 PC **A03**/MF **A01**

Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC **A03**/MF **A01**

Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03**/MF **A01**

Statistical Evaluation of the EMAP-Wetlands Classification.
PB93-199446/REB 93-01 PC **A03**/MF **A01**

Managing Nonpoint Source Pollution. Final Report to Congress on Section 319 of the Clean Water Act (1989).
PB93-200897/REB 93-01 PC **A10**/MF **A03**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

AutoMOUSE (Modular Oriented Uncertainty SystEm) - An Improvement to the MOUSE Computerized Uncertainty Analysis Program (for Microcomputers).
PB93-500007/REB 93-01 CP **D03**

Health Effects Assessment Summary Tables.
PB93-921100/REB 93-01 Standing Order

**ENVIRONMENTAL IMPACT STATEMENTS DRAFT**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1A. National Impacts Assessment.
PB93-156552/REB 93-01 PC **A08**/MF **A02**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1B. Control Technologies.
PB93-156560/REB 93-01 PC **A13**/MF **A03**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1C. Model Emission Sources.
PB93-156578/REB 93-01 PC **A11**/MF **A03**

Low-Level and NARM Radioactive Wastes. Draft Environmental Impact Statement for Proposed Rules. Volume 1. Background Information Document.
PB93-200673/REB 93-01 PC **A99**/MF **A06**

Ethylene Oxide Emissions from Commercial Sterilization/Fumigation Operations: Background Information for Proposed Standards.
PB93-226744/REB 93-04 PC **A13**/MF **A03**

**ENVIRONMENTAL IMPACT STATEMENTS-FINAL**

Proposed Revisions to Ocean Dumping Criteria: Final Environmental Impact Statement. Volume 2.
PB93-206548/REB 93-04 PC **A99**/MF **A06**

**ENVIRONMENTAL IMPACTS**

Trends in Nitrogen in the Chesapeake Bay, 1984-1990.
PB93-122174/REB 93-01 PC **A04**/MF **A01**

Life Cycle Design Guidance Manual. Environmental Requirements and the Product System.
PB93-164507/REB 93-04 PC **A09**/MF **A03**

Guide to Using Chesapeake Bay Program Water Quality Monitoring Data.
PB93-205888/REB 93-04 PC **A07**/MF **A02**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Monofilament Fiber Manufacturing.
PB93-205961/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Printing Operations.
PB93-205979/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electrodeposition of Organic Coatings.
PB93-205987/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Spray Application of Organic Coatings.
PB93-205995/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Semiconductor Manufacturing.
PB93-206001/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Formulation of Aqueous Solutions.
PB93-206019/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electroplating Operations.
PB93-206027/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Textile Dyeing.
PB93-206035/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Presswood and Laminated Wood Products Manufacturing.
PB93-206043/REB 93-04 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Roller, Knife, and Gravure Coating Operations.
PB93-206050/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Paper and Paperboard Production.
PB93-206068/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Leather Tanning and Finishing.
PB93-206076/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Wood Preserving Operations.
PB93-206084/REB 93-04 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Rubber Production and Compounding.
PB93-206092/REB 93-04 PC **A03**/MF **A01**

Workbook of Screening Techniques for Assessing Impacts of Toxic Air Pollutants (Revised).
PB93-210367/REB 93-04 PC **A14**/MF **A03**

Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
PB93-212462/REB 93-04 PC **A03**/MF **A01**

Impacts of Section 404 Permits Requiring Compensatory Mitigation on Wetlands in California (USA).
PB93-212512/REB 93-04 PC **A03**/MF **A01**

SCREEN2 Model User's Guide.
PB93-216885/REB 93-04 PC **A04**/MF **A01**

Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised.
PB93-219095/REB 93-04 PC **A05**/MF **A01**

Climate Change Impacts on Net Primary Production in China.
PB93-222271/REB 93-04 PC **A03**/MF **A01**

**ENVIRONMENTAL ISSUES**

Statistical Problems Arising from Environmental Issues.
PB93-185718/REB 93-01 PC **A01**/MF **A01**

Online Guided Tour of the Cleanup Information Bulletin Board System. (CLU-IN: Cleanup Information Bulletin Board).
PB93-193704/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL MANAGEMENT**

Hazardous Waste Management.
PB93-116135/REB 93-01 PC **A03**/MF **A01**

Overview of Strategic Planning at the Environmental Protection Agency.
PB93-128064/REB 93-01 PC **A03**/MF **A01**

Pollution Prevention: Meeting the Environmental Challenges of the 1990s. Region 5 FY 91 Accomplishments.
PB93-128106/REB 93-01 PC **A04**/MF **A01**

News-Notes Number 21: The Condition of the Environment and the Nonpoint Sources of Water Pollution.
PB93-204030/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL MONITORING**

Environmental Monitoring Methods Index. Version 1.0 Software. User's Manual.
PB92-169648/REB 93-01 PC **A06**/MF **A02**

Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC **A12**/MF **A03**

Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13**/MF **A03**

EMAP and Other Tools for Measuring Biodiversity, Habitat Conditions, and Environmental Trends.
PB93-106748/REB 93-01 PC **A03**/MF **A01**

Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC **A02**/MF **A01**

Environmental Monitoring and Assessment Program: 1990 Project Descriptors.
PB93-116150/REB 93-01 PC **A04**/MF **A01**

Living Resources Monitoring Plan: Annual Progress Report.
PB93-116580/REB 93-01 PC **A03**/MF **A01**

Physiological and Nonspecific Biomarkers.
PB93-119832/REB 93-01 PC **A05**/MF **A01**

Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02**/MF **A01**

Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC **A06**/MF **A02**

Environmental Monitoring and Assessment Program: Gulf Coast Salt Marsh Pilot Study.
PB93-122398/REB 93-01 PC **A03**/MF **A01**

Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Midwest Pollution Control Biologists Meeting, 1991. Environmental Indicators: Measurement

and Assessment Endpoints. Held in Lincolnwood, Illinois on March 19-22, 1991.
PB93-145712/REB 93-01 PC **A06/MF A02**

Review of EPA's Environmental Monitoring and Assessment Program (EMAP). Interim Report.
PB93-146348/REB 93-01 PC **A03/MF A01**

Collection and Chemical Analysis of Lichens for Biomonitoring.
PB93-149862/REB 93-01 PC **A03/MF A01**

Effects of Kraft Mill Effluent on the Sexuality of Fishes: An Environmental Early Warning.
PB93-168847/REB 93-01 PC **A03/MF A01**

Research and Information Needs Related to Nonpoint Source Pollution and Wetlands in the Watershed: An EPA Perspective.
PB93-168862/REB 93-01 PC **A02/MF A01**

Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03/MF A01**

Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC **A03/MF A01**

Statistical Problems Arising from Environmental Issues.
PB93-185718/REB 93-01 PC **A01/MF A01**

Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03/MF A01**

Compendium of Methods for Marine and Estuarine Environmental Studies.
PB93-202570/REB 93-01 PC **A10/MF A03**

Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
PB93-202851/REB 93-04 PC **A06/MF A02**

Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203962/REB 93-01 PC **A08/MF A02**

National Directory of Citizen Volunteer Environmental Monitoring Programs (Third Edition).
PB93-207496/REB 93-04 PC **A03/MF A01**

Environmental Monitoring Issues: Results of Workshops Held in July 1992 as Part of EPA's Eighth Annual Waste Testing and Quality Assurance Symposium.
PB93-216075/REB 93-04 PC **A12/MF A03**

Comparing Sampling Designs for Monitoring Ecological Status and Trends: Impact of Temporal Patterns (Chapter 3).
PB93-222269/REB 93-04 PC **A03/MF A01**

Acid Precipitation in North America: 1986 Annual and Seasonal Data Summaries from Acid Deposition System Data Base.
PB93-223154/REB 93-04 PC **A04/MF A01**

Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02/MF A01**

Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.
PB93-229425/REB 93-04 PC **A03/MF A01**

Virginian Province Demonstration Report. EMAP-Estuaries, 1990.
PB93-229854/REB 93-04 PC **A11/MF A03**

Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC **A02/MF A01**

Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03/MF A01**

Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.
PB93-236438/REB 93-04 PC **A03/MF A01**

Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.
PB93-236446/REB 93-04 PC **A03/MF A01**

Inter-Regional Comparison of Patterns and Trends in Surface Water Acidification Across the United States.
PB93-236453/REB 93-04 PC **A03/MF A01**

Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02/MF A01**

**ENVIRONMENTAL MONITORING AND ASSESSMENT PROGRAM**

Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13/MF A03**

Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120968/REB 93-01 PC **A02/MF A01**

Environmental Monitoring and Assessment Program: Gulf Coast Salt Marsh Pilot Study.
PB93-122398/REB 93-01 PC **A03/MF A01**

Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC **A03/MF A01**

Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC **A11/MF A03**

Review of EPA's Environmental Monitoring and Assessment Program (EMAP). Interim Report.
PB93-146348/REB 93-01 PC **A03/MF A01**

Environmental Monitoring and Assessment Program: EMAP-Arid Colorado Plateau Pilot Study, 1992. Implementation Plan.
PB93-181618/REB 93-01 PC **A08/MF A02**

**ENVIRONMENTAL PERSISTENCE**

Pilot Study to Evaluate Methods for the Assessment of Exposure of Small Children to Pesticides in the Residential Environment.
PB93-119899/REB 93-01 PC **A03/MF A01**

**ENVIRONMENTAL POLICY**

Integrating Sustainable Agriculture, Ecology, and Environmental Policy. Conference Proceedings.
PB93-191492/REB 93-01 PC **A02/MF A01**

Marine Debris Action Agenda for the Gulf of Mexico: Framework for Action.
PB93-223469/REB 93-04 PC **A08/MF A02**

**ENVIRONMENTAL POLLUTANTS**

Developing Improved Strategies to Determine Male Reproductive Risk from Environmental Toxins.
PB93-167286/REB 93-01 PC **A03/MF A01**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191351/REB 93-01 PC **A02/MF A01**

Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
PB93-191575/REB 93-01 PC **A02/MF A01**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium': Involvement of the Lignin Degrading System.
PB93-191583/REB 93-01 PC **A02/MF A01**

Anaerobic Dehalogenation and Its Environmental Implications. Abstracts of 1992 American Society for Microbiology Conference. Held in Athens, Georgia on August 30-September 4, 1992.
PB93-217792/REB 93-04 PC **A04/MF A01**

Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02/MF A01**

In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02/MF A01**

Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03/MF A01**

**ENVIRONMENTAL POLLUTION**

Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04/MF A01**

Environmental Protection Agency Civil Enforcement Docket.
PB93-921700/REB 93-01 Subscription

**ENVIRONMENTAL PROJECTS**

Financing Models for Environmental Protection: Helping Communities Meet Their Environmental Goals.
PB93-124998/REB 93-01 PC **A05/MF A01**

**ENVIRONMENTAL PROTECTION**

Federal Consistency Guidance: Federal Consistency with State Nonpoint Source Management Programs.
AD-A267 517/1/REB 93-04 PC **A03/MF A01**

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Project Summary.
PB92-226527/REB 93-01 PC **A08/MF A02**

Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13/MF A03**

Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99/MF A06**

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99/MF E11**

Protecting the Environment: A Research Strategy for the 1990s.
PB93-115954/REB 93-01 PC **A04/MF A01**

Financing Models for Environmental Protection: Helping Communities Meet Their Environmental Goals.
PB93-124998/REB 93-01 PC **A05/MF A01**

Successful Practices in Title 3 Implementation Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Series 6, Number 8.
PB93-126126/REB 93-01 PC **A03/MF A01**

Enforcement Four-Year Strategic Plan: Enhanced Environmental Enforcement for the 1990's.
PB93-129724/REB 93-01 PC **A05/MF A01**

Successful Practices in Title III Implementation. Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Cameron County, Texas; Bucks County, Pennsylvania; Harford County, Maryland; Dallas County, Texas. Series 6, Number 7.
PB93-130086/REB 93-01 PC **A03/MF A01**

U.S. Environmental Protection Agency Advisory Committees Charters, Rosters and Accomplishments.
PB93-130094/REB 93-01 PC **A05/MF A01**

Model Pollution Prevention Plan for the Kraft Segment of the Pulp and Paper Industry.
PB93-145605/REB 93-01 PC **A04/MF A01**

Pollution Prevention for the Kraft Pulp and Paper Industry.
PB93-145613/REB 93-01 PC **A04/MF A01**

Pollution Prevention Opportunity Assessment: Manufacturing and Fabrication Repair Laboratory at Sandia National Laboratories.
PB93-146868/REB 93-01 PC **A03/MF A01**

Pollution Prevention Opportunity Assessment: Geochemistry Laboratory, Sandia National Laboratories.
PB93-146900/REB 93-01 PC **A03/MF A01**

Precollege Education: A Vital Component if Sustainable Agriculture is to Take Root.
PB93-168870/REB 93-01 PC **A03/MF A01**

Regulatory Applications of Sediment Criteria.
PB93-174472/REB 93-01 PC **A03/MF A01**

Evaluation of Environmental Marketing Terms in the United States.
PB93-175784/REB 93-01 PC **A10/MF A03**

Greening of World Trade: A Report to EPA from the Trade and Environment Committee of the National Advisory Council for Environmental Policy and Technology.
PB93-176980/REB 93-01 PC **A11/MF A03**

Marine and Estuarine Protection: Programs and Activities.
PB93-179000/REB 93-01 PC **A03/MF A01**

Framework for Characterization. (Revised Final Report March 1992).
PB93-191237/REB 93-01 PC **A04/MF A01**

Expanding Global Forest Management: An 'Easy First' Proposal.
PB93-199669/REB 93-01 PC **A02/MF A01**

Guide for Cost-Effectiveness and Cost-Benefit Analysis of State and Local Ground Water Protection Programs.
PB93-207397/REB 93-04 PC **A06/MF A02**

EPA's Research in LCA Methodology.
PB93-212439/REB 93-04 PC **A03/MF A01**

International Trade in Environmental Protection Equipment: An Assessment of Existing Data.
PB93-236206/REB 93-04 PC **A04/MF A01**

SCOUT: A Data Analysis Program (Version 1.40) (for Microcomputers).
PB93-505303/REB 93-01 CP **D02**

EPA (Environmental Protection Agency) Publications Bibliography, Quarterly Abstract Bulletin.
PB93-904200/REB 93-01 Subscription

**ENVIRONMENTAL PROTECTION AGENCY**

Mentor-Protege Program.
PB93-963251/REB 93-01 PC **A02/MF A01**

**ENVIRONMENTAL QUALITY**

Chesapeake Bay Program Annual Progress Report, Wetlands Workgroup, December 1991.
PB93-136893/REB 93-01 PC **A03/MF A01**

**ENVIRONMENTAL SURVEY**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, June 1992.
PB93-500197/REB 93-01 CP **T05**

**ENVIRONMENTAL SURVEYS**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, June 1992. Record and Data Element Description.
PB93-100261/REB 93-01 PC **A03/MF A01**

Framework for Ecological Risk Assessment.
PB93-102192/REB 93-01 PC **A04/MF A01**

Report on the Ecological Risk Assessment Guidelines Strategic Planning Workshop. Held in Miami, Florida on April 30-May 2, 1991.
PB93-102200/REB 93-01 PC **A05/MF A01**

PA-Score (Preliminary Assessment Score) User's Manual and Tutorial. Version 2.1.
PB93-108322/REB 93-01 PC **A05/MF A01**

Public Access: A How To Guide.
PB93-111029/REB 93-01 PC **A09/MF A03**

Technology Needs and Emerging Technologies (Joint Environmental Restoration and Waste Management Activities).
PB93-111052/REB 93-01 PC **A10/MF A03**

Surfactants and Subsurface Remediation.
PB93-149654/REB 93-01 PC **A02/MF A01**

Proceedings of the Annual EPA Conference on Analysis of Pollutants in the Environment (15th). Held in Norfolk, Virginia on May 6-7, 1992.
PB93-152601/REB 93-01 PC **A99/MF A06**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, January 1993, Documentation.
PB93-155166/REB 93-01 PC **A03/MF A01**

Using a Neural Network to Estimate Solvent Consumption.
PB93-173110/REB 93-01 PC **A02/MF A01**

Environmental Monitoring and Assessment Program: EMAP-Arid Colorado Plateau Pilot Study, 1992. Implementation Plan.
PB93-181618/REB 93-01 PC **A08/MF A02**

Compendium of Current Monitoring Programs in Tampa Bay and Its Watershed.
PB93-191666/REB 93-01 PC **A05/MF A01**

Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
PB93-229706/REB 93-04 PC **A02**/MF **A01**

Total Volatile Organic Concentrations in 2700 Personal, Indoor, and Outdoor Air Samples Collected in the US EPA Team Studies.
PB93-229730/REB 93-04 PC **A03**/MF **A01**

Role of Ecological Sample Surveys in the Implementation of Biocriteria.
PB93-234524/REB 93-04 PC **A03**/MF **A01**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 3) (for Microcomputers).
PB93-500270/REB 93-01 CP **D02**

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 2) (for Microcomputers).
PB93-500288/REB 93-01 CP **D02**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, January 1993.
PB93-504595/REB 93-01 CP **T05**

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 3) (for Microcomputers).
PB93-505352/REB 93-04 CP **D02**

**ENVIRONMENTAL TRANSPORT**

Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3, Hydraulic Conductivity Variability and Calculated Macrodispersivities.
PB93-107050/REB 93-01 PC **A03**/MF **A01**

Behavior of Metals in Soils.
PB93-131480/REB 93-01 PC **A03**/MF **A01**

Methods for Assessing Exposure to Chemical Substances. Volume 11. Methodology for Estimating the Migration of Additives and Impurities from Polymeric Materials.
PB93-134096/REB 93-01 PC **A09**/MF **A02**

Laboratory Studies on the Stability and Transport of Inorganic Colloids Through Natural Aquifer Material (Chapter 49).
PB93-175537/REB 93-01 PC **A02**/MF **A01**

Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02**/MF **A01**

VIRTUS, a Model of Virus Transport in Unsaturated Soils.
PB93-185890/REB 93-01 PC **A02**/MF **A01**

Pesticide Reregistration Rejection Rate Analysis Residue Chemistry/Environmental Fate Follow Up Guidance for Conducting Rotational Crop Studies.
PB93-194041/REB 93-01 PC **A03**/MF **A01**

Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC **A03**/MF **A01**

FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC **A02**/MF **A01**

Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.
PB93-212686/REB 93-04 PC **A03**/MF **A01**

Modeling Protocol for Applying MESOPUFF II to Long Range Transport Problems.
PB93-226106/REB 93-04 PC **A04**/MF **A01**

Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
PB93-228516/REB 93-04 PC **A02**/MF **A01**

Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-228575/REB 93-04 PC **A03**/MF **A01**

ADL Migration Estimation Model (for Microcomputers) (Release Number 1).
PB93-500684/REB 93-01 CP **D02**

**ENVIRONMENTS**

Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

**ENZYME ACTIVITY**

Oxidation of Biphenyl by a Multicomponent Enzyme System from 'Pseudomonas' sp. Strain LB400.
PB93-229466/REB 93-04 PC **A02**/MF **A01**

Genetic and Cell-Free Studies of PCB Biodegradation in 'Pseudomonas putida' LB400.
PB93-229748/REB 93-04 PC **A03**/MF **A01**

**ENZYME INDUCTION**

Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
PB93-229458/REB 93-04 PC **A03**/MF **A01**

**ENZYMES**

Simple Mini-Method to Extract DNA Directly from Soil for Use with Polymerase Chain Reaction Amplification.
PB93-222792/REB 93-04 PC **A02**/MF **A01**

**EPA METHODS**

Proceedings of Annual Analytical Symposium (7th). Held in Norfolk, Virginia on March 28-29, 1984.
PB93-237519/REB 93-04 PC **A99**/MF **A06**

**EPA REGION 1**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC **A08**/MF **A02**

Economic Growth Analysis System (E-GAS) for EPA Region I - New England States (for Microcomputers).
PB93-505477/REB 93-04 CP **D03**

**EPA REGION 10**

Clean Water Act (Section 319): An Evaluation of Program Implementation in Region 10.
PB93-145654/REB 93-01 PC **A05**/MF **A01**

Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC **A05**/MF **A01**

Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP **D03**

**EPA REGION 2**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC **A08**/MF **A02**

Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
PB93-505485/REB 93-04 CP **D03**

**EPA REGION 3**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC **A06**/MF **A02**

Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
PB93-505485/REB 93-04 CP **D03**

**EPA REGION 4**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC **A99**/MF **E11**

Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).
PB93-505493/REB 93-04 CP **D03**

**EPA REGION 5**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC **A21**/MF **A04**

Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).
PB93-505501/REB 93-04 CP **D03**

**EPA REGION 6**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC **A07**/MF **A02**

Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).
PB93-505519/REB 93-04 CP **D03**

**EPA REGION 7**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC **A20**/MF **A04**

Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).
PB93-505527/REB 93-04 CP **D03**

**EPA REGION 8**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC **A06**/MF **A02**

Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP **D03**

**EPA REGION 9**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC **A24**/MF **A04**

Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).
PB93-505543/REB 93-04 CP **D03**

**EPA REGIONS 1-10**

Economic Growth Analysis System: Reference Manual.
PB93-183408/REB 93-04 PC **A12**/MF **A03**

Economic Growth Analysis System: User's Guide.
PB93-183416/REB 93-04 PC **A04**/MF **A01**

Economic Growth Analysis System (E-GAS) for all EPA Regions (I through X) (for Microcomputers).
PB93-505469/REB 93-04 CP **D18**

**EPANET MODEL**

EPANET Water Quality Model.
PB93-236552/REB 93-04 PC **A03**/MF **A01**

**EPICHLOROHYDRIN**

Evaluation of the Potential Carcinogenicity of Epichlorohydrin (106-89-8).
PB93-192334/REB 93-01 PC **A03**/MF **A01**

**EPIDEMIOLOGY**

Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC **A03**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 7. Epidemiology/Human Data.
PB93-222719/REB 93-04 PC **A07**/MF **A02**

Human Health Effects of Air Pollution.
PB93-231843/REB 93-04 PC **A03**/MF **A01**

**EPIDIDYMIS**

Direct Effects of Ethane Dimethanesulphonate on Epididymal Function in Adult Rats. An In vitro Demonstration.
PB93-141281/REB 93-01 PC **A03**/MF **A01**

**EPISODIC ACIDIFICATION**

Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC **A03**/MF **A01**

**EPISODIC DEPRESSIONS**

Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC **A02**/MF **A01**

**EPITHELIUM**

Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
PB93-175677/REB 93-01 PC **A02**/MF **A01**

**EPOXIDE/CYCLOPENTAPYRENE**

Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC **A02**/MF **A01**

**EQUIPMENT**

Guides to Pollution Prevention: The Mechanical Equipment Repair Industry.
PB93-121317/REB 93-01 PC **A03**/MF **A01**

Benzene Equipment Leak Inspection Manual.
PB93-199123/REB 93-01 PC **A06**/MF **A02**

**EROSION CONTROL**

Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC **A03**/MF **A01**

**ERROR ANALYSIS**

Uncertainties in Countrywide Forest Biomass Estimates.
PB93-149250/REB 93-01 PC **A03**/MF **A01**

**ERWINIA HERBICOLA**

Effect of Aerosolization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC **A02**/MF **A01**

**ERYTHROLEUKEMIA**

Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC **A03**/MF **A01**

**ESCHERICHIA**

Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC **A01**/MF **A01**

**ESCHERICHIA COLI**

Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
PB93-121176/REB 93-01 PC **A02**/MF **A01**

Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC **A03**/MF **A01**

Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC **A02**/MF **A01**

Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC **A01**/MF **A01**

Long-Term Survival and Plasmid Maintenance of 'Escherichia coli' in Marine Microcosms.
PB93-236230/REB 93-04 PC **A02**/MF **A01**

**ESTRUS**
Steroidogenic Assessment Using Ovary Culture in Cycling Rats: Effects of Bis(2-Diethylhexyl) Phthalate on Ovarian Steroid Production.
PB93-181022/REB 93-01 PC **A03**/MF **A01**

**ESTUARIES**
Introduction to Nonpoint Source Pollution and Wetland Mitigation.
PB93-106953/REB 93-01 PC **A03**/MF **A01**

Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC **A03**/MF **A01**

Saving Bays and Estuaries: A Primer for Establishing and Managing Estuary Programs. Appendices G, H, and I.
PB93-115077/REB 93-01 PC **A05**/MF **A02**

Near Coastal Program Plan for 1991: Estuaries.
PB93-116176/REB 93-01 PC **A12**/MF **A03**

Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC **A10**/MF **A03**

Potential Intertidal Habitat Restoration Sites in the Duwamish River Estuary.
PB93-122190/REB 93-01 PC **A05**/MF **A02**

Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC **A23**/MF **A04**

Strategic Assessment of Near Coastal Waters: Northeast Case Study.
PB93-136521/REB 93-01 PC **A06**/MF **A02**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC **A03**/MF **A01**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

Restoration Potential of Diked Estuarine Wetlands in Washington and Oregon. Phase 2: Identification of Candidate Sites in Puget Sound.
PB93-145597/REB 93-01 PC **A04**/MF **A01**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03**/MF **A01**

Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03**/MF **A01**

Marine and Estuarine Protection: Programs and Activities.
PB93-179000/REB 93-01 PC **A03**/MF **A01**

Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03**/MF **A01**

Distribution of Selected Fish Species in Tampa Bay.
PB93-191229/REB 93-01 PC **A04**/MF **A01**

Estuary Program Primer. National Estuary Program.
PB93-193753/REB 93-01 PC **A06**/MF **A02**

Summary of Implementation and Demonstration Projects in Bays and Estuaries.
PB93-194637/REB 93-01 PC **A07**/MF **A02**

Design of a Basinwide Monitoring Program for the Tampa Bay Estuary.
PB93-194694/REB 93-01 PC **A05**/MF **A01**

Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11**/MF **A03**

Observations on the State of Marine Disease Studies (Chapter 18).
PB93-204170/REB 93-01 PC **A03**/MF **A01**

Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC **A20**/MF **A04**

Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albemarle Sound.
PB93-207561/REB 93-04 PC **A03**/MF **A01**

Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

Proceedings and Summary of the Workshop on Finfish as Indicators of Toxic Contamination. Held in Airlie, Virginia on July 27-28, 1986.
PB93-208320/REB 93-04 PC **A06**/MF **A02**

National Estuary Program Guidance. Comprehensive Conservation and Management Plans: Content and Approval Requirements.
PB93-217172/REB 93-04 PC **A03**/MF **A01**

Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
PB93-228518/REB 93-04 PC **A02**/MF **A01**

Virginian Province Demonstration Report. EMAP-Estuaries, 1990.
PB93-229854/REB 93-04 PC **A11**/MF **A03**

Microbial Trophic Interactions in Aquatic Microcosms Designed for Testing Genetically Engineered Microorganisms: A Field Comparison.
PB93-236248/REB 93-04 PC **A03**/MF **A01**

**ESTUARINE**
Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC **A10**/MF **A03**

**ETHANE/DICHLORO**
Evaluation of the Potential Carcinogenicity of 1,2-Dichloroethane (107-06-2).
PB93-194264/REB 93-01 PC **A03**/MF **A01**

**ETHANE/HEXACHLORO**
Evaluation of the Potential Carcinogenicity of Hexachloroethane (67-72-1).
PB93-190510/REB 93-01 PC **A03**/MF **A01**

**ETHANE/PENTACHLORO**
Evaluation of the Potential Carcinogenicity of Pentachloroethane (76-01-7).
PB93-185320/REB 93-01 PC **A03**/MF **A01**

**ETHANE/TETRACHLORO**
Evaluation of the Potential Carcinogenicity of 1,1,2,2-Tetrachloroethane (79-34-5).
PB93-201242/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1,1,2-Tetrachloroethane (630-20-6).
PB93-201259/REB 93-01 PC **A03**/MF **A01**

**ETHANE/TRICHLORO**
Evaluation of the Potential Carcinogenicity of 1,1,2-Trichloroethane (79-00-5).
PB93-204584/REB 93-01 PC **A03**/MF **A01**

**ETHANOLS**
Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC **A03**/MF **A01**

**ETHER/CHLOROMETHYL-METHYL**
Evaluation of the Potential Carcinogenicity of Chloromethyl Methyl Ether (Technical Grade) (107-30-2).
PB93-185122/REB 93-01 PC **A03**/MF **A01**

**ETHERS**
Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03**/MF **A01**

Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03**/MF **A01**

Simulation of Performance of Chlorine-Free Fluorinated Ethers and Fluorinated Hydrocarbons to Replace CFC-11 and CFC-114 in Chillers.
PB93-175511/REB 93-01 PC **A03**/MF **A01**

Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

**ETHICS**
Who Will Speak for Biodiversity.
PB93-135762/REB 93-01 PC **A01**/MF **A01**

**ETHYL ALCOHOL**
Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03**/MF **A01**

Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC **A03**/MF **A01**

**ETHYLENE**
*RED Facts: Ethylene.*
PB93-100345/REB 93-01 PC **A02**/MF **A01**

**ETHYLENE DIBROMIDES**
Evaluation of the Potential Carcinogenicity of Ethylene Dibromide (106-93-4).
PB93-192367/REB 93-01 PC **A03**/MF **A01**

**ETHYLENE OXIDE**
Evaluation of the Potential Carcinogenicity of Ethylene Oxide (75-21-8).
PB93-192375/REB 93-01 PC **A03**/MF **A01**

Genetic Damage In vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04**/MF **A01**

Ethylene Oxide Emissions from Commercial Sterilization/Fumigation Operations: Background Information for Proposed Standards.
PB93-226744/REB 93-04 PC **A13**/MF **A03**

**ETHYLENE/TRICHLORO**
Evaluation of the Potential Carcinogenicity of Trichloroethylene (79-01-6).
PB93-202323/REB 93-01 PC **A03**/MF **A01**

**ETHYLENETHIOUREA**
Evaluation of the Potential Carcinogenicity of Ethylenethiourea (96-45-7).
PB93-193589/REB 93-01 PC **A03**/MF **A01**

**ETHYLNITROSOUREA**
Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
PB93-141463/REB 93-01 PC **A02**/MF **A01**

ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC **A02**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Ethylurea (759-73-9).
PB93-196475/REB 93-01 PC **A03**/MF **A01**

**EUKARYOTIC CELLS**
Proteins from Eight Eukaryotic Cytochrome P-450 Families Share a Segmented Region of Sequence Similarity.
PB93-229235/REB 93-04 PC **A02**/MF **A01**

**EUTROPHICATION**
Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

**EVANS MOUNTAIN**
Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-228500/REB 93-04 PC **A02**/MF **A01**

**EVAPORATIVE EMISSIONS**
EVAP3.0 CRC Evaporative Emission Model: User's Manual.
PB93-213916/REB 93-04 PC **A03**/MF **A01**

Final Regulatory Impact Analysis and Summary and Analysis of Comments: Control of Vehicular Evaporative Emissions.
PB93-228138/REB 93-04 PC **A07**/MF **A02**

Evaporative Emission Model (EVAP 3.0) (for Microcomputers).
PB93-506301/REB 93-04 CP **D02**

**EVESHAM TOWNSHIP (NEW JERSEY)**
Superfund Record of Decision (EPA Region 2): Ellis Property, Sharp Road, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963820/REB 93-04 PC **A04**/MF **A01**

**EVOKED POTENTIALS**
Olfactory Evoked Responses to Odorous Stimuli of Different Intensities.
PB93-141315/REB 93-01 PC **A02**/MF **A01**

**EVOLUTION**
Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC **A03**/MF **A01**

**EXCRETION**
Ammonia Abatement System for Whole-Body Small Animal Inhalation Exposures to Acid Aerosols.
PB93-229516/REB 93-04 PC **A03**/MF **A01**

**EXHAUST EMISSION MEASUREMENT**
*Report on the EPA/Manufacturer Cooperative I/M Testing Program.*
PB93-206015/REB 93-04 PC **A10**/MF **A03**

**EXHAUST EMISSIONS**
Technology for Reduction of CO2 Emissions from the Transportation Sector.
PB93-106987/REB 93-01 PC **A02**/MF **A01**

Test Car List, 1992. Passenger Cars.
PB93-111185/REB 93-01 PC **A05**/MF **A01**

Federal Certification Test Results for 1992 Model Year. Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines.
PB93-111219/REB 93-01 PC **A13**/MF **A03**

Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC **A03**/MF **A01**

Evaluation of Resistively Heated Fuel Injection Technology to Reduce Cold Start Emissions and Assist Starting/Driveaway of a Methanol-Fueled Vehicle.
PB93-144350/REB 93-01 PC **A03**/MF **A01**

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC **A03**/MF **A01**

Commercial Marine Vessel Contributions to Emission Inventories.
PB93-173961/REB 93-01 PC **A07**/MF **A02**

Methodology to Estimate Nonroad Equipment Populations by Nonattainment Areas.
PB93-174332/REB 93-01 PC **A05**/MF **A01**

Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
PB93-180875/REB 93-01 PC **A06**/MF **A02**

Nonroad Mobile Source Sales and Attrition Study: Identification and Evaluation of Available Data Sources.
PB93-190098/REB 93-01 PC **A11**/MF **A03**

Issues and Approaches to Improving Transportation Modeling for Air Quality Analysis.
PB93-194066/REB 93-01 PC **A05**/MF **A02**

Recommended Quality Assurance Procedures for Opacity Continuous Emission Monitoring Systems.
PB93-199263/REB 93-01 PC **A05**/MF **A01**

Empirical Model of Vehicle Emissions.
PB93-199602/REB 93-01 PC **A02**/MF **A01**

Structure and Performance of the Health Effects Institute.
PB93-200335/REB 93-01 PC **A08**/MF **A02**

Federal Test Procedure Review Project: Preliminary Technical Report.
PB93-207975/REB 93-04 PC **A11**/MF **A03**

Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC **A03**/MF **A01**

Dynamometer Testing of On-Road Vehicles from the Los Angeles in-Use Emissions Study.
PB93-222297/REB 93-04 PC **A03**/MF **A01**

Heavy-Duty Engine Testing Report Cummins/EPA/Taiwan Correlation Test Results, 1993.
PB93-236172/REB 93-04 PC **A03**/MF **A01**

**EXHAUST GASES**

Impact of fuels on diesel exhaust emissions. A chemical and biological characterization.
DE92563058/REB 93-01 PC **A08**/MF **A02**

Evaluation of Two Methods for the Measurement of Mercury Emissions in Exhaust Gases from a Municipal Waste Combustor.
PB93-105542/REB 93-01 PC **A05**/MF **A01**

Test Car List, 1993. Passenger Cars.
PB93-164531/REB 93-01 PC **A05**/MF **A02**

Cold Starting an Alcohol-Fueled Engine with Ultrasonic Fuel Atomization.
PB93-206597/REB 93-04 PC **A03**/MF **A01**

Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02**/MF **A01**

**EXPEDITED RESPONSE ACTION**

Expedited Response Actions.
PB93-963410/REB 93-01 PC **A02**/MF **A01**

**EXPERIMENTAL DATA**

Importance of Experimenter-Blind Procedure in Neurotoxicology (Mini-Review).
PB93-175628/REB 93-01 PC **A02**/MF **A01**

**EXPERT SYSTEMS**

FLEX: An Expert System for Reviewing the Chemical Resistance of Flexible Membrane Liners for Waste Management.
PB93-106706/REB 93-01 PC **A03**/MF **A01**

Use of Expert System in a Water Utility.
PB93-123081/REB 93-01 PC **A04**/MF **A01**

User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.
PB93-229383/REB 93-04 PC **A03**/MF **A01**

Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.
PB93-229425/REB 93-04 PC **A03**/MF **A01**

Flexible Membrane Liner Advisory Expert System (FLEX) (for Microcomputers) (Version 3.0).
PB93-502631/REB 93-01 CP **D02**

**EXPOSURE**

Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
PB93-105534/REB 93-01 PC **A04**/MF **A01**

Decision Model for Biomarkers of Exposure.
PB93-106995/REB 93-01 PC **A03**/MF **A01**

Assessing Potential Exposures from Routine Use of VOC-Contaminated Groundwater.
PB93-173060/REB 93-01 PC **A02**/MF **A01**

Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02**/MF **A01**

Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances.
PB93-206449/REB 93-04 PC **A06**/MF **A02**

DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03**/MF **A01**

Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04**/MF **A01**

Exposure Modeling of Acid Aerosols.
PB93-228559/REB 93-04 PC **A02**/MF **A01**

Predictors of Individual Differences in Acute Response to Ozone Exposure.
PB93-228849/REB 93-04 PC **A02**/MF **A01**

Evaluation of the Effects of Methanol during Early Pregnancy in the Rat.
PB93-231850/REB 93-04 PC **A03**/MF **A01**

**EXPOSURE MODEL**

Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC **A03**/MF **A01**

**EXTRACTION**

Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC **A02**/MF **A01**

**EXXON VALDEZ**

Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02**/MF **A01**

UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

Bioremediation as a Technology: Experiences with the Exxon Valdez Oil Spill.
PB93-121226/REB 93-01 PC **A03**/MF **A01**

Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03**/MF **A01**

**EXXON VALDEZ OIL SPILL**

Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC **A02**/MF **A01**

Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC **A02**/MF **A01**

**EYE NEOPLASMS**

Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02**/MF **A01**

**EYELID CONDITIONING**

Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-228880/REB 93-04 PC **A03**/MF **A01**

**FACILITIES**

Resistance of Membranes in Cover Systems to Root Penetration by Grass and Trees.
PB93-106714/REB 93-01 PC **A02**/MF **A01**

**FACILITIES MANAGEMENT**

Facility Response Plans.
PB93-963408/REB 93-01 PC **A01**/MF **A01**

**FACILITY RESPONSE PLAN**

Facility Response Plans.
PB93-963408/REB 93-01 PC **A01**/MF **A01**

**FARM CROPS**

Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC **A03**/MF **A01**

Engineered Plants in the Environment.
PB93-234532/REB 93-04 PC **A03**/MF **A01**

**FARM MANAGEMENT**

Cost Effective Corn and Soybean Production Without Tillage: Fact or Fiction (May 1988).
PB93-157568/REB 93-01 PC **A03**/MF **A01**

**FARMS**

Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC **A03**/MF **A01**

**FAST ATOM BOMBARDMENT MASS SPECTROMETRY**

Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC **A02**/MF **A01**

**FATE DATA BASE**

FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC **A02**/MF **A01**

**FCTS (FIELD CERTIFICATION TRACKING SYSTEM)**

Field Certification Tracking System (FCTS). User's Guide. Version 2.1.
PB93-963415/REB 93-04 PC **A04**/MF **A01**

**FEDERAL AGENCIES**

Setting an Agenda for Research in the Federal Statistical System: Needs for Statistical Disclosure Limitation Procedures.
PB93-204097/REB 93-04 PC **A03**/MF **A01**

**FEDERAL FACILITIES**

Guidance for Federal Facilities on Release Notification Requirements under CERCLA and SARA Title III.
PB93-963412/REB 93-01 PC **A03**/MF **A01**

**FEDERAL INSECTICIDE FUNGICIDE AND RODENTICIDE ACT**

Federal Insecticide, Fungicide, and Rodenticide Act as Amended.
PB93-116085/REB 93-01 PC **A05**/MF **A01**

**FEDERAL TEST PROCEDURE**

Test Car List, 1992. Passenger Cars.
PB93-111185/REB 93-01 PC **A05**/MF **A01**

Federal Certification Test Results for 1992 Model Year. Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines.
PB93-111219/REB 93-01 PC **A13**/MF **A03**

Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines. Federal Certification Test Results for 1993 Model Year.
PB93-164523/REB 93-01 PC **A15**/MF **A03**

Test Car List, 1993. Passenger Cars.
PB93-164531/REB 93-01 PC **A05**/MF **A02**

Federal Test Procedure Review Project: Status Report.
PB93-197903/REB 93-01 PC **A03**/MF **A01**

**FEEDING HABITS**

Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

Effects of Food Density on Growth and on Patterns of Prey Depletion by Larval Silverside Fish, 'Menidia beryllina' (Cope): A Laboratory Investigation with Image Analysis.
PB93-212587/REB 93-04 PC **A03**/MF **A01**

**FEEDING STUFFS**

Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC **A03**/MF **A01**

**FEMALE GENETIC RISK**

Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC **A01**/MF **A01**

Gene Expression during Oogenesis in Mice.
PB93-194389/REB 93-01 PC **A03**/MF **A01**

Gene Expression in Pre-Implantation Mammalian Embryos.
PB93-194397/REB 93-01 PC **A03**/MF **A01**

Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence In situ Hybridization.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

Cytoplasmic Microtubular Dynamics and Chromatin Organization during Mammalian Oogenesis and Oocyte Maturation.
PB93-194413/REB 93-01 PC **A03**/MF **A01**

Maternal Age Effect: The Enigma of Down Syndrome and Other Trisomic Conditions.
PB93-194421/REB 93-01 PC **A03**/MF **A01**

Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC **A03**/MF **A01**

Frequency and Nature of Specific-Locus Mutations Induced in Female Mice by Radiations and Chemicals: A Review.
PB93-194447/REB 93-01 PC **A03**/MF **A01**

ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC **A02**/MF **A01**

Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03**/MF **A01**

**FEMALES**

Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC **A01**/MF **A01**

Mutational Risks in Females: Genomic Imprinting and Maternal Molecules.
PB93-194488/REB 93-01 PC **A03**/MF **A01**

**FENTHION**

Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02**/MF **A01**

**FERRUGINOUS SMECTITE**

Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02**/MF **A01**

**FERTILIZATION**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC **A04**/MF **A01**

**FERTILIZERS**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants.
PB93-156495/REB 93-01 PC **A04**/MF **A01**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants, July 1986.
PB93-156503/REB 93-01 PC **A05**/MF **A01**

**FETAL DEVELOPMENT**

Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03**/MF **A01**

**FIBERS**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Monofilament Fiber Manufacturing.
PB93-205961/REB 93-04 PC **A02**/MF **A01**

**FIELD TESTS**

Development of a Field Test Method for the Determination of Lead in Paint and Paint-Contaminated Dust and Soil.
PB93-173128/REB 93-01 PC **A03**/MF **A01**

Field-Deployable Monitors for Volatile Organic Compounds in Air. (Essential Capabilities of a Portable Gas Chromatograph).
PB93-185700/REB 93-01 PC **A03**/MF **A01**

Using Method 301 to Validate Sampling and Analytical Methods for Selected CAAA Compounds.
PB93-191419/REB 93-01 PC **A03**/MF **A01**

Field Test of a Generic Method for Halogenated Hydrocarbons.
PB93-212181/REB 93-04 PC **A13**/MF **A03**

Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.
PB93-221653/REB 93-04 PC **A07**/MF **A02**

Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC **A02**/MF **A01**

**FIFTH REMEDIAL ACTION**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 6), Lakehurst, NJ. (Fifth Remedial Action), December 1991.
PB93-963810/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.
PB93-964010/REB 93-04 PC **A03**/MF **A01**

**FILTRATION**

Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC **A10**/MF **A03**

Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
PB93-221638/REB 93-04 PC **A04**/MF **A01**

Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.
PB93-227205/REB 93-04 PC **A04**/MF **A01**

SITE Program Demonstration of the SBP Technologies, Inc., Membrane Filtration System on Creosote-Contaminated Water.
PB93-228567/REB 93-04 PC **A02**/MF **A01**

Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC **A02**/MF **A01**

**FINANCES**

Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.
PB93-212033/REB 93-04 PC **A01**/MF **A01**

**FINANCING**

Overview of Existing State Alternative Financing Programs: Financing Drinking Water System Capital Needs in the 1990's.
PB93-132637/REB 93-01 PC **A05**/MF **A01**

**FINES**

Determination of the Strong Acidity of Atmospheric Fine-Particles (< 2.5 mum) Using Annular Denuder Technology. Standard Method, Enhanced Method.
PB93-178234/REB 93-01 PC **A07**/MF **A02**

**FINFISH**

Proceedings and Summary of the Workshop on Finfish as Indicators of Toxic Contamination. Held in Airlie, Virginia on July 27-28, 1986.
PB93-208320/REB 93-04 PC **A06**/MF **A02**

**FIRS**

Soil-Mediated Effects of Atmospheric Deposition on Eastern U.S. Spruce-Fir Forests.
PB93-141125/REB 93-01 PC **A03**/MF **A01**

Characterization of Eastern U.S. Spruce-Fir Soils.
PB93-141133/REB 93-01 PC **A03**/MF **A01**

**FIRST REMEDIAL ACTION**

Superfund Record of Decision (EPA Region 1): Revere Textile Prints, Sterling, CT. (First Remedial Action), September 1992.
PB93-963703/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Otis Air National Guard/Camp Edwards, MA. (First Remedial Action), May 1992.
PB93-963704/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 1): Town Garage Radio Beacon, Londonderry, NH. (First Remedial Action), September 1992.
PB93-963705/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 1): Newport Naval Education/Training Center, Newport, RI. (First Remedial Action), September 1992.
PB93-963707/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 1): PSC Resources Site, Palmer, MA. (First Remedial Action), September 1992.
PB93-963708/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 1): Tibbetts Road, Barrington, NH. (First Remedial Action), September 1992.
PB93-963709/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 2): Bioclinical Laboratories, Town of Islip, Suffolk County, NY. (First Remedial Action), September 1992.
PB93-963807/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Witco Chemical (Oakland Plant), Bergen County, Oakland, NJ. (First Remedial Action), September 1992.
PB93-963812/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Evor Phillips Leasing Company, Old Bridge Township, Middlesex County, NJ. (First Remedial Action), September 1992.
PB93-963814/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 1), Clinton County, NY. (First Remedial Action), September 1992.
PB93-963815/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Imperial Oil/Champion Chemicals, Monmouth County, NJ. (Second Remedial Action), September 1992.
PB93-963823/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Industrial Latex, Bergen County, Wallington, NJ. (First Remedial Action), September 1992.
PB93-963824/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Islip Municipal Sanitary Landfill, Town of Islip, NY. (First Remedial Action), September 1992.
PB93-963825/REB 93-04 PC **A05**/MF **A02**

Superfund Record of Decision (EPA Region 2): Rowe Industries Groundwater Contamination, Sag Harbor, NY. (First Remedial Action), September 1992.
PB93-963827/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.
PB93-963912/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.
PB93-963913/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, Operable Unit 1, Richmond, VA. (First Remedial Action), May 1992.
PB93-963923/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964009/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964011/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.
PB93-964012/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Standard Auto Bumper Site, Dade County, Hialeah, FL. (First Remedial Action), September 1992.
PB93-964014/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): National Electric Coil/Cooper Industries, KY. (First Remedial Action), September 1992.
PB93-964016/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Agrico Chemical, Escambia County, Pensacola, FL. (First Remedial Action), September 1992.
PB93-964017/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Benfield Industries, Haywood County, Hazelwood, NC. (First Remedial Action), July 1992.
PB93-964018/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 4): Carrier Air Conditioning, Collierville, TN. (First Remedial Action), September 1992.
PB93-964019/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Florida Steel Corporation, Martin County, Indiantown, FL. (First Remedial Action), June 1992.
PB93-964020/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Madison County Sanitary Landfill, Madison, FL. (First Remedial Action), September 1992.
PB93-964021/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Milan Army Ammunition Plant, TN. (First Remedial Action), September 1992.
PB93-964022/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 1, SC. (First Remedial Action), June 1992.
PB93-964023/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): USMC Camp Lejeune Military Reservation, NC. (First Remedial Action), September 1992.
PB93-964026/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Butterworth No. 2 Landfill Site, Grand Rapids, MI. (First Remedial Action), September 1992.
PB93-964122/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): American Chemical Services, Griffith, IN. (First Remedial Action), September 1992.
PB93-964125/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): Central Illinois Public Service, Taylorville Manufactured Gas Plant Site, Christian County, IL. (First Remedial Action), September 1992.
PB93-964127/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): City Disposal Sanitary Landfill, Dane County, WI. (First Remedial Action), September 1992.
PB93-964128/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): H. Brown Company, Walker, MI. (First Remedial Action), September 1992.
PB93-964129/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 2), Vermilion Parish, LA. (First Remedial Action), September 1992.
PB93-964206/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 6): Koppers (Texarkana Plant), TX. (First Remedial Action), (Amendment), March 1992.
PB93-964208/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 6): Prewitt Abandoned Refinery, Prewitt, NM. (First Remedial Action), September 1992.
PB93-964209/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 6): Double Eagle Refinery, Oklahoma City, OK. (First Remedial Action), September 1992.
PB93-964210/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.
PB93-964304/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 7): Pester Refinery, Butler County, El Dorado, KS. (First Remedial Action), September 1992.
PB93-964305/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Idaho Pole National Priorities List Site, Bozeman, MT. (First Remedial Action), September 1992.
PB93-964406/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 10): Arrcom (Drexler Enterprise), Rathdrum, ID. (First Remedial Action), June 1992.
PB93-964606/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Fort Lewis Military Reservation, Landfill No. 5, Pierce County, WA. (First Remedial Action), July 1992.
PB93-964607/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Pesticide Laboratory, Yakima, WA. (First Remedial Action), September 1992.
PB93-964608/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Naval Air Station Whidbey Island - Ault Field, (Operable Unit 1, Area 6), Oak Harbor, WA. (First Remedial Action), April 1992.
PB93-964609/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Umatilla Army Depot (Lagoons), Soils Operable Unit 2, Hermiston, OR. (First Remedial Action), September 1992.
PB93-964610/REB 93-04 PC **A04**/MF **A01**

**FISH DISEASES**

Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03**/MF **A01**

Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04**/MF **A01**

**FISH MANAGEMENT**

Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC **A10**/MF **A03**

**FISHERIES**

Chesapeake Bay Striped Bass Fishery Management Plan: Chesapeake Bay Program. Annual Progress Report (April 1992).
PB93-114585/REB 93-01 PC **A03**/MF **A01**

Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans.
PB93-122182/REB 93-01 PC **A03**/MF **A01**

Fish and Fisheries Management in Lakes and Reservoirs. Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-210375/REB 93-04 PC **A15**/MF **A03**

Chesapeake Bay American Eel Fishery Management Plan. Agreement Commitment Report 1991.
PB93-226017/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans, December 1992.
PB93-226058/REB 93-04 PC **A04**/MF **A01**

**FISHES**

Molecular Regulation of the Induction of Cytochrome P-450E in the Estuarine Fish Fundulus Heteroclitus.
AD-A258 623/8/REB 93-01 PC **A11**/MF **A03**

National Study of Chemical Residues in Fish, Volume 1.
PB93-114981/REB 93-01 PC **E09**/MF **A01**

National Study of Chemical Residues in Fish, Volume 2.
PB93-114999/REB 93-01 PC **E11**/MF **A04**

Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93-148252/REB 93-01 PC **A08**/MF **A02**

Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

Effects of Chemical Contaminants on Blood Chemistry of Teleost Fish: A Bibliography and Synopsis of Selected Effects.
PB93-168961/REB 93-01 PC **A03**/MF **A01**

Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC **A02**/MF **A01**

Sampling and Assessment Issues in Using Fish as Indicators of Ecological Condition in Lakes: A Workshop Report. (3rd Draft Report).
PB93-186278/REB 93-01 PC **A03**/MF **A01**

Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04**/MF **A01**

Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.
PB93-222354/REB 93-04 PC **A03**/MF **A01**

Assessment and Control of Bioconcentratable Contaminants in Surface Waters.
PB93-229813/REB 93-04 PC **A13**/MF **A03**

Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1. Fish Sampling and Analysis.
PB93-237899/REB 93-04 PC **A16**/MF **A03**

**FISHWAYS**

Implementation Plan for Removing Impediments to Migratory Fishes in the Chesapeake Bay Watershed (January-December 1991).
PB93-116572/REB 93-01 PC **A03**/MF **A01**

**FLAME INCINERATORS**

Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
PB93-121127/REB 93-01 PC **A03**/MF **A01**

**FLASH LAMPS**

Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.
PB93-205383/REB 93-04 PC **A03**/MF **A01**

**FLATFISHES**

Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Summer Flounder Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226637/REB 93-04 PC **A03**/MF **A01**

**FLAVOPROTEINS**

Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
PB93-229458/REB 93-04 PC **A03**/MF **A01**

**FLEX SYSTEM**

FLEX: An Expert System for Reviewing the Chemical Resistance of Flexible Membrane Liners for Waste Management.
PB93-106706/REB 93-01 PC **A03**/MF **A01**

**FLEXIBLE MEMBRANE LINER ADVISORY EXPERT SYSTEM**

User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

Flexible Membrane Liner Advisory Expert System (FLEX) (for Microcomputers) (Version 3.0).
PB93-502631/REB 93-01 CP **D02**

**FLEXOGRAPHY**

Ink and Cleaner Waste Reduction Evaluation for Flexographic Printers.
PB93-191286/REB 93-01 PC **A03**/MF **A01**

**FLOODS**

Private Wells: Guidance for What to Do After the Flood.
PB93-226710/REB 93-04 PC **A02**/MF **A01**

**FLORIDA**

Recommended Performance Standard of the Florida Radon Research Program.
PB93-122281/REB 93-01 PC **A03**/MF **A01**

Alternate Performance Standard Project: Interpreting the Post-Construction Test.
PB93-175529/REB 93-01 PC **A03**/MF **A01**

National Priorities List Sites: Florida, 1992.
PB93-963210/REB 93-01 PC **A08**/MF **A02**

Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964009/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964011/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.
PB93-964012/REB 93-04 PC **A04**/MF **A01**

**FLORIDA RADON RESEARCH PROGRAM**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
PB93-100907/REB 93-01 PC **A07**/MF **A02**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

**FLOUNDER**

Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

**FLOW DISTRIBUTION**

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119873/REB 93-01 PC **A02**/MF **A01**

Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119881/REB 93-01 PC **A03**/MF **A01**

**FLOW MODELS**

Compilation of Ground-Water Models.
PB93-209401/REB 93-04 PC **A13**/MF **A03**

**FLOWMETERS**

Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
PB93-115806/REB 93-01 PC **A05**/MF **A01**

Development and Application of Borehole Flowmeters for Environmental Assessment.
PB93-185817/REB 93-01 PC **A03**/MF **A01**

**FLUE GAS CLEANING**

Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC **A02**/MF **A01**

**FLUE GAS DESULFURIZATION**

Advacate-Low-Cost Process for SO2 Control.
PB93-141117/REB 93-01 PC **A02**/MF **A01**

**FLUE GASES**

Dry Flue Gas Cleaning Processes for Achieving Air Pollutant Emissions Requirements.
PB93-131605/REB 93-01 PC **A03**/MF **A01**

Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
PB93-131704/REB 93-01 PC **A03**/MF **A01**

Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC **A02**/MF **A01**

Air Emissions Testing.
PB93-180933/REB 93-01 PC **A02**/MF **A01**

Multiple Metals Stack Emission Measurement Methodology for Stationary Sources, Current Status.
PB93-185734/REB 93-01 PC **A02**/MF **A01**

Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02**/MF **A01**

Guidelines for Stack Testing at Municipal Waste Combustion Facilities. Project Summary.
PB93-222610/REB 93-04 PC **A02**/MF **A01**

Evaluation of FGD Dry Injection Sorbents and Additives. Volume 1. Development of High Reactivity Sorbents. Project Summary.
PB93-228484/REB 93-04 PC **A02**/MF **A01**

**FLUFF**

Characterization of Emissions from the Simulated Open-Burning of Non-Metallic Automobile Shredder Residue.
PB93-172914/REB 93-01 PC **A05**/MF **A01**

**FLUID FLOW**

LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC **A05**/MF **A01**

**FLUORANTHENE**

Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC **A03**/MF **A01**

**FLUORANTHENE/BENZO (B)**

Evaluation of the Potential Carcinogenicity of Benzo(b)fluoranthene (00205-99-2).
PB93-184984/REB 93-01 PC **A03**/MF **A01**

**FLUORANTHENE/BENZO (K)**

Evaluation of the Potential Carcinogenicity of Benzo(k)fluoranthene (207-08-9).
PB93-184992/REB 93-01 PC **A03**/MF **A01**

**FLUORESCENCE**

Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC **A03**/MF **A01**

**FLUORESCENCE IN SITU HYBRIDIZATION**

Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence In situ Hybridization.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

**FLUORESCENT DYES**

Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
PB93-121184/REB 93-01 PC **A02**/MF **A01**

**FLUORIDES**

Economic Assessment of Reducing Fluoride in Drinking Water.
PB93-115830/REB 93-01 PC **A05**/MF **A01**

**FLUORINATED ETHERS**

Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03**/MF **A01**

Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03**/MF **A01**

Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

**FLUORINATION**

Economic Assessment of Reducing Fluoride in Drinking Water.
PB93-115830/REB 93-01 PC **A05**/MF **A01**

**FLUORINE ORGANIC COMPOUNDS**

Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03**/MF **A01**

Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03**/MF **A01**

Simulation of Performance of Chlorine-Free Fluorinated Ethers and Fluorinated Hydrocarbons to Replace CFC-11 and CFC-114 in Chillers.
PB93-175511/REB 93-01 PC **A03**/MF **A01**

Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

**FLUOROURACIL**

Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC **A01**/MF **A01**

Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC **A03**/MF **A01**

**FLY ASH**

Advacate-Low-Cost Process for SO2 Control.
PB93-141117/REB 93-01 PC **A02**/MF **A01**

**FOAM**

Foam Scrubbing (Chapter 9).
PB93-236560/REB 93-04 PC **A03**/MF **A01**

**FOAM SCRUBBING**

Foam Scrubbing (Chapter 9).
PB93-236560/REB 93-04 PC **A03**/MF **A01**

**FOG**

Formaldehyde-Contaminated Fog Effects on Plant Growth.
PB93-121101/REB 93-01 PC **A02**/MF **A01**

**FOLLICULAR ATRESIA**

Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC **A03**/MF **A01**

**FOOD CHAINS**

Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93 148252/REB 93-01 PC **A08**/MF **A02**

Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC **A02**/MF **A01**

**FOOD CONTAMINATION**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 1.
PB93-209013/REB 93-04 PC **A03**/MF **A01**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 2.
PB93-209021/REB 93-04 PC **A15**/MF **A03**

**FOOD WEB**

Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08**/MF **A02**

**FORECASTING**

Projections of Regional Fuel Oil and Natural Gas Prices. Project Summary.
PB93-222552/REB 93-04 PC **A01**/MF **A01**

Advanced Utility Simulation Model. Project Summary.
PB93-222636/REB 93-04 PC **A02**/MF **A01**

**FOREIGN TECHNOLOGY**

Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC **A03**/MF **A01**

Impact of fuels on diesel exhaust emissions. A chemical and biological characterization.
DE92563058/REB 93-01 PC **A08**/MF **A02**

Measurements of total ozone.
DE92563059/REB 93-01 PC **A04**/MF **A01**

Air monitoring in the Arctic: 1980-90.
DE92563060/REB 93-01 PC **A03**/MF **A01**

Metal concentrations of the mor layer.
DE92563061/REB 93-01 PC **A05**/MF **A01**

Radioecology in Nordic limnic systems - present knowledge and future prospects.
DE92643948/REB 93-01 PC **A04**/MF **A01**

Foerbraenning av sorterat industriavfall. Huvudrapport. (Incineration of sorted industrial wastes. Main report).
DE93500869/REB 93-04 PC **A03**/MF **A01**

Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
DE93500872/REB 93-04 PC **A03**/MF **A01**

Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
DE93500877/REB 93-04 PC **A04**/MF **A01**

Bladder-wrack (Fucus vesiculosus L) as an indicator for radionuclides in the environment of Swedish nuclear power plants.
DE93603681/REB 93-01 PC **A03**/MF **A01**

Phasing out of CFCs in the electronics and engineering industries in Sweden.
DE93711212/REB 93-01 PC **A03**/MF **A01**

Sanering av Jaernsjoen i Emaan. Huvudstudie. (Remediation of lake Jaernsjoen in the Emaan river. Main report).
DE93711213/REB 93-01 PC **A04**/MF **A01**

Risk assessment, Health-Environment. A research programme during the period 1992/93-1994/95.
DE93711214/REB 93-01 PC **A03**/MF **A01**

New technology for refrigeration and heating plants.
DE93721673/REB 93-01 PC **A03**/MF **A01**

Greenhouse gases. Emissions and countermeasures in an international perspective.
DE93721674/REB 93-01 PC **A07**/MF **A02**

Air pollutants in urban areas. A bibliography 1985-1991.
DE93769990/REB 93-01 PC **A04**/MF **A01**

Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC **A04**/MF **A01**

Release of PCB and mercury from fibre sediments.
DE93778469/REB 93-01 PC **A05**/MF **A01**

Trace elements in agricultural soils. Fluxes, balances and background values.
DE93778470/REB 93-01 PC **A03**/MF **A01**

Critical concentrations of heavy metals in the mor horizon of Swedish forests.
DE93778471/REB 93-01 PC **A03**/MF **A01**

Heavy metal concentrations in agricultural soils critical to microorganisms.
DE93778472/REB 93-01 PC **A03**/MF **A01**

Long-term forest fertilization experiments in Finland and Sweden - their use for vitality and nutrient balance studies.
DE93778473/REB 93-01 PC **A07**/MF **A02**

Freshwater environmental monitoring in Sweden. Proposals from a working group.
DE93778474/REB 93-01 PC **A08**/MF **A02**

Astgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC **A14**/MF **A03**

Recovery of CFCs from refrigeration equipment. Current processes.
DE93778476/REB 93-01 PC **A04**/MF **A01**

Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC **A03**/MF **A01**

Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC **A03**/MF **A01**

Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC **A03**/MF **A01**

International Evaluation of In-situ Biorestoration of Contaminated Soil and Groundwater (September 1990)--Translation.
PB93-207553/REB 93-04 PC **A03**/MF **A01**

Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02**/MF **A01**

Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC **A03**/MF **A01**

**FOREST FIRES**

Forest Fires in Russia: Carbon Dioxide Emissions to the Atmosphere.
PB93-229664/REB 93-04 PC **A02**/MF **A01**

**FOREST LAND**

Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC **A03**/MF **A01**

Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
PB93-135671/REB 93-01 PC **A01**/MF **A01**

Uncertainties in Countrywide Forest Biomass Estimates.
PB93-149250/REB 93-01 PC **A03**/MF **A01**

Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC **A04**/MF **A01**

Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC **A04**/MF **A01**

Role and Function of Forest Buffers in the Chesapeake Bay Basin for Nonpoint Source Management.
PB93-207405/REB 93-04 PC **A03**/MF **A01**

**FOREST MANAGEMENT**

Forest Management in Russia: Challenges and Opportunities in the Era of Perestroika.
PB93-106961/REB 93-01 PC **A02**/MF **A01**

Forest Sector Carbon Budget of the United States: Carbon Pools and Flux under Alternative Policy Options.
PB93-196996/REB 93-01 PC **A10**/MF **A03**

Expanding Global Forest Management: An 'Easy First' Proposal.
PB93-199669/REB 93-01 PC **A02**/MF **A01**

Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.
PB93-212637/REB 93-04 PC **A03**/MF **A01**

Role and Design of Water Quality Monitoring on Forested Watersheds.
PB93-222248/REB 93-04 PC **A02**/MF **A01**

Conservation and Sequestration of Carbon: The Potential of Forest and Agroforest Management Practices.
PB93-229656/REB 93-04 PC **A03**/MF **A01**

**FOREST TREES**

Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
PB93-212652/REB 93-04 PC **A03**/MF **A01**

Effects of CO2 and Climate Change on Forest Trees.
PB93-222339/REB 93-04 PC **A07**/MF **A02**

**FORESTRY**

Long-term forest fertilization experiments in Finland and Sweden - their use for vitality and nutrient balance studies.
DE93778473/REB 93-01 PC **A07**/MF **A02**

Soil-Mediated Effects of Atmospheric Deposition on Eastern U.S. Spruce-Fir Forests.
PB93-141125/REB 93-01 PC **A03**/MF **A01**

Characterization of Eastern U.S. Spruce-Fir Soils.
PB93-141133/REB 93-01 PC **A03**/MF **A01**

Maya Forest: Key Issues and Recommendations for Action: A Workshop Report. Held in Flores, Guatemala on February 8-9, 1993.
PB93-183713/REB 93-04 PC **A03**/MF **A01**

**FORESTS**

Biologic Markers of Air-Pollution Stress and Damage in Forests.
PB93-110187/REB 93-01 PC **A17**/MF **A03**

General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC **A04**/MF **A01**

Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.
PB93-229680/REB 93-04 PC **A03**/MF **A01**

**FORMALDEHYDE**

Formaldehyde-Contaminated Fog Effects on Plant Growth.
PB93-121101/REB 93-01 PC **A02**/MF **A01**

Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
PB93-179950/REB 93-01 PC **A03**/MF **A01**

Sorption and Reemission of Formaldehyde by Gypsum Wallboard.
PB93-180917/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Formaldehyde (50-00-0).
PB93-193605/REB 93-01 PC **A03**/MF **A01**

**FOSSIL FUELS**

Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.
PB93-229144/REB 93-04 PC **A03**/MF **A01**

**FOUNDATIONS**

Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
PB93-199388/REB 93-01 PC **A03**/MF **A01**

**FOUNDRIES**

Summary of Factors Affecting Compliance by Ferrous Foundaries. Volume 1. Text.
PB93-199347/REB 93-01 PC **A05**/MF **A02**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 1.
PB93-206498/REB 93-04 PC **A24**/MF **A04**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 2.
PB93-206506/REB 93-04 PC **A22**/MF **A04**

**FOURTH REMEDIAL ACTION**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation, Operable Unit 6, Roane County, TN. (Fourth Remedial Action), September 1992.
PB93-964025/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Reilly Tar and Chemical, St. Louis Park, MN. (Fourth Remedial Action), September 1992.
PB93-964124/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 3, Weber County, UT. (Fourth Remedial Action), September 1992.
PB93-964408/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), Operable Unit 2, Golden, CO. (Fourth Remedial Action), September 1992.
PB93-964411/REB 93-04 PC **A19**/MF **A04**

**FRACTIONAL AEROSOL FILTRATION EFFICIENCY**

Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC **A02**/MF **A01**

**FRACTIONATION**

Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02**/MF **A01**

**FREEZE DRYING**

Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC **A02**/MF **A01**

**FREEZERS**

Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
PB93-106821/REB 93-01 PC **A03**/MF **A01**

Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC **A03**/MF **A01**

**FREON 113**

Preliminary Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease.
PB93-214344/REB 93-04 PC **A05**/MF **A02**

**FREONS**

Experimental Investigation of PIC Formation in CFC-12 Incineration.
PB93-191294/REB 93-01 PC **A07**/MF **A02**

Characterization of the Organic Emissions from the Thermal Destruction of CFCs.
PB93-205557/REB 93-04 PC **A10**/MF **A03**

**FRESH WATER**

Freshwater environmental monitoring in Sweden. Proposals from a working group.
DE93778474/REB 93-01 PC **A08**/MF **A02**

**FRESH WATER FISHES**

Effects of Kraft Mill Effluent on the Sexuality of Fishes: An Environmental Early Warning.
PB93-168847/REB 93-01 PC **A03**/MF **A01**

Effects of Food Density on Growth and on Patterns of Prey Depletion by Larval Silverside Fish, 'Menidia beryllina' (Cope): A Laboratory Investigation with Image Analysis.
PB93-212587/REB 93-04 PC **A03**/MF **A01**

Biological and Water Quality Survey of Sugar Creek and Tributaries Crawford County, Illinois, August and September 1992.
PB93-217180/REB 93-04 PC **A04**/MF **A01**

**FUCUS**

Bladder-wrack (Fucus vesiculosus L) as an indicator for radionuclides in the environment of Swedish nuclear power plants.
DE93603681/REB 93-01 PC **A03**/MF **A01**

**FUEL ADDITIVES**

EPA Evaluation of the Fuelon Power Gasoline Fuel Additive under Section 511 of the Motor Vehicle Information and Cost Savings Act.
PB93-236693/REB 93-04 PC **A03**/MF **A01**

Emissions and Fuel Economy Effects of the Fuelon Power Gasoline Fuel Additive.
PB93-236701/REB 93-04 PC **A03**/MF **A01**

**FUEL CONSUMPTION**

EPA Evaluation of the Fuelon Power Gasoline Fuel Additive under Section 511 of the Motor Vehicle Information and Cost Savings Act.
PB93-236693/REB 93-04 PC **A03**/MF **A01**

Emissions and Fuel Economy Effects of the Fuelon Power Gasoline Fuel Additive.
PB93-236701/REB 93-04 PC **A03**/MF **A01**

**FUEL ECONOMY**

Test Car List, 1992. Passenger Cars.
PB93-111185/REB 93-01 PC **A05**/MF **A01**

Fuel Economy Guide, 1992. 3-Number.
PB93-111193/REB 93-01 PC **A04**/MF **A01**

Fuel Economy Guide, 1992. 6-Number.
PB93-111201/REB 93-01 PC **A04**/MF **A01**

Test Car List, 1993. Passenger Cars.
PB93-164531/REB 93-01 PC **A05**/MF **A02**

Fuel Economy Guide, 1993. 3-Number.
PB93-169340/REB 93-01 PC **A04**/MF **A01**

Fuel Economy Guide, 1993. 6 Number.
PB93-169357/REB 93-01 PC **A04**/MF **A01**

Light-Duty Automotive Technology and Fuel Economy Trends through 1993.
PB93-199255/REB 93-01 PC **A06**/MF **A02**

Emissions and Fuel Economy Results 1992 Car Models (for Microcomputers).
PB93-504546/REB 93-01 CP **D02**

Emissions and Fuel Economy Results 1993 Car Models (for Microcomputers).
PB93-504553/REB 93-01 CP **D02**

**FUEL INJECTION SYSTEMS**

Evaluation of Resistively Heated Fuel Injection Technology to Reduce Cold Start Emissions and Assist Starting/Driveaway of a Methanol-Fueled Vehicle.
PB93-144350/REB 93-01 PC **A03**/MF **A01**

**FUEL INJECTORS**

Spray Characteristics of Two Types of Fuel Injectors.
PB93-180859/REB 93-01 PC **A03**/MF **A01**

**FUEL OIL**

Evaluation of Carbon Black Slurries as Clean Burning Fuels.
PB93-222057/REB 93-04 PC **A03**/MF **A01**

Projections of Regional Fuel Oil and Natural Gas Prices. Project Summary.
PB93-222552/REB 93-04 PC **A01**/MF **A01**

**FUEL TANK EMISSIONS**
Gasoline and Methanol Exposures from Automobiles within Residences and Attached Garages.
PB93-222222/REB 93-04 PC **A02**/MF **A01**

**FUELON POWER ADDITIVE**
EPA Evaluation of the Fuelon Power Gasoline Fuel Additive under Section 511 of the Motor Vehicle Information and Cost Savings Act.
PB93-236693/REB 93-04 PC **A03**/MF **A01**

Emissions and Fuel Economy Effects of the Fuelon Power Gasoline Fuel Additive.
PB93-236701/REB 93-04 PC **A03**/MF **A01**

**FUGITIVE EMISSIONS**
Feasibility of Including Fugitive PM-10 Emissions Estimates in the EPA Emissions Trends Report.
PB93-169084/REB 93-01 PC **A03**/MF **A01**

Agricultural Pesticide Emissions Associated with Common Crops in the United States.
PB93-173136/REB 93-01 PC **A03**/MF **A01**

Protocol for Equipment Leak Emission Estimates.
PB93-229219/REB 93-04 PC **A12**/MF **A03**

Foam Scrubbing (Chapter 9).
PB93-236560/REB 93-04 PC **A03**/MF **A01**

**FULLERTON (CALIFORNIA)**
Demonstration of a Trial Excavation at the McColl Superfund Site.
PB93-100121/REB 93-01 PC **A04**/MF **A01**

**FULTON (NEW YORK)**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Fulton Terminals Site Profile, Oswego County, NY).
PB93-963616/REB 93-04 PC **A02**/MF **A01**

**FUMIGANTS**
Methylbromide and Its Alternatives as Fumigants, 1979-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149912/REB 93-01 PC **A09**/MF **A03**

**FUMIGATION**
Ethylene Oxide Emissions from Commercial Sterilization/Fumigation Operations: Background Information for Proposed Standards.
PB93-226744/REB 93-04 PC **A13**/MF **A03**

**FUNCTIONAL OBSERVATIONAL BATTERY**
International Validation of a Neurobehavioral Screening Battery: The IPCS/WHO Collaborative Study.
PB93-175594/REB 93-01 PC **A02**

**FUNDS**
Drinking Water State Revolving Fund: Ensuring Safe Drinking Water for America.
PB93-227858/REB 93-04 PC **A02**/MF **A01**

**FUNDULUS HETEROCLITUS**
Molecular Regulation of the Induction of Cytochrome P-450E in the Estuarine Fish Fundulus Heteroclitus.
AD-A258 623/8/REB 93-01 PC **A11**/MF **A03**

**FUNGAL GENES**
Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC **A02**/MF **A01**

Disruption of the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.
PB93-229276/REB 93-04 PC **A03**/MF **A01**

Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
PB93-229441/REB 93-04 PC **A03**/MF **A01**

**FUNGAL STRUCTURAL GENES**
Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
PB93-229243/REB 93-04 PC **A03**/MF **A01**

**FUNGI**
Interim Protocol for Testing the Effects of Microbial Pathogens on Subterranean Termites ('Isoptera: rhinotermitidae').
PB93-124634/REB 93-01 PC **A03**/MF **A01**

Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
PB93-194223/REB 93-01 PC **A03**/MF **A01**

Mineralization of Recalcitrant Environmental Pollutants by a White Rot Fungus. Proceedings of the National Conference on Hazardous Wastes and Hazardous Materials. Held in Washington, DC. on March 16-18, 1987.
PB93-204154/REB 93-01 PC **A02**/MF **A01**

Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
PB93-222024/REB 93-04 PC **A02**/MF **A01**

**FUNGICIDES**
Dermal Penetration of ((14)C)Captan in Young and Adult Rats.
PB93-107142/REB 93-01 PC **A03**/MF **A01**

Pesticide Fact Sheet: 'Pseudomonas cepacia' Type Wisconsin.
PB93-206746/REB 93-04 PC **A02**/MF **A01**

Pesticide Fact Sheet: Streptomyces sp. Strain K61.
PB93-206761/REB 93-04 PC **A02**/MF **A01**

Pesticide Fact Sheet: GY-81/Enzone.
PB93-219848/REB 93-04 PC **A03**/MF **A01**

Dithiocarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.
PB93-228989/REB 93-04 PC **A02**/MF **A01**

Bitertanol, a Triazole Fungicide, Increases Operant Responding but Not Motor Activity.
PB93-236370/REB 93-04 PC **A02**/MF **A01**

**FURNACES**
Alternative Control Techniques Document-NOx Emissions from Process Heaters.
PB93-166211/REB 93-01 PC **A10**/MF **A03**

**FURNISHINGS**
Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC **A03**/MF **A01**

**GALVANIZED STEEL**
Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
PB93-120970/REB 93-01 PC **A02**/MF **A01**

**GALVESTON BAY**
Proceedings: Galveston Bay Characterization Workshop. Held on February 21-23, 1991.
PB93-205672/REB 93-04 PC **A11**/MF **A03**

Regulatory Effectiveness Study for the Armand Bayou Coastal Preserve.
PB93-205680/REB 93-04 PC **A08**/MF **A02**

Regulatory Effectiveness Study for the Christmas Bay Coastal Preserve.
PB93-205698/REB 93-04 PC **A09**/MF **A03**

Shoreline Survey for Unpermitted Discharges to Galveston Bay.
PB93-205706/REB 93-04 PC **A03**/MF **A01**

Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1. Technical Report.
PB93-205722/REB 93-04 PC **A11**/MF **A03**

Wetland Plant Communities, Galveston Bay System.
PB93-205730/REB 93-04 PC **A07**/MF **A02**

Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC **A20**/MF **A04**

Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16**/MF **A03**

Characterization of Selected Public Health Issues in Galveston Bay.
PB93-205771/REB 93-04 PC **A08**/MF **A02**

Ambient Water and Sediment Quality of Galveston Bay: Present Status and Historical Trends. Volume 1.
PB93-205789/REB 93-04 PC **A09**/MF **A03**

Environmental Management Inventory of Galveston Bay.
PB93-205797/REB 93-04 PC **A06**/MF **A02**

Recreational Fishery By-Catch in the Galveston Bay System.
PB93-205805/REB 93-04 PC **A06**/MF **A02**

**GAME BIRDS**
Pathogenicity of 'Salmonella pullorum' in Northern Bobwhite Quail and Mallard Ducks.
PB93-135739/REB 93-01 PC **A03**/MF **A01**

**GAMMA RAY ASTRONOMY**
Search for Radiative Neutrino Decay from Supernovae.
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

**GAMMA RAYS**
Search for Radiative Neutrino Decay from Supernovae.
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

**GARAGES**
Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02**/MF **A01**

**GARY (INDIANA)**
Superfund Record of Decision (EPA Region 5): MIDCO I, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964130/REB 93-04 PC **A05**/MF **A01**

**GAS ANALYSIS**
Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03**/MF **A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit.
PB93-168839/REB 93-01 PC **A02**/MF **A01**

Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit (May 1993).
PB93-221869/REB 93-04 PC **A03**/MF **A01**

**GAS CHROMATOGRAPHY**
On-Line Measurement of Nitrous Oxide from Combustion Sources by Automated Gas Chromatography.
PB93-106847/REB 93-01 PC **A03**/MF **A01**

Evaluation of Portable Gas Chromatographs.
PB93-168813/REB 93-01 PC **A03**/MF **A01**

Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
PB93-204063/REB 93-01 PC **A02**/MF **A01**

Development and Evaluation of a Transportable Fast Gas Chromatograph for the Monitoring of Organic Vapors in Air.
PB93-228526/REB 93-04 PC **A02**/MF **A01**

**GAS DETECTORS**
Survey of Portable Analyzers for the Measurement of Gaseous Fugitive Emissions.
PB93-126589/REB 93-01 PC **A05**/MF **A01**

Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

**GAS ENGINES**
Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC **A03**/MF **A01**

**GAS GENERATORS**
Biomass Combustion in Gas-Turbine-Based Systems.
PB93-185742/REB 93-01 PC **A02**/MF **A01**

**GAS PRODUCTION**
Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
PB93-173979/REB 93-01 PC **A22**/MF **A04**

Regulatory Impact Analysis of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-174613/REB 93-01 PC **A06**/MF **A02**

Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC **A02**/MF **A01**

Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02**/MF **A01**

**GAS TRANSFER SYSTEMS**
Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

**GAS TURBINES**
Alternative Control Techniques Document. NOx Emissions from Stationary Gas Turbines.
PB93-156586/REB 93-01 PC **A11**/MF **A03**

**GASES**
Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC **A03**/MF **A01**

Two New Gas Standards Programs at the National Institute of Standards and Technology.
PB93-191427/REB 93-01 PC **A02**/MF **A01**

**GASOLINE**
EPA Evaluation of the Fuelon Power Gasoline Fuel Additive under Section 511 of the Motor Vehicle Information and Cost Savings Act.
PB93-236693/REB 93-04 PC **A03**/MF **A01**

Emissions and Fuel Economy Effects of the Fuelon Power Gasoline Fuel Additive.
PB93-236701/REB 93-04 PC **A03**/MF **A01**

**GASOLINE SPILLS**
LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

**GASOLINE VAPORS**
Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02**/MF **A01**

**GEARS**
Waste Reduction Activities and Options for a Manufacturer of Hardened Steel Gears.
PB93-126282/REB 93-01 PC **A02**/MF **A01**

**GENE EXPRESSION**
Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC **A01**/MF **A01**

Gene Expression during Oogenesis in Mice.
PB93-194389/REB 93-01 PC **A03**/MF **A01**

Gene Expression in Pre-Implantation Mammalian Embryos.
PB93-194397/REB 93-01 PC **A03**/MF **A01**

Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC **A02**/MF **A01**

**GENE LIBRARY**
Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC **A01**/MF **A01**

**GENERAL CIRCULATION MODELS**
Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.
PB93-229649/REB 93-04 PC **A03**/MF **A01**

**GENETIC CONJUGATION**
Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02/MF A01**

**GENETIC ENGINEERING**
Use of a Novel Plasmid to Monitor the Fate of a Genetically Engineered 'Pseudomonas putida' Strain.
PB93-169001/REB 93-01 PC **A02/MF A01**

Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC **A02/MF A01**

Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC **A03/MF A01**

Engineered Plants in the Environment.
PB93-234532/REB 93-04 PC **A03/MF A01**

Microbial Trophic Interactions in Aquatic Microcosms Designed for Testing Genetically Engineered Microorganisms: A Field Comparison.
PB93-236248/REB 93-04 PC **A03/MF A01**

**GENETIC TRANSCRIPTION**
Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
PB93-222909/REB 93-04 PC **A03/MF A01**

**GENETIC TRANSFORMATION**
Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. aeschynomene' Transformants with Benomyl Resistance.
PB93-212629/REB 93-04 PC **A02/MF A01**

**GENETIC VECTORS**
Rapid Efficient Production of Baculovirus Expression Vectors.
PB93-228896/REB 93-04 PC **A03/MF A01**

**GENOMIC IMPRINTING**
Mutational Risks in Females: Genomic Imprinting and Maternal Molecules.
PB93-194488/REB 93-01 PC **A03/MF A01**

**GENTIAN VIOLET**
Biodegradation of Crystal Violet by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191609/REB 93-01 PC **A02/MF A01**

**GEO-EAS COMPUTER PROGRAM**
Geostatistical Environmental Assessment Software: User's Guide. GEO-EAS 1.2.1.
PB93-163236/REB 93-01 PC **A07/MF A02**

Geo-EAS: Software for Geostatistics 1.2.1 (3 1/2 inch Version) (for Microcomputers).
PB93-504967/REB 93-01 CP **D02**

**GEOCHEMISTRY**
Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC **A02/MF A01**

**GEOGRAPHIC INFORMATION SYSTEMS**
Exploring the Effects of Vector to Raster and Raster to Vector Conversion.
PB93-122166/REB 93-01 PC **A04/MF A01**

Summary of GIS Support to Superfund.
PB93-963506/REB 93-04 PC **A04/MF A01**

**GEOGRAPHICAL REGIONS**
Geographical Distribution and Source Type Analysis of Toxic Metal Emissions.
PB93-121036/REB 93-01 PC **A02/MF A01**

**GEOGRAPHY**
Manual of Federal Geographic Data Products.
PB93-236503/REB 93-04 PC **A17/MF A03**

**GEOLOGY**
Geo-EAS: Software for Geostatistics 1.2.1 (5 1/4 Inch Version) (for Microcomputers).
PB93-504959/REB 93-01 CP **D02**

**GEOPHAGIA**
Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03/MF A01**

**GEOPHYSICS**
Geophysics Advisor Expert System, Version 2.0.
PB93-163285/REB 93-01 PC **A03/MF A01**

Geophysics Advisor Expert System (Version 2.0) (for Microcomputers).
PB93-505162/REB 93-01 CP **D02**

**GEORGES BANK**
Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03/MF A01**

**GEORGIA**
Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03/MF A01**

National Priorities List Sites: Georgia, 1992.
PB93-963211/REB 93-01 PC **A04/MF A01**

**GEOSYNTHETIC MATERIALS**
Opportunities for the Use of Geosynthetics in Waste Management Facilities.
PB93-131670/REB 93-01 PC **A03/MF A01**

Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC **A03/MF A01**

**GEOTECHNICAL FABRICS**
Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC **A03/MF A01**

Stress Cracking Behavior of HDPE Geomembranes and Its Prevention.
PB93-196616/REB 93-01 PC **A06/MF A02**

**GERM CELLS**
Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC **A01/MF A01**

Quantification of Germ-Cell Risk Associated with the Induction of Heritable Translocations.
PB93-199677/REB 93-01 PC **A03/MF A01**

**GLASS**
Glass Markets Information System: Application Records.
PB93-193902/REB 93-01 PC **A21/MF A04**

Glass Markets Information System; Application Summary Reports.
PB93-197887/REB 93-01 PC **A05/MF A01**

**GLASS MARKETS INFORMATION SYSTEM**
Glass Markets Information System: Application Records.
PB93-193902/REB 93-01 PC **A21/MF A04**

**GLASS RECYCLING**
Markets for Recovered Glass.
PB93-169845/REB 93-01 PC **A03/MF A01**

**GLOBAL**
Global Oceans Directory. A Compendium of Organizations Dedicated to Marine Conservation.
PB93-206555/REB 93-04 PC **A08/MF A02**

**GLOBAL ASPECTS**
Estimate of Global Methane Emissions from Coal Mines.
PB93-212553/REB 93-04 PC **A03/MF A01**

**GLOBAL FOREST AGREEMENT**
Expanding Global Forest Management: An 'Easy First' Proposal.
PB93-199669/REB 93-01 PC **A02/MF A01**

**GLUCOCORTICOIDS**
Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC **A03/MF A01**

**GLUTAMATE ANTAGONISTS**
Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02/MF A01**

**GLUTAMATES**
Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02/MF A01**

**GLUTATHIONE**
Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02/MF A01**

**GLYCIDYLALDEHYDE**
Evaluation of the Potential Carcinogenicity of Glycidylaldehyde (765-34-4).
PB93-193613/REB 93-01 PC **A03/MF A01**

**GLYPHOSPHATE**
Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02/MF A01**

**GOLD**
Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Gold Placer Mining Industry.
PB93-203990/REB 93-04 PC **A07/MF A02**

**GOVERNMENT AGENCIES**
Guide to Federal Water Quality Programs and Information: A Guide with Computer Software Developed by the Interagency Work Group on Water Quality.
PB93-186245/REB 93-01 PC **A09/MF A02**

Cost of Providing Government Services to Alternative Residential Patterns.
PB93-207728/REB 93-04 PC **A09/MF A02**

**GOVERNMENT POLICIES**
Enforcement Four-Year Strategic Plan: Enhanced Environmental Enforcement for the 1990's.
PB93-129724/REB 93-01 PC **A05/MF A01**

Federal Policies and Technological Problem-Solving.
PB93-142107/REB 93-01 PC **A03/MF A01**

NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC **A01/MF A01**

Discussions with the Public Concerning NPL Listings.
PB93-963338/REB 93-01 PC **A03/MF A01**

Presumptive Remedies: Policy and Procedures.
PB93-963345/REB 93-04 PC **A02/MF A01**

**GRAAFIAN FOLLICLE**
Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC **A03/MF A01**

**GRANULAR ACTIVATED CARBON TREATMENT**
Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC **A03/MF A01**

Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC **A03/MF A01**

Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC **A03/MF A01**

Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.
PB93-222214/REB 93-04 PC **A10/MF A03**

**GRAPHIC ARTS**
Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
PB93-122307/REB 93-01 PC **A03/MF A01**

Guideline for Graphic Arts Calculations.
PB93-199370/REB 93-01 PC **A05/MF A01**

**GRAZING LAND**
News Notes, Number 22: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-126183/REB 93-01 PC **A03/MF A01**

**GREAT LAKES**
Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC **A04/MF A01**

Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Guidance.
PB93-154730/REB 93-01 PC **A10/MF A03**

Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC **A09/MF A02**

Federal Register, Volume 58, No. 72. Part 2. Environmental Protection Agency, 40 CFR Parts 122 et al. Water Quality Guidance for the Great Lakes System and Correction; Proposed Rules.
PB93-183002/REB 93-01 PC **A11/MF A03**

Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03/MF A01**

Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.
PB93-205508/REB 93-04 PC **A99/MF A06**

Great Lakes Water Quality Guidance Docket Index.
PB93-207769/REB 93-04 PC **A05/MF A01**

Wildlife Criteria Portions of the Proposed Water Quality Guidance for the Great Lakes System.
PB93-227866/REB 93-04 PC **A05/MF A01**

Regulatory Impact Analysis (RIA) for the Proposed Great Lakes Water Quality Guidance (for Microcomputers).
PB93-505386/REB 93-04 CP **D02**

Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Initiative Guidance (for Microcomputers).
PB93-505394/REB 93-04 CP **D02**

Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study Technical Background Document (for Microcomputers).
PB93-505402/REB 93-04 CP **D04**

**GREAT LAKES BASIN**
Atmopheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02/MF A01**

**GREAT LAKES REGION (UNITED STATES)**
Proposed Water Quality Guidance for the Great Lakes System.
PB93-164515/REB 93-01 PC **A14/MF A03**

Federal Register, Volume 58, No. 72. Part 2. Environmental Protection Agency, 40 CFR Parts 122 et al. Water Quality Guidance for the Great Lakes System and Correction; Proposed Rules.
PB93-183002/REB 93-01 PC **A11/MF A03**

Great Lakes Water Quality Guidance Docket Index.
PB93-207769/REB 93-04 PC **A05/MF A01**

Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).
PB93-505501/REB 93-04 CP **D03**

**GREAT PLAINS REGION (UNITED STATES)**
Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).
PB93-505527/REB 93-04 CP **D03**

**GREENHOUSE EFFECT**
Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
PB93-222776/REB 93-04 PC **A02/MF A01**

Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC **A03/MF A01**

**GREENHOUSE GASES**
Greenhouse gases. Emissions and countermeasures in an international perspective.
DE93721674/REB 93-01 PC **A07/MF A02**

Climate Change Impacts on Net Primary Production in China.
PB93-222271/REB 93-04 PC **A03**/MF **A01**

**GRIDS**

Digital Topographic Approach to Modeling: The Distribution of Precipitation in Mountainous Terrain.
PB93-106649/REB 93-01 PC **A03**/MF **A01**

**GROUND DISPOSAL**

Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

**GROUND WATER**

Wellhead Protection Programs: Tools for Local Governments.
PB93-101111/REB 93-01 PC **A04**/MF **A01**

Citizen's Guide to Ground-Water Protection.
PB93-115814/REB 93-01 PC **A03**/MF **A01**

Managing Ground Water Contamination Sources in Wellhead Protection Areas: A Priority Setting Approach.
PB93-115863/REB 93-01 PC **A12**/MF **A03**

Compendium of Federal Financial Assistance Programs: Targeting Programs for State and Local Ground-Water Protection.
PB93-116069/REB 93-01 PC **A06**/MF **A02**

Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC **A03**/MF **A01**

Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC **A08**/MF **A02**

Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC **A07**/MF **A02**

Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
PB93-131845/REB 93-01 PC **A03**/MF **A01**

Innovative Treatment Technologies: Semi-Annual Status Report (Fourth Edition).
PB93-133387/REB 93-01 PC **A05**/MF **A01**

Draft Ground-Water Disinfection Rule.
PB93-134351/REB 93-01 PC **A05**/MF **A01**

EPA's Ground Water and Drinking Water Program: Making a Difference.
PB93-136612/REB 93-01 PC **A03**/MF **A01**

RCRA Ground-Water Monitoring: Draft Technical Guidance.
PB93-139350/REB 93-01 PC **A10**/MF **A03**

Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport.
PB93-141497/REB 93-01 PC **A02**/MF **A01**

Cell Density and Non-Equilibrium Sorption Effects on Bacterial Dispersal in Groundwater Microcosms.
PB93-141505/REB 93-01 PC **A03**/MF **A01**

In-situ Bioremediation of Ground Water.
PB93-146850/REB 93-01 PC **A01**/MF **A01**

Comparison of Ground-Water Sampling Devices Based on Equilibration of Water Quality Indicator Parameters.
PB93-149201/REB 93-01 PC **A03**/MF **A01**

DNAPL Site Evaluation.
PB93-150217/REB 93-01 PC **A16**/MF **A03**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC **A10**/MF **A03**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC **A08**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC **A08**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC **A99**/MF **E11**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC **A21**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC **A07**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC **A20**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC **A24**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC **A05**/MF **A01**

Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC **A02**/MF **A01**

Quality Assurance and Quality Control in the Development and Application of Ground-Water Models.
PB93-178226/REB 93-01 PC **A08**/MF **A02**

Consensus Method for Determining Groundwaters under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA).
PB93-180818/REB 93-01 PC **A04**/MF **A01**

Passive Sampling of Groundwater Monitoring Wells without Purging: Multilevel Well Chemistry and Tracer Disappearance.
PB93-181170/REB 93-01 PC **A03**/MF **A01**

VIRTUS, a Model of Virus Transport in Unsaturated Soils.
PB93-185890/REB 93-01 PC **A02**/MF **A01**

Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
PB93-202620/REB 93-01 PC **A07**/MF **A02**

Case Studies in Wellhead Protection: Ten Examples of Innovative Wellhead Protection Programs.
PB93-207363/REB 93-04 PC **A03**/MF **A01**

Guide for Cost-Effectiveness and Cost-Benefit Analysis of State and Local Ground Water Protection Programs.
PB93-207397/REB 93-04 PC **A06**/MF **A02**

International Evaluation of In-situ Biorestoration of Contaminated Soil and Groundwater (September 1990)--Translation.
PB93-207553/REB 93-04 PC **A03**/MF **A01**

Compilation of Ground-Water Models.
PB93-209401/REB 93-04 PC **A13**/MF **A03**

In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC **A12**/MF **A03**

Wellhead Protection: A Guide for Small Communities.
PB93-215580/REB 93-04 PC **A08**/MF **A02**

Guidelines for Delineation of Wellhead Protection Areas, 1993.
PB93-215861/REB 93-04 PC **A10**/MF **A03**

Protecting Local Ground-Water Supplies through Wellhead Protection.
PB93-216109/REB 93-04 PC **A03**/MF **A01**

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC **A07**/MF **A02**

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 1: Pages 1 through 662.
PB93-218246/REB 93-04 PC **A99**/MF **A06**

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 2: Pages 663 through 1389.
PB93-218253/REB 93-04 PC **A99**/MF **A06**

Retrospective Performance Evaluation on In situ Bioremediation: Site Characterization.
PB93-221919/REB 93-04 PC **A03**/MF **A01**

Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC **A03**/MF **A01**

Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC **A02**/MF **A01**

Biotransformation and Mineralization of Alkylbenzenes under Denitrifying Conditions.
PB93-229623/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Dover Municipal Well 4, Morris County, Dover, NJ. (First Remedial Action), September 1992.
PB93-963819/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Ellis Property, Sharp Road, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963820/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Endicott Village Well Field, Broome County, NY. (Third Remedial Action), September 1992.
PB93-963821/REB 93-04 PC **A05**/MF **A01**

**GROUND WATER MOVEMENT**

Ground-Water Modeling Compendium. Model Fact Sheets, Descriptions, Applications and Assessment Framework.
PB93-207504/REB 93-04 PC **A08**/MF **A02**

Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC **A03**/MF **A01**

**GROWTH**

Repeated Maternal Separation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC **A03**/MF **A01**

Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC **A02**/MF **A01**

Effects of Food Density on Growth and on Patterns of Prey Depletion by Larval Silverside Fish, 'Menidia beryllina' (Cope): A Laboratory Investigation with Image Analysis.
PB93-212587/REB 93-04 PC **A03**/MF **A01**

Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
PB93-212652/REB 93-04 PC **A03**/MF **A01**

Synthesis of Ectomycorrhizae on Northern Red Oak Seedlings in a Michigan Nursery.
PB93-212678/REB 93-04 PC **A02**/MF **A01**

Effects of CO2 and Climate Change on Forest Trees.
PB93-222339/REB 93-04 PC **A07**/MF **A02**

Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.
PB93-222404/REB 93-04 PC **A02**/MF **A01**

**GROWTH ABNORMALITIES**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.
PB93-222693/REB 93-04 PC **A06**/MF **A02**

**GROWTH REGULATORS**

Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02**/MF **A01**

**GROWTH SUBSTANCES**

Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

**GUAM**

National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC **A04**/MF **A01**

**GUATEMALA**

Maya Forest: Key Issues and Recommendations for Action: A Workshop Report. Held in Flores, Guatemala on February 8-9, 1993.
PB93-183713/REB 93-04 PC **A03**/MF **A01**

**GUIDELINES**

Fuel Economy Guide, 1992. 3-Number.
PB93-111193/REB 93-01 PC **A04**/MF **A01**

Fuel Economy Guide, 1992. 6-Number.
PB93-111201/REB 93-01 PC **A04**/MF **A01**

Citizen's Guide to Ground-Water Protection.
PB93-115814/REB 93-01 PC **A03**/MF **A01**

Sanitary Survey Training: Instructor's Guide for Inspectors of Small Water Systems.
PB93-115871/REB 93-01 PC **A05**/MF **A01**

Sanitary Survey Training: Instructor's Guide for Sanitarians of Micronesia.
PB93-115889/REB 93-01 PC **A09**/MF **A02**

Guides to Pollution Prevention: The Mechanical Equipment Repair Industry.
PB93-121317/REB 93-01 PC **A03**/MF **A01**

Technical Information Document for Residential Wood Combustion Best Available Control Measures.
PB93-122224/REB 93-01 PC **A05**/MF **A01**

**GULF COAST**

Proceedings: Galveston Bay Characterization Workshop. Held on February 21-23, 1991.
PB93-205672/REB 93-04 PC **A11**/MF **A03**

Regulatory Effectiveness Study for the Armand Bayou Coastal Preserve.
PB93-205680/REB 93-04 PC **A08**/MF **A02**

Regulatory Effectiveness Study for the Christmas Bay Coastal Preserve.
PB93-205698/REB 93-04 PC **A09**/MF **A03**

Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1. Technical Report.
PB93-205722/REB 93-04 PC **A11**/MF **A03**

Segmentation Development for Galveston Bay.
PB93-205748/REB 93-04 PC **A07**/MF **A02**

**GUMS**

Economic Analysis of Interim Final Effluent Guidelines for the Gum and Wood Chemicals Industry. Group 2.
PB93-167740/REB 93-01 PC **A04**/MF **A01**

**HABITAT IMPROVEMENT**

Potential Intertidal Habitat Restoration Sites in the Duwamish River Estuary.
PB93-122190/REB 93-01 PC **A05**/MF **A02**

**HABITATS**

Habitat Quality Assessment of Two Wetland Treatment Systems in Mississippi: A Pilot Study.
PB93-135614/REB 93-01 PC **A06**/MF **A02**

Distribution of Selected Fish Species in Tampa Bay.
PB93-191229/REB 93-01 PC **A04**/MF **A01**

Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

Design of a Basinwide Monitoring Program for the Tampa Bay Estuary.
PB93-194694/REB 93-01 PC A05/MF A01

Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC A12/MF A03

News-Notes Number 21: The Condition of the Environment and the Nonpoint Sources of Water Pollution.
PB93-204030/REB 93-01 PC A03/MF A01

Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
PB93-207561/REB 93-04 PC A03/MF A01

Habitat Quality Assessment of Two Wetland Treatment Systems in the Arid West: A Pilot Study.
PB93-222305/REB 93-04 PC A06/MF A02

Virginian Province Demonstration Report. EMAP-Estuaries, 1990.
PB93-229654/REB 93-04 PC A11/MF A03

**HALOALKANES**

Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC A03/MF A01

**HALOGEN ORGANIC COMPOUNDS**

Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC A03/MF A01

**HALOGENATED HYDROCARBONS**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
PB93-227163/REB 93-04 PC A11/MF A03

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
PB93-227171/REB 93-04 PC A12/MF A03

**HALONS**

Investigation of Possible Uses of Surplus CFC/Halon Chemicals.
PB93-229771/REB 93-04 PC A07/MF A02

**HAMSTERS**

Twenty-Four Hour Rhythms of Selected Ambient Temperature in Rat and Hamster.
PB93-175727/REB 93-01 PC A02/MF A01

**HANDBOOKS**

Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC A04/MF A01

Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC A10/MF A03

Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC A06/MF A02

Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC A07/MF A02

Superfund Reauthorization: NACEPT Subcommittee Handbook.
PB93-963296/REB 93-04 PC A05/MF A02

**HANDS**

Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
PB93-105534/REB 93-01 PC A04/MF A01

**HAWAII**

National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC A12/MF A03

**HAZARD RANKING SYSTEM**

Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC A22/MF A04

PA-Score (Preliminary Assessment Score), Version 2.1, 5 1/4 inch (for Microcomputers).
PB93-500346/REB 93-01 CP D02

PA-Score (Preliminary Assessment Score), Version 2.1, 3 1/2 inch (for Microcomputers).
PB93-500353/REB 93-01 CP D02

**HAZARDOUS MATERIALS**

ARARs Fact Sheet: Compliance with the Clean Air Act and Associated Air Quality Requirements.
PB92-963282/REB 93-01 PC A03/MF A01

Superfund: Qualified Disadvantaged Business Utilization in State Response.
PB92-963283/REB 93-01 PC A01/MF A01

OSWER Superfund Telephone Directory.
PB92-963289/REB 93-01 PC A03/MF A01

Guidance for Performing Site Inspections under CERCLA.
PB92-963375/REB 93-01 PC A11/MF A03

Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC A22/MF A04

Consideration of ARARs during Removal Actions.
PB92-963410/REB 93-01 PC A02/MF A01

Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC A09/MF A02

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Valley of the Drums, Bullitt County, Kentucky).
PB92-963618/REB 93-01 PC A02/MF A01

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (American Thermostat Corporation, New York).
PB92-963627/REB 93-01 PC A02/MF A01

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Wide Beach Section of Brant, New York).
PB92-963628/REB 93-01 PC A02/MF A01

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Krysowaty Farm, Hillsborough, New Jersey).
PB92-963629/REB 93-01 PC A02/MF A01

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Ciba-Geigy Corporation, McIntosh, Alabama).
PB92-963630/REB 93-01 PC A02/MF A01

Demonstration of a Trial Excavation at the McColl Superfund Site.
PB93-100121/REB 93-01 PC A04/MF A01

Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC A12/MF A03

Carver-Greenfield Process (Trade Name) Dehydro-Tech Corporation. Applications Analysis Report.
PB93-101152/REB 93-01 PC A03/MF A01

Engineering Bulletin: Slurry Walls.
PB93-105575/REB 93-01 PC A02/MF A01

Engineering Bulletin: Pyrolysis Treatment.
PB93-105583/REB 93-01 PC A02/MF A01

Engineering Bulletin: Technology Preselection Data Requirements.
PB93-105591/REB 93-01 PC A02/MF A01

Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC A03/MF A01

Technical Guidance Document: Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems.
PB93-105625/REB 93-01 PC A05/MF A02

Technical Issues on Long-Term Performance of Solidified/Stabilized Waste Forms.
PB93-106680/REB 93-01 PC A03/MF A01

PA-Score (Preliminary Assessment Score) User's Manual and Tutorial. Version 2.1.
PB93-108322/REB 93-01 PC A05/MF A01

Superfund Innovative Technology Evaluation (SITE) Program.
PB93-116093/REB 93-01 PC A03/MF A01

Hazardous Waste Management.
PB93-116135/REB 93-01 PC A03/MF A01

Bioremediation of Hazardous Wastes.
PB93-116143/REB 93-01 PC A04/MF A01

Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC A02/MF A01

Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC A03/MF A01

Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC A03/MF A01

Evaluation of Commercially-Available Portable Gas Chromatographs.
PB93-121051/REB 93-01 PC A02/MF A01

Use of Inoculation in Bioremediation.
PB93-121150/REB 93-01 PC A03/MF A01

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Quick Reference Fact Sheet.
PB93-121325/REB 93-01 PC A02/MF A01

Assessing Potential Indoor Air Impacts for Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-122257/REB 93-01 PC A09/MF A03

Babcock and Wilcox Cyclone Furnace Vitrification Technology: Applications Analysis Report.
PB93-122315/REB 93-01 PC A03/MF A01

Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
PB93-123016/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
PB93-123024/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Penny Blanks and Zinc Products.
PB93-123107/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
PB93-123115/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
PB93-123123/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
PB93-123131/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
PB93-123149/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for an Autobody Repair Facility.
PB93-123156/REB 93-01 PC A01/MF A01

Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
PB93-123164/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Artists Supply Paints.
PB93-123172/REB 93-01 PC A01/MF A01

Waste Reduction Activities and Options for a Manufacturer of Wire Stock Used for Production of Metal Items.
PB93-123180/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
PB93-123198/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
PB93-123206/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
PB93-123214/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
PB93-123222/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
PB93-123248/REB 93-01 PC A02/MF A01

Bioremediation: An Information Update on Applying Bioremediation to Site Cleanup.
PB93-126175/REB 93-01 PC A03/MF A01

Waste Reduction Activities and Options for a Manufacturer of Hardened Steel Gears.
PB93-126282/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
PB93-126290/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Fine Chemicals Using Batch Processes.
PB93-126308/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of General Purpose Paints and Painting Supplies.
PB93-126316/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Printing Plate Preparation Section of a Newspaper.
PB93-126563/REB 93-01 PC A02/MF A01

Superfund Innovative Technology Evaluation Program: Progress and Accomplishments Fiscal Year 1991. A 5th Report to Congress.
PB93-126613/REB 93-01 PC A05/MF A01

Waste Minimization Assessment for a Manufacturer Producing Printed Circuit Boards.
PB93-126621/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for an Electrical Utility Transmission System Monitoring and Maintenance Facility.
PB93-126639/REB 93-01 PC A02/MF A01

Guide for Conducting Treatability Studies under CERCLA.
PB93-126787/REB 93-01 PC A05/MF A01

Opportunities for the Use of Geosynthetics in Waste Management Facilities.
PB93-131670/REB 93-01 PC A03/MF A01

Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC A03/MF A01

Innovative Treatment Technologies: Semi-Annual Status Report (Fourth Edition).
PB93-133387/REB 93-01 PC A05/MF A01

User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC A03/MF A01

Air/Superfund National Technical Guidance Study Series: Applicability of Open Path Monitors for Superfund.
PB93-138154/REB 93-01 PC A07/MF A02

RCRA Ground-Water Monitoring: Draft Technical Guidance.
PB93-139350/REB 93-01 PC **A10/MF A03**

Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC **A02/MF A01**

OSWER Source Book. Volume 1. Training and Technology Transfer Resources, 1992-1993.
PB93-143980/REB 93-01 PC **A10/MF A03**

Synopses of Federal Demonstrations of Innovative Site Remediation Technologies.
PB93-144111/REB 93-01 PC **A11/MF A03**

OSWER Source Book. Volume 2. Training and Technology Transfer Resources, 1992-1993.
PB93-144129/REB 93-01 PC **A11/MF A03**

Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC **A04/MF A01**

Volatile Organic Sampling Train Soot Interference Report.
PB93-144145/REB 93-01 PC **A04/MF A01**

Babcock and Wilcox Cyclone Furnace Vitrification. Technology Demonstration Summary.
PB93-145621/REB 93-01 PC **A02/MF A01**

Horsehead Resource Development Company, Inc., Flame Reactor Technology. Technology Demonstration Summary.
PB93-145639/REB 93-01 PC **A02/MF A01**

Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04/MF A01**

Pollution Prevention Opportunity Assessment and Implementation Plan. For Simpson Tacoma Kraft Company, Tacoma, Washington.
PB93-145670/REB 93-01 PC **A05/MF A01**

Pollution Prevention Opportunity Assessment: USDA Beltsville Agricultural Research Center.
PB93-146843/REB 93-01 PC **A04/MF A01**

Pollution Prevention Opportunity Assessment: Manufacturing and Fabrication Repair Laboratory at Sandia National Laboratories.
PB93-146868/REB 93-01 PC **A03/MF A01**

Pollution Prevention Opportunity Assessment: Geochemistry Laboratory, Sandia National Laboratories.
PB93-146900/REB 93-01 PC **A03/MF A01**

Enabling Document for Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants.
PB93-147007/REB 93-01 PC **A07/MF A02**

Bioremediation.
PB93-149193/REB 93-01 PC **A03/MF A01**

Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC **A03/MF A01**

National Emission Standards for Hazardous Air Pollutants Compliance Extensions for Early Reductions: Background Information for Promulgated Standards.
PB93-149425/REB 93-01 PC **A08/MF A02**

Pilot-Scale Evaluation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02/MF A01**

Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC **A03/MF A01**

DNAPL Site Evaluation.
PB93-150217/REB 93-01 PC **A16/MF A03**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1A. National Impacts Assessment.
PB93-156552/REB 93-01 PC **A08/MF A02**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1B. Control Technologies.
PB93-156560/REB 93-01 PC **A13/MF A03**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1C. Model Emission Sources.
PB93-156578/REB 93-01 PC **A11/MF A03**

Inside the Hotline: A Compilation of 1992 Monthly Hotline Reports.
PB93-159572/REB 93-01 PC **A05/MF A01**

Geostatistical Environmental Assessment Software: User's Guide. GEO-EAS 1.2.1.
PB93-163236/REB 93-01 PC **A07/MF A02**

ASSESS User's Guide.
PB93-163251/REB 93-01 PC **A03/MF A01**

Geophysics Advisor Expert System, Version 2.0.
PB93-163285/REB 93-01 PC **A03/MF A01**

Contingency Analysis Modeling for Superfund Sites and Other Sources.
PB93-169126/REB 93-01 PC **A13/MF A03**

Petitions to Delist Hazardous Wastes: A Guidance Manual. Second Edition.
PB93-169365/REB 93-01 PC **A08/MF A02**

Applications Analysis Report: Silicate Technology Corporation's Solidification/Stabilization Technology for Organic and Inorganic Contaminants in Soils.
PB93-172948/REB 93-01 PC **A07/MF A02**

Air/Superfund National Technical Guidance Study Series. Air Emissions from Area Sources: Estimating Soil and Soil-Gas Sample Number Requirements.
PB93-173995/REB 93-01 PC **A04/MF A01**

RCRA Implementation Plan, FY 1993.
PB93-176956/REB 93-01 PC **A05/MF A02**

LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC **A05/MF A01**

Alternative Control Technology Document: Carbon Reactivation Processes.
PB93-180826/REB 93-01 PC **A06/MF A02**

Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02/MF A01**

Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-183440/REB 93-04 PC **A05/MF A01**

Instruction Manual for the Resource Conservation and Recovery Information System (RCRIS) Extract Data Tapes.
PB93-183499/REB 93-04 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Azaserine (115-02-6).
PB93-184901/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Chloromethyl Methyl Ether (Technical Grade) (107-30-2).
PB93-185122/REB 93-01 PC **A03/MF A01**

Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
PB93-185536/REB 93-01 PC **A11/MF A03**

Program for Providing Engineering Technical Assistance to Site Remediation Managers.
PB93-185809/REB 93-01 PC **A02/MF A01**

Incineration of Hazardous Waste: A Critical Review Update.
PB93-185916/REB 93-01 PC **A03/MF A01**

MULTIMED: The Multimedia Exposure Assessment Model for Evaluating the Land Disposal of Wastes-Model Theory.
PB93-186252/REB 93-01 PC **A07/MF A02**

Ink and Cleaner Waste Reduction Evaluation for Flexographic Printers.
PB93-191286/REB 93-01 PC **A03/MF A01**

Resource Conservation and Recovery Information System (RCRIS) Data Element Dictionary.
PB93-192656/REB 93-04 PC **A24/MF A04**

PREscore Software: Users Manual and Tutorial Version 2.0.
PB93-192698/REB 93-04 PC **A05/MF A01**

Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-192755/REB 93-04 PC **A05/MF A01**

Hazardous Waste Management Planning Needs and Practices: A Review of Several State Agency Approaches.
PB93-193225/REB 93-04 PC **A04/MF A01**

VOC/HAP Emissions from Marine Vessel Loading Operations. Technical Support Document for Proposed Standards.
PB93-193910/REB 93-01 PC **A13/MF A03**

Toxic Chemical Release Inventory Reporting Form R and Instructions. Revised 1992 Version. Section 313 of the Emergency Planning and Community Right-to-Know Act.
PB93-194140/REB 93-01 PC **A06/MF A02**

EPA's Life Cycle Methodology: Guidelines for Use in Development of Packaging.
PB93-194199/REB 93-01 PC **A03/MF A01**

Life Cycle Analysis (Video Conference Paper).
PB93-194207/REB 93-01 PC **A02/MF A01**

Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
PB93-194223/REB 93-01 PC **A03/MF A01**

Benzene Equipment Leak Inspection Manual.
PB93-199123/REB 93-01 PC **A06/MF A02**

Air/Superfund National Technical Guidance Study Series. Volume 4. Guidance for Ambient Air Monitoring at Superfund Sites (Revised).
PB93-199214/REB 93-01 PC **A08/MF A02**

Air/Superfund National Technical Guidance Study Series: Compilation of Information on Real-Time Air Monitoring for Use at Superfund Sites.
PB93-199222/REB 93-04 PC **A05/MF A02**

Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC **A05/MF A01**

Risk Communication About Chemicals in Your Community. Facilitator's Manual and Guide.
PB93-200541/REB 93-01 PC **A05/MF A02**

Toxic and Hazardous Chemicals, Title III and Communities: An Outreach Manual for Community Groups.
PB93-200806/REB 93-01 PC **A08/MF A02**

Air/Superfund National Technical Guidance Study Series: Evaluation of Short-Term Air Action Levels for Superfund Sites.
PB93-200913/REB 93-01 PC **A14/MF A03**

Guidance Manual for Control of Slug Loadings to POTWs.
PB93-202745/REB 93-01 PC **A08/MF A02**

Alternating Current Electrocoagulation for Superfund Site Remediation.
PB93-205144/REB 93-04 PC **A02/MF A01**

Emergency Planning and Community Right-to-Know Act: Section 313 Release Reporting Requirements (August 1991).
PB93-205847/REB 93-04 PC **A03/MF A01**

Abstract Proceedings: Superfund Technical Support Project General Meeting. Held in Athens, Georgia on December 3-6, 1990.
PB93-205862/REB 93-04 PC **A03/MF A01**

Understanding Bioremediation: A Guidebook for Citizens.
PB93-205870/REB 93-04 PC **A03/MF A01**

Bioremediation in the Field: Number 1, November 1990.
PB93-206340/REB 93-04 PC **A03/MF A01**

Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances.
PB93-206449/REB 93-04 PC **A06/MF A02**

INSEA User's Manual Environmental Performance Model of Incineration at Sea Operations.
PB93-206977/REB 93-04 PC **A07/MF A02**

Criteria for Review of Hazardous Materials Emergency Plans.
PB93-207348/REB 93-04 PC **A03/MF A01**

Community Right-to-Know and Small Business: Understanding Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act of 1986.
PB93-207538/REB 93-04 PC **A03/MF A01**

Toxics Release Inventory. Public Data Release. State Fact Sheets, 1991.
PB93-208668/REB 93-04 PC **A06/MF A02**

Supplemental Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation.
PB93-209872/REB 93-04 PC **A06/MF A02**

Guidance for Capacity Assurance Planning. Capacity Planning Pursuant to CERCLA Section 104(c)(9).
PB93-209898/REB 93-04 PC **A09/MF A02**

Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants (Revised).
PB93-212025/REB 93-04 PC **A05/MF A01**

Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212538/REB 93-04 PC **A03/MF A01**

Control of Air Emissions from Superfund Sites.
PB93-215614/REB 93-04 PC **A08/MF A02**

Selecting Remediation Techniques for Contaminated Sediment.
PB93-216273/REB 93-04 PC **A10/MF A03**

Simultaneous Control of PM-10 and Hazardous Air Pollutants: Rationale for Selection of Hazardous Air Pollutants as Potential Particulate Matter or Associated with Particulate Matter at Source Conditions.
PB93-216380/REB 93-04 PC **A05/MF A01**

Companies that Generate, Treat, Dispose or Recover Hazardous Waste. 1991 Annual Report.
PB93-216638/REB 93-04 PC **A15/MF A03**

Guiding Principles for Chemical Accident Prevention, Preparedness and Response.
PB93-217560/REB 93-04 PC **A07/MF A02**

Risk Reduction Engineering Laboratory Site Remediation Technical Support Program: FY92 Annual Report.
PB93-217651/REB 93-04 PC **A03/MF A01**

Toxics Release Inventory: Public Release Data, 1991.
PB93-219988/REB 93-04 PC **A16/MF A03**

Environmental Fate Constants for Organic Chemicals under Consideration for EPA's Hazardous Waste Identification Projects.
PB93-221646/REB 93-04 PC **A09/MF A02**

Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC **A03/MF A01**

General Provisions for 40 CFR Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories. Background Information for Proposed Regulation.
PB93-226090/REB 93-04 PC **A06/MF A02**

Wildlife Criteria Portions of the Proposed Water Quality Guidance for the Great Lakes System.
PB93-227866/REB 93-04 PC **A05/MF A01**

Replacement of Hazardous Material in Wide Web Flexographic Printing Process.
PB93-229128/REB 93-04 PC **A05/MF A01**

Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02/MF A01**

Field Applications of Robotic Systems in Hazardous Environments, p1-29 1993. See also PB86-176344 and PB92-166743.
PB93-229755/REB 93-04 PC **A03/MF A01**

Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04/MF A01**

Instruction Manual for the Biennial Reporting System (BRS) NTIS Data Tape.
PB93-233740/REB 93-04 PC **A05**/MF **A01**

Hazardous Waste Report, 1991: Instructions and Forms.
PB93-233757/REB 93-04 PC **A08**/MF **A02**

Opportunities and Challenges for Local Emergency Planning Committees: Bestseller in EPCRA.
PB93-234789/REB 93-04 PC **A02**/MF **A01**

Report to Congress on Implementation of Section 112 of the Clean Air Act Amendments of 1990.
PB93-236008/REB 93-04 PC **A05**/MF **A01**

Recent Developments in Cleanup Technologies.
PB93-236289/REB 93-04 PC **A03**/MF **A01**

Technical Resource Document: Solidification/Stabilization and Its Application to Waste Materials.
PB93-237535/REB 93-04 PC **A16**/MF **A03**

PA-Score (Preliminary Assessment Score), Version 2.1, 5 1/4 inch (for Microcomputers).
PB93-500346/REB 93-01 CP **D02**

PA-Score (Preliminary Assessment Score), Version 2.1, 3 1/2 inch (for Microcomputers).
PB93-500353/REB 93-01 CP **D02**

Flexible Membrane Liner Advisory Expert System (FLEX) (for Microcomputers) (Version 3.0).
PB93-502631/REB 93-01 CP **D02**

Geo-EAS: Software for Geostatistics 1.2.1 (3 1/2 inch Version) (for Microcomputers).
PB93-504967/REB 93-01 CP **D02**

ASESS 1.01A (3 1/2 Inch Diskette) (for Microcomputers).
PB93-505154/REB 93-01 CP **D02**

Geophysics Advisor Expert System (Version 2.0) (for Microcomputers).
PB93-505162/REB 93-01 CP **D02**

ASSESS 1.01A (5 1/4 Inch Diskette) (for Microcomputers).
PB93-505295/REB 93-01 CP **D02**

Toxic Release Inventory, (TRI), 1991.
PB93-505873/REB 93-04 CP **T14**

Toxic Release Inventory, 1991 Reporting Facilities Names and Addresses.
PB93-505881/REB 93-04 CP **T02**

Toxic Release Inventory (TRI), 1987.
PB93-506004/REB 93-04 CP **T16**

Toxic Release Inventory (TRI), 1988.
PB93-506012/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1989.
PB93-506020/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1990.
PB93-506038/REB 93-04 CP **T14**

Biennial Reporting System (BRS) 1989 (Date of Coverage: 1989).
PB93-507044/REB 93-04 CP **T04**

Resource Conservation and Recovery Information System (RCRIS) Extract Tapes.
PB93-592570/REB
93-04 Subscription PC$2540.00

Health Effects Assessment Summary Tables.
PB93-921100/REB 93-01 Standing Order

National Priorities List Sites: Alabama, 1992.
PB93-963201/REB
93-01
see individual report for order number and price

National Priorities List Sites: Alaska, 1992.
PB93-963202/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Arkansas, 1992.
PB93-963205/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC **A12**/MF **A03**

National Priorities List Sites: Colorado, 1992.
PB93-963207/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Connecticut, 1992.
PB93-963208/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Delaware, 1992.
PB93-963209/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Florida, 1992.
PB93-963210/REB 93-01 PC **A08**/MF **A02**

National Priorities List Sites: Georgia, 1992.
PB93-963211/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Idaho, 1992.
PB93-963212/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Illinois, 1992.
PB93-963213/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Indiana, 1992.
PB93-963214/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Iowa, 1992.
PB93-963215/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Kansas, 1992.
PB93-963216/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Kentucky, 1992.
PB93-963217/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Louisiana, 1992.
PB93-963218/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Maine, 1992.
PB93-963219/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Maryland, 1992.
PB93-963220/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Massachusetts, 1992.
PB93-963221/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Michigan, 1992.
PB93-963222/REB 93-01 PC **A10**/MF **A03**

National Priorities List Sites: Minnesota, 1992.
PB93-963223/REB 93-01 PC **A07**/MF **A02**

National Priorities List Sites: Mississippi, 1992.
PB93-963224/REB 93-01 PC **A03**/MF **A01**

National Priorities List Sites: Missouri, 1992.
PB93-963225/REB 93-01 PC **A05**/MF **A02**

National Priorities List Sites: Montana, 1992.
PB93-963226/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Nebraska, 1992.
PB93-963227/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: New Hampshire, 1992.
PB93-963228/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: New Jersey, 1992.
PB93-963229/REB 93-01 PC **A14**/MF **A03**

National Priorities List Sites: New Mexico, 1992.
PB93-963230/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: New York, 1992.
PB93-963231/REB 93-01 PC **A11**/MF **A03**

National Priorities List Sites: North Carolina, 1992.
PB93-963232/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Ohio, 1992.
PB93-963234/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Oklahoma, 1992.
PB93-963235/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Oregon, 1992.
PB93-963236/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Pennsylvania, 1992.
PB93-963237/REB 93-01 PC **A12**/MF **A03**

National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Rhode Island, 1992.
PB93-963239/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: South Carolina, 1992.
PB93-963240/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Tennessee, 1992.
PB93-963241/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Texas, 1992.
PB93-963242/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Utah, 1992.
PB93-963243/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Vermont, 1992.
PB93-963244/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Virginia, 1992.
PB93-963245/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Washington, 1992.
PB93-963246/REB 93-01 PC **A08**/MF **A02**

National Priorities List Sites: West Virginia, 1992.
PB93-963247/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Wisconsin, 1992.
PB93-963248/REB 93-01 PC **A07**/MF **A02**

National Priorities List Sites: Wyoming, 1992.
PB93-963249/REB 93-01 PC **A03**/MF **A01**

Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP.
PB93-963252/REB 93-01 PC **A03**/MF **A01**

Exercising Flexibility through the Superfund Accelerated Cleanup Model (SACM).
PB93-963253/REB 93-01 PC **A01**/MF **A01**

Superfund Progress: Fall/Winter 1992.
PB93-963254/REB 93-01 PC **A03**/MF **A01**

Superfund Progress. Aficionado's Version. Progress as of September 30, 1992.
PB93-963255/REB 93-01 PC **A03**/MF **A01**

Superfund Records of Decision Update. Volume 7, Number 2, November 1992.
PB93-963256/REB 93-01 PC **A02**/MF **A01**

Overview of the Outyear Liability Model (OLM).
PB93-963259/REB 93-01 PC **A02**/MF **A01**

Highlights: Superfund Program Management. Fiscal Year 1993.
PB93-963261/REB 93-01 PC **A03**/MF **A01**

Standard Document for Remedial Site Assessment Decisions.
PB93-963268/REB 93-01 PC **A01**/MF **A01**

Superfund: EPA/ICMA Superfund Revitalization Conference. Held in Chicago, Illinois on November 12-13, 1992.
PB93-963274/REB 93-01 PC **A04**/MF **A01**

Initiatives to Streamline the Alternative Remedial Contracting Strategy (ARCS) Contracts' Award Fee Process.
PB93-963275/REB 93-01 PC **A03**/MF **A01**

Performance Tracking under ARCS Contracts.
PB93-963276/REB 93-01 PC **A01**/MF **A01**

Amendment to Historical Definitions of NPL Deletion Start and Completion Dates.
PB93-963278/REB 93-01 PC **A01**/MF **A01**

Identification of a Senior Superfund Official for Addressing Special NPL Site-Related Issues.
PB93-963279/REB 93-01 PC **A01**/MF **A01**

Guidance on Program Management Activities under ARCS.
PB93-963280/REB 93-01 PC **A03**/MF **A01**

Clarification of Delegation to Approve Consistency Exemptions at NPL Sites.
PB93-963281/REB 93-01 PC **A01**/MF **A01**

Use of Time and Materials and Cost Reimbursement Subcontracts for Remedial Actions under the Alternative Remedial Contracting Strategy Contracts.
PB93-963282/REB 93-01 PC **A02**/MF **A01**

Smart Moves in Superfund - Regional Pilots and Initiatives. Volume 1, Number 2, September 1992.
PB93-963283/REB 93-01 PC **A01**/MF **A01**

Smart Moves in Superfund - Revitalization One Year Later. Volume 1, Number 3, January 1993.
PB93-963284/REB 93-01 PC **A01**/MF **A01**

Superfund Accelerated Cleanup Model (SACM): Questions and Answers.
PB93-963286/REB 93-04 PC **A01**/MF **A01**

HSED SACM Report. Volume 1, Number 1, January 1993.
PB93-963289/REB 93-01 PC **A01**/MF **A01**

Response Action Contractor Final Indemnification Guidelines. Volume 2, Number 1, March 1993.
PB93-963290/REB 93-01 PC **A01**/MF **A01**

Further Direction on Implementing the Superfund Accelerated Cleanup Model (SACM).
PB93-963291/REB 93-01 PC **A02**/MF **A01**

Superfund Administrative Improvements. Executive Summary.
PB93-963294/REB 93-04 PC **A03**/MF **A01**

Superfund Administrative Improvements. Final Report.
PB93-963295/REB 93-04 PC **A04**/MF **A01**

Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis.
PB93-963297/REB 93-04 PC **A03**/MF **A01**

Cost of Remedial Action Model.
PB93-963304/REB 93-04 PC **A01**/MF **A01**

Cost of Remedial Actions (CORA) Model: Overview and Applications.
PB93-963318/REB 93-04 PC **A03**/MF **A01**

SARA '200' Remedial Action Starts Requirement.
PB93-963324/REB 93-01 PC **A01**/MF **A01**

Permits and Permit 'Equivalency' Processes for CERCLA On-Site Response Actions.
PB93-963325/REB 93-01 PC **A02**/MF **A01**

NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC **A01**/MF **A01**

Compendium of ROD Language for FY 1993 Focus Areas.
PB93-963328/REB 93-01 PC **A04**/MF **A01**

ATSDR Health Consultations under CERCLA.
PB93-963334/REB 93-01 PC **A01**/MF **A01**

Ensuring the Adequacy of Cost Share Provisions in Superfund State Contracts.
PB93-963336/REB 93-01 PC **A03**/MF **A01**

Discussions with the Public Concerning NPL Listings.
PB93-963338/REB 93-01 PC **A03**/MF **A01**

PA Review Checklist.
PB93-963342/REB 93-04 PC **A03**/MF **A01**

Site Assessment: Evaluating Risks at Superfund Sites.
PB93-963347/REB 93-04 PC **A02**/MF **A01**

Guide to Community Involvement for Site Assessment Managers.
PB93-963348/REB 93-04 PC **A02**/MF **A01**

OSWER Integrated Health and Safety Standard Operating Practices.
PB93-963401/REB 93-01 PC **A01**/MF **A01**

Expedited Response Actions.
PB93-963410/REB 93-01 PC **A02**/MF **A01**

Guidance on Implementation of the 'Contribute to Remedial Performance' Provision.
PB93-963413/REB 93-04 PC **A02**/MF **A01**

Determination of Imminent and Substantial Endangerment for Removal Actions.
PB93-963416/REB 93-04 PC **A01**/MF **A01**

Effect of OSHA's Bloodborne Pathogens Standard on Hazardous Waste Cleanup Activities.
PB93-963419/REB 93-04 PC **A02**/MF **A01**

Personal Air Sampling and Air Monitoring Requirements under 29 CFR 1910.120.
PB93-963420/REB 93-04 PC **A03**/MF **A01**

Reassignment of CLP Transportation Functions.
PB93-963501/REB 93-01 PC **A01**/MF **A01**

Extending the Tracking of Analytical Services to Potentially Responsible Party-Lead Superfund Sites (Supplemental Guidance on OSWER Directive 9240.0-2A).
PB93-963502/REB 93-01 PC **A03**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Harvey and Knott Drum Site, New Castle County, Delaware).
PB93-963614/REB 93-04 PC **A01**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Fulton Terminals Site Profile, Oswego County, NY).
PB93-963616/REB 93-04 PC **A02**/MF **A01**

Guidance on CERCLA Settlements with De Micromis Waste Contributors.
PB93-963619/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Darling Hill Dump, Lyndon, VT. (First Remedial Action), June 1992.
PB93-963702/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Revere Textile Prints, Sterling, CT. (First Remedial Action), September 1992.
PB93-963703/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Otis Air National Guard/Camp Edwards, MA. (First Remedial Action), May 1992.
PB93-963704/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 1): Town Garage Radio Beacon, Londonderry, NH. (First Remedial Action), September 1992.
PB93-963705/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 1): Brunswick Naval Air Station, Operable Unit 2, ME. (Second Remedial Action), June 1992.
PB93-963706/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 1): Newport Naval Education/Training Center, Newport, RI. (First Remedial Action), September 1992.
PB93-963707/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 1): PSC Resources Site, Palmer, MA. (First Remedial Action), September 1992.
PB93-963708/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 1): Tibbetts Road, Barrington, NH. (First Remedial Action), September 1992.
PB93-963709/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 2): Ramapo Landfill Site, Rockland County, NY. (First Remedial Action), March 1992.
PB93-963801/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Pasley Solvents and Chemicals, Town of Hempstead, Nassau County, NY. (First Remedial Action), April 1992.
PB93-963805/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 2): Bioclinical Laboratories, Town of Islip, Suffolk County, NY. (First Remedial Action), September 1992.
PB93-963807/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): FAA Technical Center, Atlantic County, Atlantic City International Airport, NJ. (Third Remedial Action), September 1992.
PB93-963808/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 5), Lakehurst, NJ. (Sixth Remedial Action), January 1992.
PB93-963809/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 6), Lakehurst, NJ. (Fifth Remedial Action), December 1991.
PB93-963810/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): North Sea Municipal Landfill, Suffolk County, Southampton, NY. (Second Remedial Action), September 1992.
PB93-963811/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Witco Chemical (Oakland Plant), Bergen County, Oakland, NJ. (First Remedial Action), September 1992.
PB93-963812/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Higgins Farm, Franklin Township, Somerset County, NJ. (Second Remedial Action), September 1992.
PB93-963813/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Evor Phillips Leasing Company, Old Bridge Township, Middlesex County, NJ. (First Remedial Action), September 1992.
PB93-963814/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 1), Clinton County, NY. (First Remedial Action), September 1992.
PB93-963815/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 3), Clinton County, NY. (Second Remedial Action), September 1992.
PB93-963816/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Preferred Plating, Suffolk County, Farmingdale, NY. (Second Remedial Action), September 1992.
PB93-963817/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Imperial Oil/Champion Chemicals, Monmouth County, NJ. (Second Remedial Action), September 1992.
PB93-963823/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Industrial Latex, Bergen County, Wallington, NJ. (First Remedial Action), September 1992.
PB93-963824/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Islip Municipal Sanitary Landfill, Town of Islip, NY. (First Remedial Action), September 1992.
PB93-963825/REB 93-04 PC **A05**/MF **A02**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 7), Ocean County, NJ. (Seventh Remedial Action), March 1992.
PB93-963826/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Rowe Industries Groundwater Contamination, Sag Harbor, NY. (First Remedial Action), September 1992.
PB93-963827/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, (Operable Unit 5), Richmond, VA. (First Remedial Action), March 1992.
PB93-963901/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Raymark Site, Operable Unit 1, Montgomery County, PA. (First Remedial Action), December 1991.
PB93-963902/REB 93-01 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 3): Dublin Water Supply, Bucks County, PA. (First Remedial Action), December 1991.
PB93-963903/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 3): MW Manufacturing Site, Montour County, PA. (Subsequent Remedial Action), June 1992.
PB93-963904/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Dixie Caverns Landfill Site, Operable Unit 2, Roanoke County, VA. (Second Remedial Action), September 1992.
PB93-963907/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.
PB93-963912/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.
PB93-963913/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Eastern Diversified Metals Site, Schuylkill County, Hometown, PA. (Second Remedial Action), July 1992.
PB93-963914/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): USA Aberdeen, Operable Unit One, Michaelsville, MD. (Second Remedial Action), June 1992.
PB93-963915/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Strasburg Landfill, Newlin Township, Chester County, PA. (Third Remedial Action), March 1992.
PB93-963916/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Abex Corporation, Portsmouth, VA. (First Remedial Action), September 1992.
PB93-963917/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Brown's Battery Breaking, Tilden Township, Berks County, PA. (Second Remedial Action), July 1992.
PB93-963918/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Butz Landfill, Pocono and Jackson Townships, Monroe County, PA. (Second Remedial Action), June 1992.
PB93-963919/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Commodore Semiconductor Group, Lower Providence Township, PA. (First Remedial Action), September 1992.
PB93-963920/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 3): Rhinehart Tire Fire Dump, Operable Unit 2, Winchester, VA. (Second Remedial Action), September 1992.
PB93-963921/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Tonolli Corporation, Nesquehoning Borough, Carbon County, PA. (First Remedial Action), September 1992.
PB93-963922/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, Operable Unit 1, Richmond, VA. (First Remedial Action), May 1992.
PB93-963923/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964009/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.
PB93-964010/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964011/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.
PB93-964012/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), A/M Area Groundwater Operable Unit 3, Aiken County, SC. (Third Remedial Action), June 1992.
PB93-964013/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Standard Auto Bumper Site, Dade County, Hialeah, FL. (First Remedial Action), September 1992.
PB93-964014/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Yellow Water Road Dump, Duval County, Baldwin, FL. (Second Remedial Action), June 1992.
PB93-964015/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): National Electric Coil/Cooper Industries, KY. (First Remedial Action), September 1992.
PB93-964016/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Agrico Chemical, Escambia County, Pensacola, FL. (First Remedial Action), September 1992.
PB93-964017/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Benfield Industries, Haywood County, Hazelwood, NC. (First Remedial Action), July 1992.
PB93-964018/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 4): Carrier Air Conditioning, Collierville, TN. (First Remedial Action), September 1992.
PB93-964019/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Florida Steel Corporation, Martin County, Indiantown, FL. (First Remedial Action), June 1992.
PB93-964020/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Madison County Sanitary Landfill, Madison, FL. (First Remedial Action), September 1992.
PB93-964021/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Milan Army Ammunition Plant, TN. (First Remedial Action), September 1992.
PB93-964022/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 1, SC. (First Remedial Action), June 1992.
PB93-964023/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 2, SC. (Second Remedial Action), June 1992.
PB93-964024/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation, Operable Unit 6, Roane County, TN. (Fourth Remedial Action), September 1992.
PB93-964025/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): USMC Camp Lejeune Military Reservation, NC. (First Remedial Action), September 1992.
PB93-964026/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Grand Traverse Overall Supply Site, Greilickville, MI. (First Remedial Action), February 1992.
PB93-964101/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Midco II, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964102/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): Twin Cities AF Reserve (SAR Landfill), MN. (First Remedial Action), March 1992.
PB93-964103/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Columbus Old Municipal Landfill, Columbus, IN. (First Remedial Action), March 1992.
PB93-964104/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Clare Water Supply Site, Clare County, Clare, MI. (Second Remedial Action), September 1992.
PB93-964106/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Kohler Landfill, Kohler, WI. (First Remedial Action), March 1992.
PB93-964111/REB 93-01 PC **A05**/MF **A02**

Superfund Record of Decision (EPA Region 5): Metal Working Shop, Benzie County, Lake Ann, MI. (First Remedial Action), June 1992.
PB93-964113/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Savanna Army Depot, Savanna, IL. (First Remedial Action), March 1992.
PB93-964116/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Torch Lake Site, Operable Units 1 and 3, Houghton County, MI. (First Remedial Action), September 1992.
PB93-964120/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Alsco Anaconda Site, Gnadenhutten, OH. (Second Remedial Action), September 1992.
PB93-964121/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Butterworth No. 2 Landfill Site, Grand Rapids, MI. (First Remedial Action), September 1992.
PB93-964122/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 1, Anoka County, Andover, MN. (Second Remedial Action), (Amendment), June 1992.
PB93-964123/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Reilly Tar and Chemical, St. Louis Park, MN. (Fourth Remedial Action), September 1992.
PB93-964124/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): American Chemical Services, Griffith, IN. (First Remedial Action), September 1992.
PB93-964125/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): Cannelton Industries Site, Sault Sainte Marie, MI. (First Remedial Action), September 1992.
PB93-964126/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Central Illinois Public Service, Taylorville Manufactured Gas Plant Site, Christian County, IL. (First Remedial Action), September 1992.
PB93-964127/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): City Disposal Sanitary Landfill, Dane County, WI. (First Remedial Action), September 1992.
PB93-964128/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): H. Brown Company, Walker, MI. (First Remedial Action), September 1992.
PB93-964129/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): MIDCO I, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964130/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): New Brighton/Arden Hills, Ramsey County, MN. (Eighth Remedial Action), September 1992.
PB93-964131/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 2, Anoka County, Andover, MN. (Second Remedial Action), December 1992.
PB93-964132/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Tri County/Elgin Landfill Site, Elgin, IL. (First Remedial Action), September 1992.
PB93-964133/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 2), Vermilion Parish, LA. (First Remedial Action), September 1992.
PB93-964206/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 1), Vermilion Parish, LA. (Second Remedial Action), September 1992.
PB93-964207/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 6): Koppers (Texarkana Plant), TX. (First Remedial Action), (Amendment), March 1992.
PB93-964208/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 6): Prewitt Abandoned Refinery, Prewitt, NM. (First Remedial Action), September 1992.
PB93-964209/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 6): Double Eagle Refinery, Oklahoma City, OK. (First Remedial Action), September 1992.
PB93-964210/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.
PB93-964304/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 7): Pester Refinery, Butler County, El Dorado, KS. (First Remedial Action), September 1992.
PB93-964305/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Denver Radium, Operable Unit 9, Denver, CO. (Eighth Remedial Action), December 1991.
PB93-964402/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Hill Air Force Base, UT. (Second Remedial Action), September 1992.
PB93-964403/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), (Operable Unit 4), Golden, CO. (Third Remedial Action), April 1992.
PB93-964404/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 8): Denver Radium Site, Operable Unit 8, Denver, CO. (Ninth Remedial Action), January 1992.
PB93-964405/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 8): Idaho Pole National Priorities List Site, Bozeman, MT. (First Remedial Action), September 1992.
PB93-964406/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 1, Weber County, UT. (Second Remedial Action), June 1992.
PB93-964407/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 3, Weber County, UT. (Fourth Remedial Action), September 1992.
PB93-964408/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 4, UT. (Third Remedial Action), September 1992.
PB93-964409/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 8): Portland Cement Co. (Kiln Dust No. 2 and No. 3), Operable Unit 2, Salt Lake City, UT. (Second Remedial Action), March 1992.
PB93-964410/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), Operable Unit 2, Golden, CO. (Fourth Remedial Action), September 1992.
PB93-964411/REB 93-04 PC **A19**/MF **A04**

Superfund Record of Decision (EPA Region 8): Silver Bow Creek/Butte Area, MT. (Second Remedial Action), June 1992.
PB93-964412/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 9): Westinghouse Electric (Sunnyvale Plant), Sunnyvale, CA. (First Remedial Action), October 1991.
PB93-964501/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 9): Hassayampa Landfill, AZ. (First Remedial Action), August 1992.
PB93-964505/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 9): Jasco Chemical Company, Mountain View, CA. (First Remedial Action), September 1992.
PB93-964507/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 9): Purity Oil Sales, Fresno County, CA. (Second Remedial Action), September 1992.
PB93-964508/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 3, Sacramento, CA. (Second Remedial Action), December 1991.
PB93-964509/REB 93-04 PC **A09**/MF **A03**

Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 4, Sacramento, CA. (Third Remedial Action), September 1992.
PB93-964510/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 10): Elmendorf Air Force Base, Operable Unit 2, Source Area ST41, Anchorage, AK. (First Remedial Action), September 1992.
PB93-964604/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Arrcom (Drexler Enterprise), Rathdrum, ID. (First Remedial Action), June 1992.
PB93-964606/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Fort Lewis Military Reservation, Landfill No. 5, Pierce County, WA. (First Remedial Action), July 1992.
PB93-964607/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Pesticide Laboratory, Yakima, WA. (First Remedial Action), September 1992.
PB93-964608/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Naval Air Station Whidbey Island - Ault Field, (Operable Unit 1, Area 6), Oak Harbor, WA. (First Remedial Action), April 1992.
PB93-964609/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Umatilla Army Depot (Lagoons), Soils Operable Unit 2, Hermiston, OR. (First Remedial Action), September 1992.
PB93-964610/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Bunker Hill Mining and Metallurgical Complex, Shoshone County, ID. (Second Remedial Action), September 1992.
PB93-964611/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 10): Eielson Air Force Base, AK. (First Remedial Action), September 1992.
PB93-964612/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Joseph Forest Products, Wallowa County, OR. (First Remedial Action), September 1992.
PB93-964613/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): McChord AFB, Washrack Treatment Area, WA. (First Remedial Action), September 1992.
PB93-964614/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 2, ID. (Third Remedial Action), September 1992.
PB93-964615/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 22, ID. (Fourth Remedial Action), September 1992.
PB93-964616/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 23, ID. (Second Remedial Action), June 1992.
PB93-964617/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Wyckoff/Eagle Harbor, WA. (First Remedial Action), September 1992.
PB93-964618/REB 93-04 PC **A07**/MF **A02**

Superfund Accelerated Cleanup Model (SACM) Coordination Strategy.
PB94-963201/REB 93-04 PC **A01**/MF **A01**

**HAZARDOUS MATERIALS SPILLS**

Oil and Hazardous Materials Technical Assistance Data System, (OHM-TADS) Fields and Their Definitions. Users' Guide.
PB93-111706/REB 93-01 PC **A03**/MF **A01**

Guidance on the Application of Refined Dispersion Models for Hazardous/Toxic Air Releases.
PB93-210359/REB 93-04 PC **A20**/MF **A04**

Oil and Hazardous Materials, Technical Assistance Data System (OHM-TADS) (for Microcomputers).
PB93-500577/REB 93-01 CP **D06**

**HAZARDOUS WASTE SITES**

Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
PB93-141257/REB 93-01 PC **A02**/MF **A01**

**HAZARDS**

Measurements of electric and magnetic fields in the Waianae, Hawaii area.
DE92019891/REB 93-01 PC **A03**/MF **A01**

**HEALTH**

Human Health Effects of Air Pollution.
PB93-231843/REB 93-04 PC **A03**/MF **A01**

Evaluation of the Effects of Methanol during Early Pregnancy in the Rat.
PB93-231850/REB 93-04 PC **A03**/MF **A01**

**HEALTH ADVISORY**

Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC **A05**/MF **A01**

Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

**HEALTH EFFECTS**

Human Health Risk Assessment for the Use and Disposal of Sewage Sludge: Benefits of Regulation.
PB93-111540/REB 93-04 PC **A14**/MF **A03**

**HEALTH EFFECTS INSTITUTE**

Structure and Performance of the Health Effects Institute.
PB93-200335/REB 93-01 PC **A08**/MF **A02**

**HEALTH HAZARDS**

Research to Improve Health Risk Assessments (RIHRA) Program.
PB93-116226/REB 93-01 PC **A06**/MF **A02**

*NCI/EPA Agricultural Health Study (AHS): Development* of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC **A02**/MF **A01**

Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
PB93-229565/REB 93-04 PC **A02**/MF **A01**

Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04**/MF **A01**

Health Effects Assessment Summary Tables.
PB93-921100/REB 93-01 Standing Order

**HEARING LOSS**

Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC **A03**/MF **A01**

**HEART FUNCTION TESTS**

Distribution of Cardiac Output during Diurnal Changes of Activity in Rats.
PB93-180982/REB 93-01 PC **A02**/MF **A01**

**HEART RATE**

Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC **A03**/MF **A01**

Acute and Delayed Effects of Diisopropyl Fluorophosphate on Body Temperature, Heart Rate and Motor Activity in the Awake, Unrestrained Rat.
PB93-228971/REB 93-04 PC **A03**/MF **A01**

**HEAT**

Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03**/MF **A01**

Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03**/MF **A01**

**HEAT ISLANDS**

Laboratory Simulation of Turbulent Convection Over an Urban Heat Island.
PB93-120871/REB 93-01 PC **A02**/MF **A01**

**HEAT PUMPS**
New technology for refrigeration and heating plants.
DE93721673/REB 93-01 PC **A03**/MF **A01**

**HEAT RADIATORS**
Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
PB93-123230/REB 93-01 PC **A02**/MF **A01**

**HEAT SET EMISSIONS**
Initial Assessment of Emissions from Heat Setting Carpet Yarn.
PB93-229862/REB 93-04 PC **A04**/MF **A01**

**HEAT-SHOCK PROTEINS**
Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
PB93-185866/REB 93-01 PC **A02**/MF **A01**

Stress Proteins in Aquatic Organisms: An Environmental Perspective.
PB93-199578/REB 93-01 PC **A03**/MF **A01**

Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03**/MF **A01**

**HEAT TREATMENT**
Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 1.
PB93-115160/REB 93-01 PC **A09**/MF **A02**

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 2.
PB93-115178/REB 93-01 PC **A15**/MF **A03**

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Remedy Selection. Interim Guidance.
PB93-126597/REB 93-01 PC **A03**/MF **A01**

Guides to Pollution Prevention: Metal Casting and Heat Treating Industry.
PB93-127793/REB 93-01 PC **A05**/MF **A01**

Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

**HEATING EQUIPMENT**
Baseline Emissions Forecasts for Industrial Non-Boiler Sources. Project Summary.
PB93-222560/REB 93-04 PC **A01**/MF **A01**

**HEATING FUELS**
Organic Combustion Fingerprints of Three Common Home Heating Fuels.
PB93-222123/REB 93-04 PC **A02**/MF **A01**

**HELICOBACTER PYLORI**
Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
PB93-205078/REB 93-04 PC **A02**/MF **A01**

**HEPTACHLOR**
Evaluation of the Potential Carcinogenicity of Heptachlor (76-44-8).
PB93-190478/REB 93-01 PC **A03**/MF **A01**

**HEPTACHLOR EPOXIDE**
Evaluation of the Potential Carcinogenicity of Heptachlor Epoxide (1024-57-3).
PB93-190486/REB 93-01 PC **A03**/MF **A01**

**HERBICIDES**
Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02**/MF **A01**

Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC **A02**/MF **A01**

Pesticide Fact Sheet: Glufosinate Ammonium.
PB93-219830/REB 93-04 PC **A03**/MF **A01**

**HERMAPHRODITISM**
Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC **A02**/MF **A01**

**HEXACHLOROBENZENE**
Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport.
PB93-141497/REB 93-01 PC **A02**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachlorobenzene (118-74-1).
PB93-190494/REB 93-01 PC **A03**/MF **A01**

Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204980/REB 93-01 PC **A03**/MF **A01**

**HEXACHLOROBIPHENYL**
Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204980/REB 93-01 PC **A03**/MF **A01**

**HEXACHLOROBUTADIENE**
Evaluation of the Potential Carcinogenicity of Hexachlorobutadiene (87-68-3).
PB93-190502/REB 93-01 PC **A03**/MF **A01**

**HEXAMITA SALMONIS**
Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03**/MF **A01**

**HIGH TEMPERATURE TESTS**
Thermal Degradation Characteristics of Environmentally Sensitive Pesticide Products.
PB93-201127/REB 93-01 PC **A04**/MF **A01**

**HILLSBOROUGH TOWNSHIP (NEW JERSEY)**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Krysowaty Farm, Hillsborough, New Jersey).
PB92-963629/REB 93-01 PC **A02**/MF **A01**

**HOMARUS AMERICANUS**
Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC **A03**/MF **A01**

**HORMONES**
Dithicarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.
PB93-228989/REB 93-04 PC **A02**/MF **A01**

**HOTLINE REPORTS**
Index to the Monthly Hotline Report Questions (June 1982 to December 1991).
PB92-131374/REB 93-01 PC **A07**/MF **A02**

**HOUSEHOLD WASTES**
Proceedings of the National United States Environmental Protection Agency Conference on Household Hazardous Waste Management (7th), Held in Minneapolis, Minnesota on December 8-12, 1992.
PB93-170116/REB 93-01 PC **A99**/MF **A06**

**HOUSES**
Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
PB93-100907/REB 93-01 PC **A07**/MF **A02**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

Measurement and Distribution of Radon and Radon Progeny: An Overview of Indoor Radon Risk Reduction in the United States.
PB93-107092/REB 93-01 PC **A02**/MF **A01**

Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04**/MF **A01**

Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC **A02**/MF **A01**

Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
PB93-121259/REB 93-01 PC **A02**/MF **A01**

Recommended Performance Standard of the Florida Radon Research Program.
PB93-122281/REB 93-01 PC **A03**/MF **A01**

Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02**/MF **A01**

Indoor Radon Reduction in Crawl-Space Houses: A Review of Alternative Approaches.
PB93-173177/REB 93-01 PC **A03**/MF **A01**

Chemical Contaminants in House Dust: Occurrences and Sources.
PB93-228542/REB 93-04 PC **A02**/MF **A01**

Measurement of the Surface Permeability of Basement Concretes.
PB93-232114/REB 93-04 PC **A03**/MF **A01**

**HRD FLAME REACTOR**
Horsehead Resource Development Company, Inc., Flame Reactor Technology. Technology Demonstration Summary.
PB93-145639/REB 93-01 PC **A02**/MF **A01**

**HUMAN HEALTH CRITERIA**
Great Lakes Water Quality Initiative Criteria Documents for the Protection of Human Health (February 1993 Draft).
PB93-154680/REB 93-01 PC **A09**/MF **A03**

Great Lakes Water Quality Initiative Technical Support Document for Human Health Criteria and Values (January 1993 Draft).
PB93-154698/REB 93-01 PC **A05**/MF **A01**

**HUMIC LAKE ACIDIFICATION EXPERIMENT**
Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC **A03**/MF **A01**

**HUMIDIFIERS**
Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
PB93-123149/REB 93-01 PC **A02**/MF **A01**

**HUMUS**
Metal concentrations of the mor layer.
DE92563061/REB 93-01 PC **A05**/MF **A01**

Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC **A03**/MF **A01**

**HYDRAULIC CONDUCTIVITY**
Hydraulic Conductivity of Three Geosynthetic Clay Liners.
PB93-131746/REB 93-01 PC **A02**/MF **A01**

Development and Application of Borehole Flowmeters for Environmental Assessment.
PB93-185817/REB 93-01 PC **A03**/MF **A01**

Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC **A05**/MF **A01**

**HYDRAULIC ENGINEERING**
Plume Definition in Regions of Strong Bending.
PB93-221844/REB 93-04 PC **A02**/MF **A01**

**HYDRAULIC FLUIDS**
Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

**HYDRAZINE**
Evaluation of the Potential Carcinogenicity of Hydrazine (302-01-2).
PB93-190528/REB 93-01 PC **A03**/MF **A01**

**HYDRAZINE/DIETHYL**
Evaluation of the Potential Carcinogenicity of 1,2-Diethylhydrazine (1615-80-1).
PB93-194298/REB 93-01 PC **A03**/MF **A01**

**HYDRAZINE/DIPHENYL**
Evaluation of the Potential Carcinogenicity of 1,2-Diphenylhydrazine (122-66-7).
PB93-192326/REB 93-01 PC **A03**/MF **A01**

**HYDRAZINES**
Evaluation of the Potential Carcinogenicity of 1,2-Diethylhydrazine (1615-80-1).
PB93-194298/REB 93-01 PC **A03**/MF **A01**

**HYDROCARB PROCESS**
Coprocessing of Fossil Fuels and Biomass for CO2 Emission Reduction in the Transportation Sector.
PB93-194165/REB 93-01 PC **A02**/MF **A01**

**HYDROCARBONS**
UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC **A03**/MF **A01**

LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC **A03**/MF **A01**

Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03**/MF **A01**

**HYDROCHLOROFLUOROCARBONS**
Atmospheric Chemistry and Physical Fate of HCFCs and HFCs and Their Degradation Products.
PB93-131449/REB 93-01 PC **A03**/MF **A01**

**HYDROCORTISONE**
Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

**HYDROFLUOROCARBONS**
Atmospheric Chemistry and Physical Fate of HCFCs and HFCs and Their Degradation Products.
PB93-131449/REB 93-01 PC **A03**/MF **A01**

**HYDROGEN CHLORIDE**
Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC **A03**/MF **A01**

Reaction Kinetics of Ca-Based Sorbents with HCl.
PB93-131860/REB 93-01 PC **A03**/MF **A01**

**HYDROGEN FLUORIDE**
Chemical Emergency Preparedness and Prevention Advisory: Hydrogen Fluoride, Series 8, No. 3.
PB93-234797/REB 93-04 PC **A02**/MF **A01**

**HYDROGEN IONS**
Kinetics of Chemical Weathering in B Horizon Spodosol Fraction.
PB93-141539/REB 93-01 PC **A02**/MF **A01**

**HYDROGEN ISOTOPES**
Possible Influence of Hydrogen Concentration on Microbial Methane Stable Hydrogen Isotopic Composition.
PB93-205128/REB 93-04 PC **A03**/MF **A01**

**HYDROGEOLOGY**
Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC **A02**/MF **A01**

**HYDROLOGY**
Quality Assurance and Quality Control in the Development and Application of Ground-Water Models.
PB93-178226/REB 93-01 PC **A08**/MF **A02**

**HYDROXYL RADICALS**
Rapid Measurement of Aqueous Hydroxyl Radical Concentrations in Steady-State HO Flux Systems.
PB93-131779/REB 93-01 PC **A03**/MF **A01**

Determination of Rates of Reaction in the Gas-Phase in the Troposphere. Theory and Practice. 5. Rate of Indirect Photoreaction.
PB93-149334/REB 93-01 PC **A06**/MF **A02**

**HYDROXYTETRACYCLINE MONOHYDROCHLORIDE**
Reregistration Eligibility Document (RED) Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-234763/REB 93-04 PC **A07**/MF **A02**

**HYPERSENSITIVITY**
Multiple Chemical Sensitivities. Addendum to Biologic Markers in Immunotoxicology.
PB93-222990/REB 93-04 PC **A09**/MF **A03**

**HYPOCHLOROUS ACIDS**
Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

**HYPOXANTHINE PHOSPHORIBOSYLTRANSFERASE**
V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02**/MF **A01**

Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC **A03**/MF **A01**

**IAQPC (INDOOR AIR QUALITY SIMULATOR FOR PERSONAL COMPUTERS)**
IAQPC: An Indoor Air Quality Simulator.
PB93-212397/REB 93-04 PC **A03**/MF **A01**

**IDAHO**
National Priorities List Sites: Idaho, 1992.
PB93-963212/REB 93-01 PC **A04**/MF **A01**

**ILLINOIS**
Volunteer Lake Monitoring Program, 1991. Volume 5. East-Central Illinois Region.
PB93-102234/REB 93-01 PC **A04**/MF **A01**

Illinois Water Quality Management Plan.
PB93-138451/REB 93-01 PC **A07**/MF **A02**

Illinois Annual Air Quality Report, 1992.
PB93-208759/REB 93-04 PC **A05**/MF **A01**

Illinois Annual Air Quality Report, 1991.
PB93-208775/REB 93-04 PC **A05**/MF **A01**

Water Quality in Illinois, 1990-1991.
PB93-210193/REB 93-04 PC **A03**/MF **A01**

Companies that Generate, Treat, Dispose or Recover Hazardous Waste. 1991 Annual Report.
PB93-216638/REB 93-04 PC **A15**/MF **A03**

Volunteer Lake Monitoring Program, 1992. Volume 1: Statewide Summary.
PB93-216927/REB 93-04 PC **A06**/MF **A02**

Volunteer Lake Monitoring Program, 1992. Volume 5. East-Central Illinois Region.
PB93-223162/REB 93-04 PC **A05**/MF **A01**

Pilot Project for Vehicle Scrapping in Illinois.
PB93-232890/REB 93-04 PC **A06**/MF **A02**

National Priorities List Sites: Illinois, 1992.
PB93-963213/REB 93-01 PC **A06**/MF **A02**

**IMINODIPROPIONITRILES**
Olfactory Toxicity of Beta,Beta'-Iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC **A02**/MF **A01**

Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.
PB93-226872/REB 93-04 PC **A03**/MF **A01**

**IMMUNOASSAY**
Immunoassay for p-Nitrophenol in Urine (Chapter XX).
PB93-175552/REB 93-01 PC **A03**/MF **A01**

**IMMUNOSUPPRESSION**
Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomegalovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC **A03**/MF **A01**

Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC **A03**/MF **A01**

**IMMUNOSUPPRESSIVE AGENTS**
Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomegalovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC **A03**/MF **A01**

**IMMUNOTOXICITY**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 4. Immunotoxic Effects.
PB93-222685/REB 93-04 PC **A04**/MF **A01**

**IMPLANTATION**
Waste Reduction Activities and Options for a Manufacturer of Orthopedic Implants.
PB93-126217/REB 93-01 PC **A02**/MF **A01**

**IMPURITY**
Methods for Assessing Exposure to Chemical Substances. Volume 11. Methodology for Estimating the Migration of Additives and Impurities from Polymeric Materials.
PB93-134096/REB 93-01 PC **A09**/MF **A02**

**IN-SITU PROCESSING**
In-situ Bioremediation of Ground Water.
PB93-146850/REB 93-01 PC **A01**/MF **A01**

In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03**/MF **A01**

**INADEQUATE TESTS**
Evaluation of the Potential Carcinogenicity of Diethylarsine (692-42-2).
PB93-184877/REB 93-01 PC **A03**/MF **A01**

**INCENTIVES**
Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC **A06**/MF **A02**

**INCINERATION**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
DE93500872/REB 93-04 PC **A03**/MF **A01**

Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
DE93500877/REB 93-04 PC **A04**/MF **A01**

Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC **A03**/MF **A01**

Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC **A04**/MF **A01**

INSEA User's Manual Environmental Performance Model of Incineration at Sea Operations.
PB93-206977/REB 93-04 PC **A07**/MF **A02**

* Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.
PB93-229870/REB 93-04 PC **A25**/MF **A06**

**INCINERATION RESEARCH FACILITY**
Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

**INCINERATORS**
Foerbraenning av sorterat industriavfall. Huvudrapport. (Incineration of sorted industrial wastes. Main report).
DE93500869/REB 93-04 PC **A03**/MF **A01**

Technical Support for the Incineration of Sewage Sludge.
PB93-110617/REB 93-01 PC **A11**/MF **A03**

Seminar Publication. Medical and Institutional Waste Incineration: Regulations, Management, Technology, Emissions, and Operations.
PB93-116283/REB 93-01 PC **A03**/MF **A01**

Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
PB93-121127/REB 93-01 PC **A03**/MF **A01**

Superfund Engineering Issue: Considerations for Evaluating the Impact of Metals Partitioning during the Incineration of Contaminated Soils from Superfund Sites.
PB93-121341/REB 93-01 PC **A03**/MF **A01**

Applications of Pulse Combustion in Industrial and Incineration Processes.
PB93-131639/REB 93-01 PC **A03**/MF **A01**

Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

Pilot-Scale Evlauation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02**/MF **A01**

What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC **A03**/MF **A01**

Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC **A03**/MF **A01**

Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC **A03**/MF **A01**

Incineration of Hazardous Waste: A Critical Review Update.
PB93-185916/REB 93-01 PC **A03**/MF **A01**

Experimental Investigation of PIC Formation in CFC-12 Incineration.
PB93-191294/REB 93-01 PC **A07**/MF **A02**

Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03**/MF **A01**

Characterization of the Organic Emissions from the Thermal Destruction of CFCs.
PB93-205557/REB 93-04 PC **A10**/MF **A03**

Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212538/REB 93-04 PC **A03**/MF **A01**

Guidelines for Stack Testing at Municipal Waste Combustion Facilities. Project Summary.
PB93-222610/REB 93-04 PC **A02**/MF **A01**

Medical Waste Incinerator Operator Training Program: Course Handbook.
PB93-781979/REB 93-04 PC**$56.00**/MF**$22.00**

**INDEXES (DOCUMENTATION)**
Index to the Monthly Hotline Report Questions (June 1982 to December 1991).
PB92-131374/REB 93-01 PC **A07**/MF **A02**

Environmental Monitoring Methods Index. Version 1.0 Software. User's Manual.
PB92-169648/REB 93-01 PC **A06**/MF **A02**

**INDIAN TRIBES**
Indian Primacy Procedures Handbook for the Public Water System Supervision (PWSS) Program and the Underground Injection Control (UIC) Program.
PB93-185585/REB 93-01 PC **A09**/MF **A02**

**INDIANA**
Development of Index of Biotic Integrity Expectations for the Ecoregions of Indiana. I. Central Corn Belt Plain.
PB93-149383/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Indiana, 1992.
PB93-963214/REB 93-01 PC **A06**/MF **A02**

**INDOLE BUTYRIC ACID**
EPA Pesticide RED FACTS Sheets: Indole-3-Butyric Acid.
PB93-107282/REB 93-01 PC **A02**/MF **A01**

**INDOOR AIR POLLUTION**
Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
PB93-100907/REB 93-01 PC **A07**/MF **A02**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

Modeling of Indoor Air Quality for a Personal Computer.
PB93-106771/REB 93-01 PC **A03**/MF **A01**

Validation of Source and Sink Models: Problems and Possible Solutions.
PB93-106789/REB 93-01 PC **A03**/MF **A01**

ASHRAE Standard 62: Ventilation for Acceptable Indoor Air Quality.
PB93-106797/REB 93-01 PC **A03**/MF **A01**

Airborne Particle Sizes and Sources Found in Indoor Air.
PB93-107019/REB 93-01 PC **A03**/MF **A01**

Modeling of the Fast Organic Emissions from a Wood-Finishing Product: Floor Wax.
PB93-107027/REB 93-01 PC **A02**/MF **A01**

Evaluation of Para-Dichlorobenzene Emissions from Solid Moth Repellant as a Source of Indoor Air Pollution.
PB93-107035/REB 93-01 PC **A02**/MF **A01**

Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC **A03**/MF **A01**

Measurement and Distribution of Radon and Radon Progeny: An Overview of Indoor Radon Risk Reduction in the United States.
PB93-107092/REB 93-01 PC **A02**/MF **A01**

Animal Models for Assessing the Neurobehavioral Impact of Airborne Pollutants.
PB93-107233/REB 93-01 PC **A03**/MF **A01**

Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04**/MF **A01**

Modeling Individual Exposure from Indoor Sources.
PB93-119840/REB 93-01 PC **A03**/MF **A01**

Survey of Protocols for Conducting Indoor Air Quality Investigations in Large Buildings.
PB93-119865/REB 93-01 PC **A03**/MF **A01**

Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC **A02**/MF **A01**

Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
PB93-121259/REB 93-01 PC **A02**/MF **A01**

Assessing Potential Indoor Air Impacts for Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-122257/REB 93-01 PC **A09**/MF **A03**

Recommended Performance Standard of the Florida Radon Research Program.
PB93-122281/REB 93-01 PC **A03**/MF **A01**

Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02**/MF **A01**

Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC **A03**/MF **A01**

Evaluating Materials for Healthy Buildings.
PB93-131621/REB 93-01 PC **A03**/MF **A01**

Analysis of IAQ Control Options and the Effects of Sources and Sinks.
PB93-131647/REB 93-01 PC **A02**/MF **A01**

Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC **A02**/MF **A01**

Proceedings of the Indoor Radon Modeling Workshop, Florida Radon Research Program. Held in Tampa, Florida on April 16-17, 1991.
PB93-172922/REB 93-01 PC **A09**/MF **A02**

Assessing Potential Exposures from Routine Use of VOC-Contaminated Groundwater.
PB93-173060/REB 93-01 PC **A02**/MF **A01**

Indoor Radon Reduction in Crawl-Space Houses: A Review of Alternative Approaches.
PB93-173177/REB 93-01 PC **A03**/MF **A01**

Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC **A03**/MF **A01**

Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC **A03**/MF **A01**

Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC **A03**/MF **A01**

Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC **A02**/MF **A01**

Sorption and Reemission of Formaldehyde by Gypsum Wallboard.
PB93-180917/REB 93-01 PC **A03**/MF **A01**

Human Upper Respiratory Tract Responses to Inhaled Pollutants with Emphasis on Nasal Lavage.
PB93-181089/REB 93-01 PC **A02**/MF **A01**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

Building and HVAC Characterization for Commercial Building Indoor Air Quality Investigations.
PB93-198844/REB 93-01 PC **A07**/MF **A02**

Radon/Radon Progeny Measurement Proficiency Program: Cumulative Proficiency Report (Revised September 1987).
PB93-203909/REB 93-04 PC **A03**/MF **A01**

Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02**/MF **A01**

Indoor Concentration Modeling of Aerosol Strong Acidity.
PB93-204071/REB 93-01 PC **A02**/MF **A01**

Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02**/MF **A01**

National Radon Measurement Proficiency Program: Individual Proficiency Report.
PB93-209989/REB 93-04 PC **A16**/MF **A03**

National Radon Contractor Proficiency (RCP) Program. Proficiency Report, July 1993.
PB93-209997/REB 93-04 PC **A11**/MF **A03**

Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC **A13**/MF **A03**

Association of Personal and Workplace Characteristics with Reported Health Symptoms of 6771 Government Employees in Washington, DC.
PB93-212264/REB 93-04 PC **A02**/MF **A01**

Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC **A02**/MF **A01**

IAQPC: An Indoor Air Quality Simulator.
PB93-212397/REB 93-04 PC **A03**/MF **A01**

Relating Air Cleaner Efficiency to Indoor Air Quality.
PB93-212405/REB 93-04 PC **A03**/MF **A01**

Evaluation of Ventilation Performance for Indoor Space.
PB93-212751/REB 93-04 PC **A02**/MF **A01**

Aerosol Measurement: Principles, Techniques, and Applications.
PB93-212827/REB 93-04 PC **A03**/MF **A01**

Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC **A02**/MF **A01**

Establishing Priorities in the U.S. EPA's Indoor Air Engineering Research Program.
PB93-221984/REB 93-04 PC **A02**/MF **A01**

Fundamental Mass Transfer Models for Indoor Air Pollution Sources.
PB93-221992/REB 93-04 PC **A02**/MF **A01**

Removal Efficiencies in Terms of Particle Size and Concentration in a Suburban Home of Console Air Cleaners.
PB93-222016/REB 93-04 PC **A03**/MF **A01**

Bioresponse Testing of Sources of Indoor Air Contaminants.
PB93-222032/REB 93-04 PC **A02**/MF **A01**

Status of ASHRAE Standard 62. Ventilation for Acceptable Indoor Air Quality.
PB93-222040/REB 93-04 PC **A02**/MF **A01**

EPA's Indoor Air/Pollution Prevention Workshop.
PB93-222065/REB 93-04 PC **A03**/MF **A01**

International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.
PB93-222073/REB 93-04 PC **A02**/MF **A01**

Gasoline and Methanol Exposures from Automobiles within Residences and Attached Garages.
PB93-222222/REB 93-04 PC **A02**/MF **A01**

Preliminary Diagnostic Procedures for Radon Control. Project Summary.
PB93-222545/REB 93-04 PC **A01**/MF **A01**

Clinton, New Jersey, Radon Mitigation Follow-Up and Long-Term Monitoring. Project Summary.
PB93-222594/REB 93-04 PC **A02**/MF **A01**

Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC **A02**/MF **A01**

Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02**/MF **A01**

Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.
PB93-231835/REB 93-04 PC **A02**/MF **A01**

Contribution to Indoor Ozone Levels of an Ozone Generator.
PB93-234557/REB 93-04 PC **A03**/MF **A01**

DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC **A02**/MF **A01**

ADL Migration Estimation Model (for Microcomputers) (Release Number 1).
PB93-500684/REB 93-01 CP **D02**

**INDOOR ENVIRONMENT**

Indoor Concentration Modeling of Aerosol Strong Acidity.
PB93-204071/REB 93-01 PC **A02**/MF **A01**

**INDUCED HYPERTHERMIA**

Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03**/MF **A01**

Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03**/MF **A01**

**INDUSTRIAL HEATING**

Alternative Control Techniques Document-NOx Emissions from Process Heaters.
PB93-186211/REB 93-01 PC **A10**/MF **A03**

Baseline Emissions Forecasts for Industrial Non-Boiler Sources. Project Summary.
PB93-222560/REB 93-04 PC **A01**/MF **A01**

**INDUSTRIAL PLANTS**

Applications of Pulse Combustion in Industrial and Incineration Processes.
PB93-131639/REB 93-01 PC **A03**/MF **A01**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants.
PB93-156495/REB 93-01 PC **A04**/MF **A01**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants, July 1986.
PB93-156503/REB 93-01 PC **A05**/MF **A01**

Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry.
PB93-214328/REB 93-04 PC **A03**/MF **A01**

Supplement to the Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics and Synthetic Fibers Point Source Category.
PB93-214336/REB 93-04 PC **A08**/MF **A02**

**INDUSTRIAL SAFETY**

Estimation of the Cost of Using Chemical Protective Clothing.
PB93-168805/REB 93-01 PC **A03**/MF **A01**

**INDUSTRIAL SOURCE COMPLEX MODELS**

Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC **A08**/MF **A02**

**INDUSTRIAL TREATMENT**

Constructed Wetland Design: the First Generation.
PB93-131753/REB 93-01 PC **A02**/MF **A01**

**INDUSTRIAL WASTE**

Industrial Source Complex Short Term (ISCST) (for Microcomputers).
PB93-500221/REB 93-01 CP **D03**

Industrial Source Complex LongTerm (ISCLT) (for Microcomputers).
PB93-500239/REB 93-01 CP **D03**

**INDUSTRIAL WASTE TREATMENT**

Maritime Industrial Waste Project Reduction of Toxicant Pollution from the Maritime Industry in Puget Sound.
PB93-119568/REB 93-01 PC **A08**/MF **A02**

Environmental Pollution Control Alternatives: Reducing Water Pollution Control Costs in the Electroplating Industry. (Revised).
PB93-122240/REB 93-01 PC **A04**/MF **A01**

Supplement to the OCPSF Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category.
PB93-186096/REB 93-04 PC **A11**/MF **A03**

PRELIM Version 4.0 Users Guide. Documentation for the EPA Computer Program for Development of Local Discharge Limitations under the Pretreatment Program. Data Tape Documentation.
PB93-192748/REB 93-04 PC **A05**/MF **A01**

Guidance Manual for Control of Slug Loadings to POTWs.
PB93-202745/REB 93-01 PC **A08**/MF **A02**

Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards, and Pretreatment Standards for the Paint Formulating Point Source Category.
PB93-206472/REB 93-04 PC **A21**/MF **A04**

Treatability Studies for the Inorganic Chemicals Manufacturing Point Source Category.
PB93-206480/REB 93-04 PC **A11**/MF **A03**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 1.
PB93-206498/REB 93-04 PC **A24**/MF **A04**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 2.
PB93-206506/REB 93-04 PC **A22**/MF **A04**

Development Document for Effluent Limitations Guidelines and Standards for the Porcelain Enameling. Point Source Category.
PB93-206514/REB 93-04 PC **A21**/MF **A04**

Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category (Proposed).
PB93-206522/REB 93-04 PC **A23**/MF **A04**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Inorganic Chemicals Manufacturing Point Source Category, Phase 2 (Proposed).
PB93-206530/REB 93-04 PC **A24**/MF **A04**

Development Document for Effluent Limitations Guidelines and Standards for the Pharmaceuticals Manufacturing. Point Source Category.
PB93-206969/REB 93-04 PC **A04**/MF **A01**

Supplementary Development Document for Effluent Limitations Guidelines for the Leather Tanning and Finishing Point Source Category.
PB93-207934/REB 93-04 PC **A06**/MF **A02**

Development Document for Effluent Limitations Guidelines and Standards for the Aluminum Forming Point Source Category.
PB93-208213/REB 93-04 PC **A99**/MF **A06**

Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Pharmaceutical Manufacturing Point Source Category.
PB93-208221/REB 93-04 PC **A22**/MF **A04**

PRELIM, Version 4.0 (for Microcomputers).
PB93-505980/REB 93-04 CP **D03**

Superfund Record of Decision (EPA Region 3): Raymark Site, Operable Unit 1, Montgomery County, PA. (First Remedial Action), December 1991.
PB93-963902/REB 93-01 PC **A07**/MF **A02**

**INDUSTRIAL WASTES**

Foerbraenning av sorterat industriavfall. Huvudrapport. (Incineration of sorted industrial wastes. Main report).
DE93500869/REB 93-04 PC **A03**/MF **A01**

Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
DE93500872/REB 93-04 PC **A03**/MF **A01**

Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
DE93500877/REB 93-04 PC A04/MF A01

Guides to Pollution Prevention: The Metal Finishing Industry.
PB93-100105/REB 93-04 PC A04/MF A01

Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants (Revised).
PB93-212025/REB 93-04 PC A05/MF A01

Preliminary Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease.
PB93-214344/REB 93-04 PC A05/MF A02

Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC A04/MF A01

**INDUSTRIES**

State Clean Water Strategies: Meeting the Challenges of the Future.
PB93-217628/REB 93-04 PC A03/MF A01

**INDUSTRY**

Phasing out of CFCs in the electronics and engineering industries in Sweden.
DE93711212/REB 93-01 PC A03/MF A01

**INFLAMMATION**

Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC A02/MF A01

**INFORMATION DISSEMINATION**

Toxic and Hazardous Chemicals, Title III and Communities: An Outreach Manual for Community Groups.
PB93-200806/REB 93-01 PC A06/MF A02

**INFORMATION MANAGEMENT**

Index to the Monthly Hotline Report Questions (June 1982 to December 1991).
PB92-131374/REB 93-01 PC A07/MF A02

TSCA Confidential Business Information Security Manual.
PB93-184844/REB 93-01 PC A07/MF A02

Information Management Guidelines for the Wetlands Research Program.
PB93-202844/REB 93-01 PC A04/MF A01

**INFORMATION RETRIEVAL**

Environmental Monitoring Methods Index. Version 1.0 Software. User's Manual.
PB92-169648/REB 93-01 PC A06/MF A02

**INFORMATION SERVICES**

Public Access: A How To Guide.
PB93-111029/REB 93-01 PC A09/MF A03

Directory of OAQPS Information Services, May 1993.
PB93-196624/REB 93-01 PC A03/MF A01

**INFORMATION SYSTEMS**

User's Manual for the BLIS BBS.
PB93-122422/REB 93-01 PC A07/MF A02

Information Technology Architecture.
PB93-122430/REB 93-01 PC A03/MF A01

Office of Water Environmental and Program Information Systems Compendium, FY 1992.
PB93-186203/REB 93-01 PC A06/MF A02

Data Management Strategy for the Tampa Bay National Estuary Program: Recommendations and Implementation Plan.
PB93-191633/REB 93-01 PC A09/MF A03

Online Guided Tour of the Cleanup Information Bulletin Board System. (CLU-IN: Cleanup Information Bulletin Board).
PB93-193704/REB 93-01 PC A03/MF A01

Glass Markets Information System: Application Records.
PB93-193902/REB 93-01 PC A21/MF A04

Compliance Data System Quality Assurance Manual, June 1984.
PB93-199339/REB 93-01 PC A10/MF A03

Aeros Manual Series. Volume 5. Aeros Manual of Codes. Update Number 9.
PB93-200798/REB 93-01 PC A10/MF A03

FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC A02/MF A01

EPA's Information Management System for Tracking Reasonable Further Progress.
PB93-212388/REB 93-04 PC A03/MF A01

Manual of Federal Geographic Data Products.
PB93-236503/REB 93-04 PC A17/MF A03

**INFORMATION TRANSFER**

State Air Pollution Control Programs: A Profile Report.
PB93-122364/REB 93-01 PC A03/MF A01

Successful Practices in Title 3 Implementation Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Series 6, Number 8.
PB93-126126/REB 93-01 PC A03/MF A01

Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127801/REB 93-01 PC A06/MF A02

**INJECTION MOLDING**

Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC A02/MF A01

**INJECTION WELLS**

Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
PB93-115806/REB 93-01 PC A05/MF A01

Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells.
PB93-115897/REB 93-01 PC A04/MF A01

Underground Injection Control Program.
PB93-115905/REB 93-01 PC A03/MF A01

Mechanical Integrity Testing and Training Facility, Ada, Oklahoma.
PB93-222859/REB 93-04 PC A02/MF A01

**INNOVATIVE TREATMENT TECHNOLOGIES**

Carver-Greenfield Process (Trade Name) Dehydro-Tech Corporation. Applications Analysis Report.
PB93-101152/REB 93-01 PC A03/MF A01

Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC A03/MF A01

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 1.
PB93-115160/REB 93-01 PC A09/MF A02

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 2.
PB93-115178/REB 93-01 PC A15/MF A03

Babcock and Wilcox Cyclone Furnace Vitrification Technology: Applications Analysis Report.
PB93-122315/REB 93-01 PC A03/MF A01

Superfund Innovative Technology Evaluation Program: Progress and Accomplishments Fiscal Year 1991. A 5th Report to Congress.
PB93-126613/REB 93-01 PC A05/MF A01

Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC A02/MF A01

Synopses of Federal Demonstrations of Innovative Site Remediation Technologies.
PB93-144111/REB 93-01 PC A11/MF A03

Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC A03/MF A01

**INNOVATIVE TREATMENT TECHNOLOGY**

Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC A05/MF A01

**INOCULATION**

Use of Inoculation in Bioremediation.
PB93-121150/REB 93-01 PC A03/MF A01

Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC A02/MF A01

Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.
PB93-212645/REB 93-04 PC A02/MF A01

**INORGANIC COMPOUNDS**

Phase II Fact Sheet: National Primary Drinking Water Regulations for 38 Inorganic and Synthetic Organic Chemicals.
PB93-193787/REB 93-01 PC A03/MF A01

Treatability Studies for the Inorganic Chemicals Manufacturing Point Source Category.
PB93-206480/REB 93-04 PC A11/MF A03

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Inorganic Chemicals Manufacturing Point Source Category, Phase 2 (Proposed).
PB93-206530/REB 93-04 PC A24/MF A04

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC A10/MF A03

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC A15/MF A03

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 2) (for Microcomputers).
PB93-500288/REB 93-01 CP D02

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 3) (for Microcomputers).
PB93-505352/REB 93-04 CP D02

**INORGANIC CONTRACT COMPLIANCE SCREENING SYSTEM**

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 2) (for Microcomputers).
PB93-500288/REB 93-01 CP D02

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 3) (for Microcomputers).
PB93-505352/REB 93-04 CP D02

**INORGANIC NITRATES**

Role of Nitrate in the Acidification of Streams in the Catskill Mountains of New York.
PB93-150167/REB 93-01 PC A03/MF A01

**INORGANIC SALTS**

RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC A02/MF A01

Reregistration Eligibility Document (RED) Zinc Salts.
PB93-101657/REB 93-01 PC A11/MF A03

**INSEA (INCINERATION AT SEA)**

INSEA User's Manual Environmental Performance Model of Incineration at Sea Operations.
PB93-206977/REB 93-04 PC A07/MF A02

**INSECTICIDES**

Development of Genetically Enhanced Baculovirus Pesticides (Chapter 5).
PB93-149235/REB 93-01 PC A02/MF A01

Effects of Culture Parameters on DDT (1,1,1-Trichloro-2,2-BIS(4-Chlorophenyl)Ethane) Biodegradation by 'Phanerochaete chrysosporium'.
PB93-191567/REB 93-01 PC A03/MF A01

Biodegradation of DDT (1,1,1-Trichloro-2,2-Bis(4-Chlorophenyl)Ethane) by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191617/REB 93-01 PC A02/MF A01

Pesticide Fact Sheet: GY-81/Enzone.
PB93-219848/REB 93-04 PC A03/MF A01

**INSECTS**

Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC A02/MF A01

**INSPECTION**

Guidance for Performing Site Inspections under CERCLA.
PB92-963375/REB 93-01 PC A11/MF A03

Sanitary Survey Training: Instructor's Guide for Inspectors of Small Water Systems.
PB93-115871/REB 93-01 PC A05/MF A01

Sanitary Survey Training: Instructor's Guide for Sanitarians of Micronesia.
PB93-115889/REB 93-01 PC A09/MF A02

Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC A03/MF A01

Guide to Effective Inspection Reports for Air Pollution Violations. Stationary Source Compliance Training Series.
PB93-199107/REB 93-01 PC A04/MF A01

Course 2. Model Curriculum for School Building Inspectors (Training Manual).
PB93-780823/REB 93-01 PC$136.00

Model EPA Curriculum for Training Building Inspectors. Student Notebook. Course 2 (Training Manual).
PB93-780831/REB 93-01 PC A17

Guidance on Setting Priorities for NPL Candidate Sites.
PB93-963333/REB 93-01 PC A02/MF A01

**INSPECTIONS**

Guide to Performing Reinspections under the Asbestos Hazard Emergency Response Act (AHERA).
PB93-128007/REB 93-01 PC A06/MF A02

**INSTALLATION MANUALS**

Field Certification Tracking System (FCTS). User's Guide. Version 2.1.
PB93-963415/REB 93-04 PC A04/MF A01

**INSTRUCTIONS**

Toxic Chemical Release Inventory Reporting Form R and Instructions. Revised 1992 Version. Section 313 of the Emergency Planning and Community Right-to-Know Act.
PB93-194140/REB 93-01 PC A06/MF A02

**INSTRUMENTS**

Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
PB93-123131/REB 93-01 PC A02/MF A01

**INSULATION**

Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC A03/MF A01

**INTEGRATED LAKE WATERSHED ACIDIFICATION STUDY MODEL**

Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC A03/MF A01

**INTERAGENCY COOPERATION**

Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.
PB93-212033/REB 93-04 PC A01/MF A01

**INTEREST RATE**

Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis.
PB93-963297/REB 93-04 PC A03/MF A01

**INTERFACE AND EMISSION DISPLAY SYSTEM**

User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC A99/MF A06

**INTERLABORATORY COMPARISONS**

Acid Aerosol Measurement Methods: A Summary of U.S. EPA Intercomparisons.
PB93-221885/REB 93-04 PC A02/MF A01

**INTERLEUKIN-8**
Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
PB93-175677/REB 93-01 PC **A02**/MF **A01**

**INTERMEDIATE FILAMENTS**
Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC **A02**/MF **A01**

**INTERNAL COMBUSTION ENGINES**
Development of Conversion Factors for Heavy-Duty Bus Engines G/BHP-HR to G/Mile.
PB93-232932/REB 93-04 PC **A03**/MF **A01**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEB, Engine: B5254S EGR.
PB93-233815/REB 93-04 PC **A13**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEB, Engine: B230FT.
PB93-233823/REB 93-04 PC **A10**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEA, Engine: B230F.
PB93-233831/REB 93-04 PC **A09**/MF **A02**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAFA, Engine: B230FS4.
PB93-233849/REB 93-04 PC **A11**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEA, Engine: B6304S EGR.
PB93-233856/REB 93-04 PC **A13**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEA, Engine: B5254S.
PB93-233864/REB 93-04 PC **A09**/MF **A02**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3VHGFEK, Engine: B5234T.
PB93-233872/REB 93-04 PC **A17**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGFEA, Engine: B5254S AIR.
PB93-233880/REB 93-04 PC **A15**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEB, Engine: B6304S.
PB93-233898/REB 93-04 PC **A11**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GEEA, Engine: B230FT4.
PB93-233906/REB 93-04 PC **A13**/MF **A03**

**INTERNATIONAL AGREEMENTS**
Expanding Global Forest Management: An 'Easy First' Proposal.
PB93-199669/REB 93-01 PC **A02**/MF **A01**

**INTERNATIONAL TRADE**
Greening of World Trade: A Report to EPA from the Trade and Environment Committee of the National Advisory Council for Environmental Policy and Technology.
PB93-176980/REB 93-01 PC **A11**/MF **A03**

Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC **A03**/MF **A01**

International Trade in Environmental Protection Equipment: An Assessment of Existing Data.
PB93-236206/REB 93-04 PC **A04**/MF **A01**

**INTERSECTIONS**
User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections.
PB93-210250/REB 93-04 PC **A05**/MF **A02**

**INTERSTITIAL WATER**
Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC **A02**/MF **A01**

**INVENTORIES**
Quality of Our Nation's Water: 1990.
PB93-205904/REB 93-04 PC **A03**/MF **A01**

**INVERTEBRATES**
Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC **A02**/MF **A01**

**ION EXCLUSION CHROMATOGRAPHY**
Determination of Carboxylic Acids by Ion-Exclusion Chromatography with Non-Suppressed Conductivity and Optical Detectors.
PB93-181212/REB 93-01 PC **A02**/MF **A01**

**IOWA**
National Priorities List Sites: Iowa, 1992.
PB93-963215/REB 93-01 PC **A05**/MF **A01**

**IRON**
Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03**/MF **A01**

**IRON AND STEEL INDUSTRY**
Summary of Factors Affecting Compliance by Ferrous Foundaries. Volume 1. Text.
PB93-199347/REB 93-01 PC **A05**/MF **A02**

**IRON SALTS**
RED Facts: Iron Salts.
PB93-198703/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED): Iron Salts.
PB93-200780/REB 93-01 PC **A05**/MF **A02**

**IRON SULFATES**
RED Facts: Iron Salts.
PB93-198703/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED): Iron Salts.
PB93-200780/REB 93-01 PC **A05**/MF **A02**

**IRRIGATION**
PR Notice 87-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-141687/REB 93-01 PC **A03**/MF **A01**

Irrigated Wetlands of the Colorado Plateau: Information Synthesis and Habitat Evaluation Method.
PB93-186260/REB 93-01 PC **A05**/MF **A02**

**ISOCYANATES**
Development and Validation of a Source Test Method for 2,4-Toluene Diisocyanate.
PB93-204055/REB 93-01 PC **A03**/MF **A01**

**ISOENZYMES**
Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

**ISOFLUROPHATE**
Strain Comparisons of DFP Neurotoxicity in Rats.
PB93-228609/REB 93-04 PC **A03**/MF **A01**

Acute and Delayed Effects of Diisopropyl Fluorophosphate on Body Temperature, Heart Rate and Motor Activity in the Awake, Unrestrained Rat.
PB93-228971/REB 93-04 PC **A03**/MF **A01**

Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC **A02**/MF **A01**

**ISOFLUROPHOSPHATE**
Relationship between Serum Cholinesterase Activity and the Change in Body Temperature and Motor Activity in the Rat: A Dose-Response Study of Diisopropyl Fluorophosphate.
PB93-175644/REB 93-01 PC **A02**/MF **A01**

**ISOPTERA**
Interim Protocol for Testing the Effects of Microbial Pathogens on Subterranean Termites ('Isoptera: rhinotermitidae').
PB93-124634/REB 93-01 PC **A03**/MF **A01**

**ISOSAFROLE**
Evaluation of the Potential Carcinogenicity of Isosafrole (120-58-1).
PB93-190544/REB 93-01 PC **A03**/MF **A01**

**ISOTHERMS**
Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC **A02**/MF **A01**

Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC **A03**/MF **A01**

**ISOTOPES**
Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.
PB93-234490/REB 93-04 PC **A03**/MF **A01**

**JURISDICTION**
Indian Primacy Procedures Handbook for the Public Water System Supervision (PWSS) Program and the Underground Injection Control (UIC) Program.
PB93-185585/REB 93-01 PC **A09**/MF **A02**

**KANSAS**
National Priorities List Sites: Kansas, 1992.
PB93-963216/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.
PB93-964304/REB 93-04 PC **A03**/MF **A01**

**KENDALL TAU TEST**
Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03**/MF **A01**

**KENTUCKY**
National Priorities List Sites: Kentucky, 1992.
PB93-963217/REB 93-01 PC **A05**/MF **A01**

**KEPONE**
Evaluation of the Potential Carcinogenicity of Kepone Chlordecone (143-50-0).
PB93-190569/REB 93-01 PC **A03**/MF **A01**

**KERATINOCYTES**
Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175651/REB 93-01 PC **A03**/MF **A01**

**KEROSENE**
Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02**/MF **A01**

**KETOCONAZOLE**
Disruption of the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.
PB93-229276/REB 93-04 PC **A03**/MF **A01**

**KINETICS**
Kinetics of Chemical Weathering in B Horizon Spodosol Fraction.
PB93-141539/REB 93-01 PC **A02**/MF **A01**

**KRAFT PAPER**
Model Pollution Prevention Plan for the Kraft Segment of the Pulp and Paper Industry.
PB93-145605/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention for the Kraft Pulp and Paper Industry.
PB93-145613/REB 93-01 PC **A04**/MF **A01**

**KRESS INDIRECT DRY COOLING SYSTEM**
Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 1. Technical Report and Appendices A-F.
PB93-191302/REB 93-01 PC **A13**/MF **A03**

Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 2. Appendices G-N.
PB93-191310/REB 93-01 PC **A15**/MF **A03**

**KYNURENIC ACID**
Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02**/MF **A01**

**LABELS**
PR Notice 87-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-141687/REB 93-01 PC **A03**/MF **A01**

PR Notice 87-4. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-141695/REB 93-01 PC **A03**/MF **A01**

PR Notice 92-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219475/REB 93-04 PC **A01**/MF **A01**

PR Notice 92-4. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219491/REB 93-04 PC **A01**/MF **A01**

PR Notice 92-6. Notice to Manufacturers, Producers, Formulators and Registrants of Pesticides.
PB93-219517/REB 93-04 PC **A01**/MF **A01**

**LABORATORIES**
Manual for the Certification of Laboratories Analyzing Drinking Water. Criteria and Procedures Quality Assurance (Third Edition).
PB93-145688/REB 93-01 PC **A03**/MF **A01**

Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC **A02**/MF **A01**

**LABORATORY ANIMAL SCIENCE**
Behavioral Development Following Daily Episodes of Mother-Infant Separation in the Rat.
PB93-141406/REB 93-01 PC **A01**/MF **A01**

**LABORATORY ANIMALS**
Ammonia Abatement System for Whole-Body Small Animal Inhalation Exposures to Acid Aerosols.
PB93-229516/REB 93-04 PC **A03**/MF **A01**

**LAKE ERIE**
Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

**LAKE ERIE CONSERVATION TILLAGE DEMONSTRATION PROJECT**
Cost Effective Corn and Soybean Production Without Tillage: Fact or Fiction (May 1988).
PB93-157568/REB 93-01 PC **A03**/MF **A01**

**LAKE HURON**
Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

**LAKE JAERNSJOEN**
Sanering av Jaernsjoen i Emaan. Huvudstudie. (Remediation of lake Jaernsjoen in the Emaan river. Main report).
DE93711213/REB 93-01 PC **A04**/MF **A01**

**LAKE MICHIGAN**
Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
PB93-121069/REB 93-01 PC **A02**/MF **A01**

Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

**LAKE MICHIGAN URBAN AIR TOXICS STUDY**
Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
PB93-121069/REB 93-01 PC **A02**/MF **A01**

**LAKE ONTARIO**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
PB93-128015/REB 93-01 PC **A04**/MF **A01**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC **A04**/MF **A01**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
PB93-128031/REB 93-01 PC **A06/MF A02**

**LAKE SKJERVATJERN**

Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC **A03/MF A01**

**LAKES**

Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC **A03/MF A01**

Sanering av Jaemsjoen i Emaan. Huvudstudie. (Remediation of lake Jaemsjoen in the Emaan river. Main report).
DE93711213/REB 93-01 PC **A04/MF A01**

Volunteer Lake Monitoring Program, 1991. Volume 5. East-Central Illinois Region.
PB93-102234/REB 93-01 PC **A04/MF A01**

Volunteer Lake Monitoring Program, 1991. Volume 3. Northeastern Illinois Region.
PB93-113538/REB 93-01 PC **A07/MF A02**

Water Temperature Characteristics of Lakes Subjected to Climate Change.
PB93-135648/REB 93-01 PC **A09/MF A02**

Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC **A02/MF A01**

Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC **A06/MF A02**

Lake and Reservoir Restoration Guidance Manual: Second Edition.
PB93-207926/REB 93-04 PC **A15/MF A03**

Commitment to Watershed Protection: A Review of the Clean Lakes Program.
PB93-210300/REB 93-04 PC **A04/MF A01**

Fish and Fisheries Management in Lakes and Reservoirs. Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-210375/REB 93-04 PC **A15/MF A03**

Volunteer Lake Monitoring Program, 1992. Volume 1: Statewide Summary.
PB93-216927/REB 93-04 PC **A06/MF A02**

Volunteer Lake Monitoring Program, 1992. Volume 2: Northwestern Illinois Region.
PB93-217214/REB 93-04 PC **A04/MF A01**

Volunteer Lake Monitoring Program, 1992. Volume 4. West Central Illinois Region.
PB93-219111/REB 93-04 PC **A04/MF A01**

Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).
PB93-222586/REB 93-04 PC **A01/MF A01**

Volunteer Lake Monitoring Program, 1992. Volume 5. East-Central Illinois Region.
PB93-223162/REB 93-04 PC **A05/MF A01**

Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC **A07/MF A02**

Reactions That Modify Chemistry in Lakes of the National Surface Water Survey.
PB93-229672/REB 93-04 PC **A02/MF A01**

Longterm Response of Lakes to Acidic Deposition.
PB93-229722/REB 93-04 PC **A02/MF A01**

Volunteer Lake Monitoring Program, 1992. Volume 6. Southwestern Illinois Region.
PB93-234126/REB 93-04 PC **A03/MF A01**

Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.
PB93-236436/REB 93-04 PC **A03/MF A01**

**LAMINATING**

Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
PB93-126290/REB 93-01 PC **A02/MF A01**

**LAND COVERINGS**

Opportunities for the Use of Geosynthetics in Waste Management Facilities.
PB93-131670/REB 93-01 PC **A03/MF A01**

**LAND MANAGEMENT**

Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
PB93-128114/REB 93-01 PC **A04/MF A01**

Sustainable Agriculture and the Environment in the Humid Tropics.
PB93-173920/REB 93-01 PC **A99/MF A06**

**LAND POLLUTION**

Metal concentrations of the mor layer.
DE92563061/REB 93-01 PC **A05/MF A01**

Column Vapor Extraction Experiments on Gasoline Contaminated Soil.
PB93-131514/REB 93-01 PC **A03/MF A01**

Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
PB93-141554/REB 93-01 PC **A02/MF A01**

Basic Concepts of Contaminant Sorption.
PB93-146835/REB 93-01 PC **A01/MF A01**

Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02/MF A01**

Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC **A02/MF A01**

Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02/MF A01**

Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-228575/REB 93-04 PC **A03/MF A01**

**LAND POLLUTION ABATEMENT**

Regulatory Applications of Sediment Criteria.
PB93-174472/REB 93-01 PC **A03/MF A01**

**LAND POLLUTION CONTROL**

Technology Assessment of Soil Vapor Extraction and Air Sparging.
PB93-100154/REB 93-01 PC **A04/MF A01**

Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02/MF A01**

UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02/MF A01**

Bioremediation as a Technology: Experiences with the Exxon Valdez Oil Spill.
PB93-121226/REB 93-01 PC **A03/MF A01**

Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC **A02/MF A01**

Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC **A03/MF A01**

Technologies and Options for UST Corrective Actions: Overview of Current Practice.
PB93-145589/REB 93-01 PC **A05/MF A01**

Extraction and Recovery of Lead Species from Soil.
PB93-150142/REB 93-01 PC **A02/MF A01**

Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC **A03/MF A01**

Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03/MF A01**

In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03/MF A01**

Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC **A05/MF A01**

In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC **A12/MF A03**

Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
PB93-216067/REB 93-04 PC **A07/MF A02**

Technology Evaluation Report: Site Program Demonstration Test. Accutech Pneumatic Fracturing Extraction and Hot Gas Injection, Phase 1. Volume 1.
PB93-216596/REB 93-04 PC **A06/MF A02**

Molecular Size Exclusion by Soil Organic Materials Estimated from Their Swelling in Organic Solvents.
PB93-228583/REB 93-04 PC **A02/MF A01**

Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC **A02/MF A01**

Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC **A02/MF A01**

**LAND RECLAMATION**

Town of Edinburg Landfill Reclamation Demonstration Project.
PB93-196976/REB 93-01 PC **A12/MF A03**

**LANDFILLS**

Town of Edinburg Landfill Reclamation Demonstration Project.
PB93-196976/REB 93-01 PC **A12/MF A03**

National List of Asbestos Landfills.
PB93-200517/REB 93-01 PC **A10/MF A03**

Use of Alternative Materials for Daily Cover at Municipal Solid Waste Landfills.
PB93-227197/REB 93-04 PC **A06/MF A02**

Presumptive Remedy for CERCLA Municipal Landfill Sites.
PB93-963339/REB 93-04 PC **A03/MF A01**

**LANDSCAPING**

Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC **A03/MF A01**

Xeriscape Landscaping: Preventing Pollution and Using Resources Efficiently.
PB93-210219/REB 93-04 PC **A03/MF A01**

Adding a Landscape Ecology Perspective to Conservation and Management Planning.
PB93-234516/REB 93-04 PC **A03/MF A01**

**LARVICIDES**

PR Notice 87-4. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-141695/REB 93-01 PC **A03/MF A01**

**LASER INDUCED REACTIONS**

SITE-Emerging Technologies: Laser Induced Photochemical Oxidative Destruction of Toxic Organics in Leachates and Groundwaters.
PB93-131431/REB 93-01 PC **A04/MF A01**

**LASIOCARPINE**

Evaluation of the Potential Carcinogenicity of Lasiocarpine (303-34-4).
PB93-190577/REB 93-01 PC **A03/MF A01**

**LATEX**

Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC **A02/MF A01**

**LAW ENFORCEMENT**

Enforcement Four-Year Strategic Plan: Enhanced Environmental Enforcement for the 1990's.
PB93-129724/REB 93-01 PC **A05/MF A01**

Site Enforcement Tracking System (SETS): PRP Listing by Site for Region 4.
PB93-177178/REB 93-01 PC **A99**

Guide to Effective Inspection Reports for Air Pollution Violations. Stationary Source Compliance Training Series.
PB93-199107/REB 93-01 PC **A04/MF A01**

Environmental Protection Agency Civil Enforcement Docket.
PB93-921700/REB 93-01 Subscription

**LAWSUITS**

Guidance on CERCLA Settlements with De Micromis Waste Contributors.
PB93-963619/REB 93-04 PC **A03/MF A01**

**LEACHATE**

Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
PB93-135671/REB 93-01 PC **A01/MF A01**

**LEACHATES**

Evaluation of Mitigation for Acid Aluminum Leachate from a Highway Fill in Garrett County, Maryland.
PB93-180321/REB 93-01 PC **A04/MF A01**

**LEACHING**

Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC **A04/MF A01**

Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
PB93-185536/REB 93-01 PC **A11/MF A03**

Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
PB93-217784/REB 93-04 PC **A07/MF A02**

**LEAD**

Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194181/REB 93-01 PC **A03/MF A01**

**LEAD ACID BATTERIES**

Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
PB93-121333/REB 93-01 PC **A03/MF A01**

**LEAD AND COPPER RULE**

Lead and Copper Rule Guidance Manual. Volume 2. Corrosion Control Treatment.
PB93-101533/REB 93-01 PC **A10/MF A03**

Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03/MF A01**

Corrosion Control Principles and Strategies for Reducing Lead and Copper in Drinking Water Systems.
PB93-199420/REB 93-01 PC **A03/MF A01**

**LEAD INORGANIC COMPOUNDS**

Extraction and Recovery of Lead Species from Soil.
PB93-150142/REB 93-01 PC **A02/MF A01**

**LEAD (METAL)**

Lead in Drinking Water Regulation: Public Education Guidance (Guidance for Conducting a Community-Based Public Education Program on Lead in Drinking Water).
PB93-101079/REB 93-01 PC **A04/MF A01**

Lead and Copper Rule Guidance Manual. Volume 2. Corrosion Control Treatment.
PB93-101533/REB 93-01 PC **A10/MF A03**

Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC **A03/MF A01**

Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
PB93-121127/REB 93-01 PC **A03/MF A01**

Extraction and Recovery of Lead Species from Soil.
PB93-150142/REB 93-01 PC **A02/MF A01**

Development of a Field Test Method for the Determination of Lead in Paint and Paint-Contaminated Dust and Soil.
PB93-173128/REB 93-01 PC **A03/MF A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 50,001 to 100,000 Persons.
PB93-174514/REB 93-01 PC **A04/MF A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 101 to 500 Persons.
PB93-174522/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 501 to 3,300 Persons.
PB93-174530/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 3,301 to 10,000 Persons.
PB93-174548/REB 93-01 PC **A03**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 10,001 to 50,000 Persons.
PB93-174555/REB 93-01 PC **A04**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving > 100,000 Persons.
PB93-174563/REB 93-01 PC **A04**/MF **A01**

Fact Sheet: National Primary Drinking Water Regulations for Lead and Copper.
PB93-193746/REB 93-01 PC **A03**/MF **A01**

Medium Systems That Failed to Conduct Required Initial Lead Tap Monitoring and Reporting.
PB93-196632/REB 93-01 PC **A03**/MF **A01**

X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.
PB93-203156/REB 93-04 PC **A03**/MF **A01**

Outreach to Manufacturers of Lead Test Kits.
PB93-216570/REB 93-04 PC **A03**/MF **A01**

Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.
PB93-216604/REB 93-04 PC **A06**/MF **A02**

Workshop Report: Identification of Performance Parameters for Portable X-ray Fluorescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.
PB93-216612/REB 93-04 PC **A05**/MF **A02**

Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.
PB93-221653/REB 93-04 PC **A07**/MF **A02**

Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC **A02**/MF **A01**

Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.
PB93-229177/REB 93-04 PC **A03**/MF **A01**

**LEAD MOUNTAIN**

Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC **A04**/MF **A01**

**LEAK TESTING**

Mechanical Integrity Testing and Training Facility, Ada, Oklahoma.
PB93-222859/REB 93-04 PC **A02**/MF **A01**

**LEAKAGE**

LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC **A05**/MF **A01**

Location of Leaks in Pressurized Petroleum Pipelines by Means of Passive-Acoustic Sensing Methods.
PB93-185783/REB 93-01 PC **A03**/MF **A01**

Benzene Equipment Leak Inspection Manual.
PB93-199123/REB 93-01 PC **A06**/MF **A02**

Screening Methodology for Assessing Leaking UST Sites and Clean Up Technologies.
PB93-199404/REB 93-01 PC **A03**/MF **A01**

Protocol for Equipment Leak Emission Estimates.
PB93-229219/REB 93-04 PC **A12**/MF **A03**

**LEAKAGE DETECTION COLLECTION AND REMOVAL SYSTEMS**

LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC **A05**/MF **A01**

**LEATHER**

Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
PB93-123115/REB 93-01 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Leather Tanning and Finishing.
PB93-206076/REB 93-04 PC **A03**/MF **A01**

**LEATHER INDUSTRY**

Supplementary Development Document for Effluent Limitations Guidelines for the Leather Tanning and Finishing Point Source Category.
PB93-207934/REB 93-04 PC **A06**/MF **A02**

**LEGISLATION**

Report to Congress on Implementation of Section 403(c) of the Federal Water Pollution Control Act.
PB93-207488/REB 93-04 PC **A07**/MF **A02**

**LEPC (LOCAL EMERGENCY RESPONSE COMMITTEES)**

Criteria for Review of Hazardous Materials Emergency Plans.
PB93-207348/REB 93-04 PC **A03**/MF **A01**

**LETHAL GENES**

Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03**/MF **A01**

**LICENSES**

General Information on Applying for Registration of Pesticides in the United States.
PB93-115939/REB 93-01 PC **A08**/MF **A02**

U.S. EPA NPDES: Basic Permit Writers' Course. Workbook.
PB93-185619/REB 93-01 PC **A17**/MF **A03**

Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
PB93-212462/REB 93-04 PC **A03**/MF **A01**

Impacts of Section 404 Permits Requiring Compensatory Mitigation on Wetlands in California (USA).
PB93-212512/REB 93-04 PC **A03**/MF **A01**

RCRA Public Involvement Manual.
PB93-231066/REB 93-04 PC **A11**/MF **A03**

**LICHENS**

Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC **A04**/MF **A01**

Collection and Chemical Analysis of Lichens for Biomonitoring.
PB93-149862/REB 93-01 PC **A03**/MF **A01**

**LIFE-CYCLE ASSESSMENT**

Life-Cycle Assessment: Inventory Guidelines and Principles.
PB93-139681/REB 93-01 PC **A07**/MF **A02**

**LIFE-CYCLE DESIGN**

Life Cycle Design Guidance Manual. Environmental Requirements and the Product System.
PB93-164507/REB 93-04 PC **A09**/MF **A03**

**LIFE CYCLES**

Synthesis of Basic Life Histories of Tampa Bay Species.
PB93-196012/REB 93-01 PC **A12**/MF **A03**

**LIFE (DURABILITY)**

Life Cycle Analysis (Video Conference Paper).
PB93-194207/REB 93-01 PC **A02**/MF **A01**

**LIGHT DUTY VEHICLES**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEB, Engine: B5254S EGR.
PB93-233815/REB 93-04 PC **A13**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEB, Engine: B230FT.
PB93-233823/REB 93-04 PC **A10**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEA, Engine: B230F.
PB93-233831/REB 93-04 PC **A09**/MF **A02**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAFA, Engine: B230FS4.
PB93-233849/REB 93-04 PC **A11**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEA, Engine: B6304S EGR.
PB93-233856/REB 93-04 PC **A13**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEA, Engine: B5254S.
PB93-233864/REB 93-04 PC **A09**/MF **A02**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3VHGFEK, Engine: B5234T.
PB93-233872/REB 93-04 PC **A17**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGFEA, Engine: B5254S AIR.
PB93-233880/REB 93-04 PC **A15**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEB, Engine: B6304S.
PB93-233898/REB 93-04 PC **A11**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GEEA, Engine: B230FT4.
PB93-233906/REB 93-04 PC **A13**/MF **A03**

**LIGNIN**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium': Involvement of the Lignin Degrading System.
PB93-191583/REB 93-01 PC **A02**/MF **A01**

Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC **A02**/MF **A01**

Oxidative Degradation of Phenanthrene by the Ligninolytic Fungus 'Phanerochaete chrysosposium'.
PB93-199511/REB 93-01 PC **A02**/MF **A01**

Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC **A02**/MF **A01**

**LIGNINASES**

Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC **A02**/MF **A01**

**LIMITING FACTORS**

Physiological Limitations on Phytoplankton Productivity in the Ocean.
PB93-204923/REB 93-01 PC **A02**/MF **A01**

**LIMNOLOGY**

Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.
PB93-211985/REB 93-04 PC **A21**/MF **A04**

**LININGS**

Landfill Containment and Cover Systems.
PB93-106698/REB 93-01 PC **A03**/MF **A01**

FLEX: An Expert System for Reviewing the Chemical Resistance of Flexible Membrane Liners for Waste Management.
PB93-106706/REB 93-01 PC **A03**/MF **A01**

Opportunities for the Use of Geosynthetics in Waste Management Facilities.
PB93-131670/REB 93-01 PC **A03**/MF **A01**

Hydraulic Conductivity of Three Geosynthetic Clay Liners.
PB93-131746/REB 93-01 PC **A02**/MF **A01**

User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC **A02**/MF **A01**

Stress Cracking Behavior of HDPE Geomembranes and Its Prevention.
PB93-196616/REB 93-01 PC **A06**/MF **A02**

Flexible Membrane Liner Advisory Expert System (FLEX) (for Microcomputers) (Version 3.0).
PB93-502631/REB 93-01 CP **D02**

**LIPIDS**

Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC **A03**/MF **A01**

**LIQUID WASTES**

Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC **A04**/MF **A01**

**LISTINGS**

National List of Asbestos Landfills.
PB93-200517/REB 93-01 PC **A10**/MF **A03**

Status of Pesticides in Reregistration and Special Review (Rainbow Report), June 1993.
PB93-230829/REB 93-04 PC **A17**/MF **A03**

**LITTLE ROCK LAKE**

Recent Sulfur Enrichment in the Sediments of Little Rock Lake, Wisconsin.
PB93-135721/REB 93-01 PC **A03**/MF **A01**

**LIVER**

Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02**/MF **A01**

Analysis of DNA Strand Breaks Induced in Rodent Liver In vivo, Hepatocytes in Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC **A03**/MF **A01**

Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03**/MF **A01**

**LIVESTOCK**

Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

**LIVING RESOURCES SUBCOMMITTEE**

Living Resources Subcommittee: Annual Summary.
PB93-112506/REB 93-01 PC **A03**/MF **A01**

**LOBSTERS**

Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC **A03**/MF **A01**

**LOCAL GOVERNMENT**

Cost of Providing Government Services to Alternative Residential Patterns.
PB93-207728/REB 93-04 PC **A09**/MF **A02**

**LONG ISLAND SOUND**

Measurement of Sediment Resuspension Rates in Long Island Sound.
PB93-222115/REB 93-04 PC **A01**/MF **A01**

**LONG RANGE PLANNING**

Future Context of Sustainable Agriculture: Planning for Uncertainty.
PB93-191518/REB 93-01 PC **A03**/MF **A01**

**LONG TERM EFFECTS**

Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

**LOS ANGELES (CALIFORNIA)**

Dynamometer Testing of On-Road Vehicles from the Los Angeles in-Use Emissions Study.
PB93-222297/REB 93-04 PC **A03**/MF **A01**

**LOSS FUNCTION**

Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC **A02**/MF **A01**

**LOSSES**
Inventory of Methane Losses from the Natural Gas Industry.
PB93-131720/REB 93-01 PC **A03**/MF **A01**

**LOUISIANA**
Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
PB93-229714/REB 93-04 PC **A02**/MF **A01**

National Priorities List Sites: Louisiana, 1992.
PB93-963218/REB 93-01 PC **A04**/MF **A01**

**LOW-LEVEL RADIOACTIVE WASTES**
Transport of Low-Level Radioactive Soil at Deep-Ocean Disposal Site.
PB93-199487/REB 93-01 PC **A03**/MF **A01**

Low-Level and NARM Radioactive Wastes. Draft Environmental Impact Statement for Proposed Rules. Volume 1. Background Information Document.
PB93-200673/REB 93-01 PC **A99**/MF **A06**

Identification of Cost Factors for the Ocean Disposal Alternative for Low-Level Radioactive Waste.
PB93-203917/REB 93-04 PC **A03**/MF **A01**

**LUNG**
Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC **A02**/MF **A01**

Extrapolation Modeling of Aerosol Deposition in Human and Laboratory Rat Lungs.
PB93-181097/REB 93-01 PC **A03**/MF **A01**

Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-226864/REB 93-04 PC **A02**/MF **A01**

Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
PB93-236321/REB 93-04 PC **A03**/MF **A01**

Deposition of Sulfate Acid Aerosols in the Developing Human Lung.
PB93-236388/REB 93-04 PC **A03**/MF **A01**

Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC **A02**/MF **A01**

**LUNG NEOPLASMS**
Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders.
PB93-134419/REB 93-01 PC**$29.00**/MF **A04**

**LYSINE**
Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.'
PB93-236479/REB 93-04 PC **A03**/MF **A01**

**MACHINE PARTS**
Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC **A02**/MF **A01**

**MACROPHAGES**
Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175551/REB 93-01 PC **A03**/MF **A01**

**MACT (MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY)**
Guidelines for MACT Determinations under Section 112(j) (Proposal).
PB93-183283/REB 93-04 PC **A08**/MF **A02**

**MAGIC MODEL**
MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC **A02**/MF **A01**

**MAGNETIC FIELD METERS**
Laboratory Testing of Commercially Available Power Frequency Magnetic Field Survey Meters.
PB93-131506/REB 93-01 PC **A15**/MF **A03**

**MAGNETIC FIELDS**
Measurements of electric and magnetic fields in the Waianae, Hawaii area.
DE92019691/REB 93-01 PC **A03**/MF **A01**

Review of the Literature on Potential Reproductive and Developmental Toxicity of Electric and Magnetic Fields.
PB93-141307/REB 93-01 PC **A03**/MF **A01**

Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.
PB93-236305/REB 93-04 PC **A03**/MF **A01**

Evidence for Direct Effect of Magnetic Fields on Neurite Outgrowth.
PB93-236669/REB 93-04 PC **A02**/MF **A01**

**MAGNETIC MEDIA**
Toxic Chemical Release Inventory Magnetic Media Submission Instructions. Section 313 of the Emergency Planning and Community Right-to-Know Act (Revised 1990 Version).
PB93-116127/REB 93-01 PC **A03**/MF **A01**

**MAGNETIC TAPES**
Resource Conservation and Recovery Information System (RCRIS) Extract Tapes.
PB93-592570/REB 93-04 SubscriptionPC**$2540.00**

**MAINE**
Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC **A02**/MF **A01**

Institutional Solutions to Drinking Water Problems: Maine Case Studies.
PB93-180834/REB 93-01 PC **A03**/MF **A01**

National Priorities List Sites: Maine, 1992.
PB93-963219/REB 93-01 PC **A04**/MF **A01**

**MALE INFERTILITY**
Gonadal Effects of Fetal Exposure to the Azo Dye Congo Red in Mice: Infertility in Female but Not Male Offspring.
PB93-181071/REB 93-01 PC **A03**/MF **A01**

**MAN ENVIRONMENT INTERACTIONS**
Framework for Ecological Risk Assessment.
PB93-102192/REB 93-01 PC **A04**/MF **A01**

Report on the Ecological Risk Assessment Guidelines Strategic Planning Workshop. Held in Miami, Florida on April 30-May 2, 1991.
PB93-102200/REB 93-01 PC **A05**/MF **A01**

Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC **A03**/MF **A01**

Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.
PB93-234540/REB 93-04 PC **A04**/MF **A01**

**MANAGEMENT**
Proceedings of the EPA's Contaminated Sediment Management Strategy Forums.
PB93-126399/REB 93-01 PC **A10**/MF **A03**

**MANAGEMENT PLANNING**
Waterfowl Workgroup Living Resources Subcommittee: Annual Progress Report.
PB93-112704/REB 93-01 PC **A03**/MF **A01**

Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans.
PB93-122182/REB 93-01 PC **A03**/MF **A01**

Chesapeake Bay American Eel Fishery Management Plan. Agreement Commitment Report 1991.
PB93-226017/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans, December 1992.
PB93-226058/REB 93-04 PC **A04**/MF **A01**

Course 3. Model Curriculum for School Asbestos Management Planners (Training Manual).
PB93-780872/REB 93-01 PC**$81.00**

Model EPA Curriculum for Training Management Planners. Student Notebook. Course 3 (Training Manual).
PB93-780880/REB 93-01 PC **A07**

Model EPA Curriculum for Training Management Planners. Instructor's Course Syllabus. Course 3 (Training Manual).
PB93-780898/REB 93-01 PC **A04**

**MANUALS**
Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC **A22**/MF **A04**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

Manual for the Certification of Laboratories Analyzing Drinking Water. Criteria and Procedures Quality Assurance (Third Edition).
PB93-145688/REB 93-01 PC **A03**/MF **A01**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03**/MF **A01**

Training Manual for NPDES Permit Writers.
PB93-217644/REB 93-04 PC **A09**/MF **A02**

Guidelines for Water Use.
PB93-222180/REB 93-04 PC **A12**/MF **A03**

Medical Waste Incinerator Operator Training Program: Course Handbook.
PB93-781979/REB 93-04 PC**$56.00**/MF**$22.00**

**MANUFACTURING**
Life Cycle Analysis (Video Conference Paper).
PB93-194207/REB 93-01 PC **A02**/MF **A01**

**MANURE**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
PB93-128031/REB 93-01 PC **A06**/MF **A02**

**MANURES**
Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

**MAPPING**
Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC **A03**/MF **A01**

**MAPS**
Comparison of Systematic and Random Sampling for Estimating the Accuracy of Maps Generated from Remotely Sensed Data.
PB93-191443/REB 93-01 PC **A02**/MF **A01**

**MARINE ANIMALS**
Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC **A06**/MF **A02**

Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC **A03**/MF **A01**

**MARINE BIOLOGY**
Waterfowl Workgroup Living Resources Subcommittee: Annual Progress Report.
PB93-112704/REB 93-01 PC **A03**/MF **A01**

Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
PB93-121176/REB 93-01 PC **A02**/MF **A01**

Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC **A23**/MF **A04**

Performance of an Aquatic Multispecies System in Evaluating the Effects of a Model Microbial Pest Control Agent on Nontarget Organisms.
PB93-131803/REB 93-01 PC **A03**/MF **A01**

Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03**/MF **A01**

Oligohaline Areas in Tampa Bay Tributaries: Spatial Extent and Species Lists.
PB93-191179/REB 93-01 PC **A03**/MF **A01**

Observations on the State of Marine Disease Studies (Chapter 18).
PB93-204170/REB 93-01 PC **A03**/MF **A01**

Physiological Limitations on Phytoplankton Productivity in the Ocean.
PB93-204923/REB 93-01 PC **A02**/MF **A01**

Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03**/MF **A01**

Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02**/MF **A01**

Characterization of Reference Artemia III for Marine Toxicological Studies.
PB93-212595/REB 93-04 PC **A03**/MF **A01**

Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC **A03**/MF **A01**

Cholinesterases of Aquatic Animals.
PB93-236222/REB 93-04 PC **A03**/MF **A01**

Long-Term Survival and Plasmid Maintenance of 'Escherichia coli' in Marine Microcosms.
PB93-236230/REB 93-04 PC **A02**/MF **A01**

**MARINE DISPOSAL**
Transport of Low-Level Radioactive Soil at Deep-Ocean Disposal Site.
PB93-199487/REB 93-01 PC **A03**/MF **A01**

Identification of Cost Factors for the Ocean Disposal Alternative for Low-Level Radioactive Waste.
PB93-203917/REB 93-04 PC **A03**/MF **A01**

Proposed Revisions to Ocean Dumping Criteria: Final Environmental Impact Statement. Volume 2.
PB93-206548/REB 93-04 PC **A99**/MF **A06**

Proceeding of the Workshop on the Sea-Surface Microlayer in Relation to Ocean Disposal. Held in Airlie, Virginia on December 18-19, 1985.
PB93-206993/REB 93-04 PC **A06**/MF **A02**

Monitoring, Research, and Surveillance Plan for the 106-Mile Deepwater Municipal Sludge Dump Site and Environs.
PB93-207744/REB 93-04 PC **A07**/MF **A02**

Proceedings of the Ocean Dumping Workshop 106-Mile Site. Held in Ocean City, NJ., on March 28-30, 1989.
PB93-208072/REB 93-04 PC **A07**/MF **A02**

Turning the Tide on Trash: A Learning Guide on Marine Debris.
PB93-216992/REB 93-04 PC **A05**/MF **A01**

Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02**/MF **A01**

Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
PB93-229706/REB 93-04 PC **A02**/MF **A01**

Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
PB93-229714/REB 93-04 PC **A02**/MF **A01**

**MARINE ENGINES**
Commercial Marine Vessel Contributions to Emission Inventories.
PB93-173961/REB 93-01 PC **A07**/MF **A02**

Marine Industry Characterization Report.
PB93-216174/REB 93-04 PC **A10**/MF **A03**

**MARINE ENVIRONMENT**
Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

**MARINE ENVIRONMENTS**
Marine and Estuarine Protection: Programs and Activities.
PB93-179000/REB 93-01 PC **A03**/MF **A01**

Compendium of Methods for Marine and Estuarine Environmental Studies.
PB93-202570/REB 93-01 PC **A10**/MF **A03**

Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).
PB93-221836/REB 93-04 PC **A03**/MF **A01**

Global Flux of Methane from Shallow Submarine Sediments.
PB93-222388/REB 93-04 PC **A03**/MF **A01**

**MARINE FISHES**
Effects of 'Beauveria bassiana' on Embryos of the Inland Silverside Fish ('Menidia beryllina').
PB93-131811/REB 93-01 PC **A02**/MF **A01**

Distribution of Selected Fish Species in Tampa Bay.
PB93-191229/REB 93-01 PC **A04**/MF **A01**

Importance of Fish Diseases: An Overview.
PB93-204113/REB 93-01 PC **A03**/MF **A01**

Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16**/MF **A03**

Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
PB93-207561/REB 93-04 PC **A03**/MF **A01**

Proceedings and Summary of the Workshop on Finfish as Indicators of Toxic Contamination. Held in Airlie, Virginia on July 27-28, 1986.
PB93-208320/REB 93-04 PC **A06**/MF **A02**

Chesapeake Bay Atlantic Croaker and Spot Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226629/REB 93-04 PC **A03**/MF **A01**

Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03**/MF **A01**

Spawning Periodicity of the Inland Silverside, 'Menidia beryllina' (Pisces: Atherinidae) in the Laboratory: Relationship to Lunar Cycles.
PB93-236297/REB 93-04 PC **A02**/MF **A01**

**MARINE POLLUTION**
Public Health Action Agenda for the Gulf of Mexico: Frame Work for Action.
PB93-223428/REB 93-04 PC **A06**/MF **A02**

Marine Debris Action Agenda for the Gulf of Mexico: Framework for Action.
PB93-223469/REB 93-04 PC **A08**/MF **A02**

**MARINE TRANSPORTATION**
VOC/HAP Emissions from Marine Vessel Loading Operations. Technical Support Document for Proposed Standards.
PB93-193910/REB 93-01 PC **A13**/MF **A03**

**MARKERS**
Decision Model for Biomarkers of Exposure.
PB93-106995/REB 93-01 PC **A03**/MF **A01**

**MARKET ANALYSIS**
Markets for Recovered Aluminum.
PB93-170132/REB 93-01 PC **A03**/MF **A01**

**MARKET RESEARCH**
Markets for Recovered Glass.
PB93-169845/REB 93-01 PC **A03**/MF **A01**

**MARKETING**
Evaluation of Environmental Marketing Terms in the United States.
PB93-175784/REB 93-01 PC **A10**/MF **A03**

**MARKETS**
Assessing the Environmental Consumer Market.
PB93-116028/REB 93-01 PC **A03**/MF **A01**

**MARSHES**
Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC **A01**/MF **A01**

Establishing Quantitative Performance Criteria for Wetland Restoration.
PB93-236610/REB 93-04 PC **A01**/MF **A01**

**MARYLAND**
Implementation Plan for Removing Impediments to Migratory Fishes in the Chesapeake Bay Watershed (January-December 1991).
PB93-116572/REB 93-01 PC **A03**/MF **A01**

National Priorities List Sites: Maryland, 1992.
PB93-963220/REB 93-01 PC **A04**/MF **A01**

**MASS BALANCE**
Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC **A02**/MF **A01**

Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC **A03**/MF **A01**

**MASSACHUSETTS**
National Priorities List Sites: Massachusetts, 1992.
PB93-963221/REB 93-01 PC **A06**/MF **A02**

**MASSACHUSETTS BAY**
Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02**/MF **A01**

Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
PB93-229706/REB 93-04 PC **A02**/MF **A01**

**MATERIALS HANDLING**
Guide to the Asbestos NESHAP as Revised November 1990.
PB93-199362/REB 93-01 PC **A04**/MF **A01**

**MATERIALS RECOVERY**
Glass Markets Information System: Application Records.
PB93-193902/REB 93-01 PC **A21**/MF **A04**

Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.
PB93-212801/REB 93-04 PC **A03**/MF **A01**

Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
PB93-221638/REB 93-04 PC **A04**/MF **A01**

**MATERIALS TESTS**
FLEX: An Expert System for Reviewing the Chemical Resistance of Flexible Membrane Liners for Waste Management.
PB93-106706/REB 93-01 PC **A03**/MF **A01**

**MATERNAL AGE**
Maternal Age Effect: The Enigma of Down Syndrome and Other Trisomic Conditions.
PB93-194421/REB 93-01 PC **A03**/MF **A01**

**MATERNAL DEPRIVATION**
Behavioral Development Following Daily Episodes of Mother-Infant Separation in the Rat.
PB93-141406/REB 93-01 PC **A01**/MF **A01**

**MATERNAL SEPARATION**
Repeated Maternal Separation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC **A03**/MF **A01**

**MATHEMATICAL MODELING**
Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC **A02**/MF **A01**

**MATHEMATICAL MODELS**
Superfund Accelerated Cleanup Model (SACM). Volume 1, Number 4, November 1992.
PB92-963287/REB 93-01 PC **A01**/MF **A01**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

Evaluation of CO Intersection Modeling Techniques Using a New York City Database.
PB93-105559/REB 93-01 PC **A10**/MF **A03**

Validation of Source and Sink Models: Problems and Possible Solutions.
PB93-106789/REB 93-01 PC **A03**/MF **A01**

Modelling Epicodic Acidification of Surface Waters: The State of Science.
PB93-106920/REB 93-01 PC **A03**/MF **A01**

Mathematical Model of Plant Uptake and Translocation of Organic Chemicals: Development of the Model.
PB93-106938/REB 93-01 PC **A02**/MF **A01**

Mathematical Model of Plant Uptake and Translocations of Organic Chemicals: Application to Experiments.
PB93-106946/REB 93-01 PC **A03**/MF **A01**

Modeling of the Fast Organic Emissions from a Wood-Finishing Product: Floor Wax.
PB93-107027/REB 93-01 PC **A02**/MF **A01**

Model Calculations of the Annual Atmospheric Deposition of Toxic Metals to Lake Michigan.
PB93-120905/REB 93-01 PC **A03**/MF **A01**

Atmospheric Deposition of Toxic Metals to Lake Michigan: Preliminary Annual Model Calculations.
PB93-120954/REB 93-01 PC **E02**/MF **A01**

General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC **A04**/MF **A01**

Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC **A04**/MF **A01**

Simulation of Raw Water and Treatment Parameters in Support of the Disinfection By-Products Regulatory Impact Analysis.
PB93-134401/REB 93-01 PC **A03**/MF **A01**

Subjective-Probability-Based Scenarios for Uncertain Input Parameters: Stratospheric Ozone Depletion, December 1990.
PB93-143741/REB 93-01 PC **A03**/MF **A01**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03**/MF **A01**

Methods for Analyzing Extreme Events Under Climate Change.
PB93-146827/REB 93-01 PC **A03**/MF **A01**

Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC **A03**/MF **A01**

Quality Assurance and Quality Control in the Development and Application of Ground-Water Models.
PB93-178226/REB 93-01 PC **A08**/MF **A02**

Sorption and Reemission of Formaldehyde by Gypsum Wallboard.
PB93-180917/REB 93-01 PC **A03**/MF **A01**

Air/Superfund National Technical Guidance Study Series. Models for Estimating Air Emission Rates from Superfund Remedial Actions.
PB93-186807/REB 93-01 PC **A08**/MF **A02**

Issues and Approaches to Improving Transportation Modeling for Air Quality Analysis.
PB93-194066/REB 93-01 PC **A05**/MF **A02**

Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03**/MF **A01**

Compilation of Ground-Water Models.
PB93-209401/REB 93-04 PC **A13**/MF **A03**

Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.
PB93-212363/REB 93-04 PC **A02**/MF **A01**

Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC **A03**/MF **A01**

Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03**/MF **A01**

Guideline on Air Quality Models (Revised): Appendix W of 40 CFR Part 51 (Supplement B).
PB93-213213/REB 93-04 PC **A03**/MF **A01**

Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
PB93-217784/REB 93-04 PC **A07**/MF **A02**

Plume Definition in Regions of Strong Bending.
PB93-221844/REB 93-04 PC **A02**/MF **A01**

Armitage-Doll Two-Stage Model: Implications and Extension.
PB93-222842/REB 93-04 PC **A02**/MF **A01**

Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC **A06**/MF **A02**

Comparison of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model and Wind Tunnel Data.
PB93-226751/REB 93-04 PC **A08**/MF **A02**

Sensitivity Analysis of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model.
PB93-226769/REB 93-04 PC **A05**/MF **A01**

Development and Evaluation of a Revised Area Source Algorithm for the Industrial Source Complex Long Term Model.
PB93-226777/REB 93-04 PC **A06**/MF **A02**

Tagged Species Engineering Model (TSEM).
PB93-229417/REB 93-04 PC **A03**/MF **A01**

Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone. Volume 2. Emission Inventory Requirements for Photochemical Air Quality Simulation Models (Revised).
PB93-234375/REB 93-04 PC **A11**/MF **A03**

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

New Mathematical Model of Pollutant Dispersion Near a Building.
PB93-236529/REB 93-04 PC **A03**/MF **A01**

**MAUMEE RIVER BASIN**
Maumee River Basin Pilot Watershed Study. Volume 5. Continued Watershed Monitoring (1981-1985) and Rainulator Study - Detailed Data (1986).
PB93-128098/REB 93-01 PC **A10**/MF **A03**

**MCINTOSH (ALABAMA)**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Ciba-Geigy Corporation, McIntosh, Alabama).
PB92-963630/REB 93-01 PC **A02**/MF **A01**

**MEASUREMENT**
Guidelines for Mercury Measurements from Stationary Sources: Quality Assurance Handbook. Section 3.19. Volume 3.
PB93-131209/REB 93-01 PC **A08**/MF **A02**

Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

**MEDFORD AIR BASIN**
Stagnation Diffusion Observed in a Deeply Pooling Valley during STAGMAP.
PB93-120897/REB 93-01 PC **A02**/MF **A01**

**MEDICAL WASTES**
Seminar Publication. Medical and Institutional Waste Incineration: Regulations, Management, Technology, Emissions, and Operations.
PB93-116283/REB 93-01 PC **A03**/MF **A01**

Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

Medical Waste Incinerator Operator Training Program: Course Handbook.
PB93-781979/REB 93-04 · PC**$56.00**/MF**$22.00**

Effect of OSHA's Bloodborne Pathogens Standard on Hazardous Waste Cleanup Activities.
PB93-963419/REB 93-04 PC **A02**/MF **A01**

**MEETINGS**
Radioecology in Nordic limnic systems - present knowledge and future prospects.
DE92643948/REB 93-01 PC **A04**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Pollution Prevention Workshop.
PB92-228543/REB 93-01 PC **A12**/MF **A03**

Superfund: Report of the EPA Superfund Revitalization Public Meeting Held on June 24, 1992. Volumes 1 and 2.
PB92-963268/REB 93-01 PC **A06**/MF **A02**

Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
PB93-101160/REB 93-01 PC **A06**/MF **A02**

Report on the Ecological Risk Assessment Guidelines Strategic Planning Workshop. Held in Miami, Florida on April 30-May 2, 1991.
PB93-102200/REB 93-01 PC **A05**/MF **A01**

Technical Issues on Long-Term Performance of Solidified/Stabilized Waste Forms.
PB93-106680/REB 93-01 PC **A03**/MF **A01**

Use of Ecoregions in Biological Monitoring.
PB93-106730/REB 93-01 PC **A03**/MF **A01**

Use of Surface-Coating-Free Materials for Reduction of Volatile Organic Compound Emissions from Coating Operations.
PB93-106839/REB 93-01 PC **A03**/MF **A01**

Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107043/REB 93-01 PC **A02**/MF **A01**

Biologic Markers of Air-Pollution Stress and Damage in Forests.
PB93-110187/REB 93-01 PC **A17**/MF **A03**

Proceedings of the EPA/A and WMA International Symposium (1992), Measurement of Toxic and Related Air Pollutants. Held in Durham, North Carolina on May 4-9, 1992.
PB93-121093/REB 93-01 PC **A01**/MF **A01**

Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Symposium on Soil Venting. Held in Houston, Texas on April 29-May 1, 1991.
PB93-122323/REB 93-01 PC **A15**/MF **A03**

Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 1.
PB93-122331/REB 93-01 PC **A99**/MF **A06**

Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 2.
PB93-122349/REB 93-01 PC **A99**/MF **A06**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 1. Sessions P, 0, 1A, 2A, 3A, 4A, 6A, 6B, 9C and 10B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124170/REB 93-01 PC **A20**/MF **A04**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 2. Sessions 1B, 2B, 3B, 4B, 7A, 7B, 8A, 8B and 9B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124188/REB 93-01 PC **A21**/MF **A04**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 3. Sessions 1C, 2C, 3C, 4C, 6C, 7C, 8C, 9A, and 10A/C. Held in Tampa, Florida on April 16-19, 1991.
PB93-124196/REB 93-01 PC **A21**/MF **A04**

Proceedings of National Integrated Pest Management Forum. Held in Arlington, VA., on June 17-19, 1992.
PB93-124675/REB 93-01 PC **A07**/MF **A02**

Proceedings of the EPA's Contaminated Sediment Management Strategy Forums.
PB93-126399/REB 93-01 PC **A10**/MF **A03**

Proceedings: Interagency Symposium (2nd) on Stabilization of Soils and Other Materials. Held in Metairie, Louisiana on November 2-5, 1992.
PB93-131977/REB 93-01 PC **A17**/MF **A04**

Proceedings of the 1989 Midwest Pollution Control Biologists Meeting. Held in Chicago, Illinois on February 14-17, 1989.
PB93-143691/REB 93-01 PC **A08**/MF **A02**

Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC **A07**/MF **A02**

Proceedings of the National Conference (3rd): Water Quality Standards for the 21st Century. Held in Las Vegas, Nevada on August 31-September 3, 1992.
PB93-144210/REB 93-01 PC **A16**/MF **A03**

Proceedings of the Midwest Pollution Control Biologists Meeting, 1991. Environmental Indicators: Measurement and Assessment Endpoints. Held in Lincolnwood, Illinois on March 19-22, 1991.
PB93-145712/REB 93-01 PC **A06**/MF **A02**

Report of the Neurotoxicity Risk Assessment Guidelines Peer Review Workshop. Held in Washington, DC. on June 2-3, 1992.
PB93-146918/REB 93-01 PC **A08**/MF **A02**

Highlights of the EPA Innovative Regulatory Strategies Workshop: Market-Based Incentives and other Innovations for Air Pollution Control. Summary of Workshop Discussion Sessions. Held in Washington, DC. on January 15-17, 1992.
PB93-150290/REB 93-01 PC **A05**/MF **A01**

Proceedings of the Annual EPA Conference on Analysis of Pollutants in the Environment (15th). Held in Norfolk, Virginia on May 6-7, 1992.
PB93-152601/REB 93-01 PC **A99**/MF **A06**

Proceedings: Tiered Testing Issues for Freshwater and Marine Sediments. Held in Washington, DC. on September 16-18, 1992.
PB93-152619/REB 93-01 PC **A22**/MF **A04**

Proceedings of the National United States Environmental Protection Agency Conference on Household Hazardous Waste Management (7th). Held in Minneapolis, Minnesota on December 8-12, 1992.
PB93-170116/REB 93-01 PC **A99**/MF **A06**

Proceedings of the Indoor Radon Modeling Workshop, Florida Radon Research Program. Held in Tampa, Florida on April 16-17, 1991.
PB93-172922/REB 93-01 PC **A09**/MF **A02**

Summary of the 1987 Carver-Greenfield Sludge Drying Technology Workshop: Problems and Solutions. Held in Los Angeles, California on March 10-11, 1987.
PB93-174506/REB 93-01 PC **A04**/MF **A01**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 1.
PB93-174761/REB 93-01 PC **A24**/MF **A04**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 2.
PB93-174779/REB 93-01 PC **A25**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
PB93-174787/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 2.
PB93-174795/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 1.
PB93-174803/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 2.
PB93-174811/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 4.
PB93-174829/REB 93-01 PC **A13**/MF **A03**

Maya Forest: Key Issues and Recommendations for Action: A Workshop Report. Held in Flores, Guatemala on February 8-9, 1993.
PB93-183713/REB 93-04 PC **A03**/MF **A01**

Video Teleconference on Emergency Planning for Potable Water Suppliers. Held on October 30-31, 1985.
PB93-184455/REB 93-01 PC **A10**/MF **A03**

Sampling and Assessment Issues in Using Fish as Indicators of Ecological Condition in Lakes: A Workshop Report. (3rd Draft Report).
PB93-186278/REB 93-01 PC **A03**/MF **A01**

Tribal Water Utility Management.
PB93-190908/REB 93-01 PC **A09**/MF **A02**

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Atmospheric Deposition of Critical Issue Forum. Held in Annapolis, Maryland on November 5, 1992.
PB93-193738/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Contaminated Sediments Critical Issue Forum. Held in Annapolis, Maryland on December 10, 1992.
PB93-194017/REB 93-01 PC **A03**/MF **A01**

Proceedings: 1991 SO2 Control Symposium. Volume 1. Opening Session and Sessions 1-3.
PB93-196095/REB 93-01 PC **A19**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 2. Sessions 4 and 5A.
PB93-196103/REB 93-01 PC **A22**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 3. Sessions 5B and 6.
PB93-196111/REB 93-01 PC **A20**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 4. Session 7.
PB93-196129/REB 93-01 PC **A15**/MF **A03**

Proceedings: 1991 SO2 Control Symposium. Volume 5. Session 8.
PB93-196137/REB 93-01 PC **A13**/MF **A03**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

Clean Water and the American Economy. Proceedings: Surface Water. Volume 1. Held on October 19-21, 1992.
PB93-202612/REB 93-01 PC **A14**/MF **A03**

Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
PB93-202620/REB 93-01 PC **A07**/MF **A02**

Proceedings of the International Workshop on Carbon Cycling in Boreal Forest and Sub-Arctic Ecosystems: Biospheric Responses and Feedbacks to Global Climate Change.
PB93-205540/REB 93-04 PC **A13**/MF **A03**

Abstract Proceedings: Superfund Technical Support Project General Meeting. Held in Athens, Georgia on December 3-6, 1990.
PB93-205862/REB 93-04 PC **A03**/MF **A01**

Proceedings and Summary of the Workshop on Finfish as Indicators of Toxic Contamination. Held in Airlie, Virginia on July 27-28, 1986.
PB93-208320/REB 93-04 PC **A06**/MF **A02**

Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212538/REB 93-04 PC **A03**/MF **A01**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991.
PB93-212835/REB 93-04 PC **E99**/MF **E99**

Revision of Methodology for Deriving National Ambient Water Quality Criteria for the Protection of Human Health: Report of Workshop and EPA's Preliminary Recommendations for Revision.
PB93-213494/REB 93-04 PC **A06**/MF **A02**

Environmental Monitoring Issues: Results of Workshops Held in July 1992 as Part of EPA's Eighth Annual Waste Testing and Quality Assurance Symposium.
PB93-216075/REB 93-04 PC **A12**/MF **A03**

Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.
PB93-216604/REB 93-04 PC **A06**/MF **A02**

Workshop Report: Identification of Performance Parameters for Portable X-ray Fluorescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.
PB93-216612/REB 93-04 PC **A05**/MF **A02**

Anaerobic Dehalogenation and Its Environmental Implications. Abstracts of 1992 American Society for Microbiology Conference. Held in Athens, Georgia on August 30-September 4, 1992.
PB93-217792/REB 93-04 PC **A04**/MF **A01**

Stream Indicator and Design Workshop.
PB93-222321/REB 93-04 PC **A05**/MF **A01**

Municipal Water Pollution Prevention Program, National MWPP Conference. Held in Washington, DC. on April 27-28, 1993.
PB93-231140/REB 93-04 PC **A03**/MF **A01**

Proceedings of Annual Analytical Symposium (10th). U.S. Environmental Protection Agency, Office of Water, Industrial Technology Division. Held in Norfolk, Virginia on May 13-14, 1987.
PB93-234771/REB 93-04 PC **A99**/MF **E08**

Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC **A01**/MF **A01**

Establishing Quantitative Performance Criteria for Wetland Restoration.
PB93-236610/REB 93-04 PC **A01**/MF **A01**

Proceedings of Annual Analytical Symposium (7th). Held in Norfolk, Virginia on March 28-29, 1984.
PB93-237519/REB 93-04 PC **A99**/MF **A06**

Superfund: EPA/ICMA Superfund Revitalization Conference. Held in Chicago, Illinois on November 12-13, 1992.
PB93-963274/REB 93-01 PC **A04**/MF **A01**

**MELPHALAN**

Evaluation of the Potential Carcinogenicity of Melphalan (148-82-3).
PB93-196301/REB 93-01 PC **A03**/MF **A01**

**MEMBRANES**

User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

SITE Program Demonstration of the SBP Technologies, Inc., Membrane Filtration System on Creosote-Contaminated Water.
PB93-228567/REB 93-04 PC **A02**/MF **A01**

Flexible Membrane Liner Advisory Expert System (FLEX) (for Microcomputers) (Version 3.0).
PB93-502631/REB 93-01 CP **D02**

**MEMORY**

Effects of Dopaminergic Drugs on Working and Reference Memory in Rats.
PB93-236412/REB 93-04 PC **A03**/MF **A01**

**MENIDIA BERYLLINA**

Effects of Food Density on Growth and on Patterns of Prey Depletion by Larval Silverside Fish, 'Menidia beryllina' (Cope): A Laboratory Investigation with Image Analysis.
PB93-212587/REB 93-04 PC **A03**/MF **A01**

**MERCENARIA MERCENARIA**

Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02**/MF **A01**

Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03**/MF **A01**

**MERCURY**

Release of PCB and mercury from fibre sediments.
DE93778469/REB 93-01 PC **A05**/MF **A01**

**MERCURY (METAL)**

Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
PB93-105518/REB 93-01 PC **A08**/MF **A02**

Evaluation of Two Methods for the Measurement of Mercury Emissions in Exhaust Gases from a Municipal Waste Combustor.
PB93-105542/REB 93-01 PC **A05**/MF **A01**

Atmopheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

Guidelines for Mercury Measurements from Stationary Sources: Quality Assurance Handbook. Section 3.19. Volume 3.
PB93-131209/REB 93-01 PC **A08**/MF **A02**

Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC **A02**/MF **A01**

**MESOSCALE PHENOMENA**

Stochastic Methodology for Regional Wind-Field Modeling.
PB93-229391/REB 93-04 PC **A03**/MF **A01**

**METABOLIC ACTIVATION**

32P-Postlabeling in Studies of PAH Activation.
PB93-106631/REB 93-01 PC **A03**/MF **A01**

In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02**/MF **A01**

**METABOLISM**

Metabolism and Disposition of Inorganic Arsenic in Laboratory Animals and Humans.
PB93-107183/REB 93-01 PC **A02**/MF **A01**

Age-Related Changes in Disposition and Metabolism of Benzene in Male C57BL/6N Mice.
PB93-107191/REB 93-01 PC **A02**/MF **A01**

Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

**METAL CLEANING**

Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
PB93-221638/REB 93-04 PC **A04**/MF **A01**

**METAL FINISHING**

Guides to Pollution Prevention: The Metal Finishing Industry.
PB93-100105/REB 93-04 PC **A04**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
PB93-123123/REB 93-01 PC **A02**/MF **A01**

Economic Impacts of RCRA Regulations on the Plating and Polishing Industry.
PB93-158988/REB 93-01 PC **A07**/MF **A02**

**METAL INDUSTRY**

Waste Minimization Assessment for a Manufacturer of Penny Blanks and Zinc Products.
PB93-123107/REB 93-01 PC **A02**/MF **A01**

Guides to Pollution Prevention: Metal Casting and Heat Treating Industry.
PB93-127793/REB 93-01 PC **A05**/MF **A01**

Economic Analysis of Pretreatment Standards: The Secondary Copper and Aluminum Subcategories of the Nonferrous Metals Manufacturing Point Source Category.
PB93-167757/REB 93-01 PC **A07**/MF **A02**

Economic Impact Analysis of Effluent Limitations and Standards for the Nonferrous Metals Smelting and Refining Industry. Phase 2.
PB93-167781/REB 93-01 PC **A09**/MF **A03**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 1.
PB93-206498/REB 93-04 PC **A24**/MF **A04**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 2.
PB93-206506/REB 93-04 PC **A22**/MF **A04**

**METAL PARTITIONING**

Superfund Engineering Issue: Considerations for Evaluating the Impact of Metals Partitioning during the Incineration of Contaminated Soils from Superfund Sites.
PB93-121341/REB 93-01 PC **A03**/MF **A01**

**METAL RECYCLING**

Markets for Recovered Aluminum.
PB93-170132/REB 93-01 PC **A03**/MF **A01**

**METAL SCRAP**

Waste Reduction Activities and Options for a Scrap Metal Recovery Facility.
PB93-126266/REB 93-01 PC **A02**/MF **A01**

**METAL SHEETS**

Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
PB93-123016/REB 93-01 PC **A02**/MF **A01**

**METAL WORKING**

Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
PB93-123164/REB 93-01 PC **A02**/MF **A01**

Cost Effectiveness Analysis of Effluent Guidelines and Standards for the Aluminum Forming Category.
PB93-156107/REB 93-01 PC **A03**/MF **A01**

Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category (Proposed).
PB93-206522/REB 93-04 PC **A23**/MF **A04**

Development Document for Effluent Limitations Guidelines and Standards for the Aluminum Forming Point Source Category.
PB93-208213/REB 93-04 PC **A99**/MF **A06**

Mobile On-Site Recycling of Metalworking Fluids.
PB93-216562/REB 93-04 PC **A04**/MF **A01**

**METALS**

Model Calculations of the Annual Atmospheric Deposition of Toxic Metals to Lake Michigan.
PB93-120905/REB 93-01 PC **A03**/MF **A01**

Atmospheric Deposition of Toxic Metals to Lake Michigan: Preliminary Annual Model Calculations.
PB93-120954/REB 93-01 PC **E02**/MF **A01**

Geographical Distribution and Source Type Analysis of Toxic Metal Emissions.
PB93-121036/REB 93-01 PC **A02**/MF **A01**

Superfund Engineering Issue: Considerations for Evaluating the Impact of Metals Partitioning during the Incineration of Contaminated Soils from Superfund Sites.
PB93-121341/REB 93-01 PC **A03**/MF **A01**

Behavior of Metals in Soils.
PB93-131480/REB 93-01 PC **A03**/MF **A01**

Multiple Metals Stack Emission Measurement Methodology for Stationary Sources, Current Status.
PB93-185734/REB 93-01 PC **A02**/MF **A01**

Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC **A02**/MF **A01**

Emerging Technology Report: Metals Treatment at Superfund Sites by Absorptive Filtration.
PB93-231165/REB 93-04 PC **A04**/MF **A01**

**METHANE**

Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC **A03**/MF **A01**

Inventory of Methane Losses from the Natural Gas Industry.
PB93-131720/REB 93-01 PC **A03**/MF **A01**

Methane Emissions from Wetland Rice Areas of Asia.
PB93-191468/REB 93-01 PC **A03**/MF **A01**

Possible Influence of Hydrogen Concentration on Microbial Methane Stable Hydrogen Isotopic Composition.
PB93-205128/REB 93-04 PC **A03**/MF **A01**

Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC **A03**/MF **A01**

Estimate of Global Methane Emissions from Coal Mines.
PB93-212553/REB 93-04 PC **A03**/MF **A01**

Comparison of Methods for Estimating Global Methane Emissions from Landfills.
PB93-212561/REB 93-04 PC **A03**/MF **A01**

Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.
PB93-212579/REB 93-04 PC **A02**/MF **A01**

Global Flux of Methane from Shallow Submarine Sediments.
PB93-222388/REB 93-04 PC **A03**/MF **A01**

Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC **A02**/MF **A01**

Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02**/MF **A01**

**METHANE/TETRANITRO**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Tetranitromethane (TNM).
PB93-116994/REB 93-01 PC **A03**/MF **A01**

**METHANOL**

Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC **A03**/MF **A01**

Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03**/MF **A01**

Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02**/MF **A01**

Evaluation of the Effects of Methanol during Early Pregnancy in the Rat.
PB93-231850/REB 93-04 PC **A03**/MF **A01**

**METHANOL FUELS**

Evaluation of Resistively Heated Fuel Injection Technology to Reduce Cold Start Emissions and Assist Starting/Driveaway of a Methanol-Fueled Vehicle.
PB93-144350/REB 93-01 PC **A03**/MF **A01**

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC **A03**/MF **A01**

Coprocessing of Fossil Fuels and Biomass for CO2 Emission Reduction in the Transportation Sector.
PB93-194165/REB 93-01 PC **A02**/MF **A01**

Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.
PB93-216869/REB 93-04 PC **A03**/MF **A01**

**METHODOLOGY**

Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC **A07**/MF **A02**

Protecting Confidentiality in Establishment Surveys.
PB93-180958/REB 93-01 PC **A03**/MF **A01**

**METHOXYCHLOR**

Effect of Methoxychlor on Ovarian Steroidogenesis: Role in Early Pregnancy Loss.
PB93-181030/REB 93-01 PC **A02**/MF **A01**

**METHYL BROMIDE**

Methylbromide and Its Alternatives as Fumigants, 1979-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149912/REB 93-01 PC **A09**/MF **A03**

**METHYL CHLORIDE**

Evaluation of the Potential Carcinogenicity of Methyl Chloride (74-87-3).
PB93-196319/REB 93-01 PC **A03**/MF **A01**

**METHYL IODIDE**

Evaluation of the Potential Carcinogenicity of Methyl Iodide (74-88-4).
PB93-196343/REB 93-01 PC **A03**/MF **A01**

**METHYLENE CHLORIDE**

Locating and Estimating Air Emissions from Sources of Methylene Chloride.
PB93-207579/REB 93-04 PC **A10**/MF **A03**

**METHYLENEBIS (CHLOROANILINE)**

Evaluation of the Potential Carcinogenicity of 4,4'-Methylenebis (1-Chloroaniline) (101-14-4).
PB93-196335/REB 93-01 PC **A03**/MF **A01**

**METHYLENEDIOXYMETHAMPHETAMINE**

Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02**/MF **A01**

**METHYLNITRONITROSOGUANIDINE**

Evaluation of the Potential Carcinogenicity of N-Methyl-N'-Nitro-N-Nitrosoguanidine (70-25-7).
PB93-196350/REB 93-01 PC **A03**/MF **A01**

**METHYLNITROSOUREA**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurea (684-93-5).
PB93-196483/REB 93-01 PC **A03**/MF **A01**

**METHYLTHIOURACIL**

Evaluation of the Potential Carcinogenicity of Methylthiouracil (56-04-2).
PB93-196368/REB 93-01 PC **A03**/MF **A01**

**MEXICO CITY (MEXICO)**

VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC **A02**/MF **A01**

**MEXICO GULF**

Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC **A03/MF A01**

Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC **A02/MF A01**

Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC **A03/MF A01**

Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03/MF A01**

Public Health Action Agenda for the Gulf of Mexico: Frame Work for Action.
PB93-223428/REB 93-04 PC **A06/MF A02**

Marine Debris Action Agenda for the Gulf of Mexico: Framework for Action.
PB93-223469/REB 93-04 PC **A06/MF A02**

**MICHIGAN**

Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC **A03/MF A01**

National Priorities List Sites: Michigan, 1992.
PB93-963222/REB 93-01 PC **A10/MF A03**

**MICROBIAL COLONY COUNT**

Comparing the Accuracy of Equation Formats for Modeling Microbial Population Decay Rates.
PB93-131548/REB 93-01 PC **A03/MF A01**

Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
PB93-205011/REB 93-04 PC **A02/MF A01**

Influence of Root Colonizing Bacteria on the Defense Responses of Bean.
PB93-205045/REB 93-04 PC **A03/MF A01**

Relationship of Total Viable and Culturable Cells in Epiphytic Populations of 'Pseudomonas syringae'.
PB93-222826/REB 93-04 PC **A02/MF A01**

**MICROBIAL DEGRADATION**

Inhibition of Alkylbenzene Biodegradation under Denitrifying Conditions by Using Acetylene Block Technique.
PB93-121242/REB 93-01 PC **A02/MF A01**

Use of Microbial Risk Assessment in Setting U.S. Drinking Water Standards.
PB93-134930/REB 93-01 PC **A03/MF A01**

Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC **A03/MF A01**

Possible Influence of Hydrogen Concentration on Microbial Methane Stable Hydrogen Isotopic Composition.
PB93-205128/REB 93-04 PC **A03/MF A01**

Performance of Pilot Scale Bioventing at an Aviation Gasoline Spill Site.
PB93-221943/REB 93-04 PC **A02/MF A01**

Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.
PB93-221968/REB 93-04 PC **A02/MF A01**

**MICROBIAL DRUG RESISTANCE**

Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. aeschynomene' Transformants with Benomyl Resistance.
PB93-212629/REB 93-04 PC **A02/MF A01**

**MICROBIAL SENSITIVITY TESTS**

Disruption of the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.
PB93-229276/REB 93-04 PC **A03/MF A01**

**MICROBIOLOGY**

Comparing the Accuracy of Equation Formats for Modeling Microbial Population Decay Rates.
PB93-131548/REB 93-01 PC **A03/MF A01**

Effects of 'Beauveria bassiana' on Embryos of the Inland Silverside Fish ('Menidia beryllina').
PB93-131811/REB 93-01 PC **A02/MF A01**

**MICRONESIA**

Sanitary Survey Training: Instructor's Guide for Sanitarians of Micronesia.
PB93-115889/REB 93-01 PC **A09/MF A02**

**MICRONUCLEUS TESTS**

Application of the 'Tradescantia micronucleus' Assay for the Genetic Evaluation of Chemical Mixtures in Soil and Aqueous Media.
PB93-141380/REB 93-01 PC **A02/MF A01**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: A Field Test in Snuff Users.
PB93-141448/REB 93-01 PC **A03/MF A01**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC **A03/MF A01**

**MICROORGANISM CONTROL (WATER)**

Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC **A02/MF A01**

**MICROORGANISMS**

Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC **A03/MF A01**

Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC **A03/MF A01**

Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC **A03/MF A01**

Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02/MF A01**

Microcosm and In situ Field Studies of Enhanced Biotransformation of Trichloroethylene by Phenol-Utilizing Microorganisms.
PB93-222867/REB 93-04 PC **A02/MF A01**

Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.
PB93-227205/REB 93-04 PC **A04/MF A01**

**MICROORGANISMS CONTROL (WATER)**

In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC **A03/MF A01**

**MICROTUBULES**

Cytoplasmic Microtubular Dynamics and Chromatin Organization during Mammalian Oogenesis and Oocyte Maturation.
PB93-194413/REB 93-01 PC **A03/MF A01**

**MIDDLE ATLANTIC REGION (UNITED STATES)**

Virginian Province Demonstration Report. EMAP-Estuaries, 1990.
PB93-229654/REB 93-04 PC **A11/MF A03**

Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
PB93-505485/REB 93-04 CP **D03**

**MINERAL INDUSTRY**

Calciners and Dryers in Mineral Industries: Background Information for Promulgated Standards.
PB93-122448/REB 93-01 PC **A04/MF A01**

Enabling Document for New Source Performance Standards for Calciners and Dryers in Mineral Industries.
PB93-122455/REB 93-01 PC **A04/MF A01**

Economic Analysis of Effluent Guidelines: Mineral Mining and Processing Industry.
PB93-167765/REB 93-01 PC **A14/MF A03**

**MINERALS**

Transformation of Carbon Tetrachloride in the Presence of Sulfide, Biotite, and Vermiculite.
PB93-135713/REB 93-01 PC **A02/MF A01**

Mineral Dissolution Rates: A Comparison of Laboratory and Field Studies.
PB93-141182/REB 93-01 PC **A01/MF A01**

**MINING**

Economic Analysis of Effluent Guidelines: Mineral Mining and Processing Industry.
PB93-167765/REB 93-01 PC **A14/MF A03**

**MINNESOTA**

Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.
PB93-212306/REB 93-04 PC **A02/MF A01**

National Priorities List Sites: Minnesota, 1992.
PB93-963223/REB 93-01 PC **A07/MF A02**

**MINNOWS**

Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204980/REB 93-01 PC **A03/MF A01**

Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows ('Cyprinodon variegatus').
PB93-204998/REB 93-04 PC **A03/MF A01**

**MISSISSIPPI**

National Priorities List Sites: Mississippi, 1992.
PB93-963224/REB 93-01 PC **A03/MF A01**

**MISSISSIPPI RIVER**

Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93-148252/REB 93-01 PC **A06/MF A02**

**MISSOURI**

National Priorities List Sites: Missouri, 1992.
PB93-963225/REB 93-01 PC **A05/MF A02**

**MISSOURI RIVER**

Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93-148252/REB 93-01 PC **A06/MF A02**

**MITIGATION**

Measurement and Distribution of Radon and Radon Progeny: An Overview of Indoor Radon Risk Reduction in the United States.
PB93-107092/REB 93-01 PC **A02/MF A01**

Design of New Schools and Other Large Buildings Which Are Radon Resistant and Easy to Mitigate.
PB93-131662/REB 93-01 PC **A03/MF A01**

Evaluation of Mitigation for Acid Aluminum Leachate from a Highway Fill in Garrett County, Maryland.
PB93-180321/REB 93-01 PC **A04/MF A01**

**MIXING ZONES**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03/MF A01**

**MIXTURES**

Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-228831/REB 93-04 PC **A03/MF A01**

**MOBILE HOMES**

Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02/MF A01**

**MOBILE POLLUTANT SOURCES**

Evaluation of CO Intersection Modeling Techniques Using a New York City Database.
PB93-105559/REB 93-01 PC **A10/MF A03**

Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
PB93-180875/REB 93-01 PC **A06/MF A02**

Nonroad Mobile Source Sales and Attrition Study: Identification and Evaluation of Available Data Sources.
PB93-190098/REB 93-01 PC **A11/MF A03**

Issues and Approaches to Improving Transportation Modeling for Air Quality Analysis.
PB93-194066/REB 93-01 PC **A05/MF A02**

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel - Final Report.
PB93-197929/REB 93-01 PC **A03/MF A01**

Heavy-Duty Engine Testing Report Cummins/EPA/Taiwan Correlation Test Results, 1993.
PB93-236172/REB 93-04 PC **A03/MF A01**

**MODEL STUDIES**

Ground-Water Modeling Compendium. Model Fact Sheets, Descriptions, Applications and Assessment Framework.
PB93-207504/REB 93-04 PC **A06/MF A02**

**MODELS-SIMULATION**

Industrial Source Complex Short Term (ISCST) (for Microcomputers).
PB93-500221/REB 93-01 CP **D03**

MESOPUFF (for Microcomputers).
PB93-500247/REB 93-01 CP **D02**

COMPLEX1 (for Microcomputers).
PB93-504538/REB 93-01 CP **D05**

Economic Growth Analysis System (E-GAS) for all EPA Regions (I through X) (for Microcomputers).
PB93-505469/REB 93-04 CP **D18**

Preliminary Ranking Evaluation Score (PREscore) Version 2.0 (for Microcomputers).
PB93-505915/REB 93-04 CP **D02**

**MODULAR ORIENTED UNCERTAINTY SYSTEM**

AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
PB93-100113/REB 93-01 PC **A10/MF A03**

AutoMOUSE (Modular Oriented Uncertainty SystEm) - An Improvement to the MOUSE Computerized Uncertainty Analysis Program (for Microcomputers).
PB93-500007/REB 93-01 CP **D03**

**MOLDING TECHNIQUES**

Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
PB93-123024/REB 93-01 PC **A02/MF A01**

**MOLECULAR BIOLOGY**

Aromatic Hydrocarbon Degradation: A Molecular Approach.
PB93-229433/REB 93-04 PC **A03/MF A01**

**MOLECULAR CLONING**

PCR Primers Specific for Detection of a Rat Repetitive Sequence.
PB93-141396/REB 93-01 PC **A01/MF A01**

Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
PB93-204972/REB 93-04 PC **A03/MF A01**

Rapid Efficient Production of Baculovirus Expression Vectors.
PB93-228898/REB 93-04 PC **A03/MF A01**

**MOLECULAR CONFORMATION**

Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC **A03/MF A01**

**MOLECULAR STRUCTURE**

Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
PB93-131761/REB 93-01 PC **A02/MF A01**

**MOLECULAR WEIGHT**

Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.
PB93-229383/REB 93-04 PC **A03/MF A01**

**MONITORING**
Status Report on Analytical Methods to Support the Disinfectant/Disinfection By-Products Regulation.
PB93-134898/REB 93-01 PC **A03**/MF **A01**

Guide to Using Chesapeake Bay Program Water Quality Monitoring Data.
PB93-205888/REB 93-04 PC **A07**/MF **A02**

UV Monitoring Program at US EPA.
PB93-212272/REB 93-04 PC **A03**/MF **A01**

**MONOCLONAL ANTIBODIES**
Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02**/MF **A01**

Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

**MONTANA**
National Priorities List Sites: Montana, 1992.
PB93-963226/REB 93-01 PC **A04**/MF **A01**

**MORONE SAXATILIS**
Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
PB93-207561/REB 93-04 PC **A03**/MF **A01**

**MORTALITY**
Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC **A03**/MF **A01**

**MOTOR ACTIVITY**
Relationship between Serum Cholinesterase Activity and the Change in Body Temperature and Motor Activity in the Rat: A Dose-Response Study of Diisopropyl Fluorophosphate.
PB93-175644/REB 93-01 PC **A02**/MF **A01**

Acute and Delayed Effects of Diisopropyl Fluorophosphate on Body Temperature, Heart Rate and Motor Activity in the Awake, Unrestrained Rat.
PB93-228971/REB 93-04 PC **A03**/MF **A01**

Bitertanol, a Triazole Fungicide, Increases Operant Responding but Not Motor Activity.
PB93-236370/REB 93-04 PC **A02**/MF **A01**

**MOTOR VEHICLE ENGINES**
Evaluation of Resistively Heated Fuel Injection Technology to Reduce Cold Start Emissions and Assist Starting/Driveaway of a Methanol-Fueled Vehicle.
PB93-144350/REB 93-01 PC **A03**/MF **A01**

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC **A03**/MF **A01**

Spray Characteristics of Two Types of Fuel Injectors.
PB93-180859/REB 93-01 PC **A03**/MF **A01**

Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.
PB93-216869/REB 93-04 PC **A03**/MF **A01**

**MOTOR VEHICLES**
Test Car List, 1992. Passenger Cars.
PB93-111185/REB 93-01 PC **A05**/MF **A01**

Fuel Economy Guide, 1992. 3-Number.
PB93-111193/REB 93-01 PC **A04**/MF **A01**

Fuel Economy Guide, 1992. 6-Number.
PB93-111201/REB 93-01 PC **A04**/MF **A01**

Federal Certification Test Results for 1992 Model Year. Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines.
PB93-111219/REB 93-01 PC **A13**/MF **A03**

Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC **A02**/MF **A01**

Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC **A02**/MF **A01**

Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03**/MF **A01**

Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines. Federal Certification Test Results for 1993 Model Year.
PB93-164523/REB 93-01 PC **A15**/MF **A03**

Test Car List, 1993. Passenger Cars.
PB93-164531/REB 93-01 PC **A05**/MF **A02**

Fuel Economy Guide, 1993. 3-Number.
PB93-169340/REB 93-01 PC **A04**/MF **A01**

Fuel Economy Guide, 1993. 6 Number.
PB93-169357/REB 93-01 PC **A04**/MF **A01**

Light-Duty Automotive Technology and Fuel Economy Trends through 1993.
PB93-199255/REB 93-01 PC **A06**/MF **A02**

Structure and Performance of the Health Effects Institute.
PB93-200335/REB 93-01 PC **A08**/MF **A02**

Federal Test Procedure Review Project: Preliminary Technical Report.
PB93-207975/REB 93-04 PC **A11**/MF **A03**

Analysis of Original Equipment and Aftermarket Manufacturer Oxygen Sensor Constructional, Functional, and Price Differences.
PB93-208007/REB 93-04 PC **A18**/MF **A04**

Report on the EPA/Manufacturer Cooperative I/M Testing Program.
PB93-208015/REB 93-04 PC **A10**/MF **A03**

User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections.
PB93-210250/REB 93-04 PC **A05**/MF **A02**

Final Regulatory Impact Analysis and Summary and Analysis of Comments: Control of Vehicular Evaporative Emissions.
PB93-228138/REB 93-04 PC **A07**/MF **A02**

**MOUNTAINS**
Digital Topographic Approach to Modeling: The Distribution of Precipitation in Mountainous Terrain.
PB93-106649/REB 93-01 PC **A03**/MF **A01**

**MOUTH**
Micronuclei and Other Nuclear Anomalies in Buccal Smears: A Field Test in Snuff Users.
PB93-141448/REB 93-01 PC **A03**/MF **A01**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC **A03**/MF **A01**

**MUCONIC ACIDS**
Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC **A02**/MF **A01**

**MUCUS**
Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC **A03**/MF **A01**

**MUNICIPAL WASTES**
Results of U.S. EPA Research Waste Combustion Residues.
PB93-106672/REB 93-01 PC **A03**/MF **A01**

Development of Good Combustion Practice for Municipal Waste Combustors.
PB93-131613/REB 93-01 PC **A03**/MF **A01**

Opportunities for the Use of Geosynthetics in Waste Management Facilities.
PB93-131670/REB 93-01 PC **A03**/MF **A01**

Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131652/REB 93-01 PC **A02**/MF **A01**

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC **A10**/MF **A03**

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC **A15**/MF **A03**

**MUNICIPALITIES**
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 1. Sessions P, 0, 1A, 2A, 3A, 4A, 6A, 6B, 9C and 10B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124170/REB 93-01 PC **A20**/MF **A04**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 2. Sessions 1B, 2B, 3B, 4B, 7A, 7B, 8A, 8B and 9B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124188/REB 93-01 PC **A21**/MF **A04**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 3. Sessions 1C, 2C, 3C, 4C, 6C, 7C, 8C, 9A, and 10A/C. Held in Tampa, Florida on April 16-19, 1991.
PB93-124196/REB 93-01 PC **A21**/MF **A04**

Dry Flue Gas Cleaning Processes for Achieving Air Pollutant Emissions Requirements.
PB93-131605/REB 93-01 PC **A03**/MF **A01**

Quality Assurance Plan for 1991 Pilot Study of the Ecological Condition of Municipal Wastewater Constructed Wetland Treatment Systems.
PB93-134674/REB 93-01 PC **A05**/MF **A01**

Quality Assurance Field Operations Report for the Pilot Study Evaluating the Habitat Value of Wetland Treatment Systems.
PB93-134682/REB 93-01 PC **A04**/MF **A01**

Municipal Water Pollution Prevention Bibliography: 1992, the Year of Clean Water. Celebration and Commitment.
PB93-141083/REB 93-01 PC **A03**/MF **A01**

State Clean Water Strategies: Meeting the Challenges of the Future.
PB93-217628/REB 93-04 PC **A03**/MF **A01**

Habitat Quality Assessment of Two Wetland Treatment Systems in the Arid West: A Pilot Study.
PB93-222305/REB 93-04 PC **A06**/MF **A02**

Municipal Water Pollution Prevention Program, National MWPP Conference. Held in Washington, DC. on April 27-28, 1993.
PB93-231140/REB 93-04 PC **A03**/MF **A01**

**MUSSELS**
Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
PB93-185866/REB 93-01 PC **A02**/MF **A01**

Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03**/MF **A01**

**MUTAGEN SCREENING**
Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC **A02**/MF **A01**

**MUTAGENESIS**
V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02**/MF **A01**

Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC **A03**/MF **A01**

**MUTAGENICITY TESTS**
In vitro Mammalian Mutagenesis as a Model for Genetic Lesions in Human Cancer.
PB93-141471/REB 93-01 PC **A02**/MF **A01**

Genetic Toxicology of Putative Nongenotoxic Carcinogens.
PB93-175636/REB 93-01 PC **A03**/MF **A01**

Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.
PB93-236362/REB 93-04 PC **A04**/MF **A01**

**MUTAGENS**
Genotoxicity of 2,4,5-Trichlorophenoxyacetic Acid Biodegradation Products in the 'Salmonella' Reversion and Lambda Prophage-Induction Bioassays.
PB93-107175/REB 93-01 PC **A02**/MF **A01**

Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC **A03**/MF **A01**

Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
PB93-141257/REB 93-01 PC **A02**/MF **A01**

Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC **A03**/MF **A01**

Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02**/MF **A01**

Application of the 'Tradescantia micronucleus' Assay for the Genetic Evaluation of Chemical Mixtures in Soil and Aqueous Media.
PB93-141380/REB 93-01 PC **A02**/MF **A01**

Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03**/MF **A01**

Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC **A01**/MF **A01**

Frequency and Nature of Specific-Locus Mutations Induced in Female Mice by Radiations and Chemicals: A Review.
PB93-194447/REB 93-01 PC **A03**/MF **A01**

ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC **A02**/MF **A01**

Radiation- and Chemically-Induced Chromosome Aberrations in Mouse Oocytes: A Comparison with Effects in Males.
PB93-194462/REB 93-01 PC **A02**/MF **A01**

Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03**/MF **A01**

Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03**/MF **A01**

Quantification of Germ-Cell Risk Associated with the Induction of Heritable Translocations.
PB93-199677/REB 93-01 PC **A03**/MF **A01**

Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC **A02**/MF **A01**

Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC **A02**/MF **A01**

In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02**/MF **A01**

Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.
PB93-236362/REB 93-04 PC **A04**/MF **A01**

Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03**/MF **A01**

**MUTATION**
ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC **A02**/MF **A01**

**MUTATIONS**
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC **A03**/MF **A01**

Frequency and Nature of Specific-Locus Mutations Induced in Female Mice by Radiations and Chemicals: A Review.
PB93-194447/REB 93-01 PC **A03**/MF **A01**

Mutational Risks in Females: Genomic Imprinting and Maternal Molecules.
PB93-194488/REB 93-01 PC **A03**/MF **A01**

**MYCOBACTERIUM BOVIS**
Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175651/REB 93-01 PC **A03**/MF **A01**

Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
PB93-229607/REB 93-04 PC **A02**/MF **A01**

**MYTILUS**
Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
PB93-185866/REB 93-01 PC **A02**/MF **A01**

**MYTILUS EDULIS**
Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03**/MF **A01**

**MYTOMYCIN C**
Evaluation of the Potential Carcinogenicity of Mitomycin C (50-07-7).
PB93-196376/REB 93-01 PC **A03**/MF **A01**

**N-BUTYLAMINE/N-NITROSODI**
Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Butylamine (924-16-3).
PB93-196426/REB 93-01 PC **A03**/MF **A01**

**N-NITROSOPYRROLIDINE**
Evaluation of the Potential Carcinogenicity of N-Nitrosopyrrolidine.
PB93-196525/REB 93-01 PC **A03**/MF **A01**

**NADH DEHYDROGENASE**
Disruption of the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.
PB93-229276/REB 93-04 PC **A03**/MF **A01**

**NADPH CYTOCHROME REDUCTASE**
Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
PB93-229458/REB 93-04 PC **A03**/MF **A01**

**NAPHTHALENE**
Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

**NAPHTHALENES**
Evaluation of the Potential Carcinogenicity of 1-Naphthylamine (134-32-7).
PB93-196384/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2-Naphthylamine (91-59-8).
PB93-196392/REB 93-01 PC **A03**/MF **A01**

**NAPHTHOLS**
Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

**NARM (NATURALLY OCCURRING AND ACCELERATOR-PRODUCED RADIOACTIVE MATERIALS)**
Low-Level and NARM Radioactive Wastes. Draft Environmental Impact Statement for Proposed Rules. Volume 1. Background Information Document.
PB93-200673/REB 93-01 PC **A99**/MF **A06**

**NARRANGANSETT BAY**
Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

**NASAL LAVAGE**
Human Upper Respiratory Tract Responses to Inhaled Pollutants with Emphasis on Nasal Lavage.
PB93-181089/REB 93-01 PC **A02**/MF **A01**

**NATIONAL AIR TOXICS INFORMATION CLEARINGHOUSE**
National Air Toxics Information Clearinghouse: Ongoing Research and Regulatory Development Projects, July 1992.
PB93-206563/REB 93-04 PC **A14**/MF **A03**

National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Index, 1992.
PB93-206571/REB 93-04 PC **A99**/MF **A06**

National Air Toxics Information Clearinghouse: NATICH Data Base Report of Federal, State, Local and EPA Air Toxics Activities.
PB93-206589/REB 93-04 PC **A99**/MF **E08**

National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Volume 6. Citations, 1992.
PB93-207652/REB 93-04 PC **A10**/MF **A03**

**NATIONAL AMBIENT AIR QUALITY STANDARD**
Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.
PB93-212785/REB 93-04 PC **A03**/MF **A01**

**NATIONAL AMBIENT AIR QUALITY STANDARDS**
Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or Inhalable Particulate Data (Draft).
PB93-200640/REB 93-01 PC **A04**/MF **A01**

**NATIONAL BIOACCUMULATION STUDY**
National Study of Chemical Residues in Fish. Volume 1.
PB93-114981/REB 93-01 PC **E09**/MF **A01**

**NATIONAL DRY DEPOSITION NETWORK**
Dry Deposition Flux Calculations for the National Dry Deposition Network.
PB93-178242/REB 93-01 PC **A05**/MF **A02**

**NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS**
Guide to the Asbestos NESHAP as Revised November 1990.
PB93-199362/REB 93-01 PC **A04**/MF **A01**

**NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS**
Regulatory Impact Analysis for the National Emissions Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Seven Other Processes.
PB93-143972/REB 93-01 PC **A09**/MF **A02**

**NATIONAL ESTUARY PROGRAM**
Data Management Strategy for the Tampa Bay National Estuary Program: Recommendations and Implementation Plan.
PB93-191633/REB 93-01 PC **A09**/MF **A03**

Estuary Program Primer. National Estuary Program.
PB93-193753/REB 93-01 PC **A06**/MF **A02**

Summary of Implementation and Demonstration Projects in Bays and Estuaries.
PB93-194637/REB 93-01 PC **A07**/MF **A02**

**NATIONAL PARKS**
Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04**/MF **A01**

Protecting Visibility in National Parks and Wilderness Areas.
PB93-186393/REB 93-01 PC **A20**/MF **A04**

**NATIONAL PESTICIDE SURVEY**
National Pesticide Survey: Glossary.
PB93-115970/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Project Summary.
PB93-115988/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Survey Design.
PB93-116002/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Survey Analytes.
PB93-116010/REB 93-01 PC **A03**/MF **A01**

**NATIONAL PESTICIDE SURVEYS**
National Pesticide Survey: Summary Results of EPA's National Survey of Pesticides in Drinking Water Wells.
PB93-115996/REB 93-01 PC **A03**/MF **A01**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**
Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.
PB93-184620/REB 93-01 PC **A03**/MF **A01**

**NATIONAL PRIMARY DRINKING WATER REGULATIONS**
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 50,001 to 100,000 Persons.
PB93-174514/REB 93-01 PC **A04**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 101 to 500 Persons.
PB93-174522/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 501 to 3,300 Persons.
PB93-174530/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 3,301 to 10,000 Persons.
PB93-174548/REB 93-01 PC **A03**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 10,001 to 50,000 Persons.
PB93-174555/REB 93-01 PC **A04**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving > 100,000 Persons.
PB93-174563/REB 93-01 PC **A04**/MF **A01**

Fact Sheet: National Primary Drinking Water Regulations for Lead and Copper.
PB93-193746/REB 93-01 PC **A03**/MF **A01**

**NATIONAL PRIORITIES LIST**
National Priorities List Sites: Alabama, 1992.
PB93-963201/REB 93-01
see individual report for order number and price

National Priorities List Sites: Alaska, 1992.
PB93-963202/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Arkansas, 1992.
PB93-963205/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC **A12**/MF **A03**

National Priorities List Sites: Colorado, 1992.
PB93-963207/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Connecticut, 1992.
PB93-963208/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Delaware, 1992.
PB93-963209/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Florida, 1992.
PB93-963210/REB 93-01 PC **A08**/MF **A02**

National Priorities List Sites: Georgia, 1992.
PB93-963211/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Idaho, 1992.
PB93-963212/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Illinois, 1992.
PB93-963213/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Indiana, 1992.
PB93-963214/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Iowa, 1992.
PB93-963215/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Kansas, 1992.
PB93-963216/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Kentucky, 1992.
PB93-963217/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Louisiana, 1992.
PB93-963218/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Maine, 1992.
PB93-963219/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Maryland, 1992.
PB93-963220/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Massachusetts, 1992.
PB93-963221/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Michigan, 1992.
PB93-963222/REB 93-01 PC **A10**/MF **A03**

National Priorities List Sites: Minnesota, 1992.
PB93-963223/REB 93-01 PC **A07**/MF **A02**

National Priorities List Sites: Mississippi, 1992.
PB93-963224/REB 93-01 PC **A03**/MF **A01**

National Priorities List Sites: Missouri, 1992.
PB93-963225/REB 93-01 PC **A05**/MF **A02**

National Priorities List Sites: Montana, 1992.
PB93-963226/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Nebraska, 1992.
PB93-963227/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: New Hampshire, 1992.
PB93-963228/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: New Jersey, 1992.
PB93-963229/REB 93-01 PC **A14**/MF **A03**

National Priorities List Sites: New Mexico, 1992.
PB93-963230/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: New York, 1992.
PB93-963231/REB 93-01 PC **A11**/MF **A03**

National Priorities List Sites: North Carolina, 1992.
PB93-963232/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Ohio, 1992.
PB93-963234/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Oklahoma, 1992.
PB93-963235/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Oregon, 1992.
PB93-963236/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Pennsylvania, 1992.
PB93-963237/REB 93-01 PC **A12**/MF **A03**

National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Rhode Island, 1992.
PB93-963239/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: South Carolina, 1992.
PB93-963240/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Tennessee, 1992.
PB93-963241/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Texas, 1992.
PB93-963242/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Utah, 1992.
PB93-963243/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Vermont, 1992.
PB93-963244/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Virginia, 1992.
PB93-963245/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Washington, 1992.
PB93-963246/REB 93-01 PC **A08**/MF **A02**

National Priorities List Sites: West Virginia, 1992.
PB93-963247/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Wisconsin, 1992.
PB93-963248/REB 93-01 PC **A07**/MF **A02**

National Priorities List Sites: Wyoming, 1992.
PB93-963249/REB 93-01 PC **A03**/MF **A01**

Guidance on Setting Priorities for NPL Candidate Sites.
PB93-963333/REB 93-01 PC **A02**/MF **A01**

Discussions with the Public Concerning NPL Listings.
PB93-963338/REB 93-01 PC **A03**/MF **A01**

**NATIONAL PRIORITY LIST**

NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC **A01**/MF **A01**

**NATURAL EMISSIONS**

Measurement of Biogenic Emissions from Corn.
PB93-180883/REB 93-01 PC **A02**/MF **A01**

Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.
PB93-205102/REB 93-04 PC **A02**/MF **A01**

Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC **A02**/MF **A01**

**NATURAL GAS**

Inventory of Methane Losses from the Natural Gas Industry.
PB93-131720/REB 93-01 PC **A03**/MF **A01**

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC **A03**/MF **A01**

Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.
PB93-212579/REB 93-04 PC **A02**/MF **A01**

Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC **A03**/MF **A01**

Projections of Regional Fuel Oil and Natural Gas Prices. Project Summary.
PB93-222552/REB 93-04 PC **A01**/MF **A01**

**NATURAL GAS INDUSTRY**

Methane Emissions from the Natural Gas Industry.
PB93-212421/REB 93-04 PC **A03**/MF **A01**

**NATURAL KILLER CELLS**

Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomegalovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC **A03**/MF **A01**

Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC **A03**/MF **A01**

**NATURAL RADIOACTIVITY**

Alternate Performance Standard Project: Interpreting the Post-Construction Test.
PB93-175529/REB 93-01 PC **A03**/MF **A01**

**NATURAL RESOURCE MANAGEMENT**

Chesapeake Bay Atlantic Croaker and Spot Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226629/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Summer Flounder Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226637/REB 93-04 PC **A03**/MF **A01**

**NATURAL RESOURCES**

Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13**/MF **A03**

Biodiversity and Management of Natural Resources: The Issues.
PB93-106912/REB 93-01 PC **A01**/MF **A01**

**NATURAL RESOURCES MANAGEMENT**

Living Resources Subcommittee: Annual Summary.
PB93-112506/REB 93-01 PC **A03**/MF **A01**

Chesapeake Bay Program Annual Progress Report, Wetlands Workgroup, December 1991.
PB93-136893/REB 93-01 PC **A03**/MF **A01**

Research and Information Needs Related to Nonpoint Source Pollution and Wetlands in the Watershed: An EPA Perspective.
PB93-168862/REB 93-01 PC **A02**/MF **A01**

Sustainable Agriculture and the Environment in the Humid Tropics.
PB93-173920/REB 93-01 PC **A99**/MF **A06**

America's Wetlands: Our Vital Link between Land and Water.
PB93-206399/REB 93-04 PC **A02**/MF **A01**

**NATURAL WETLANDS**

Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).
PB93-212470/REB 93-04 PC **A03**/MF **A01**

**NAVAL ARCHITECTURE**

Marine Industry Characterization Report.
PB93-216174/REB 93-04 PC **A10**/MF **A03**

**NEBRASKA**

National Priorities List Sites: Nebraska, 1992.
PB93-963227/REB 93-01 PC **A04**/MF **A01**

**NEOPLASMS**

Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02**/MF **A01**

**NERVE CELLS**

Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

**NERVOUS SYSTEM**

Thermal Influences on Nervous System Function.
PB93-107159/REB 93-01 PC **A03**/MF **A01**

Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03**/MF **A01**

Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02**/MF **A01**

Report of the Neurotoxicity Risk Assessment Guidelines Peer Review Workshop. Held in Washington, DC. on June 2-3, 1992.
PB93-146918/REB 93-01 PC **A08**/MF **A02**

International Validation of a Neurobehavioral Screening Battery: The IPCS/WHO Collaborative Study.
PB93-175594/REB 93-01 PC **A02**

Strain Comparisons of DFP Neurotoxicity in Rats.
PB93-228609/REB 93-04 PC **A03**/MF **A01**

Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.
PB93-228872/REB 93-04 PC **A03**/MF **A01**

Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.
PB93-228948/REB 93-04 PC **A03**/MF **A01**

Using Neuroblastoma Cell Lines to Examine Organophosphate Neurotoxicity.
PB93-229508/REB 93-04 PC **A02**/MF **A01**

Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
PB93-229599/REB 93-04 PC **A03**/MF **A01**

**NEURAL NETWORKS**

Using a Neural Network to Estimate Solvent Consumption.
PB93-173110/REB 93-01 PC **A02**/MF **A01**

**NEURITES**

Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.
PB93-236305/REB 93-04 PC **A03**/MF **A01**

Evidence for Direct Effect of Magnetic Fields on Neurite Outgrowth.
PB93-236669/REB 93-04 PC **A02**/MF **A01**

**NEUROBEHAVIORAL TESTS**

Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
PB93-229599/REB 93-04 PC **A03**/MF **A01**

**NEUROBLASTOMA**

Using Neuroblastoma Cell Lines to Examine Organophosphate Neurotoxicity.
PB93-229508/REB 93-04 PC **A02**/MF **A01**

**NEURONS**

Mechanisms Underlying Somatosensory Cortical Dynamics: 1. In vivo Studies.
PB93-107217/REB 93-01 PC **A03**/MF **A01**

Mechanisms Underlying Somatosensory Cortical Dynamics: 2. In vitro Studies.
PB93-107225/REB 93-01 PC **A03**/MF **A01**

**NEUROTOXICITY**

Report of the Neurotoxicity Risk Assessment Guidelines Peer Review Workshop. Held in Washington, DC. on June 2-3, 1992.
PB93-146918/REB 93-01 PC **A08**/MF **A02**

**NEUTRINOS**

Search for Radiative Neutrino Decay from Supernovae.
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

**NEVADA**

National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC **A04**/MF **A01**

**NEW BEDFORD HARBOR**

Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02**/MF **A01**

Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
PB93-228518/REB 93-04 PC **A02**/MF **A01**

**NEW CASTLE COUNTY (DELAWARE)**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Harvey and Knott Drum Site, New Castle County, Delaware).
PB93-963614/REB 93-04 PC **A01**/MF **A01**

**NEW ENGLAND**

Field and Laboratory Studies of Chemical Contamination and Environmentally Related Diseases in Fish and Molluscs of New England.
PB93-199438/REB 93-01 PC **A02**/MF **A01**

Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

Economic Growth Analysis System (E-GAS) for EPA Region I - New England States (for Microcomputers).
PB93-505477/REB 93-04 CP **D03**

**NEW HAMPSHIRE**

National Priorities List Sites: New Hampshire, 1992.
PB93-963228/REB 93-01 PC **A05**/MF **A01**

**NEW JERSEY**

National Priorities List Sites: New Jersey, 1992.
PB93-963229/REB 93-01 PC **A14**/MF **A03**

**NEW MEXICO**

National Priorities List Sites: New Mexico, 1992.
PB93-963230/REB 93-01 PC **A04**/MF **A01**

**NEW SOURCE PERFORMANCE STANDARDS**

Calciners and Dryers in Mineral Industries: Background Information for Promulgated Standards.
PB93-122448/REB 93-01 PC **A04**/MF **A01**

Enabling Document for New Source Performance Standards for Calciners and Dryers in Mineral Industries.
PB93-122455/REB 93-01 PC **A04**/MF **A01**

**NEW YORK**

Town of Edinburg Landfill Reclamation Demonstration Project.
PB93-198976/REB 93-01 PC **A12**/MF **A03**

National Priorities List Sites: New York, 1992.
PB93-963231/REB 93-01 PC **A11**/MF **A03**

**NEW YORK BIGHT**

Monitoring, Research, and Surveillance Plan for the 106-Mile Deepwater Municipal Sludge Dump Site and Environs.
PB93-207744/REB 93-04 PC **A07**/MF **A02**

Proceedings of the Ocean Dumping Workshop 106-Mile Site. Held in Ocean City, NJ., on March 28-30, 1989.
PB93-208072/REB 93-04 PC **A07**/MF **A02**

**NEWBORN ANIMALS**

Repeated Maternal Separation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC **A03**/MF **A01**

**NICKEL**

Evaluation of the Potential Carcinogenicity of Nickel (7740-02-0).
PB93-196400/REB 93-01 PC **A03**/MF **A01**

Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02**/MF **A01**

Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03**/MF **A01**

**NINTH REMEDIAL ACTION**

Superfund Record of Decision (EPA Region 8): Denver Radium Site, Operable Unit 8, Denver, CO. (Ninth Remedial Action), January 1992.
PB93-964405/REB 93-04 PC **A06**/MF **A02**

**NIST TRACEABLE REFERENCE MATERIALS**

Two New Gas Standards Programs at the National Institute of Standards and Technology.
PB93-191427/REB 93-01 PC **A02**/MF **A01**

**NITRAPYRIN**

Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02**/MF **A01**

Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium 'Nitrosomonas europaea'.
PB93-169076/REB 93-01 PC **A02**/MF **A01**

**NITRATES**

Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC **A03**/MF **A01**

**NITRIFICATION**

Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
PB93-212652/REB 93-04 PC **A03**/MF **A01**

**NITRILE/TRICHLOROACETO**

Macromolecular Adduction by Trichloroacetonitrile in the Fischer 344 Rat Following Oral Gavage.
PB93-107134/REB 93-01 PC **A03**/MF **A01**

# KEYWORD INDEX


**NITROBENZENE/PENTACHLORO**
Evaluation of the Potential Carcinogenicity of Pentachloronitrobenzene (82-68-8).
PB93-196541/REB 93-01 PC **A03**/MF **A01**

**NITROBENZENES**
Evaluation of the Potential Carcinogenicity of Pentachloronitrobenzene (82-68-8).
PB93-196541/REB 93-01 PC **A03**/MF **A01**

**NITROGEN**
Trends in Nitrogen in the Chesapeake Bay, 1984-1990.
PB93-122174/REB 93-01 PC **A04**/MF **A01**

Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC **A02**/MF **A01**

Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC **A03**/MF **A01**

Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.
PB93-234490/REB 93-04 PC **A03**/MF **A01**

**NITROGEN DIOXIDE**
Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC **A02**/MF **A01**

**NITROGEN FIXATION**
Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02**/MF **A01**

*Review of Tampa Bay Information for Interim Nutrient* Budgets and Historical Loadings of Bay Segments.
PB93-191187/REB 93-01 PC **A03**/MF **A01**

**NITROGEN FIXING BACTERIA**
Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02**/MF **A01**

**NITROGEN ORGANIC COMPOUNDS**
Quantification of Nitro- and Hydroxylated Nitro-Aromatic/ Polycyclic Aromatic Hydrocarbons in Selected Ambient Air Daytime Winter Samples.
PB93-141190/REB 93-01 PC **A03**/MF **A01**

**NITROGEN OXIDE (N2O)**
On-Line Measurement of Nitrous Oxide from Combustion Sources by Automated Gas Chromatography.
PB93-106847/REB 93-01 PC **A03**/MF **A01**

Development of Sampling and Analytical Methods for the Measurement of Nitrous Oxide from Fossil Fuel Combustion Sources.
PB93-194330/REB 93-01 PC **A07**/MF **A02**

**NITROGEN OXIDE (NO)**
Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03**/MF **A01**

**NITROGEN OXIDES**
Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC **A03**/MF **A01**

Evaluation of Nitrogen Oxide Emissions Data from TVA Coal-Fired Boilers.
PB93-138865/REB 93-01 PC **A06**/MF **A02**

Evaluation and Costing of NOx Controls for Existing Utility Boilers in the NESCAUM Region.
PB93-142016/REB 93-01 PC **A18**/MF **A04**

Alternative Control Techniques Document. NOx Emissions from Stationary Gas Turbines.
PB93-156586/REB 93-01 PC **A11**/MF **A03**

Alternative Control Techniques Document-NOx Emissions from Process Heaters.
PB93-186211/REB 93-01 PC **A10**/MF **A03**

Relationships between Ozone Precursor Levels and Response to Emissions Reductions: Analysis of Regional Oxidant Model Results for the Northeastern United States.
PB93-186294/REB 93-01 PC **A07**/MF **A02**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991.
PB93-212835/REB 93-04 PC **E99**/MF **E99**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 1. Sessions 1-3.
PB93-212843/REB 93-04 PC **A15**/MF **A03**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 2. Sessions 4 and 5.
PB93-212850/REB 93-04 PC **A20**/MF **A04**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 3. Sessions 6-8.
PB93-212868/REB 93-04 PC **A19**/MF **A04**

Industrial Boiler Low NOx Combustion Retrofit Cost Algorithm Development. Project Summary.
PB93-222578/REB 93-04 PC **A01**/MF **A01**

Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-228450/REB 93-04 PC **A02**/MF **A01**

Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.
PB93-228468/REB 93-04 PC **A02**/MF **A01**

**NITROGEN SATURATION**
Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC **A02**/MF **A01**

**NITROPHENOLS**
Immunoassay for p-Nitrophenol in Urine (Chapter XX).
PB93-175552/REB 93-01 PC **A03**/MF **A01**

**NITROSAMINES**
Evaluation of the Potential Carcinogenicity of N-Nitrosomethylvinylamine (4549-40-0).
PB93-196509/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosopyrrolidine.
PB93-196525/REB 93-01 PC **A03**/MF **A01**

**NITROSO COMPOUNDS**
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurea (684-93-5).
PB93-196483/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosomethylvinylamine (4549-40-0).
PB93-196509/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosopiperidine (100-75-4).
PB93-196517/REB 93-01 PC **A03**/MF **A01**

**NITROSOMETHYLURETHANE**
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurethane (165-53-2).
PB93-196491/REB 93-01 PC **A03**/MF **A01**

**NITROSOMONAS EUROPAEA**
Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium 'Nitrosomonas europaea'.
PB93-169076/REB 93-01 PC **A02**/MF **A01**

**NON-GAUSSIAN PLUME MODEL**
Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03**/MF **A01**

**NON-MAMMALIAN EMBRYO**
Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

**NON-METHANE HYDROCARBONS**
Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03**/MF **A01**

**NON-TARGET SPECIES**
Bacillus thuringiensis var. kurstaki Affects a Beneficial Insect, the Cinnabar Moth (Lepidoptera: Arctidae).
PB93-199651/REB 93-01 PC **A02**/MF **A01**

**NONAZEOTROPIC REFRIGERANT MIXTURES**
Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131688/REB 93-01 PC **A03**/MF **A01**

**NONPOINT SOURCES**
Use of the Black Creek Database to Analyze Techniques for Estimating Nonpoint Source Loadings from Small Watersheds (May 1988).
PB93-128072/REB 93-01 PC **A03**/MF **A01**

Clean Water Act (Section 319): An Evaluation of Program Implementation in Region 10.
PB93-145654/REB 93-01 PC **A05**/MF **A01**

Research and Information Needs Related to Nonpoint Source Pollution and Wetlands in the Watershed: An EPA Perspective.
PB93-168862/REB 93-01 PC **A02**/MF **A01**

Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC **A14**/MF **A03**

Managing Nonpoint Source Pollution. Final Report to Congress on Section 319 of the Clean Water Act (1989).
PB93-200897/REB 93-01 PC **A10**/MF **A03**

News-Notes Number 23: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-204006/REB 93-01 PC **A03**/MF **A01**

*News-Notes Number 21: The Condition of the Environ*ment and the Nonpoint Sources of Water Pollution.
PB93-204030/REB 93-01 PC **A03**/MF **A01**

Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC **A06**/MF **A02**

Nonpoint Source Pollution: Land Use and Water Quality.
PB93-223014/REB 93-04 PC **A03**

Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC **A04**/MF **A01**

State and Local Funding of Nonpoint Source Control Programs.
PB93-228146/REB 93-04 PC **A09**/MF **A02**

Guide to Nonpoint Source Pollution Control. Controlling Nonpoint Source Pollution: A Guide.
PB93-234292/REB 93-04 PC **A07**/MF **A02**

Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters.
PB93-234672/REB 93-04 PC **A99**/MF **E08**

**NONROAD ENGINES**
Nonroad Mobile Source Sales and Attrition Study: Identification and Evaluation of Available Data Sources.
PB93-190098/REB 93-01 PC **A11**/MF **A03**

**NONROAD EQUIPMENT**
Methodology to Estimate Nonroad Equipment Populations by Nonattainment Areas.
PB93-174332/REB 93-01 PC **A05**/MF **A01**

**NONROAD VEHICLES**
Commercial Marine Vessel Contributions to Emission Inventories.
PB93-173961/REB 93-01 PC **A07**/MF **A02**

Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
PB93-180875/REB 93-01 PC **A06**/MF **A02**

Nonroad Mobile Source Sales and Attrition Study: Identification and Evaluation of Available Data Sources.
PB93-190098/REB 93-01 PC **A11**/MF **A03**

**NONTARGET SPECIES**
Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC **A02**/MF **A01**

**NORTH AMERICA**
Trace Organic Contaminants in Anthropogenically Acidified Surface Waters.
PB93-135689/REB 93-01 PC **A03**/MF **A01**

Effects of CO2 and Climate Change on Forest Trees.
PB93-222339/REB 93-04 PC **A07**/MF **A02**

Acid Precipitation in North America: 1986 Annual and Seasonal Data Summaries from Acid Deposition System Data Base.
PB93-223154/REB 93-04 PC **A04**/MF **A01**

**NORTH CAROLINA**
National Priorities List Sites: North Carolina, 1992.
PB93-963232/REB 93-01 PC **A05**/MF **A01**

**NORTH DAKOTA**
National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC **A04**/MF **A01**

**NORTHEAST REGION (ILLINOIS)**
Volunteer Lake Monitoring Program, 1991. Volume 3. Northeastern Illinois Region.
PB93-113538/REB 93-01 PC **A07**/MF **A02**

**NORTHEAST REGION (INDIANA)**
Northeast Indiana Conservation Tillage Demonstration Project. Final Report (1981-1985).
PB93-128056/REB 93-01 PC **A03**/MF **A01**

**NORTHEAST REGION (UNITED STATES)**
Strategic Assessment of Near Coastal Waters: Northeast Case Study.
PB93-136521/REB 93-01 PC **A06**/MF **A02**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

*Regional Modeling Analysis of the Dependencies of At*mospheric Oxidants to Perturbations in NOx and Hydrocarbon Emissions.
PB93-180925/REB 93-01 PC **A02**/MF **A01**

**NORTHEASTERN REGION (UNITED STATES)**
Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

**NORTHWEST REGION (ILLINOIS)**
Volunteer Lake Monitoring Program, 1992. Volume 2: Northwestern Illinois Region.
PB93-217214/REB 93-04 PC **A04**/MF **A01**

**NORTHWEST REGION (UNITED STATES)**
Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP **D03**

**NOSE (ANATOMY)**
Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
PB93-175677/REB 93-01 PC **A02**/MF **A01**

Human Upper Respiratory Tract Responses to Inhaled Pollutants with Emphasis on Nasal Lavage.
PB93-181089/REB 93-01 PC **A02**/MF **A01**

Comments on Recent Data for Particle Deposition in Human Nasal Passages.
PB93-181105/REB 93-01 PC **A02**/MF **A01**

**NOSEMA LOCUSTAE**
*RED Facts: 'Nosema locustae'.*
PB93-100352/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED) 'Nosema locustae'.
PB93-100360/REB 93-01 PC **A07**/MF **A02**

**NOTIFICATION PROCEDURES**
PR Notice 86-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144012/REB 93-01 PC **A01**/MF **A01**

PR Notice 86-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144020/REB 93-01 PC **A01**/MF **A01**

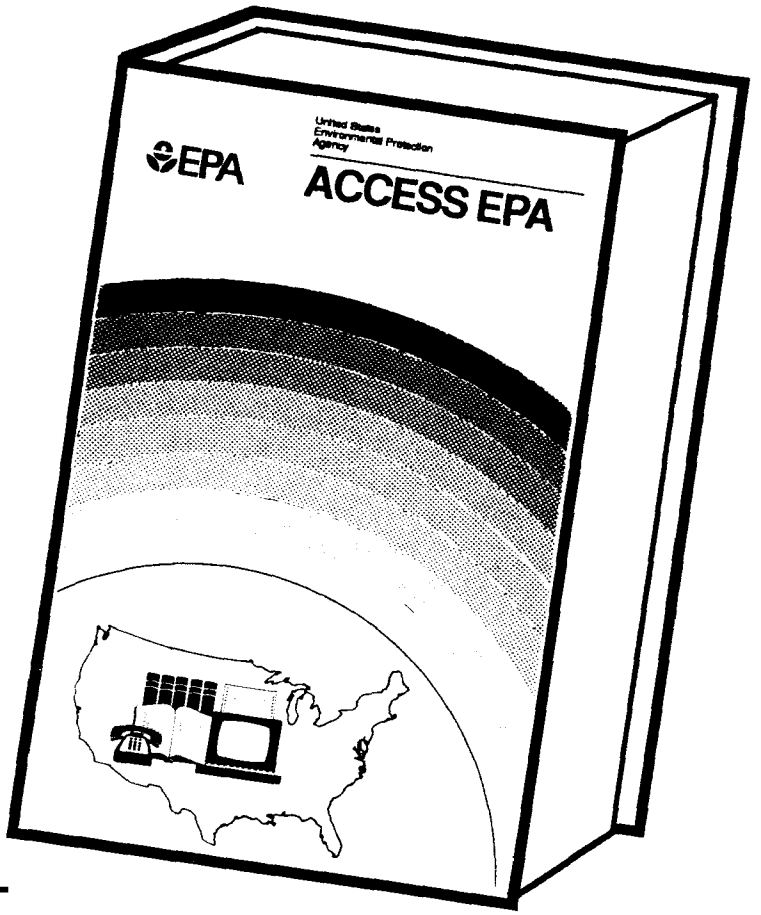
PR Notice 86-3. Notice to Producers, Registrants, and Formulators.
PB93-144038/REB 93-01 PC **A01**/MF **A01**

## *Discover The New Environmental Directory*

# ACCESS EPA Revised 1993 Edition

**Completely updated in 645 invaluable pages, including 24 new entries and all new mail codes for Headquarters offices.**

Access key, publicly available information resources on every environmental topic. Provides detailed descriptions with complete contact information. Produced by the U.S. Environmental Protection Agency (EPA), this pathfinder includes both EPA and other public sector organization resources.




Includes information on **EPA's National Environmental Supercomputing Center** (new for 1993) as well as:

- **Clearinghouses**
- **Databases**
- **Dockets**
- **EPA Scientific Models**
- **Documents**
- **EPA Libraries**
- **Records Programs**

In addition, contains directions for obtaining other publicly accessible environmental information on topics such as:

- **State Environmental Libraries**
- **Government Document Ordering Services**
- **Federal Depository Libraries**

To enhance the usefulness of this publication, there is also a selected acronym list (expanded to include 66 new entries) and a detailed author/title/subject index.

## Ordering Information:

Government Printing Office (GPO)
710 North Capitol Street, NW
Washington, DC 20402

Telephone: (202) 783-3238
Fax: (202) 512-2250
Telex: 710-822-9413 (international)

GPO Stock Number: 055-000-00437-4
Price: $24.00*

National Technical Information Service (NTIS)
5285 Port Royal Road
Springfield, VA 22161

Telephone: (703) 487-4650; (800) 553-NTIS (Rush orders only)
Fax: (703) 321-8547
Telex: 89-9405 (domestic); 64617 (international)

NTIS Number: PB93-170041
Price: $24.00*

*Please call to verify price and availability prior to placing order as shipping and handling charges may apply.

## ACCESS EPA Available Online Through The Following:

EPA Online Library System (OLS)(Updating currently in progress):
Dial In: (919) 549-0720; "IBMPSI" / "OLS" / "A"; (300-9600 baud; even parity; 1/2 duplex; 7 databits; 1 stop)
Internet: EPAIBM.RTPNC.EPA.GOV; "Public Access" / "OLS" / "A"

GPO Federal Bulletin Board System: (202) 512-1387

EPA 220-F-94-001

*Printed on Recycled Paper*

PR Notice 86-4. Notice to Registrants of Pesticides, and Applicants for Pesticide Registration.
PB93-144046/REB 93-01 PC **A02**/MF **A01**

PR Notice 86-5. Notice to Producers, Formulators, Distributors and Registrants.
PB93-144053/REB 93-01 PC **A03**/MF **A01**

PR Notice 87-2. Notice to Procedures, Registrants, and Formulators.
PB93-144061/REB 93-01 PC **A01**/MF **A01**

PR Notice 87-3. Notice to Manufacturers, Formulators, Distributors and Registrants of Pesticide Products.
PB93-144079/REB 93-01 PC **A01**/MF **A01**

PR Notice 87-6. Notice to Manufacturers, Formulators, Procedures, and Registrants of Pesticide Products.
PB93-144095/REB 93-01 PC **A02**/MF **A01**

PR Notice 87-7. Notice to Producers, Formulators and Registrants of Pesticides.
PB93-146108/REB 93-01 PC **A02**/MF **A01**

**NPAP (NATIONAL PERFORMANCE AUDIT PROGRAM)**

National Performance Audit Program (NPAP).
PB93-212322/REB 93-04 PC **A02**/MF **A01**

**NPS MANAGEMENT PROGRAM**

Federal Consistency Guidance: Federal Consistency with State Nonpoint Source Management Programs.
AD-A267 517/1/REB 93-04 PC **A03**/MF **A01**

**NPS METHODS**

National Pesticide Survey: Glossary.
PB93-115970/REB 93-01 PC **A02**/MF **A01**

**NPS METHODS 1-9**

National Pesticide Survey: Project Summary.
PB93-115988/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Survey Analytes.
PB93-116010/REB 93-01 PC **A03**/MF **A01**

**NSPS (NEW SOURCE PERFORMANCE STANDARDS)**

Sewage Treatment Plant NSPS: Responses to Comments on April 1986 Proposed Revisions.
PB93-223584/REB 93-04 PC **A03**/MF **A01**

**NUCLEAR POWER PLANTS**

Bladder-wrack (Fucus vesiculosus L) as an indicator for radionuclides in the environment of Swedish nuclear power plants.
DE93603681/REB 93-01 PC **A03**/MF **A01**

Background Information Document to Support NESHAPS Rulemaking on Nuclear Power Reactors.
PB93-199321/REB 93-01 PC **A14**/MF **A03**

**NUCLEAR WASTE CONTAINERS**

On-Board Corrosion Analysis of a Recovered Nuclear Waste Container.
PB93-202927/REB 93-01 PC **A03**/MF **A01**

**NUCLEIC ACID HYBRIDIZATION**

Genus- and Group-Specific Hybridization Probes for Determinative and Environmental Studies of Sulfate-Reducing Bacteria.
PB93-168987/REB 93-01 PC **A02**/MF **A01**

**NUCLEIC ACID REPETITIVE SEQUENCES**

PCR Primers Specific for Detection of a Rat Repetitive Sequence.
PB93-141398/REB 93-01 PC **A01**/MF **A01**

Repeated Sequences Including RS1100 'Pseudomonas cepacia' AC1100 Function as IS Elements.
PB93-205177/REB 93-04 PC **A02**/MF **A01**

**NUCLEIC ACIDS**

Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC **A03**/MF **A01**

**NUCLEOSIDES**

Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.
PB93-222354/REB 93-04 PC **A03**/MF **A01**

**NUCLEOTIDES**

Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC **A02**/MF **A01**

**NURSERIES**

Synthesis of Ectomycorrhizae on Northern Red Oak Seedlings in a Michigan Nursery.
PB93-212678/REB 93-04 PC **A02**/MF **A01**

**NUTRIENT BUDGETS**

Review of Tampa Bay Information for Interim Nutrient Budgets and Historical Loadings of Bay Segments.
PB93-191187/REB 93-01 PC **A03**/MF **A01**

**NUTRIENT LOAD**

Baseline Point Source Load Inventory, 1985. 1991 Re-evaluation Report No. 2.
PB93-193761/REB 93-01 PC **A03**/MF **A01**

**NUTRIENT LOADING**

Review of Tampa Bay Information for Interim Nutrient Budgets and Historical Loadings of Bay Segments.
PB93-191187/REB 93-01 PC **A03**/MF **A01**

**NUTRIENTS**

Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC **A03**/MF **A01**

Nutrients and Phytoplankton in Puget Sound.
PB93-119576/REB 93-01 PC **A08**/MF **A02**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

Application of the Ecotone Concept in Defining Nutrient Management Requirements for the Upper Potomac River Basin.
PB93-199560/REB 93-01 PC **A03**/MF **A01**

Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC **A02**/MF **A01**

**NWI (NATIONAL WETLANDS INVENTORY)**

Statistical Evaluation of the EMAP-Wetlands Classification.
PB93-199446/REB 93-01 PC **A03**/MF **A01**

**OAK ORCHARD CREEK WATERSHED**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
PB93-128015/REB 93-01 PC **A04**/MF **A01**

**OAK RIDGE RESERVATION**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.
PB93-964010/REB 93-04 PC **A03**/MF **A01**

**OAK TREES**

Synthesis of Ectomycorrhizae on Northern Red Oak Seedlings in a Michigan Nursery.
PB93-212678/REB 93-04 PC **A02**/MF **A01**

**OBPA (OXYBISPHENOXARSINE)**

Reregistration Eligibility Document (RED) 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-234755/REB 93-04 PC **A07**/MF **A02**

**OCCSS (ORGANIC CONTRACT COMPLIANCE SCREENING SYSTEM)**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 4) (for Microcomputers).
PB93-505345/REB 93-04 CP **D02**

**OCCUPATIONAL EXPOSURE**

Effect of OSHA's Bloodborne Pathogens Standard on Hazardous Waste Cleanup Activities.
PB93-963419/REB 93-04 PC **A02**/MF **A01**

Personal Air Sampling and Air Monitoring Requirements under 29 CFR 1910.120.
PB93-963420/REB 93-04 PC **A03**/MF **A01**

**OCCUPATIONAL HEALTH AND SAFETY**

Evaluation of the Potential Carcinogenicity of Chloromethyl Methyl Ether (Technical Grade) (107-30-2).
PB93-185122/REB 93-01 PC **A03**/MF **A01**

**OCCUPATIONAL SAFETY AND HEALTH**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Human Health (February 1993 Draft).
PB93-154680/REB 93-01 PC **A09**/MF **A03**

Estimation of the Cost of Using Chemical Protective Clothing.
PB93-168805/REB 93-01 PC **A03**/MF **A01**

Summary of Workshop III: Evoked Potentials.
PB93-175610/REB 93-01 PC **A01**/MF **A01**

Association of Personal and Workplace Characteristics with Reported Health Symptoms of 6771 Government Employees in Washington, DC.
PB93-212264/REB 93-04 PC **A02**/MF **A01**

Field Applications of Robotic Systems in Hazardous Environments, p1-29 1993. See also PB86-176344 and PB92-166743.
PB93-229755/REB 93-04 PC **A03**/MF **A01**

OSWER Integrated Health and Safety Standard Operating Practices.
PB93-963401/REB 93-01 PC **A01**/MF **A01**

**OCEAN BOTTOM**

Database of Benthic Sampling Locations in Tampa Bay.
PB93-191211/REB 93-01 PC **A05**/MF **A01**

**OCEAN DISPOSAL**

INSEA User's Manual Environmental Performance Model of Incineration at Sea Operations.
PB93-206977/REB 93-04 PC **A07**/MF **A02**

**OCEAN DUMPING BAN ACT OF 1988**

Report to Congress on Implementation of Section 403(c) of the Federal Water Pollution Control Act.
PB93-207488/REB 93-04 PC **A07**/MF **A02**

**OCEAN TEMPERATURE**

Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC **A03**/MF **A01**

**OCEAN TIDES**

Spawning Periodicity of the Inland Silverside, 'Menidia beryllina' (Pisces: Atherinidae) in the Laboratory: Relationship to Lunar Cycles.
PB93-236297/REB 93-04 PC **A02**/MF **A01**

**OCEAN WASTE DISPOSAL**

Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04**/MF **A01**

Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC **A01**/MF **A01**

Report to Congress on Implementation of Section 403(c) of the Federal Water Pollution Control Act.
PB93-207488/REB 93-04 PC **A07**/MF **A02**

Plume Definition in Regions of Strong Bending.
PB93-221844/REB 93-04 PC **A02**/MF **A01**

Guidance Manual for the Review of Permitted and Civil Works Projects for the Ocean Disposal of Dredged Material.
PB93-223048/REB 93-04 PC **A14**/MF **A03**

Dredged Material Ocean Dumping Reference Document.
PB93-223568/REB 93-04 PC **A04**/MF **A01**

**OCEANS**

Protecting Coastal and Wetlands Resources: A Guide for Local Governments.
PB93-105567/REB 93-01 PC **A09**/MF **A03**

Protecting the Nation's Wetlands, Oceans, and Watersheds: An Overview of Programs and Activities.
PB93-105609/REB 93-01 PC **A03**/MF **A01**

Global Oceans Directory. A Compendium of Organizations Dedicated to Marine Conservation.
PB93-206555/REB 93-04 PC **A08**/MF **A02**

**OFFICE BUILDINGS**

Relating Air Cleaner Efficiency to Indoor Air Quality.
PB93-212405/REB 93-04 PC **A03**/MF **A01**

**OFFICE OF AIR QUALITY PLANNING AND STANDARDS**

Directory of OAQPS Information Services, May 1993.
PB93-196624/REB 93-01 PC **A03**/MF **A01**

**OFFICE OF SCIENCE AND TECHNOLOGY**

Publications Office of Science and Technology: Catalog.
PB93-152577/REB 93-01 PC **A06**/MF **A02**

**OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE**

ARARs Fact Sheet: Compliance with the Clean Air Act and Associated Air Quality Requirements.
PB92-963282/REB 93-01 PC **A03**/MF **A01**

Superfund: Qualified Disadvantaged Business Utilization in State Response.
PB92-963283/REB 93-01 PC **A01**/MF **A01**

Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC **A22**/MF **A04**

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Quick Reference Fact Sheet.
PB93-121325/REB 93-01 PC **A02**/MF **A01**

OSWER Source Book. Volume 1. Training and Technology Transfer Resources, 1992-1993.
PB93-143980/REB 93-01 PC **A10**/MF **A03**

OSWER Source Book. Volume 2. Training and Technology Transfer Resources, 1992-1993.
PB93-144129/REB 93-01 PC **A11**/MF **A03**

Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP.
PB93-963252/REB 93-01 PC **A03**/MF **A01**

Exercising Flexibility through the Superfund Accelerated Cleanup Model (SACM).
PB93-963253/REB 93-01 PC **A01**/MF **A01**

Superfund Progress. Aficionado's Version. Progress as of September 30, 1992.
PB93-963255/REB 93-01 PC **A03**/MF **A01**

Overview of the Outyear Liability Model (OLM).
PB93-963259/REB 93-01 PC **A02**/MF **A01**

Initiatives to Streamline the Alternative Remedial Contracting Strategy (ARCS) Contracts' Award Fee Process.
PB93-963275/REB 93-01 PC **A03**/MF **A01**

Performance Tracking under ARCS Contracts.
PB93-963276/REB 93-01 PC **A01**/MF **A01**

Amendment to Historical Definitions of NPL Deletion Start and Completion Dates.
PB93-963278/REB 93-01 PC **A01**/MF **A01**

Identification of a Senior Superfund Official for Addressing Special NPL Site-Related Issues.
PB93-963279/REB 93-01 PC **A01**/MF **A01**

Guidance on Program Management Activities under ARCS.
PB93-963280/REB 93-01 PC **A03**/MF **A01**

Clarification of Delegation to Approve Consistency Exemptions at NPL Sites.
PB93-963281/REB 93-01 PC **A01**/MF **A01**

Use of Time and Materials and Cost Reimbursement Subcontracts for Remedial Actions under the Alternative Remedial Contracting Strategy Contracts.
PB93-963282/REB 93-01 PC **A02**/MF **A01**

Smart Moves in Superfund - Revitalization One Year Later. Volume 1, Number 3, January 1993.
PB93-963284/REB 93-01 PC A01/MF A01

SARA '200' Remedial Action Starts Requirement.
PB93-963324/REB 93-01 PC A01/MF A01

Permits and Permit 'Equivalency' Processes for CERCLA On-Site Response Actions.
PB93-963325/REB 93-01 PC A02/MF A01

OSWER Integrated Health and Safety Standard Operating Practices.
PB93-963401/REB 93-01 PC A01/MF A01

Reassignment of CLP Transportation Functions.
PB93-963501/REB 93-01 PC A01/MF A01

Extending the Tracking of Analytical Services to Potentially Responsible Party-Lead Superfund Sites (Supplemental Guidance on OSWER Directive 9240.0-2A).
PB93-963502/REB 93-01 PC A03/MF A01

**OFFICE OF WETLANDS OCEANS AND WATERSHEDS**

Protecting the Nation's Wetlands, Oceans, and Watersheds: An Overview of Programs and Activities.
PB93-105609/REB 93-01 PC A03/MF A01

**OFFSHORE DRILLING**

Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC A03/MF A01

Economic Benefits of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-168797/REB 93-01 PC A08/MF A02

Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
PB93-173979/REB 93-01 PC A22/MF A04

Regulatory Impact Analysis of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-174613/REB 93-01 PC A06/MF A02

**OHIO**

National Priorities List Sites: Ohio, 1992.
PB93-963234/REB 93-01 PC A06/MF A02

**OHIO RIVER**

Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC A03/MF A01

Always a River: Supplemental Environmental Education Curriculum on the Ohio River and Water Grades K-12.
PB93-200905/REB 93-01 PC A14/MF A03

**OIL POLLUTION**

Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC A02/MF A01

Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC A02/MF A01

UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC A02/MF A01

Bioremediation as a Technology: Experiences with the Exxon Valdez Oil Spill.
PB93-121226/REB 93-01 PC A03/MF A01

Inhibition of Alkylbenzene Biodegradation under Denitrifying Conditions by Using Acetylene Block Technique.
PB93-121242/REB 93-01 PC A02/MF A01

Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC A03/MF A01

Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC A03/MF A01

Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC A02/MF A01

Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC A02/MF A01

**OIL POLLUTION ACT**

Facility Response Plans.
PB93-963408/REB 93-01 PC A01/MF A01

**OIL RECOVERY**

Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
PB93-173979/REB 93-01 PC A22/MF A04

Regulatory Impact Analysis of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-174613/REB 93-01 PC A06/MF A02

**OIL SPILLS**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Wide Beach Section of Brant, New York).
PB92-963628/REB 93-01 PC A02/MF A01

Oil and Hazardous Materials Technical Assistance Data System, (OHM-TADS) Fields and Their Definitions. Users' Guide.
PB93-111706/REB 93-01 PC A03/MF A01

Proceedings of the Symposium on Soil Venting. Held in Houston, Texas on April 29-May 1, 1991.
PB93-122323/REB 93-01 PC A15/MF A03

Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC A03/MF A01

Applied Geologic, Microbiological, and Engineering Constraints of In-situ BTEX Bioremediation.
PB93-141513/REB 93-01 PC A03/MF A01

Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC A02/MF A01

Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC A06/MF A02

Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC A03/MF A01

Nutrient Movement through Beach Media: Problems and Field Results Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191344/REB 93-01 PC A03/MF A01

Evaluation of Three Oil Spill Laboratory Dispersant Effectiveness Tests.
PB93-191377/REB 93-01 PC A02/MF A01

Evaluation of Laboratory Tests to Determine the Effectiveness of Chemical Surface Washing Agents.
PB93-194215/REB 93-01 PC A02/MF A01

Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC A03/MF A01

Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203693/REB 93-04 PC A07/MF A02

Chemical Shoreline Cleaning Agents for Oil Spills: Update State-of-the-Art on Mechanisms of Action and Factors Influencing Performance.
PB93-203701/REB 93-04 PC A04/MF A01

Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC A03/MF A01

Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC A03/MF A01

Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.
PB93-236578/REB 93-04 PC A04/MF A01

Oil and Hazardous Materials, Technical Assistance Data System (OHM-TADS) (for Microcomputers).
PB93-500577/REB 93-01 CP D06

Facility Response Plans.
PB93-963408/REB 93-01 PC A01/MF A01

**OIL WASTES**

Retrospective Performance Evaluation on In situ Bioremediation: Site Characterization.
PB93-221919/REB 93-04 PC A03/MF A01

**OKLAHOMA**

National Priorities List Sites: Oklahoma, 1992.
PB93-963235/REB 93-01 PC A04/MF A01

**OLFACTORY BULB**

Olfactory Toxicity of Beta,Beta'-Iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC A02/MF A01

**OLIGONUCLEOTIDE PROBES**

Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
PB93-121164/REB 93-01 PC A02/MF A01

Genus- and Group-Specific Hybridization Probes for Determinative and Environmental Studies of Sulfate-Reducing Bacteria.
PB93-168967/REB 93-01 PC A02/MF A01

**ONTARIO**

Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC A03/MF A01

**OOCYTES**

Cytoplasmic Microtubular Dynamics and Chromatin Organization during Mammalian Oogenesis and Oocyte Maturation.
PB93-194413/REB 93-01 PC A03/MF A01

ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC A02/MF A01

Radiation- and Chemically-Induced Chromosome Aberrations in Mouse Oocytes: A Comparison with Effects in Males.
PB93-194462/REB 93-01 PC A02/MF A01

**OOGENESIS**

Gene Expression during Oogenesis in Mice.
PB93-194389/REB 93-01 PC A03/MF A01

Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC A03/MF A01

**OPEN PATH MONITORS**

Air/Superfund National Technical Guidance Study Series: Applicability of Open Path Monitors for Superfund.
PB93-138154/REB 93-01 PC A07/MF A02

**OPERANT CONDITIONING**

Bitertanol, a Triazole Fungicide, Increases Operant Responding but Not Motor Activity.
PB93-236370/REB 93-04 PC A02/MF A01

**OPERATORS (PERSONNEL)**

Medical Waste Incinerator Operator Training Program: Course Handbook.
PB93-781979/REB 93-04 PC$56.00/MF$22.00

**OPTICAL MEASURING INSTRUMENTS**

Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
PB93-131704/REB 93-01 PC A03/MF A01

**OREGON**

National Priorities List Sites: Oregon, 1992.
PB93-963236/REB 93-01 PC A04/MF A01

**ORGANIC ACIDS**

Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC A02/MF A01

Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC A02/MF A01

Role of Soil Organic Acids in Mineral Weathering Processes (Chapter 6).
PB93-149268/REB 93-01 PC A04/MF A01

Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC A03/MF A01

**ORGANIC CHEMICALS INDUSTRY**

Supplement to the OCPSF Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category.
PB93-186096/REB 93-04 PC A11/MF A03

**ORGANIC COMPOUNDS**

Mathematical Model of Plant Uptake and Translocation of Organic Chemicals: Development of the Model.
PB93-106938/REB 93-01 PC A02/MF A01

Mathematical Model of Plant Uptake and Translocations of Organic Chemicals: Application to Experiments.
PB93-106946/REB 93-01 PC A03/MF A01

Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC A02/MF A01

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Remedy Selection. Interim Guidance.
PB93-126597/REB 93-01 PC A03/MF A01

SITE-Emerging Technologies: Laser Induced Photochemical Oxidative Destruction of Toxic Organics in Leachates and Groundwaters.
PB93-131431/REB 93-01 PC A04/MF A01

Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC A03/MF A01

Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC A03/MF A01

Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC A02/MF A01

Trace Organic Contaminants in Anthropogenically Acidified Surface Waters.
PB93-135689/REB 93-01 PC A03/MF A01

Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC A03/MF A01

Regulatory Impact Analysis for the National Emissions Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Seven Other Processes.
PB93-143972/REB 93-01 PC A09/MF A02

Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC A04/MF A01

Determination of Rates of Reaction in the Gas-Phase in the Troposphere. Theory and Practice. 5. Rate of Indirect Photoreaction.
PB93-149334/REB 93-01 PC A06/MF A02

Pilot-Scale Evaluation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC A02/MF A01

Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC A02/MF A01

Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC A03/MF A01

Physical and Chemical Parameters of Sediment Extraction and Fractionation That Influence Toxicity, as Evaluated by Microtox (Trade Name).
PB93-185882/REB 93-01 PC A03/MF A01

Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC A02/MF A01

Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02**/MF **A01**

Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC **A07**/MF **A02**

Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC **A02**/MF **A01**

Evaluation of the Potential Carcinogenicity of Safrole (94-59-7).
PB93-201291/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trypan Blue (72-57-1).
PB93-202273/REB 93-01 PC **A03**/MF **A01**

Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
PB93-204063/REB 93-01 PC **A02**/MF **A01**

Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.
PB93-210383/REB 93-04 PC **A07**/MF **A02**

Organic Air Emissions from Waste Management Facilities.
PB93-215598/REB 93-04 PC **A07**/MF **A02**

Organic Combustion Fingerprints of Three Common Home Heating Fuels.
PB93-222123/REB 93-04 PC **A02**/MF **A01**

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC **A10**/MF **A03**

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC **A15**/MF **A03**

Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC **A02**/MF **A01**

Development and Evaluation of a Transportable Fast Gas Chromatograph for the Monitoring of Organic Vapors in Air.
PB93-228526/REB 93-04 PC **A02**/MF **A01**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 3) (for Microcomputers).
PB93-500270/REB 93-01 CP **D02**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 5) (for Microcomputers).
PB93-506053/REB 93-04 CP **D02**

**ORGANIC CONTRACT COMPLIANCE SCREENING SYSTEM**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 3) (for Microcomputers).
PB93-500270/REB 93-01 CP **D02**

**ORGANIC HALOGEN COMPOUNDS**

Field Test of a Generic Method for Halogenated Hydrocarbons.
PB93-212181/REB 93-04 PC **A13**/MF **A03**

**ORGANIC MATERIALS**

Molecular Size Exclusion by Soil Organic Materials Estimated from Their Swelling in Organic Solvents.
PB93-228583/REB 93-04 PC **A02**/MF **A01**

**ORGANIC MATTER**

Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.
PB93-205102/REB 93-04 PC **A02**/MF **A01**

**ORGANIC WASTES**

Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
PB93-185759/REB 93-01 PC **A03**/MF **A01**

**ORGANISMS**

Soil Biology and Ecology.
PB93-199453/REB 93-01 PC **A03**/MF **A01**

DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03**/MF **A01**

**ORGANOPHOSPHATE INSECTICIDES**

Using Neuroblastoma Cell Lines to Examine Organophosphate Neurotoxicity.
PB93-229508/REB 93-04 PC **A02**/MF **A01**

**ORGANOPHOSPHORUS COMPOUNDS**

Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02**/MF **A01**

Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC **A02**/MF **A01**

**ORGANOPHOSPHORUS INSECTICIDES**

Relationship between Serum Cholinesterase Activity and the Change in Body Temperature and Motor Activity in the Rat: A Dose-Response Study of Diisopropyl Fluorophosphate.
PB93-175644/REB 93-01 PC **A02**/MF **A01**

**ORTHOPEDICS**

Waste Reduction Activities and Options for a Manufacturer of Orthopedic Implants.
PB93-126217/REB 93-01 PC **A02**/MF **A01**

**OTOTOXICITY**

Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02**/MF **A01**

**OTTER CREEK WATERSHED**

Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
PB93-128114/REB 93-01 PC **A04**/MF **A01**

**OTTERS**

Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03**/MF **A01**

**OUTYEAR LIABILITY MODEL**

Overview of the Outyear Liability Model (OLM).
PB93-963259/REB 93-01 PC **A02**/MF **A01**

**OVARY**

Steroidogenic Assessment Using Ovary Culture in Cycling Rats: Effects of Bis(2-Diethylhexyl) Phthalate on Ovarian Steroid Production.
PB93-181022/REB 93-01 PC **A03**/MF **A01**

Effect of Methoxychlor on Ovarian Steroidogenesis: Role in Early Pregnancy Loss.
PB93-181030/REB 93-01 PC **A02**/MF **A01**

**OVULATION**

Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC **A03**/MF **A01**

Dithiocarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.
PB93-228989/REB 93-04 PC **A02**/MF **A01**

**OXALIC ACID**

Reregistration Eligibility Document (RED): Oxalic Acid.
PB93-169100/REB 93-01 PC **A06**/MF **A02**

RED Facts: Oxalic Acid.
PB93-173953/REB 93-01 PC **A02**/MF **A01**

**OXIDATION**

SITE-Emerging Technologies: Laser Induced Photochemical Oxidative Destruction of Toxic Organics in Leachates and Groundwaters.
PB93-131431/REB 93-01 PC **A04**/MF **A01**

Rapid Measurement of Aqueous Hydroxyl Radical Concentrations in Steady-State HO Flux Systems.
PB93-131779/REB 93-01 PC **A03**/MF **A01**

Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC **A03**/MF **A01**

Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC **A02**/MF **A01**

Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
PB93-191575/REB 93-01 PC **A02**/MF **A01**

Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC **A01**/MF **A01**

Oxidation of Biphenyl by a Multicomponent Enzyme System from 'Pseudomonas' sp. Strain LB400.
PB93-229466/REB 93-04 PC **A02**/MF **A01**

Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
PB93-229474/REB 93-04 PC **A02**/MF **A01**

**OXIDATION REDUCTION REACTIONS**

Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02**/MF **A01**

**OXIDIZERS**

Regional Modeling Analysis of the Dependencies of Atmospheric Oxidants to Perturbations in NOx and Hydrocarbon Emissions.
PB93-180925/REB 93-01 PC **A02**/MF **A01**

**OXIDOPAMINE**

Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Induction of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC **A03**/MF **A01**

**OXYBISPHENOARSINE**

RED Facts: 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-232908/REB 93-04 PC **A02**/MF **A01**

**OXYGEN**

Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC **A02**/MF **A01**

**OXYGEN DETECTORS**

Analysis of Original Equipment and Aftermarket Manufacturer Oxygen Sensor Constructional, Functional, and Price Differences.
PB93-208007/REB 93-04 PC **A18**/MF **A04**

**OXYTETRACYCLINE CALCIUM**

Reregistration Eligibility Document (RED) Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-234763/REB 93-04 PC **A07**/MF **A02**

**OYSTERS**

Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC **A02**/MF **A01**

Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC **A03**/MF **A01**

Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02**/MF **A01**

Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02**/MF **A01**

**OZONE**

Measurements of total ozone.
DE92563059/REB 93-01 PC **A04**/MF **A01**

Guidance on the Adjusted Base Year Emissions Inventory and the 1996 Target for the 15 Percent Rate of Progress Plans.
PB93-122356/REB 93-01 PC **A04**/MF **A01**

Guidelines for Estimating and Applying Rule Effectiveness for Ozone CO State Implementation Plan Base Year Inventories.
PB93-131498/REB 93-01 PC **A05**/MF **A01**

Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC **A03**/MF **A01**

Dry Deposition Flux Calculations for the National Dry Deposition Network.
PB93-178242/REB 93-01 PC **A05**/MF **A02**

Role of Ozone in Tracheal Cell Transformation.
PB93-179935/REB 93-01 PC **A03**/MF **A01**

Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC **A02**/MF **A01**

Relationships between Ozone Precursor Levels and Response to Emissions Reductions: Analysis of Regional Oxidant Model Results for the Northeastern United States.
PB93-186294/REB 93-01 PC **A07**/MF **A02**

Guidance for Growth Factors, Projections, and Control Strategies for the 15 Percent Rate-of-Progress Plans.
PB93-186476/REB 93-01 PC **A09**/MF **A03**

Spatiotemporal Variability of Non-Urban Ozone Concentrations Over the Eastern United States and Its Potential Replication by Satellite Data.
PB93-191328/REB 93-01 PC **A03**/MF **A01**

Potential Bias from Non-Continuous Monitoring of Ambient Ozone Concentrations for Characterizing Hourly and Daily 7- and 12-Hour Average Concentrations.
PB93-191534/REB 93-01 PC **A02**/MF **A01**

Guidance on the Relationship between the 15 Percent Rate-of-Progress Plans and Other Provisions of the Clean Air Act.
PB93-200525/REB 93-01 PC **A04**/MF **A01**

Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

Interpretive Analysis of Observed and Modeled Mesoscale Ozone Photochemistry in Areas with Numerous Point Sources.
PB93-212702/REB 93-04 PC **A03**/MF **A01**

Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.
PB93-212785/REB 93-04 PC **A03**/MF **A01**

Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-228815/REB 93-04 PC **A02**/MF **A01**

Predictors of Individual Differences in Acute Response to Ozone Exposure.
PB93-228849/REB 93-04 PC **A02**/MF **A01**

Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC **A02**/MF **A01**

Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone. Volume 2. Emission Inventory Requirements for Photochemical Air Quality Simulation Models (Revised).
PB93-234375/REB 93-04 PC **A11**/MF **A03**

Contribution to Indoor Ozone Levels of an Ozone Generator.
PB93-234557/REB 93-04 PC **A03**/MF **A01**

Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC **A03**/MF **A01**

Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC **A02**/MF **A01**

Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC A03/MF A01

**OZONE DEPLETION**

Subjective-Probability-Based Scenarios for Uncertain Input Parameters: Stratospheric Ozone Depletion, December 1990.
PB93-143741/REB 93-01 PC A03/MF A01

Role of Ozone Precursors in Tropospheric Ozone Formation and Control: A Report to Congress.
PB93-226694/REB 93-04 PC A04/MF A01

Summary of Public Comments and EPA Responses on the Draft Report: The Role of Ozone Precursors in Tropospheric Ozone Formation and Control.
PB93-226702/REB 93-04 PC A03/MF A01

**OZONE LAYER**

PR Notice 92-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219475/REB 93-04 PC A01/MF A01

PR Notice 92-3. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticide Products.
PB93-219483/REB 93-04 PC A03/MF A01

**PACIFIC OCEAN**

What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.
PB93-211985/REB 93-04 PC A21/MF A04

**PACKAGING**

EPA's Life Cycle Methodology: Guidelines for Use in Development of Packaging.
PB93-194199/REB 93-01 PC A03/MF A01

**PACKING MATERIALS**

EPA's Life Cycle Methodology: Guidelines for Use in Development of Packaging.
PB93-194199/REB 93-01 PC A03/MF A01

**PAINT INDUSTRY**

Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards, and Pretreatment Standards for the Paint Formulating Point Source Category.
PB93-206472/REB 93-04 PC A21/MF A04

**PAINTS**

Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC A02/MF A01

Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC A03/MF A01

Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
PB93-123123/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Artists Supply Paints.
PB93-123172/REB 93-01 PC A01/MF A01

Waste Reduction Activities and Options for a Manufacturer of General Purpose Paints and Painting Supplies.
PB93-126316/REB 93-01 PC A02/MF A01

Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC A02/MF A01

Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.
PB93-216604/REB 93-04 PC A06/MF A02

Workshop Report: Identification of Performance Parameters for Portable X-ray Fluoreescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.
PB93-216612/REB 93-04 PC A05/MF A02

**PALATE**

Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC A01/MF A01

**PALLIAL CAVITY**

Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC A03/MF A01

**PAPER INDUSTRY**

Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
PB93-126290/REB 93-01 PC A02/MF A01

Model Pollution Prevention Plan for the Kraft Segment of the Pulp and Paper Industry.
PB93-145605/REB 93-01 PC A04/MF A01

Pollution Prevention for the Kraft Pulp and Paper Industry.
PB93-145613/REB 93-01 PC A04/MF A01

Pollution Prevention Opportunity Assessment and Implementation Plan. For Simpson Tacoma Kraft Company, Tacoma, Washington.
PB93-145670/REB 93-01 PC A05/MF A01

Preliminary Data Summary for the Pulp, Paper and Paperboard Point Source Category.
PB93-202935/REB 93-01 PC A04/MF A01

**PAPER MILLS**

Pollution Prevention Opportunity Assessment and Implementation Plan. For Simpson Tacoma Kraft Company, Tacoma, Washington.
PB93-145670/REB 93-01 PC A05/MF A01

**PAPER PRODUCTS**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Paper and Paperboard Production.
PB93-206068/REB 93-04 PC A03/MF A01

**PARAMETRIC ANALYSIS**

Incorporating Uncertainty Associated with Censored Water Quality Data in Parametric Trend Analysis.
PB93-208262/REB 93-04 PC A03/MF A01

Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC A03/MF A01

**PARAOXON**

Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC A02/MF A01

**PARTICLE SIZE**

Airborne Particle Sizes and Sources Found in Indoor Air.
PB93-107019/REB 93-01 PC A03/MF A01

Development of Size-Specific Data from Particulate Control Technology Research Reports.
PB93-131456/REB 93-01 PC A03/MF A01

Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC A02/MF A01

**PARTICLES**

Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC A15/MF A03

Comments on Recent Data for Particle Deposition in Human Nasal Passages.
PB93-181105/REB 93-01 PC A02/MF A01

Interspecies Modeling of Inhaled Particle Deposition Patterns.
PB93-181121/REB 93-01 PC A03/MF A01

**PARTICULATES**

Design of the Clean Air Act Deposition Monitoring Network.
PB93-120947/REB 93-01 PC A03/MF A01

Characterization of PM-10 Emissions from Antiskid Materials Applied to Ice- and Snow-Covered Roadways.
PB93-150209/REB 93-01 PC A05/MF A01

Feasibility of Including Fugitive PM-10 Emissions Estimates in the EPA Emissions Trends Report.
PB93-169084/REB 93-01 PC A03/MF A01

Evaluation of Emissions from Masonry Heaters and Masonry Fireplaces in Homes.
PB93-173078/REB 93-01 PC A03/MF A01

Procedures for Identifying Reasonably Available Control Technology for Stationary Sources of PM-10.
PB93-175776/REB 93-01 PC A06/MF A02

Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC A03/MF A01

Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or Inhalable Particulate Data (Draft).
PB93-200640/REB 93-01 PC A04/MF A01

Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC A02/MF A01

Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.
PB93-215648/REB 93-04 PC A03/MF A01

Simultaneous Control of PM-10 and Hazardous Air Pollutants: Rationale for Selection of Hazardous Air Pollutants as Potential Particulate Matter or Associated with Particulate Matter at Source Conditions.
PB93-216380/REB 93-04 PC A05/MF A01

Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC A02/MF A01

Volatile Organic Compound/Particulate Matter Speciation Data Base Management System (SPECIATE), Version 1.5 (for Microcomputers).
PB93-505238/REB 93-01 CP D02

**PARTITION COEFFICIENTS**

Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC A02/MF A01

**PARTITIONING COEFFICIENTS**

Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC A02/MF A01

**PARTNERSHIPS**

Financing Models for Environmental Protection: Helping Communities Meet Their Environmental Goals.
PB93-124998/REB 93-01 PC A05/MF A01

**PASSAIC RIVER**

Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC A02/MF A01

**PASSIVE SAMPLING DEVICES**

Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC A02/MF A01

**PASSIVE SMOKING**

Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders.
PB93-134419/REB 93-01 PC$29.00/MF A04

**PATH OF POLLUTANTS**

Air/Superfund National Technical Guidance Study Series: Applicability of Open Path Monitors for Superfund.
PB93-138154/REB 93-01 PC A07/MF A02

PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
PB93-174027/REB 93-01 PC A17/MF A04

MULTIMED: The Multimedia Exposure Assessment Model for Evaluating the Land Disposal of Wastes-Model Theory.
PB93-186252/REB 93-01 PC A07/MF A02

Fate of Priority Pollutants in Publicly Owned Treatment Works. Pilot Study.
PB93-203974/REB 93-04 PC A03/MF A01

FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC A02/MF A01

Ground-Water Modeling Compendium. Model Fact Sheets, Descriptions, Applications and Assessment Framework.
PB93-207504/REB 93-04 PC A08/MF A02

Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC A03/MF A01

**PATHOBIOLOGY**

Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC A23/MF A04

**PATHOLOGY**

Pathogenicity of 'Salmonella pullorum' in Northern Bobwhite Quail and Mallard Ducks.
PB93-135739/REB 93-01 PC A03/MF A01

Importance of Fish Diseases: An Overview.
PB93-204113/REB 93-01 PC A03/MF A01

Chemically Induced Histopathology in Aquatic Invertebrates (Chapter 14).
PB93-222263/REB 93-04 PC A03/MF A01

**PATTERN RECOGNITION**

Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.
PB93-229383/REB 93-04 PC A03/MF A01

Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.
PB93-229425/REB 93-04 PC A03/MF A01

**PATTERNS**

Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC A03/MF A01

**PEND OREILLE BASIN**

Clark-Fork-Pend Oreille Basin Water Quality Study: A Summary of Findings and a Management Plan.
PB93-208148/REB 93-04 PC A08/MF A02

**PENNSYLVANIA**

National Priorities List Sites: Pennsylvania, 1992.
PB93-963237/REB 93-01 PC A12/MF A03

Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.
PB93-963912/REB 93-04 PC A04/MF A01

**PENTACHLOROPHENOL**

Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC A02/MF A01

Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191559/REB 93-01 PC A02/MF A01

**PERFORMANCE EVALUATION**

Comparison of Ground-Water Sampling Devices Based on Equilibration of Water Quality Indicator Parameters.
PB93-149201/REB 93-01 PC A03/MF A01

Evaluation of Three Oil Spill Laboratory Dispersant Effectiveness Tests.
PB93-191377/REB 93-01 PC A02/MF A01

**PERFORMANCE TESTING**

Summary of the 1987 EPA National Performance Audit Program on Source Measurements.
PB93-223444/REB 93-04 PC A03/MF A01

**PERIPHYTON**

Periphyton Photosynthesis as an Indicator of Effluent Toxicity: Relationship to Effects on Animal Test Species.
PB93-131829/REB 93-01 PC A02/MF A01

**PERKINSUS MARINUS**

Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC A02/MF A01

**PERMEABILITY**

Measurement of the Surface Permeability of Basement Concretes.
PB93-232114/REB 93-04 PC A03/MF A01

**PERMETHRIN**
Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
PB93-229599/REB 93-04 PC **A03**/MF **A01**

**PERMIT APPLICATIONS**
NPDES Storm Water Program. Question and Answer Document. Volume 1.
PB93-223410/REB 93-04 PC **A03**/MF **A01**

National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges (40CFR Parts 122, 123, and 124 Final Rule).
PB93-226728/REB 93-04 PC **A06**/MF **A02**

**PERMITS**
Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.
PB93-184620/REB 93-01 PC **A03**/MF **A01**

Guidance for Writing Permits for the Use or Disposal of Sewage Sludge.
PB93-217537/REB 93-04 PC **A18**/MF **A04**

Training Manual for NPDES Permit Writers.
PB93-217644/REB 93-04 PC **A09**/MF **A02**

Federal Register Volume 57 No. 175 Wednesday, September 9, 1992 Notices. Part 2. Final NPDES General Permits for Storm Water Discharges from Construction Sites; Fact Sheet.
PB93-227635/REB 93-04 PC **A03**/MF **A01**

**PERSONAL ACTIVITY CLOUD**
Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC **A03**/MF **A01**

**PERSONNEL DEVELOPMENT**
Drinking Water Training Resources Directory: A National Training Coalition Directory of Current Training Materials. First Edition.
PB93-202802/REB 93-01 PC **A07**/MF **A02**

Superfund Progress: Fall/Winter 1992.
PB93-963254/REB 93-01 PC **A03**/MF **A01**

**PERSONNEL MANAGEMENT**
Field Certification Tracking System (FCTS), Version 2.1 (for Microcomputers).
PB93-506582/REB 93-04 CP **D02**

**PEST CONTROL**
Evaluation of Para-Dichlorobenzene Emissions from Solid Moth Repellant as a Source of Indoor Air Pollution.
PB93-107035/REB 93-01 PC **A02**/MF **A01**

Federal Insecticide, Fungicide, and Rodenticide Act as Amended.
PB93-116085/REB 93-01 PC **A05**/MF **A01**

Proceedings of National Integrated Pest Management Forum. Held in Arlington, VA., on June 17-19, 1992.
PB93-124675/REB 93-01 PC **A07**/MF **A02**

Protection of Pome Fruits, March 1985-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149904/REB 93-01 PC **A13**/MF **A03**

Genetically Engineered Baculoviruses as Agents for Pest Control.
PB93-150175/REB 93-01 PC **A03**/MF **A01**

**PESTICIDE INDUSTRY**
Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC **A03**/MF **A01**

**PESTICIDE RESIDUES**
National Study of Chemical Residues in Fish. Volume 2.
PB93-114999/REB 93-01 PC **E11**/MF **A04**

Pilot Study to Evaluate Methods for the Assessment of Exposure of Small Children to Pesticides in the Residential Environment.
PB93-119899/REB 93-01 PC **A03**/MF **A01**

Pesticide Reregistration Rejection Rate Analysis Residue Chemistry/Environmental Fate Follow Up Guidance for Conducting Rotational Crop Studies.
PB93-194041/REB 93-01 PC **A03**/MF **A01**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 1.
PB93-209013/REB 93-04 PC **A03**/MF **A01**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 2.
PB93-209021/REB 93-04 PC **A15**/MF **A03**

Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
PB93-229151/REB 93-04 PC **A03**/MF **A01**

**PESTICIDE TRANSFER**
PR Notice 87-7. Notice to Producers, Formulators and Registrants of Pesticides.
PB93-146108/REB 93-01 PC **A02**/MF **A01**

**PESTICIDES**
RED Facts: Capsaicin.
PB93-100311/REB 93-01 PC **A02**/MF **A01**

RED Facts: Ethylene.
PB93-100345/REB 93-01 PC **A02**/MF **A01**

RED Facts: 'Nosema locustae'.
PB93-100352/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED) 'Nosema locustae'.
PB93-100360/REB 93-01 PC **A07**/MF **A02**

RED Facts: Streptomycin and Streptomycin Sulfate.
PB93-100378/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED): Streptomycin and Streptomycin Sulfate.
PB93-100386/REB 93-01 PC **A09**/MF **A02**

Reregistration Eligibility Document (RED): Capsaicin. (List D, Case 4018).
PB93-101434/REB 93-01 PC **A08**/MF **A02**

RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED) Zinc Salts.
PB93-101657/REB 93-01 PC **A11**/MF **A03**

RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED) Soap Salts.
PB93-101673/REB 93-01 PC **A13**/MF **A03**

Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC **A03**/MF **A01**

STREAM: An Exposure Assessment Methodology for Agricultural Pesticide Runoff.
PB93-106888/REB 93-01 PC **A03**/MF **A01**

EPA Pesticide RED FACTS Sheets: Indole-3-Butyric Acid.
PB93-107282/REB 93-01 PC **A02**/MF **A01**

General Information on Applying for Registration of Pesticides in the United States.
PB93-115939/REB 93-01 PC **A08**/MF **A02**

National Pesticide Survey: Glossary.
PB93-115970/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Project Summary.
PB93-115988/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Summary Results of EPA's National Survey of Pesticides in Drinking Water Wells.
PB93-115996/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Survey Design.
PB93-116002/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Survey Analytes.
PB93-116010/REB 93-01 PC **A03**/MF **A01**

Federal Insecticide, Fungicide, and Rodenticide Act as Amended.
PB93-116085/REB 93-01 PC **A05**/MF **A01**

Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC **A02**/MF **A01**

RED Facts: Sodium Hydroxide.
PB93-124683/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED): Sodium Hydroxide.
PB93-124691/REB 93-01 PC **A07**/MF **A02**

Pesticide Fact Sheet Number 236: Pyridate.
PB93-130441/REB 93-01 PC **A03**/MF **A01**

Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC **A03**/MF **A01**

PR Notice 87-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-141687/REB 93-01 PC **A03**/MF **A01**

PR Notice 87-4. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-141695/REB 93-01 PC **A03**/MF **A01**

PR Notice 86-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144012/REB 93-01 PC **A01**/MF **A01**

PR Notice 86-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144020/REB 93-01 PC **A01**/MF **A01**

PR Notice 86-3. Notice to Producers, Registrants, and Formulators.
PB93-144038/REB 93-01 PC **A01**/MF **A01**

PR Notice 86-4. Notice to Registrants of Pesticides, and Applicants for Pesticide Registration.
PB93-144046/REB 93-01 PC **A02**/MF **A01**

PR Notice 86-5. Notice to Producers, Formulators, Distributors and Registrants.
PB93-144053/REB 93-01 PC **A03**/MF **A01**

PR Notice 87-2. Notice to Procedures, Registrants, and Formulators.
PB93-144061/REB 93-01 PC **A01**/MF **A01**

PR Notice 87-3. Notice to Manufacturers, Formulators, Distributors and Registrants of Pesticide Products.
PB93-144079/REB 93-01 PC **A01**/MF **A01**

PR Notice 87-5. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-144087/REB 93-01 PC **A03**/MF **A01**

PR Notice 87-6. Notice to Manufacturers, Formulators, Procedures, and Registrants of Pesticide Products.
PB93-144095/REB 93-01 PC **A02**/MF **A01**

Pesticide Fact Sheet Number 20.2: Amitrole.
PB93-144368/REB 93-01 PC **A02**/MF **A01**

PR Notice 87-7. Notice to Producers, Formulators and Registrants of Pesticides.
PB93-146108/REB 93-01 PC **A02**/MF **A01**

PR Notice 87-8. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-147015/REB 93-01 PC **A02**/MF **A01**

PR Notice 87-9. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149151/REB 93-01 PC **A01**/MF **A01**

PR Notice 87-10. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149169/REB 93-01 PC **A01**/MF **A01**

Development of Genetically Enhanced Baculovirus Pesticides (Chapter 5).
PB93-149235/REB 93-01 PC **A02**/MF **A01**

Ecologically Acceptable Strategy for the Use of Genetically Engineered Baculovirus Pesticides.
PB93-149243/REB 93-01 PC **A02**/MF **A01**

PR Notice 87-11. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-149664/REB 93-01 PC **A01**/MF **A01**

Pesticide Fact Sheet Number 20.1: Amitrole.
PB93-149680/REB 93-01 PC **A02**/MF **A01**

Methylbromide and Its Alternatives as Fumigants, 1979-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149912/REB 93-01 PC **A09**/MF **A03**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC **A10**/MF **A03**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC **A08**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC **A08**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC **A99**/MF **E11**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC **A21**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC **A07**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC **A20**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC **A24**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC **A05**/MF **A01**

Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED): Oxalic Acid.
PB93-169100/REB 93-01 PC **A06**/MF **A02**

Agricultural Pesticide Emissions Associated with Common Crops in the United States.
PB93-173136/REB 93-01 PC **A03**/MF **A01**

RED Facts: Oxalic Acid.
PB93-173953/REB 93-01 PC **A02**/MF **A01**

PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
PB93-174027/REB 93-01 PC **A17**/MF **A04**

Pesticide Reregistration Progress Report.
PB93-178994/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Aldrin (309-00-2).
PB93-181642/REB 93-01 PC **A03**/MF **A01**

Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191559/REB 93-01 PC **A02**/MF **A01**

Pesticide Reregistration Rejection Rate Analysis Residue Chemistry. Follow-up Guidance for Generating Storage Stability Data; Submission of Raw Data; Maximum Theoretical Concentration Factors; Flowchart Diagrams.
PB93-193696/REB 93-01 PC **A04**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dieldrin (60-57-1).
PB93-194272/REB 93-01 PC **A03**/MF **A01**

Pesticide Fact Sheet Number 240: Dimethenamid. SAN 582H/Frontier (Trade Name) Herbicide.
PB93-198695/REB 93-01 PC A03/MF A01

RED Facts: Iron Salts.
PB93-198703/REB 93-01 PC A02/MF A01

Pesticide Fact Sheet: Arsenic Acid (H3AsO4).
PB93-198711/REB 93-01 PC A02/MF A01

Alternative Control Technology Document: Control of VOC Emissions from the Application of Agricultural Pesticides.
PB93-199131/REB 93-01 PC A12/MF A03

Reregistration Eligibility Document (RED): Iron Salts.
PB93-200780/REB 93-01 PC A05/MF A02

Pesticide Safety and Training Materials Catalog (Catalogo de Materiales Educativos y Proteccion Sobre Pesticidas).
PB93-200814/REB 93-01 PC A07/MF A02

Thermal Degradation Characteristics of Environmentally Sensitive Pesticide Products.
PB93-201127/REB 93-01 PC A04/MF A01

Pesticide Reregistration, March 1991.
PB93-205896/REB 93-04 PC A03/MF A01

Pesticide Reregistration Progress Report, October 1991.
PB93-206605/REB 93-04 PC A03/MF A01

Pesticide Fact Sheet Number 239: Cimectacarb.
PB93-206753/REB 93-04 PC A02/MF A01

Pesticide Fact Sheet: Polyhedral Occlusion Bodies of the Nuclear Polyhedrosis Virus of 'Spodoptera exigua'.
PB93-206779/REB 93-01 PC A02/MF A01

Pesticide Fact Sheet: 'Metarhizium anisopliae' Strain ESF1.
PB93-206787/REB 93-01 PC A01/MF A01

Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.
PB93-212306/REB 93-04 PC A02/MF A01

NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC A02/MF A01

PR Notice 92-1: Notice to Manufacturers, Formulators, Producers, and Registrants of Pesticide Products.
PB93-219467/REB 93-04 PC A02/MF A01

PR Notice 92-2: Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219475/REB 93-04 PC A01/MF A01

PR Notice 92-3: Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticide Products.
PB93-219483/REB 93-04 PC A03/MF A01

PR Notice 92-4: Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219491/REB 93-04 PC A01/MF A01

PR Notice 92-5: Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219509/REB 93-04 PC A01/MF A01

PR Notice 92-6: Notice to Manufacturers, Producers, Formulators and Registrants of Pesticides.
PB93-219517/REB 93-04 PC A01/MF A01

Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC A03/MF A01

Pesticide Reregistration Progress Report, April 1993.
PB93-226199/REB 93-04 PC A03/MF A01

Status of Pesticides in Reregistration and Special Review (Rainbow Report), June 1993.
PB93-230829/REB 93-04 PC A17/MF A03

Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC A03/MF A01

RED Facts: 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-232908/REB 93-04 PC A02/MF A01

RED Facts: Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-232916/REB 93-04 PC A02/MF A01

*RED Facts: Silver.*
PB93-232924/REB 93-04 PC A02/MF A01

Reregistration Eligibility Document (RED): Silver.
PB93-232973/REB 93-04 PC A05/MF A02

Reregistration Eligibility Document (RED) 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-234755/REB 93-04 PC A07/MF A02

Reregistration Eligibility Document (RED) Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-234763/REB 93-04 PC A07/MF A02

Pesticide Compact Label File - 1990 Updates.
PB93-911600/REB 93-01 Subscription

**PETROLEUM PIPELINES**

Location of Leaks in Pressurized Petroleum Pipelines by Means of Passive-Acoustic Sensing Methods.
PB93-185783/REB 93-01 PC A03/MF A01

**PETROLEUM PRODUCTS**

Technologies and Options for UST Corrective Actions: Overview of Current Practice.
PB93-145589/REB 93-01 PC A05/MF A01

Screening Methodology for Assessing Leaking UST Sites and Clean Up Technologies.
PB93-199404/REB 93-01 PC A03/MF A01

**PETROLEUM REFINERIES**

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Project Summary.
PB92-228527/REB 93-01 PC A08/MF A02

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown Refinery. Refinery Release Inventory.
PB92-228550/REB 93-01 PC A12/MF A03

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Air Quality Data. Volume 2.
PB92-228600/REB 93-04 PC A16/MF A03

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown, Virginia. Ecological Impacts of the Yorktown Refinery on the York River Estuarine Environment.
PB92-228634/REB 93-01 PC A05/MF A01

**PETROLEUM REFINING**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Executive Summary (Revised May 1992).
PB92-228519/REB 93-01 PC A03/MF A01

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC A08/MF A02

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Pollution Prevention Workshop.
PB92-228543/REB 93-01 PC A12/MF A03

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Solid Waste Data.
PB92-228568/REB 93-01 PC A05/MF A01

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Groundwater and Soil Data.
PB92-228576/REB 93-01 PC A12/MF A03

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Surface Water Data.
PB92-228584/REB 93-01 PC A08/MF A02

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Measurements of Hydrocarbon Emissions and Ambient Air Concentrations at the Amoco Yorktown Refinery. Air Quality Data. Volume 1.
PB92-228592/REB 93-01 PC A12/MF A03

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Project Peer Review. Report of the Peer Review Committee of the Amoco/EPA Pollution Prevention Project at the Yorktown, Virginia Refinery.
PB92-228618/REB 93-01 PC A10/MF A03

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Public Perceptions. Report of Observations, Thoughtleader Interviews and Focus Groups Yorktown Refinery Public Perception Study.
PB92-228642/REB 93-01 PC A99/MF A06

**PETROLEUM TRANSPORTATION**

Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC A06/MF A02

**PHAEODACTYLUM TRICORNUTUM**

Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC A02/MF A01

**PHAGOCYTOSIS**

Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175651/REB 93-01 PC A03/MF A01

**PHANEROCHAETE CHRYSOSPORIUM**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191351/REB 93-01 PC A02/MF A01

Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC A02/MF A01

Biodegradation of 2,4,5-Trichlorophenoxyacetic Acid in Liquid Culture and in Soil by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191542/REB 93-01 PC A02/MF A01

Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191559/REB 93-01 PC A02/MF A01

Effects of Culture Parameters on DDT (1,1,1-Trichloro-2,2-BIS(4-Chlorophenyl)Ethane) Biodegradation by 'Phanerochaete chrysosporium'.
PB93-191567/REB 93-01 PC A03/MF A01

Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
PB93-191575/REB 93-01 PC A02/MF A01

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium': Involvement of the Lignin Degrading System.
PB93-191583/REB 93-01 PC A02/MF A01

Biodegradation of Polycyclic Aromatic Hydrocarbons by 'Phanerochaete chrysosporium'.
PB93-191591/REB 93-01 PC A02/MF A01

Biodegradation of Crystal Violet by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191609/REB 93-01 PC A02/MF A01

Biodegradation of DDT (1,1,1-Trichloro-2,2-Bis(4-Chlorophenyl)Ethane) by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191617/REB 93-01 PC A02/MF A01

Oxidative Degradation of Phenanthrene by the Ligninolytic Fungus 'Phanerochaete chrysosposium'.
PB93-199511/REB 93-01 PC A02/MF A01

**PHANEROCHATE CHRYSOPORIUM**

Mineralization of Recalcitrant Environmental Pollutants by a White Rot Fungus. Proceedings of the National Conference on Hazardous Wastes and Hazardous Materials. Held in Washington, DC. on March 16-18, 1987.
PB93-204154/REB 93-01 PC A02/MF A01

**PHARMACOKINETICS**

*Age-Related Changes in Disposition and Metabolism of* Benzene in Male C57BL/6N Mice.
PB93-107191/REB 93-01 PC A02/MF A01

Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-180990/REB 93-01 PC A03/MF A01

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 1. Disposition and Pharmacokinetics.
PB93-222651/REB 93-04 PC A07/MF A02

Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-226823/REB 93-04 PC A03/MF A01

**PHARMACOLOGY**

Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Induction of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC A03/MF A01

Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC A03/MF A01

Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-226880/REB 93-04 PC A03/MF A01

**PHASE 2 RULE**

Phase II Fact Sheet: National Primary Drinking Water Regulations for 38 Inorganic and Synthetic Organic Chemicals.
PB93-193787/REB 93-01 PC A03/MF A01

**PHASE STUDIES**

Rapid Phase Indentification of Mixed Crystalline Solids.
PB93-212355/REB 93-04 PC A03/MF A01

**PHASEOLUS**

Relationship of Total Viable and Culturable Cells in Epiphytic Populations of 'Pseudomonas syringae'.
PB93-222826/REB 93-04 PC A02/MF A01

**PHENACETIN**

Evaluation of the Potential Carcinogenicity of Phenacetin (62-44-2).
PB93-196566/REB 93-01 PC A03/MF A01

**PHENANTHRENES**

Oxidative Degradation of Phenanthrene by the Ligninolytic Fungus 'Phanerochaete chrysosposium'.
PB93-199511/REB 93-01 PC A02/MF A01

**PHENOL/PENTACHLORO**

Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC A02/MF A01

Evaluation of the Potential Carcinogenicity of Pentachlorophenol (87-86-5).
PB93-196558/REB 93-01 PC A03/MF A01

**PHENOL/TRICHLORO**

Evaluation of the Potential Carcinogenicity of 2,4,6-Trichlorophenol (88-06-2).
PB93-202299/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 2,4,5-Trichlorophenol (95-95-4).
PB93-202307/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of Trichlorophenol (Mixed) (2516-78-22).
PB93-202315/REB 93-01 PC A03/MF A01

**PHENOLS**

In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with In vivo Data.
PB93-107167/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of Pentachlorophenol (87-86-5).
PB93-196558/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 2,4,6-Trichlorophenol (88-06-2).
PB93-202299/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of 2,4,5-Trichlorophenol (95-95-4).
PB93-202307/REB 93-01 PC A03/MF A01

Evaluation of the Potential Carcinogenicity of Trichlorophenol (Mixed) (2516-78-22).
PB93-202315/REB 93-01 PC **A03**/MF **A01**

Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC **A02**/MF **A01**

Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC **A02**/MF **A01**

**PHENOTYPE**

Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02**/MF **A01**

**PHENYL 4 (3-INDONLYL)THIOLOLUTANOATE**

Pesticide Fact Sheet: 1-Indole-3-Butanethioic Acid, S-Phenyl Ester.
PB93-219822/REB 93-04 PC **A02**/MF **A01**

**PHEOCHROMOCYTOMA**

Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.
PB93-236305/REB 93-04 PC **A03**/MF **A01**

**PHILADELPHIA (PENNSYLVANIA)**

Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03**/MF **A01**

**PHOSGENE**

Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
PB93-236321/REB 93-04 PC **A03**/MF **A01**

**PHOSPHATIDYLCHOLINES**

Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC **A02**/MF **A01**

**PHOSPHOINOSITIDES**

Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC **A02**/MF **A01**

**PHOSPHONIC ACID/DIMETHYL- (METHYL-ESTER)**

Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

**PHOSPHORIC ACID/TRIS (DIBROMO- (PROPYL-ESTER))**

Evaluation of the Potential Carcinogenicity of Tris(2,3-Dibromopropyl) Phosphate (126-72-7).
PB93-202281/REB 93-01 PC **A03**/MF **A01**

**PHOSPHOROUS**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
PB93-128015/REB 93-01 PC **A04**/MF **A01**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC **A04**/MF **A01**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
PB93-128031/REB 93-01 PC **A06**/MF **A02**

**PHOSPHORUS**

Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC **A03**/MF **A01**

**PHOTOCHEMICAL REACTIONS**

SITE-Emerging Technologies: Laser Induced Photochemical Oxidative Destruction of Toxic Organics in Leachates and Groundwaters.
PB93-131431/REB 93-01 PC **A04**/MF **A01**

Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC **A03**/MF **A01**

Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC **A03**/MF **A01**

Photochemical Conversion of Solar Energy in the Environment.
PB93-167187/REB 93-01 PC **A03**/MF **A01**

Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.
PB93-205102/REB 93-04 PC **A02**/MF **A01**

Interpretive Analysis of Observed and Modeled Mesoscale Ozone Photochemistry in Areas with Numerous Point Sources.
PB93-212702/REB 93-04 PC **A03**/MF **A01**

Reactive Plume Model IV (RPM-IV) User's Guide.
PB93-217412/REB 93-04 PC **A23**/MF **A04**

Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone. Volume 2. Emission Inventory Requirements for Photochemical Air Quality Simulation Models (Revised).
PB93-234375/REB 93-04 PC **A11**/MF **A03**

**PHOTOCHEMISTRY**

Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC **A01**/MF **A01**

**PHOTOLYSIS**

Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

**PHOTOSYNTHESIS**

Periphyton Photosynthesis as an Indicator of Effluent Toxicity: Relationship to Effects on Animal Test Species.
PB93-131829/REB 93-01 PC **A02**/MF **A01**

Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03**/MF **A01**

**PHOTOVOLTAIC POWER SUPPLIES**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 1.
PB93-174761/REB 93-01 PC **A24**/MF **A04**

EPA's Photovoltaic Demand-Side Management Cost-Shared Demonstrations.
PB93-212413/REB 93-04 PC **A02**/MF **A01**

**PHTHALATES**

Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.
PB93-221950/REB 93-04 PC **A01**/MF **A01**

**PHTHALIC ACID/BIS (2-DIETHYLHEXYL)**

Steroidogenic Assessment Using Ovary Culture in Cycling Rats: Effects of Bis(2-Diethylhexyl) Phthalate on Ovarian Steroid Production.
PB93-181022/REB 93-01 PC **A03**/MF **A01**

**PHTHALIC ACID/ (DIETHYLHEXYL-ESTER)**

Ambient Aquatic Life Water Quality Criteria for Di-2-Ethylhexyl Phthalate.
PB93-202752/REB 93-01 PC **A03**/MF **A01**

**PHYSICAL PROPERTIES**

Atmospheric Chemistry and Physical Fate of HCFCs and HFCs and Their Degradation Products.
PB93-131449/REB 93-01 PC **A03**/MF **A01**

**PHYSICAL RADIATION EFFECTS**

Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC **A02**/MF **A01**

**PHYSIOLOGY**

Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-180990/REB 93-01 PC **A03**/MF **A01**

**PHYTOPLANKTON**

Nutrients and Phytoplankton in Puget Sound.
PB93-119576/REB 93-01 PC **A08**/MF **A02**

Physiological Limitations on Phytoplankton Productivity in the Ocean.
PB93-204923/REB 93-01 PC **A02**/MF **A01**

What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.
PB93-211985/REB 93-04 PC **A21**/MF **A04**

Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
PB93-212454/REB 93-04 PC **A03**/MF **A01**

**PHYTOTOXICITY**

Evaluation of the Bioremediation of a Contaminated Soil with Phytotoxicity Tests.
PB93-191625/REB 93-01 PC **A03**/MF **A01**

**PIERCE COUNTY (WASHINGTON STATE)**

Superfund Record of Decision (EPA Region 10): McChord AFB, Washrack Treatment Area, WA. (First Remedial Action), September 1992.
PB93-964614/REB 93-04 PC **A04**/MF **A01**

**PIGMENT EPITHELIUM OF EYE**

Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02**/MF **A01**

**PILOT PLANTS**

Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC **A02**/MF **A01**

Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

**PILOT STUDIES**

Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03**/MF **A01**

**PINFISH**

Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC **A03**/MF **A01**

**PINFISHES**

Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02**/MF **A01**

**PIPERIDINES**

Evaluation of the Potential Carcinogenicity of N-Nitrosopiperidine (100-75-4).
PB93-196517/REB 93-01 PC **A03**/MF **A01**

**PIPING SYSTEMS**

Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC **A02**/MF **A01**

**PLACER MINING**

Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Gold Placer Mining Industry.
PB93-203990/REB 93-04 PC **A07**/MF **A02**

**PLANKTON**

Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

**PLANT ECOLOGY**

Engineered Plants in the Environment.
PB93-234532/REB 93-04 PC **A03**/MF **A01**

Landscape-Scale Effects of Toxic Events for Ecological Risk Assessment.
PB93-236628/REB 93-04 PC **A03**/MF **A01**

**PLANT GROWTH**

Formaldehyde-Contaminated Fog Effects on Plant Growth.
PB93-121101/REB 93-01 PC **A02**/MF **A01**

Physiological Limitations on Phytoplankton Productivity in the Ocean.
PB93-204923/REB 93-01 PC **A02**/MF **A01**

**PLANT GROWTH REGULATORS**

Pesticide Fact Sheet: 1-Indole-3-Butanethioic Acid, S-Phenyl Ester.
PB93-219822/REB 93-04 PC **A02**/MF **A01**

**PLANT IMMUNOLOGY**

Influence of Root Colonizing Bacteria on the Defense Responses of Bean.
PB93-205045/REB 93-04 PC **A03**/MF **A01**

**PLANTS (BOTANY)**

Mathematical Model of Plant Uptake and Translocation of Organic Chemicals: Development of the Model.
PB93-106938/REB 93-01 PC **A02**/MF **A01**

Mathematical Model of Plant Uptake and Translocations of Organic Chemicals: Application to Experiments.
PB93-106946/REB 93-01 PC **A03**/MF **A01**

Characterization of Catalase Activities in a Root-Colonizing Isolate of 'Pseudomonas putida' (Revised).
PB93-205052/REB 93-04 PC **A02**/MF **A01**

Wetland Plant Communities, Galveston Bay System.
PB93-205730/REB 93-04 PC **A07**/MF **A02**

**PLASMA CENTRIFUGAL FURNACES**

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 1.
PB93-115160/REB 93-01 PC **A09**/MF **A02**

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 2.
PB93-115178/REB 93-01 PC **A15**/MF **A03**

**PLASMIDS**

Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
PB93-121176/REB 93-01 PC **A02**/MF **A01**

Long-Term Survival and Plasmid Maintenance of 'Escherichia coli' in Marine Microcosms.
PB93-236230/REB 93-04 PC **A02**/MF **A01**

**PLASTIC PELLETS**

Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
PB93-123206/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
PB93-123248/REB 93-01 PC **A02**/MF **A01**

**PLASTICIZERS**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Diethylene Glycol Dinitrate (DEGDN).
PB93-117000/REB 93-01 PC **A03**/MF **A01**

**PLASTICS**

Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
PB93-123024/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Plastic Containers by Injection Molding.
PB93-126241/REB 93-01 PC **A02**/MF **A01**

Weatherability of Enhanced-Degradable Plastics.
PB93-229789/REB 93-04 PC **A14**/MF **A03**

**PLASTICS INDUSTRY**

Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Plastics Molding and Forming Industry.
PB93-167773/REB 93-01 PC **A05**/MF **A01**

Supplement to the OCPSF Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category.
PB93-186096/REB 93-04 PC **A11**/MF **A03**

**PLATEMAKING (PRINTING)**

Waste Reduction Activities and Options for a Printing Plate Preparation Section of a Newspaper.
PB93-126563/REB 93-01 PC **A02**/MF **A01**

**PLUME VISIBILITY MODEL**
User's Manual for the Plume Visibility Model PLUVUE II (Revised).
PB93-188233/REB 93-01 PC **A06**/MF **A02**

**PLUMES**
Final Results of the Condors Convective Diffusion Experiment.
PB93-212728/REB 93-04 PC **A03**/MF **A01**

Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03**/MF **A01**

Downwash of Plumes in the Vicinity of Buildings: A Wind-Tunnel Study.
PB93-212819/REB 93-04 PC **A03**/MF **A01**

**PNEUMATIC FRACTURING EXTRACTION**
Technology Evaluation Report: Site Program Demonstration Test. Accutech Pneumatic Fracturing Extraction and Hot Gas Injection, Phase 1. Volume 1.
PB93-216596/REB 93-04 PC **A08**/MF **A02**

**POECILIA RETICULATA**
Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02**/MF **A01**

**POINT OF ENTRY TREATMENT**
Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC **A02**/MF **A01**

**POINT SOURCES**
Air Emissions Testing.
PB93-180933/REB 93-01 PC **A02**/MF **A01**

Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC **A03**/MF **A01**

Baseline Point Source Load Inventory, 1985. 1991 Re-evaluation Report No. 2.
PB93-193761/REB 93-01 PC **A03**/MF **A01**

Preliminary Data Summary for the Pulp, Paper and Paperboard Point Source Category.
PB93-202935/REB 93-01 PC **A04**/MF **A01**

Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC **A06**/MF **A02**

Interpretive Analysis of Observed and Modeled Mesoscale Ozone Photochemistry in Areas with Numerous Point Sources.
PB93-212702/REB 93-04 PC **A03**/MF **A01**

Benefits and Feasibility of Effluent Trading between Point Sources: An Analysis in Support of Clean Water Act Reauthorization.
PB93-217636/REB 93-04 PC **A04**/MF **A01**

**POLAR REGIONS**
Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC **A02**/MF **A01**

**POLK COUNTY (FLORIDA)**
Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

**POLLUTANT RELEASES**
Toxic Chemical Release Inventory Reporting Form R and Instructions. Revised 1992 Version. Section 313 of the Emergency Planning and Community Right-to-Know Act.
PB93-194140/REB 93-01 PC **A06**/MF **A02**

Questions and Answers on Release Notification Requirements and Reportable Quantity Adjustments.
PB93-963411/REB 93-01 PC **A03**/MF **A01**

**POLLUTANT SOURCES**
Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Air Quality Data. Volume 2.
PB92-228600/REB 93-04 PC **A16**/MF **A03**

**POLLUTANTS**
Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08**/MF **A02**

Proceedings of the Annual EPA Conference on Analysis of Pollutants in the Environment (15th). Held in Norfolk, Virginia on May 6-7, 1992.
PB93-152601/REB 93-01 PC **A99**/MF **A06**

Using a Neural Network to Estimate Solvent Consumption.
PB93-173110/REB 93-01 PC **A02**/MF **A01**

Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC **A02**/MF **A01**

**POLLUTION**
Decision Model for Biomarkers of Exposure.
PB93-106995/REB 93-01 PC **A03**/MF **A01**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 1. Sessions P, 0, 1A, 2A, 3A, 4A, 6A, 6B, 9C and 10B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124170/REB 93-01 PC **A20**/MF **A04**

**POLLUTION ABATEMENT**
Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Project Summary.
PB92-228527/REB 93-01 PC **A08**/MF **A02**

Opportunities for Pollution Prevention Research to Support the 33/50 Program.
PB93-107266/REB 93-01 PC **A06**/MF **A02**

Guides to Pollution Prevention: The Mechanical Equipment Repair Industry.
PB93-121317/REB 93-01 PC **A03**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
PB93-123024/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Penny Blanks and Zinc Products.
PB93-123107/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
PB93-123115/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
PB93-123123/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
PB93-123131/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
PB93-123149/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for an Autobody Repair Facility.
PB93-123156/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
PB93-123164/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Artists Supply Paints.
PB93-123172/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Wire Stock Used for Production of Metal Items.
PB93-123180/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
PB93-123198/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
PB93-123206/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
PB93-123214/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
PB93-123248/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Hardened Steel Gears.
PB93-126282/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
PB93-126290/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fine Chemicals Using Batch Processes.
PB93-126308/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of General Purpose Paints and Painting Supplies.
PB93-126316/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Printing Plate Preparation Section of a Newspaper.
PB93-126563/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer Producing Printed Circuit Boards.
PB93-126621/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for an Electrical Utility Transmission System Monitoring and Maintenance Facility.
PB93-126639/REB 93-01 PC **A02**/MF **A01**

Guides to Pollution Prevention: Metal Casting and Heat Treating Industry.
PB93-127793/REB 93-01 PC **A05**/MF **A01**

Enforcement Four-Year Strategic Plan: Enhanced Environmental Enforcement for the 1990's.
PB93-129724/REB 93-01 PC **A05**/MF **A01**

U.S. Environmental Protection Agency Advisory Committees Charters, Rosters and Accomplishments.
PB93-130094/REB 93-01 PC **A05**/MF **A01**

On-Site Waste Ink Recycling: Technology Evaluation Report.
PB93-141026/REB 93-01 PC **A04**/MF **A01**

Model Pollution Prevention Plan for the Kraft Segment of the Pulp and Paper Industry.
PB93-145605/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention for the Kraft Pulp and Paper Industry.
PB93-145613/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention Opportunity Assessment and Implementation Plan. For Simpson Tacoma Kraft Company, Tacoma, Washington.
PB93-145670/REB 93-01 PC **A05**/MF **A01**

Pollution Prevention Opportunity Assessment: USDA Beltsville Agricultural Research Center.
PB93-146843/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention Opportunity Assessment: Manufacturing and Fabrication Repair Laboratory at Sandia National Laboratories.
PB93-146868/REB 93-01 PC **A03**/MF **A01**

Pollution Prevention Opportunity Assessment: Geochemistry Laboratory, Sandia National Laboratories.
PB93-146900/REB 93-01 PC **A03**/MF **A01**

Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC **A03**/MF **A01**

Planning and Progress of EPA's Pollution Prevention Research Program.
PB93-185767/REB 93-01 PC **A02**/MF **A01**

EPA's Photovoltaic Demand-Side Management Cost-Shared Demonstrations.
PB93-212413/REB 93-04 PC **A02**/MF **A01**

Pollution Prevention Research Ongoing: EPA's Risk Reduction Engineering Laboratory.
PB93-212447/REB 93-04 PC **A02**/MF **A01**

Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC **A04**/MF **A01**

Replacement of Hazardous Material in Wide Web Flexographic Printing Process.
PB93-229128/REB 93-04 PC **A05**/MF **A01**

Course 1. Model Curriculum for Training Asbestos Abatement Contractors and Supervisors (Training Manual).
PB93-780773/REB 93-01 PC**$182.00**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Student Notebook. Course 1 (Training Manual).
PB93-780781/REB 93-01 PC **A21**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Instructor's Course Syllabus. Course 1 (Training Manual).
PB93-780799/REB 93-01 PC **A09**

Course 2. Model Curriculum for School Building Inspectors (Training Manual).
PB93-780823/REB 93-01 PC**$136.00**

Model EPA Curriculum for Training Building Inspectors. Student Notebook. Course 2 (Training Manual).
PB93-780831/REB 93-01 PC **A17**

Model EPA Curriculum for Training Building Inspectors. Instructor's Course Syllabus. Course 2 (Training Manual).
PB93-780849/REB 93-01 PC **A07**

Course 3. Model Curriculum for School Asbestos Management Planners (Training Manual).
PB93-780872/REB 93-01 PC**$81.00**

Model EPA Curriculum for Training Management Planners. Student Notebook. Course 3 (Training Manual).
PB93-780880/REB 93-01 PC **A07**

Model EPA Curriculum for Training Management Planners. Instructor's Course Syllabus. Course 3 (Training Manual).
PB93-780898/REB 93-01 PC **A04**

Course 4. Model Curriculum for Asbestos Abatement Workers (English Version) (Training Manual).
PB93-780922/REB 93-01 PC**$235.00**

EPA Model Asbestos Worker Training Manual. Course 4 (English Version).
PB93-780930/REB 93-01 PC **A14**

EPA Model Asbestos Worker Training Course. Instructor's Manual. Course 4 (English Version) (Training Manual).
PB93-780948/REB 93-01 PC **A15**

EPA Model Asbestos Worker Training Instructor's Resources. Course 4 (English Version) (Training Manual).
PB93-780955/REB 93-01 PC **A09**

Course 5. Presentation to Accompany 'Guidance for Controlling Asbestos-Containing Materials in Buildings' (Training Manual).
PB93-780971/REB 93-01 PC**$41.00**

**POLLUTION CONTROL**
Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC **A12**/MF **A03**

Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
PB93-105518/REB 93-01 PC **A08**/MF **A02**

Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC **A05**/MF **A01**

Landfill Containment and Cover Systems.
PB93-106698/REB 93-01 PC **A03**/MF **A01**

Use of Ecoregions in Biological Monitoring.
PB93-106730/REB 93-01 PC **A03**/MF **A01**

Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
PB93-106821/REB 93-01 PC **A03**/MF **A01**

Technologies Options for Acid Rain Control.
PB93-106854/REB 93-01 PC **A03**/MF **A01**

Strategy for Environmental Health Research at EPA.
PB93-116168/REB 93-01 PC **A05**/MF **A02**

Near Coastal Program Plan for 1991: Estuaries.
PB93-116176/REB 93-01 PC **A12**/MF **A03**

Handbook: Remediation of Contaminated Sediments.
PB93-116275/REB 93-01 PC **A04**/MF **A01**

Maritime Industrial Waste Project Reduction of Toxicant Pollution from the Maritime Industry in Puget Sound.
PB93-119568/REB 93-01 PC **A08**/MF **A02**

Waste Reduction Activities and Options for a Fossil Fuel Fired Electrical Generating Station.
PB93-126233/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Plastic Containers by Injection Molding.
PB93-126241/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Scrap Metal Recovery Facility.
PB93-126266/REB 93-01 PC **A02**/MF **A01**

Guide for Conducting Contaminant Source Inventories for Public Drinking Water Supplies. Technical Assistance Document.
PB93-126407/REB 93-01 PC **A06**/MF **A02**

Design of New Schools and Other Large Buildings Which Are Radon Resistant and Easy to Mitigate.
PB93-131662/REB 93-01 PC **A03**/MF **A01**

Bioremediation.
PB93-149193/REB 93-01 PC **A03**/MF **A01**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants.
PB93-156495/REB 93-01 PC **A04**/MF **A01**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants, July 1986.
PB93-156503/REB 93-01 PC **A05**/MF **A01**

Proceedings of the Indoor Radon Modeling Workshop, Florida Radon Research Program. Held in Tampa, Florida on April 16-17, 1991.
PB93-172922/REB 93-01 PC **A09**/MF **A02**

Sustainable Agriculture and the Environment in the Humid Tropics.
PB93-173920/REB 93-01 PC **A99**/MF **A06**

Planning and Progress of EPA's Pollution Prevention Research Program.
PB93-185767/REB 93-01 PC **A02**/MF **A01**

VIRTUS, a Model of Virus Transport in Unsaturated Soils.
PB93-185890/REB 93-01 PC **A02**/MF **A01**

Control Technology Center FY92: A Summary of Program Accomplishments.
PB93-199230/REB 93-01 PC **A03**/MF **A01**

Pesticide Fact Sheet Number 239: Cimectacarb.
PB93-206753/REB 93-04 PC **A02**/MF **A01**

Pollution Prevention Research Ongoing: EPA's Risk Reduction Engineering Laboratory.
PB93-212447/REB 93-04 PC **A02**/MF **A01**

Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212538/REB 93-04 PC **A03**/MF **A01**

RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC **A05**/MF **A01**

Selecting Remediation Techniques for Contaminated Sediment.
PB93-216273/REB 93-04 PC **A10**/MF **A03**

Fundamental Mass Transfer Models for Indoor Air Pollution Sources.
PB93-221992/REB 93-04 PC **A02**/MF **A01**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 1.
PB93-227122/REB 93-04 PC **A08**/MF **A02**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 1.
PB93-227130/REB 93-04 PC **A24**/MF **A04**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grant Calumet River, Gary, Indiana. Volume 2. Part 2.
PB93-227148/REB 93-04 PC **A99**/MF **A06**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 3.
PB93-227155/REB 93-04 PC **A11**/MF **A03**

RCRA Public Involvement Manual.
PB93-231066/REB 93-04 PC **A11**/MF **A03**

International Trade in Environmental Protection Equipment: An Assessment of Existing Data.
PB93-236206/REB 93-04 PC **A04**/MF **A01**

National Priorities List Sites: Alabama, 1992.
PB93-963201/REB
93-01
see individual report for order number and price

National Priorities List Sites: Alaska, 1992.
PB93-963202/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Arkansas, 1992.
PB93-963205/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC **A12**/MF **A03**

National Priorities List Sites: Colorado, 1992.
PB93-963207/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Connecticut, 1992.
PB93-963208/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Delaware, 1992.
PB93-963209/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Florida, 1992.
PB93-963210/REB 93-01 PC **A08**/MF **A02**

National Priorities List Sites: Georgia, 1992.
PB93-963211/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Idaho, 1992.
PB93-963212/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Illinois, 1992.
PB93-963213/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Indiana, 1992.
PB93-963214/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Iowa, 1992.
PB93-963215/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Kansas, 1992.
PB93-963216/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Kentucky, 1992.
PB93-963217/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Louisiana, 1992.
PB93-963218/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Maine, 1992.
PB93-963219/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Maryland, 1992.
PB93-963220/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Massachusetts, 1992.
PB93-963221/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Michigan, 1992.
PB93-963222/REB 93-01 PC **A10**/MF **A03**

National Priorities List Sites: Minnesota, 1992.
PB93-963223/REB 93-01 PC **A07**/MF **A02**

National Priorities List Sites: Mississippi, 1992.
PB93-963224/REB 93-01 PC **A03**/MF **A01**

National Priorities List Sites: Missouri, 1992.
PB93-963225/REB 93-01 PC **A05**/MF **A02**

National Priorities List Sites: Montana, 1992.
PB93-963226/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Nebraska, 1992.
PB93-963227/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: New Hampshire, 1992.
PB93-963228/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: New Jersey, 1992.
PB93-963229/REB 93-01 PC **A14**/MF **A03**

National Priorities List Sites: New Mexico, 1992.
PB93-963230/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: New York, 1992.
PB93-963231/REB 93-01 PC **A11**/MF **A03**

National Priorities List Sites: North Carolina, 1992.
PB93-963232/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Ohio, 1992.
PB93-963234/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Oklahoma, 1992.
PB93-963235/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Oregon, 1992.
PB93-963236/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Pennsylvania, 1992.
PB93-963237/REB 93-01 PC **A12**/MF **A03**

National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Rhode Island, 1992.
PB93-963239/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: South Carolina, 1992.
PB93-963240/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Tennessee, 1992.
PB93-963241/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Texas, 1992.
PB93-963242/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Utah, 1992.
PB93-963243/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Vermont, 1992.
PB93-963244/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Virginia, 1992.
PB93-963245/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Washington, 1992.
PB93-963246/REB 93-01 PC **A08**/MF **A02**

National Priorities List Sites: West Virginia, 1992.
PB93-963247/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Wisconsin, 1992.
PB93-963248/REB 93-01 PC **A07**/MF **A02**

National Priorities List Sites: Wyoming, 1992.
PB93-963249/REB 93-01 PC **A03**/MF **A01**

Technology Selection Guide for Wood Treater Sites.
PB93-963329/REB 93-04 PC **A02**/MF **A01**

Site Assessment: Evaluating Risks at Superfund Sites.
PB93-963347/REB 93-04 PC **A02**/MF **A01**

Guide to Community Involvement for Site Assessment Managers.
PB93-963348/REB 93-04 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Fulton Terminals Site Profile, Oswego County, NY).
PB93-963616/REB 93-04 PC **A02**/MF **A01**

Superfund Record of Decision (EPA Region 1): Darling Hill Dump, Lyndon, VT. (First Remedial Action), June 1992.
PB93-963702/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Revere Textile Prints, Sterling, CT. (First Remedial Action), September 1992.
PB93-963703/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Town Garage Radio Beacon, Londonderry, NH. (First Remedial Action), September 1992.
PB93-963705/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 1): Brunswick Naval Air Station, Operable Unit 2, ME. (Second Remedial Action), June 1992.
PB93-963706/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 1): Newport Naval Education/Training Center, Newport, RI. (First Remedial Action), September 1992.
PB93-963707/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 1): PSC Resources Site, Palmer, MA. (First Remedial Action), September 1992.
PB93-963708/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 1): Tibbetts Road, Barrington, NH. (First Remedial Action), September 1992.
PB93-963709/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 2): Pasley Solvents and Chemicals, Town of Hempstead, Nassau County, NY. (First Remedial Action), April 1992.
PB93-963805/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 2): Bioclinical Laboratories, Town of Islip, Suffolk County, NY. (First Remedial Action), September 1992.
PB93-963807/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): FAA Technical Center, Atlantic County, Atlantic City International Airport, NJ. (Third Remedial Action), September 1992.
PB93-963808/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 5), Lakehurst, NJ. (Sixth Remedial Action), January 1992.
PB93-963809/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 6), Lakehurst, NJ. (Fifth Remedial Action), December 1991.
PB93-963810/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): North Sea Municipal Landfill, Suffolk County, Southampton, NY. (Second Remedial Action), September 1992.
PB93-963811/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Witco Chemical (Oakland Plant), Bergen County, Oakland, NJ. (First Remedial Action), September 1992.
PB93-963812/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Evor Phillips Leasing Company, Old Bridge Township, Middlesex County, NJ. (First Remedial Action), September 1992.
PB93-963814/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 1), Clinton County, NY. (First Remedial Action), September 1992.
PB93-963815/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 3), Clinton County, NY. (Second Remedial Action), September 1992.
PB93-963816/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Preferred Plating, Suffolk County, Farmingdale, NY. (Second Remedial Action), September 1992.
PB93-963817/REB 93-04 PC **A03**/MF **A01**

# KEYWORD INDEX


Superfund Record of Decision (EPA Region 2): Cosden Chemical Coatings, City of Beverly, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963818/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Dover Municipal Well 4, Morris County, Dover, NJ. (First Remedial Action), September 1992.
PB93-963819/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Ellis Property, Sharp Road, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963820/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Endicott Village Well Field, Broome County, NY. (Third Remedial Action), September 1992.
PB93-963821/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Facet Enterprises, Village of Elmira Heights, Chemung County, NY. (First Remedial Action), September 1992.
PB93-963822/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 2): Imperial Oil/Champion Chemicals, Monmouth County, NJ. (Second Remedial Action), September 1992.
PB93-963823/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Industrial Latex, Bergen County, Wallington, NJ. (First Remedial Action), September 1992.
PB93-963824/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Islip Municipal Sanitary Landfill, Town of Islip, NY. (First Remedial Action), September 1992.
PB93-963825/REB 93-04 PC **A05**/MF **A02**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 7), Ocean County, NJ. (Seventh Remedial Action), March 1992.
PB93-963826/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Rowe Industries Groundwater Contamination, Sag Harbor, NY. (First Remedial Action), September 1992.
PB93-963827/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Dixie Caverns Landfill Site, Operable Unit 2, Roanoke County, VA. (Second Remedial Action), September 1992.
PB93-963907/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.
PB93-963912/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Eastern Diversified Metals Site, Schuylkill County, Hometown, PA. (Second Remedial Action), July 1992.
PB93-963914/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): USA Aberdeen, Operable Unit One, Michaelsville, MD. (Second Remedial Action), June 1992.
PB93-963915/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Strasburg Landfill, Newtin Township, Chester County, PA. (Third Remedial Action), March 1992.
PB93-963916/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Abex Corporation, Portsmouth, VA. (First Remedial Action), September 1992.
PB93-963917/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Brown's Battery Breaking, Tilden Township, Berks County, PA. (Second Remedial Action), July 1992.
PB93-963918/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Butz Landfill, Pocono and Jackson Townships, Monroe County, PA. (Second Remedial Action), June 1992.
PB93-963919/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Commodore Semiconductor Group, Lower Providence Township, PA. (First Remedial Action), September 1992.
PB93-963920/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 3): Rhinehart Tire Fire Dump, Operable Unit 2, Winchester, VA. (Second Remedial Action), September 1992.
PB93-963921/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Tonolli Corporation, Nesquehoning Borough, Carbon County, PA. (First Remedial Action), September 1992.
PB93-963922/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, Operable Unit 1, Richmond, VA. (First Remedial Action), May 1992.
PB93-963923/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.
PB93-964010/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964011/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.
PB93-964012/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Standard Auto Bumper Site, Dade County, Hialeah, FL. (First Remedial Action), September 1992.
PB93-964014/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): National Electric Coil/Cooper Industries, KY. (First Remedial Action), September 1992.
PB93-964016/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Agrico Chemical, Escambia County, Pensacola, FL. (First Remedial Action), September 1992.
PB93-964017/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Benfield Industries, Haywood County, Hazelwood, NC. (First Remedial Action), July 1992.
PB93-964018/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 4): Carrier Air Conditioning, Collierville, TN. (First Remedial Action), September 1992.
PB93-964019/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Florida Steel Corporation, Martin County, Indiantown, FL. (First Remedial Action), June 1992.
PB93-964020/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Madison County Sanitary Landfill, Madison, FL. (First Remedial Action), September 1992.
PB93-964021/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Milan Army Ammunition Plant, TN. (First Remedial Action), September 1992.
PB93-964022/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 1, SC. (First Remedial Action), June 1992.
PB93-964023/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 2, SC. (Second Remedial Action), June 1992.
PB93-964024/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation, Operable Unit 6, Roane County, TN. (Fourth Remedial Action), September 1992.
PB93-964025/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): USMC Camp Lejeune Military Reservation, NC. (First Remedial Action), September 1992.
PB93-964026/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Clare Water Supply Site, Clare County, Clare, MI. (Second Remedial Action), September 1992.
PB93-964106/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Kohler Landfill, Kohler, WI. (First Remedial Action), March 1992.
PB93-964111/REB 93-01 PC **A05**/MF **A02**

Superfund Record of Decision (EPA Region 5): Metal Working Shop, Benzie County, Lake Ann, MI. (First Remedial Action), June 1992.
PB93-964113/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Savanna Army Depot, Savanna, IL. (First Remedial Action), March 1992.
PB93-964116/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Torch Lake Site, Operable Units 1 and 3, Houghton County, MI. (First Remedial Action), September 1992.
PB93-964120/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Butterworth No. 2 Landfill Site, Grand Rapids, MI. (First Remedial Action), September 1992.
PB93-964122/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Reilly Tar and Chemical, St. Louis Park, MN. (Fourth Remedial Action), September 1992.
PB93-964124/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): American Chemical Services, Griffith, IN. (First Remedial Action), September 1992.
PB93-964125/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): Cannelton Industries Site, Sault Sainte Marie, MI. (First Remedial Action), September 1992.
PB93-964126/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Central Illinois Public Service, Taylorville Manufactured Gas Plant Site, Christian County, IL. (First Remedial Action), September 1992.
PB93-964127/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): City Disposal Sanitary Landfill, Dane County, WI. (First Remedial Action), September 1992.
PB93-964128/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): H. Brown Company, Walker, MI. (First Remedial Action), September 1992.
PB93-964129/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): MIDCO I, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964130/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): New Brighton/Arden Hills, Ramsey County, MN. (Eighth Remedial Action), September 1992.
PB93-964131/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 2, Anoka County, Andover, MN. (Second Remedial Action), December 1992.
PB93-964132/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Tri County/Elgin Landfill Site, Elgin, IL. (First Remedial Action), September 1992.
PB93-964133/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 2), Vermilion Parish, LA. (First Remedial Action), September 1992.
PB93-964206/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 1), Vermilion Parish, LA. (Second Remedial Action), September 1992.
PB93-964207/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 6): Koppers (Texarkana Plant), TX. (First Remedial Action), (Amendment), March 1992.
PB93-964208/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 6): Prewitt Abandoned Refinery, Prewitt, NM. (First Remedial Action), September 1992.
PB93-964209/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 6): Double Eagle Refinery, Oklahoma City, OK. (First Remedial Action), September 1992.
PB93-964210/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.
PB93-964304/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 7): Pester Refinery, Butler County, El Dorado, KS. (First Remedial Action), September 1992.
PB93-964305/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Denver Radium, Operable Unit 9, Denver, CO. (Eighth Remedial Action), December 1991.
PB93-964402/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), (Operable Unit 4), Golden, CO. (Third Remedial Action), April 1992.
PB93-964404/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 8): Denver Radium Site, Operable Unit 8, Denver, CO. (Ninth Remedial Action), January 1992.
PB93-964405/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 8): Idaho Pole National Priorities List Site, Bozeman, MT. (First Remedial Action), September 1992.
PB93-964406/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 1, Weber County, UT. (Second Remedial Action), June 1992.
PB93-964407/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 3, Weber County, UT. (Fourth Remedial Action), September 1992.
PB93-964408/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 4, UT. (Third Remedial Action), September 1992.
PB93-964409/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 8): Portland Cement Co. (Kiln Dust No. 2 and No. 3), Operable Unit 2, Salt Lake City, UT. (Second Remedial Action), March 1992.
PB93-964410/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), Operable Unit 2, Golden, CO. (Fourth Remedial Action), September 1992.
PB93-964411/REB 93-04 PC **A19**/MF **A04**

Superfund Record of Decision (EPA Region 8): Silver Bow Creek/Butte Area, MT. (Second Remedial Action), June 1992.
PB93-964412/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 9): Hassayampa Landfill, AZ. (First Remedial Action), August 1992.
PB93-964505/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 9): Iron Mountain Mine, Shasta County, CA. (Second Remedial Action), September 1992.
PB93-964506/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 9): Jasco Chemical Company, Mountain View, CA. (First Remedial Action), September 1992.
PB93-964507/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 9): Purity Oil Sales, Fresno County, CA. (Second Remedial Action), September 1992.
PB93-964508/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 3, Sacramento, CA. (Second Remedial Action), December 1991.
PB93-964509/REB 93-04 PC **A09**/MF **A03**

Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 4, Sacramento, CA. (Third Remedial Action), September 1992.
PB93-964510/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 10): Elmendorf Air Force Base, Operable Unit 2, Source Area ST41, Anchorage, AK. (First Remedial Action), September 1992.
PB93-964604/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Arrcom (Drexler Enterprise), Rathdrum, ID. (First Remedial Action), June 1992.
PB93-964606/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Fort Lewis Military Reservation, Landfill No. 5, Pierce County, WA. (First Remedial Action), July 1992.
PB93-964607/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Pesticide Laboratory, Yakima, WA. (First Remedial Action), September 1992.
PB93-964608/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Naval Air Station Whidbey Island - Ault Field, (Operable Unit 1, Area 6), Oak Harbor, WA. (First Remedial Action), April 1992.
PB93-964609/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Umatilla Army Depot (Lagoons), Soils Operable Unit 2, Hermiston, OR. (First Remedial Action), September 1992.
PB93-964610/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Bunker Hill Mining and Metallurgical Complex, Shoshone County, ID. (Second Remedial Action), September 1992.
PB93-964611/REB 93-04 PC **A08**/MF **A02**

Superfund Record of Decision (EPA Region 10): Eielson Air Force Base, AK. (First Remedial Action), September 1992.
PB93-964612/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Joseph Forest Products, Wallowa County, OR. (First Remedial Action), September 1992.
PB93-964613/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 2, ID. (Third Remedial Action), September 1992.
PB93-964615/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 22, ID. (Fourth Remedial Action), September 1992.
PB93-964616/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 23, ID. (Second Remedial Action), June 1992.
PB93-964617/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Wyckoff/Eagle Harbor, WA. (First Remedial Action), September 1992.
PB93-964618/REB 93-04 PC **A07**/MF **A02**

**POLLUTION DETECTION**

Chemical Contaminants in House Dust: Occurrences and Sources.
PB93-228542/REB 93-04 PC **A02**/MF **A01**

**POLLUTION EFFECTS (ANIMALS)**

Ecotoxicological Principles for Avian Field Studies Using Radiotelemetry or Remote Sensing.
PB93-212793/REB 93-04 PC **A02**/MF **A01**

**POLLUTION MONITORING**

Shoreline Survey for Unpermitted Discharges to Galveston Bay.
PB93-205706/REB 93-04 PC **A03**/MF **A01**

**POLLUTION PREVENTION**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Executive Summary (Revised May 1992).
PB92-228519/REB 93-01 PC **A03**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC **A08**/MF **A02**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Pollution Prevention Workshop.
PB92-228543/REB 93-01 PC **A12**/MF **A03**

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown Refinery. Refinery Release Inventory.
PB92-228550/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Solid Waste Data.
PB92-228568/REB 93-01 PC **A05**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Groundwater and Soil Data.
PB92-228576/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Surface Water Data.
PB92-228584/REB 93-01 PC **A08**/MF **A02**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Measurements of Hydrocarbon Emissions and Ambient Air Concentrations at the Amoco Yorktown Refinery. Air Quality Data. Volume 1.
PB92-228592/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Project Peer Review. Report of the Peer Review Committee of the Amoco/EPA Pollution Prevention Project at the Yorktown, Virginia Refinery.
PB92-228618/REB 93-01 PC **A10**/MF **A03**

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown, Virginia. Ecological Impacts of the Yorktown Refinery on the York River Estuarine Environment.
PB92-228634/REB 93-01 PC **A05**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Public Perceptions. Report of Observations, Thoughtleader Interviews and Focus Groups Yorktown Refinery Public Perception Study.
PB92-228642/REB 93-01 PC **A99**/MF **A06**

Environmental Monitoring and Assessment Program: 1990 Project Descriptors.
PB93-116150/REB 93-01 PC **A04**/MF **A01**

User's Guide: Strategic Waste Minimization Initiative (SWAMI) Version 2.0: A Software Tool to Aid in Process Analysis for Pollution Prevention.
PB93-116291/REB 93-01 PC **A05**/MF **A01**

Pollution Prevention: Meeting the Environmental Challenges of the 1990s. Region 5 FY 91 Accomplishments.
PB93-128106/REB 93-01 PC **A04**/MF **A01**

Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03**/MF **A01**

EPA's Life Cycle Methodology: Guidelines for Use in Development of Packaging.
PB93-194199/REB 93-01 PC **A03**/MF **A01**

Life Cycle Analysis (Video Conference Paper).
PB93-194207/REB 93-01 PC **A02**/MF **A01**

**POLLUTION PREVENTION RESEARCH PROGRAM**

Planning and Progress of EPA's Pollution Prevention Research Program.
PB93-185767/REB 93-01 PC **A02**/MF **A01**

**POLLUTION REGULATION**

Guide to the Asbestos NESHAP as Revised November 1990.
PB93-199362/REB 93-01 PC **A04**/MF **A01**

**POLLUTION REGULATIONS**

Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

Underground Injection Control Program.
PB93-115905/REB 93-01 PC **A03**/MF **A01**

Successful Practices in Title III Implementation. Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Cameron County, Texas; Bucks County, Pennsylvania; Harford County, Maryland; Dallas County, Texas. Series 6, Number 7.
PB93-130086/REB 93-01 PC **A03**/MF **A01**

Guidelines for Estimating and Applying Rule Effectiveness for Ozone CO State Implementation Plan Base Year Inventories.
PB93-131498/REB 93-01 PC **A05**/MF **A01**

Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC **A05**/MF **A01**

Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC **A02**/MF **A01**

Regulatory Impact Analysis for the National Emissions Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Seven Other Processes.
PB93-143972/REB 93-01 PC **A09**/MF **A02**

Supplement to the OCPSF Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category.
PB93-186096/REB 93-04 PC **A11**/MF **A03**

Fact Sheet: National Primary Drinking Water Regulations for Lead and Copper.
PB93-193746/REB 93-01 PC **A03**/MF **A01**

Phase II Fact Sheet: National Primary Drinking Water Regulations for 38 Inorganic and Synthetic Organic Chemicals.
PB93-193787/REB 93-01 PC **A03**/MF **A01**

Drinking Water Regulations under the Safe Drinking Water Act.
PB93-194033/REB 93-01 PC **A03**/MF **A01**

Standards of Performance for New Stationary Sources. Volume 1. Introduction, Summary and Standards: A Compilation as of December 31, 1985.
PB93-199297/REB 93-01 PC **A08**/MF **A02**

Guidance on the Relationship between the 15 Percent Rate-of-Progress Plans and Other Provisions of the Clean Air Act.
PB93-200525/REB 93-01 PC **A04**/MF **A01**

Managing Nonpoint Source Pollution. Final Report to Congress on Section 319 of the Clean Water Act (1989).
PB93-200897/REB 93-01 PC **A10**/MF **A03**

Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards, and Pretreatment Standards for the Paint Formulating Point Source Category.
PB93-206472/REB 93-04 PC **A21**/MF **A04**

Treatability Studies for the Inorganic Chemicals Manufacturing Point Source Category.
PB93-206480/REB 93-04 PC **A11**/MF **A03**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 1.
PB93-206498/REB 93-04 PC **A24**/MF **A04**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 2.
PB93-206506/REB 93-04 PC **A22**/MF **A04**

Development Document for Effluent Limitations Guidelines and Standards for the Porcelain Enameling. Point Source Category.
PB93-206514/REB 93-04 PC **A21**/MF **A04**

Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category (Proposed).
PB93-206522/REB 93-04 PC **A23**/MF **A04**

Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Inorganic Chemicals Manufacturing Point Source Category, Phase 2 (Proposed).
PB93-206530/REB 93-04 PC **A24**/MF **A04**

Great Lakes Water Quality Guidance Docket Index.
PB93-207769/REB 93-04 PC **A05**/MF **A01**

Supplementary Development Document for Effluent Limitations Guidelines for the Leather Tanning and Finishing Point Source Category.
PB93-207934/REB 93-04 PC **A06**/MF **A02**

Development Document for Effluent Limitations Guidelines and Standards for the Aluminum Forming Point Source Category.
PB93-208213/REB 93-04 PC **A99**/MF **A06**

Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Pharmaceutical Manufacturing Point Source Category.
PB93-208221/REB 93-04 PC **A22**/MF **A04**

Guidance for Writing Permits for the Use or Disposal of Sewage Sludge.
PB93-217537/REB 93-04 PC **A18**/MF **A04**

Benefits and Feasibility of Effluent Trading between Point Sources: An Analysis in Support of Clean Water Act Reauthorization.
PB93-217636/REB 93-04 PC **A04**/MF **A01**

Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC **A04**/MF **A01**

Sewage Treatment Plant NSPS: Responses to Comments on April 1986 Proposed Revisions.
PB93-223584/REB 93-04 PC **A03**/MF **A01**

General Provisions for 40 CFR Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories. Background Information for Proposed Regulation.
PB93-226090/REB 93-04 PC **A06**/MF **A02**

Pesticide Reregistration Progress Report, April 1993.
PB93-226199/REB 93-04 PC **A03**/MF **A01**

Office of Wastewater Enforcement and Compliance (OWEC): Primer.
PB93-226736/REB 93-04 PC **A05**/MF **A01**

Guidance on Evaluation, Resolution, and Documentation of Analytical Problems Associated with Compliance Monitoring.
PB93-229847/REB 93-04 PC **A03**/MF **A01**

Reregistration Eligibility Document (RED) 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-234755/REB 93-04 PC **A07**/MF **A02**

Reregistration Eligibility Document (RED) Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-234763/REB 93-04 PC **A07**/MF **A02**

EPA Model Pretreatment Ordinance (for Microcomputers).
PB93-506079/REB 93-04 CP **D02**

Superfund Reauthorization: NACEPT Subcommittee Handbook.
PB93-963298/REB 93-04 PC **A05**/MF **A02**

Guidance for Federal Facilities on Release Notification Requirements under CERCLA and SARA Title III.
PB93-963412/REB 93-01 PC **A03**/MF **A01**

**POLLUTION SOURCES**

Validation of Source and Sink Models: Problems and Possible Solutions.
PB93-106789/REB 93-01 PC **A03**/MF **A01**

Airborne Particle Sizes and Sources Found in Indoor Air.
PB93-107019/REB 93-01 PC **A03**/MF **A01**

Modeling Individual Exposure from Indoor Sources.
PB93-119840/REB 93-01 PC **A03**/MF **A01**

Geographical Distribution and Source Type Analysis of Toxic Metal Emissions.
PB93-121036/REB 93-01 PC **A02**/MF **A01**

Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC **A05**/MF **A02**

Analysis of IAQ Control Options and the Effects of Sources and Sinks.
PB93-131647/REB 93-01 PC **A02**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

Locating and Estimating Air Emissions from Sources of Styrene.
PB93-207520/REB 93-04 PC **A06**/MF **A02**

Locating and Estimating Air Emissions from Sources of Methylene Chloride.
PB93-207579/REB 93-04 PC **A10**/MF **A03**

Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03**/MF **A01**

**POLLUTION STANDARDS**

Proceedings of Annual Analytical Symposium (10th). U.S. Environmental Protection Agency, Office of Water, Industrial Technology Division. Held in Norfolk, Virginia on May 13-14, 1987.
PB93-234771/REB 93-04 PC **A99**/MF **E06**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 5) (for Microcomputers).
PB93-506053/REB 93-04 CP **D02**

**POLLUTION TRANSPORT**

Application of a Data-Assimilating Prognostic Meteorological Model to Two Urban Areas.
PB93-126571/REB 93-01 PC **A05**/MF **A01**

Final Results of the Condors Convective Diffusion Experiment.
PB93-212728/REB 93-04 PC **A03**/MF **A01**

Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03**/MF **A01**

New Mathematical Model of Pollutant Dispersion Near a Building.
PB93-236529/REB 93-04 PC **A03**/MF **A01**

**POLLUTIONS REGULATIONS**

Development Document for Effluent Limitations Guidelines and Standards for the Pharmaceuticals Manufacturing, Point Source Category.
PB93-208969/REB 93-04 PC **A04**/MF **A01**

**POLYCHLORINATED BIPHENYLS**

Release of PCB and mercury from fibre sediments.
DE93778469/REB 93-01 PC **A05**/MF **A01**

Evaluation of the Potential Carcinogenicity of Polychlorinated Biphenyls (1336-36-3) Including Specific Aroclors.
PB93-196574/REB 93-01 PC **A03**/MF **A01**

Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02**/MF **A01**

Sequence Similarities in the Genes Encoding Polychlorinated Biphenyl Degradation by 'Pseudomonas' Strain LB400 and 'Alcaligenes eutrophus' H850.
PB93-229201/REB 93-04 PC **A01**/MF **A01**

Cloning and Expression in 'Escherichia coli' of Pseudomonas Strain LB400 Genes Encoding Polychlorinated Biphenyl Degradation.
PB93-229227/REB 93-04 PC **A02**/MF **A01**

Oxidation of Biphenyl by a Multicomponent Enzyme System from 'Pseudomonas' sp. Strain LB400.
PB93-229466/REB 93-04 PC **A02**/MF **A01**

Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
PB93-229474/REB 93-04 PC **A02**/MF **A01**

Genetic and Cell-Free Studies of PCB Biodegradation in 'Pseudomonas putida' LB400.
PB93-229748/REB 93-04 PC **A03**/MF **A01**

Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC **A03**/MF **A01**

**POLYCHLORINATED DIBENZODIOXINS**

Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC **A02**/MF **A01**

Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC **A02**/MF **A01**

**POLYCHLORINATED DIBENZOFURANS**

Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC **A02**/MF **A01**

Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC **A02**/MF **A01**

**POLYCHLOROBIPHENYL COMPOUNDS**

Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02**/MF **A01**

Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
PB93-141356/REB 93-01 PC **A03**/MF **A01**

Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
PB93-222909/REB 93-04 PC **A03**/MF **A01**

**POLYCYCLIC AROMATIC HYDROCARBONS**

32P-Postlabeling in Studies of PAH Activation.
PB93-106631/REB 93-01 PC **A03**/MF **A01**

**POLYETHYLENE**

Stress Cracking Behavior of HDPE Geomembranes and Its Prevention.
PB93-196616/REB 93-01 PC **A06**/MF **A02**

**POLYMERASE CHAIN REACTION**

PCR Primers Specific for Detection of a Rat Repetitive Sequence.
PB93-141396/REB 93-01 PC **A01**/MF **A01**

**POLYMERS**

Methods for Assessing Exposure to Chemical Substances. Volume 11. Methodology for Estimating the Migration of Additives and Impurities from Polymeric Materials.
PB93-134096/REB 93-01 PC **A09**/MF **A02**

Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC **A03**/MF **A01**

Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC **A03**/MF **A01**

ADL Migration Estimation Model (for Microcomputers) (Release Number 1).
PB93-500684/REB 93-01 CP **D02**

**POME FRUITS**

Protection of Pome Fruits, March 1965-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149904/REB 93-01 PC **A13**/MF **A03**

**PONDS**

Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03**/MF **A01**

**PORCELAIN ENAMELS**

Development Document for Effluent Limitations Guidelines and Standards for the Porcelain Enameling, Point Source Category.
PB93-206514/REB 93-04 PC **A21**/MF **A04**

**POROUS MEDIA**

Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-228575/REB 93-04 PC **A03**/MF **A01**

**PORTABLE EQUIPMENT**

Evaluation of Portable Gas Chromatographs.
PB93-168813/REB 93-01 PC **A03**/MF **A01**

Workshop Report: Identification of Performance Parameters for Portable X-ray Fluorescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.
PB93-216612/REB 93-04 PC **A05**/MF **A02**

**PORTLAND (OREGON)**

Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC **A09**/MF **A02**

**POTABLE WATER**

Lead in Drinking Water Regulation: Public Education Guidance (Guidance for Conducting a Community-Based Public Education Program on Lead in Drinking Water).
PB93-101079/REB 93-01 PC **A04**/MF **A01**

Lead and Copper Rule Guidance Manual. Volume 2. Corrosion Control Treatment.
PB93-101533/REB 93-01 PC **A10**/MF **A03**

Drinking Water and Health: Disinfectants and Disinfectant By-Products. Volume 7.
PB93-112290/REB 93-01 PC **A06**/MF **A02**

Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
PB93-115806/REB 93-01 PC **A05**/MF **A01**

Economic Assessment of Reducing Fluoride in Drinking Water.
PB93-115830/REB 93-01 PC **A05**/MF **A01**

Florida Small Systems Compliance Project.
PB93-115855/REB 93-01 PC **A04**/MF **A01**

Sanitary Survey Training: Instructor's Guide for Inspectors of Small Water Systems.
PB93-115871/REB 93-01 PC **A05**/MF **A01**

Sanitary Survey Training: Instructor's Guide for Sanitarians of Micronesia.
PB93-115889/REB 93-01 PC **A09**/MF **A02**

Wellhead Protection Strategies for Confined-Aquifer Settings.
PB93-115913/REB 93-01 PC **A05**/MF **A01**

Why do Wellhead Protection. Issues and Answers in Protecting Public Drinking Water Supply Systems.
PB93-115921/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Glossary.
PB93-115970/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Project Summary.
PB93-115988/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Summary Results of EPA's National Survey of Pesticides in Drinking Water Wells.
PB93-115996/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Survey Design.
PB93-116002/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Survey Analytes.
PB93-116010/REB 93-01 PC **A03**/MF **A01**

Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC **A05**/MF **A01**

Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

Drinking Water Toxicity Profiles.
PB93-122406/REB 93-01 PC **A09**/MF **A02**

Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC **A03**/MF **A01**

Overview of Existing State Alternative Financing Programs: Financing Drinking Water System Capital Needs in the 1990's.
PB93-132637/REB 93-01 PC **A05**/MF **A01**

Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC **A07**/MF **A02**

Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC **A05**/MF **A01**

Occurrence Assessment for Disinfectants and Disinfection By-Products (Phase 6a) in Public Drinking Water.
PB93-134377/REB 93-01 PC **A04**/MF **A01**

Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

Status Report on Analytical Methods to Support the Disinfectant/Disinfection By-Products Regulation.
PB93-134898/REB 93-01 PC **A03**/MF **A01**

Status Report on the Development of Draft MCLGs for Disinfectants and By-Products.
PB93-134906/REB 93-01 PC **A05**/MF **A01**

Status Report on Development of Regulations for Disinfectants and Disinfection By-Products.
PB93-134914/REB 93-01 PC **A03**/MF **A01**

Use of Microbial Risk Assessment in Setting U.S. Drinking Water Standards.
PB93-134930/REB 93-01 PC **A03**/MF **A01**

Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC **A02**/MF **A01**

Health Effects of Arsenic in Drinking Water: Research Needs.
PB93-141331/REB 93-01 PC **A02**/MF **A01**

Manual for the Certification of Laboratories Analyzing Drinking Water. Criteria and Procedures Quality Assurance (Third Edition).
PB93-145688/REB 93-01 PC **A03**/MF **A01**

Removal of Beryllium from Drinking Water by Chemical Coagulation and Lime Softening.
PB93-150134/REB 93-01 PC **A03**/MF **A01**

General Public Notification for Public Water Systems.
PB93-167096/REB 93-01 PC **A05**/MF **A01**

Effect of the Distribution System on Drinking-Water Quality.
PB93-173722/REB 93-01 PC **A03**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 50,001 to 100,000 Persons.
PB93-174514/REB 93-01 PC **A04**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 101 to 500 Persons.
PB93-174522/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 501 to 3,300 Persons.
PB93-174530/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 3,301 to 10,000 Persons.
PB93-174548/REB 93-01 PC **A03**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 10,001 to 50,000 Persons.
PB93-174555/REB 93-01 PC **A04**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving > 100,000 Persons.
PB93-174563/REB 93-01 PC **A04**/MF **A01**

Reactions of Potential Organic Water Contaminants with Aqueous Chlorine and Monochloramine.
PB93-175040/REB 93-01 PC **A04**/MF **A01**

Restructuring Manual: A Training Manual for State Drinking Water Personnel as They Meet the Challenges of the 1986 Safe Drinking Water Act Amendments.
PB93-180842/REB 93-01 PC **A04**/MF **A01**

National Public Water System Supervision Program. FY 1992 Compliance Report.
PB93-180867/REB 93-01 PC **A04**/MF **A01**

Video Teleconference on Emergency Planning for Potable Water Suppliers. Held on October 30-31, 1985.
PB93-184455/REB 93-01 PC **A10**/MF **A03**

Indian Primacy Procedures Handbook for the Public Water System Supervision (PWSS) Program and the Underground Injection Control (UIC) Program.
PB93-185585/REB 93-01 PC **A09**/MF **A02**

Learning Guide for State/Local Drinking Water Agreements.
PB93-185601/REB 93-01 PC **A07**/MF **A02**

Fact Sheet: National Primary Drinking Water Regulations for Lead and Copper.
PB93-193746/REB 93-01 PC **A03**/MF **A01**

Phase II Fact Sheet: National Primary Drinking Water Regulations for 38 Inorganic and Synthetic Organic Chemicals.
PB93-193787/REB 93-01 PC **A03**/MF **A01**

Drinking Water Regulations under the Safe Drinking Water Act.
PB93-194033/REB 93-01 PC **A03**/MF **A01**

Radionuclides in Drinking Water. National Primary Drinking Water Regulations for Radionuclides. Proposed Rules.
PB93-194058/REB 93-01 PC **A03**/MF **A01**

Determination of Nine Haloacetic Acids in Finished Drinking Water.
PB93-204121/REB 93-01 PC **A03**/MF **A01**

Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC **A02**/MF **A01**

Drinking Water Handbook for Public Officials.
PB93-226595/REB 93-04 PC **A04**/MF **A01**

EPANET Water Quality Model.
PB93-236552/REB 93-04 PC **A03**/MF **A01**

**POTASSIUM COMPOUNDS**

RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED) Soap Salts.
PB93-101673/REB 93-01 PC **A13**/MF **A03**

**POTENTIAL RESPONSIBLE PARTY**

Site Enforcement Tracking System (SETS): PRP Listing by Site for Region 4.
PB93-177178/REB 93-01 PC **A99**

**POTENTIALLY RESPONSIBLE PARTIES**

Extending the Tracking of Analytical Services to Potentially Responsible Party-Lead Superfund Sites (Supplemental Guidance on OSWER Directive 9240.0-2A).
PB93-963502/REB 93-01 PC **A03**/MF **A01**

**POTENTIALLY RESPONSIBLE PARTIES (PRPS)**

Discussions with the Public Concerning NPL Listings.
PB93-963338/REB 93-01 PC **A03**/MF **A01**

**POTOMAC RIVER**

Application of the Ecotone Concept in Defining Nutrient Management Requirements for the Upper Potomac River Basin.
PB93-199560/REB 93-01 PC **A03**/MF **A01**

**POTOMAC RIVER BASIN**

Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC **A03**/MF **A01**

**POTW (PUBLICLY OWNED TREATMENT WORKS)**

Guidance Manual for Control of Slug Loadings to POTWs.
PB93-202745/REB 93-01 PC **A08**/MF **A02**

Fate of Priority Pollutants in Publicly Owned Treatment Works. Pilot Study.
PB93-203974/REB 93-04 PC **A03**/MF **A01**

Supplemental Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation.
PB93-209872/REB 93-04 PC **A06**/MF **A02**

**POWDERS**

Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.
DE93014387/REB 93-04 PC **A03**/MF **A01**

**POWER TRANSMISSION LINES**

Measurements of electric and magnetic fields in the Waianae, Hawaii area.
DE92019891/REB 93-01 PC **A03**/MF **A01**

**PRECIPITATION (METEOROLOGY)**

Digital Topographic Approach to Modeling: The Distribution of Precipitation in Mountainous Terrain.
PB93-106649/REB 93-01 PC **A03**/MF **A01**

Technologies Options for Acid Rain Control.
PB93-106854/REB 93-01 PC **A03**/MF **A01**

Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC **A02**/MF **A01**

Characterizing the Distribution of Observed Precipitation and Runoff over the Continental United States.
PB93-141570/REB 93-01 PC **A03**/MF **A01**

Analysis of Acid Precipitation Samples Collected by State Agencies. Sampling Period: January-December 1990.
PB93-144152/REB 93-01 PC **A12**/MF **A03**

**PRECURSORS**

Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC **A03**/MF **A01**

**PREIMPLANTATION PHASE**

Gene Expression in Pre-Implantation Mammalian Embryos.
PB93-194397/REB 93-01 PC **A03**/MF **A01**

**PRELIM COMPUTER PROGRAM**

PRELIM Version 4.0 Users Guide. Documentation for the EPA Computer Program for Development of Local Discharge Limitations under the Pretreatment Program. Data Tape Documentation.
PB93-192748/REB 93-04 PC **A05**/MF **A01**

PRELIM, Version 4.0 (for Microcomputers).
PB93-505980/REB 93-04 CP **D03**

**PRELIMINARY ASSESSMENT**

PA-Score (Preliminary Assessment Score) User's Manual and Tutorial. Version 2.1.
PB93-108322/REB 93-01 PC **A05**/MF **A01**

**PRENATAL EXPOSURE DELAYED EFFECTS**

Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Bensidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC **A02**/MF **A01**

**PRESCORE COMPUTER MODEL**

PREscore Software: Users Manual and Tutorial Version 2.0.
PB93-192698/REB 93-04 PC **A05**/MF **A01**

Preliminary Ranking Evaluation Score (PREscore) Version 2.0 (for Microcomputers).
PB93-505915/REB 93-04 CP **D02**

**PRESCRIBED BURNING**

Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC **A15**/MF **A03**

**PRESSURE MEASURING INSTRUMENTS**

Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
PB93-115806/REB 93-01 PC **A05**/MF **A01**

**PRETREATMENT**

Supplemental Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation.
PB93-209872/REB 93-04 PC **A06**/MF **A02**

**PRETREATMENT PROCESSES**

Economic Analysis of Pretreatment Standards: The Secondary Copper and Aluminum Subcategories of the Nonferrous Metals Manufacturing Point Source Category.
PB93-167757/REB 93-01 PC **A07**/MF **A02**

**PRETREATMENT (WATER)**

Supplemental for Pretreatment to the Interim Final Development Document for the Secondary Aluminum Segment of the Nonferrous Metals Manufacturing. Point Source Category.
PB93-232122/REB 93-04 PC **A07**/MF **A02**

**PREY PREFERENCE**

Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

**PRICES**

Projections of Regional Fuel Oil and Natural Gas Prices. Project Summary.
PB93-222552/REB 93-04 PC **A01**/MF **A01**

**PRINCE WILLIAM SOUND**

Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03**/MF **A01**

Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC **A02**/MF **A01**

Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC **A02**/MF **A01**

**PRINCIPAL ORGANIC HAZARDOUS CONSTITUENTS**

Pilot-Scale Evlauation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02**/MF **A01**

**PRINTED CIRCUITS**

Waste Minimization Assessment for a Manufacturer Producing Printed Circuit Boards.
PB93-126621/REB 93-01 PC **A02**/MF **A01**

**PRINTING**

Ink and Cleaner Waste Reduction Evaluation for Flexographic Printers.
PB93-191286/REB 93-01 PC **A03**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Printing Operations.
PB93-205979/REB 93-04 PC **A02**/MF **A01**

Replacement of Hazardous Material in Wide Web Flexographic Printing Process.
PB93-229128/REB 93-04 PC **A05**/MF **A01**

**PRINTING INKS**

On-Site Waste Ink Recycling: Technology Evaluation Report.
PB93-141026/REB 93-01 PC **A04**/MF **A01**

Guideline for Graphic Arts Calculations.
PB93-199370/REB 93-01 PC **A05**/MF **A01**

**PRIORITIES**

Establishing Priorities in the U.S. EPA's Indoor Air Engineering Research Program.
PB93-221984/REB 93-04 PC **A02**/MF **A01**

**PRIS (PESTICIDE RESIDUES INFORMATION SYSTEM)**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 1.
PB93-209013/REB 93-04 PC **A03**/MF **A01**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 2.
PB93-209021/REB 93-04 PC **A15**/MF **A03**

**PRIVACY ACT**

Setting an Agenda for Research in the Federal Statistical System: Needs for Statistical Disclosure Limitation Procedures.
PB93-204097/REB 93-04 PC **A03**/MF **A01**

**PRIVATE SECTOR**

Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.
PB93-212033/REB 93-04 PC **A01**/MF **A01**

**PROBLEM SOLVING**

Federal Policies and Technological Problem-Solving.
PB93-142107/REB 93-01 PC **A03**/MF **A01**

**PRODUCT COMPARISON**

Life Cycle Analysis (Video Conference Paper).
PB93-194207/REB 93-01 PC **A02**/MF **A01**

**PROGRAM MANAGEMENT**

Program for Providing Engineering Technical Assistance to Site Remediation Managers.
PB93-185809/REB 93-01 PC **A02**/MF **A01**

Design of a Basinwide Monitoring Program for the Tampa Bay Estuary.
PB93-194694/REB 93-01 PC **A05**/MF **A01**

Chesapeake Bay Coordinated Split Sample Program Annual Report, 1990-1991: Analytical Methods and Quality Assurance Workgroup of the Chesapeake Bay Program Monitoring Subcommittee.
PB93-208270/REB 93-04 PC **A06**/MF **A02**

RCRA Public Involvement Manual.
PB93-231066/REB 93-04 PC **A11**/MF **A03**

**PROGRESS**

Superfund: Environmental Progress.
PB93-206209/REB 93-04 PC **A03**/MF **A01**

**PROJECT MANAGEMENT**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Executive Summary (Revised May 1992).
PB92-228519/REB 93-01 PC **A03**/MF **A01**

Compendium of Federal Financial Assistance Programs: Targeting Programs for State and Local Ground-Water Protection.
PB93-116069/REB 93-01 PC **A06**/MF **A02**

Financing Models for Environmental Protection: Helping Communities Meet Their Environmental Goals.
PB93-124998/REB 93-01 PC **A05**/MF **A01**

Statistical Problems Arising from Environmental Issues.
PB93-185718/REB 93-01 PC **A01**/MF **A01**

Superfund: Environmental Progress.
PB93-206209/REB 93-04 PC **A03**/MF **A01**

Highlights: Superfund Program Management. Fiscal Year 1993.
PB93-963261/REB 93-01 PC **A03**/MF **A01**

**PROJECT PLANNING**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC **A08**/MF **A02**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Project Peer Review. Report of the Peer Review Committee of the Amoco/EPA Pollution Prevention Project at the Yorktown, Virginia Refinery.
PB92-228618/REB 93-01 PC **A10**/MF **A03**

Overview of Strategic Planning at the Environmental Protection Agency.
PB93-128064/REB 93-01 PC **A03**/MF **A01**

Highlights of the EPA Innovative Regulatory Strategies Workshop: Market-Based Incentives and other Innovations for Air Pollution Control. Summary of Workshop Discussion Sessions. Held in Washington, DC. on January 15-17, 1992.
PB93-150290/REB 93-01 PC **A05**/MF **A01**

Video Teleconference on Emergency Planning for Potable Water Suppliers. Held on October 30-31, 1985.
PB93-184455/REB 93-01 PC **A10**/MF **A03**

**PROMOTOR REGIONS (GENETICS)**
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC **A03**/MF **A01**

**PROPANE/2-NITRO**
Evaluation of the Potential Carcinogenicity of 2-Nitropropane (79-46-9).
PB93-196418/REB 93-01 PC **A03**/MF **A01**

**PROPANE/PENTAFLUORO**
R-245ca: A Potential Far-Term Alternative for R-11.
PB93-173144/REB 93-01 PC **A02**/MF **A01**

**PROTECTION**
Protecting Coastal and Wetlands Resources: A Guide for Local Governments.
PB93-105567/REB 93-01 PC **A09**/MF **A03**

Delineation of Wellhead Protection Areas in Fractured Rocks.
PB93-115822/REB 93-01 PC **A08**/MF **A02**

Managing Ground Water Contamination Sources in Wellhead Protection Areas: A Priority Setting Approach.
PB93-115863/REB 93-01 PC **A12**/MF **A03**

Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC **A03**/MF **A01**

**PROTECTIVE CLOTHING**
Estimation of the Cost of Using Chemical Protective Clothing.
PB93-168805/REB 93-01 PC **A03**/MF **A01**

**PROTEINS**
Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC **A02**/MF **A01**

Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC **A03**/MF **A01**

**PROTO-ONCOGENE PROTEINS C-FOS**
Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Induction of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC **A03**/MF **A01**

**PROTOCOL COMPUTER PROGRAM**
Protocol-A Computerized Solid Waste Quantity and Composition Estimation System (Version 1.02) (for Microcomputers).
PB93-506061/REB 93-04 CP **D03**

**PROTOCOL GASES**
Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03**/MF **A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit.
PB93-168839/REB 93-01 PC **A02**/MF **A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit (May 1993).
PB93-221869/REB 93-04 PC **A03**/MF **A01**

**PROTOCOLS**
Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

Guidelines for Estimating and Applying Rule Effectiveness for Ozone CO State Implementation Plan Base Year Inventories.
PB93-131498/REB 93-01 PC **A05**/MF **A01**

Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.
PB93-236446/REB 93-04 PC **A03**/MF **A01**

**PROTOZOA**
Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.
PB93-222370/REB 93-04 PC **A02**/MF **A01**

**PROTOZOAL DISEASES**
Observations on the State of Marine Disease Studies (Chapter 18).
PB93-204170/REB 93-01 PC **A03**/MF **A01**

**PROTOZOAN INFECTIONS**
Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC **A02**/MF **A01**

Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03**/MF **A01**

**PRZM-2 MODEL**
PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
PB93-174027/REB 93-01 PC **A17**/MF **A04**

**PSEUDOMONAS**
Influence of Root Colonizing Bacteria on the Defense Responses of Bean.
PB93-205045/REB 93-04 PC **A03**/MF **A01**

Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
PB93-222909/REB 93-04 PC **A03**/MF **A01**

**PSEUDOMONAS AERUGINOSA**
Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

Competition Potentials of Environmentally Applied Bacteria with Human Fecal Microbiota.
PB93-181147/REB 93-01 PC **A02**/MF **A01**

**PSEUDOMONAS CEPACIA**
Selection of a 'Pseudomonas cepacia' Strain Constitutive for the Degradation of Trichloroethylene.
PB93-169027/REB 93-01 PC **A02**/MF **A01**

Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC **A03**/MF **A01**

Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
PB93-204972/REB 93-04 PC **A03**/MF **A01**

Repeated Sequences Including RS1100 'Pseudomonas cepacia' AC1100 Function as IS Elements.
PB93-205177/REB 93-04 PC **A02**/MF **A01**

Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC **A02**/MF **A01**

**PSEUDOMONAS FLUORESCENS**
Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
PB93-205011/REB 93-04 PC **A02**/MF **A01**

Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
PB93-205037/REB 93-04 PC **A02**/MF **A01**

**PSEUDOMONAS PUTIDA**
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC **A03**/MF **A01**

Performance of an Aquatic Multispecies System in Evaluating the Effects of a Model Microbial Pest Control Agent on Nontarget Organisms.
PB93-131803/REB 93-01 PC **A03**/MF **A01**

Use of a Novel Plasmid to Monitor the Fate of a Genetically Engineered 'Pseudomonas putida' Strain.
PB93-169001/REB 93-01 PC **A02**/MF **A01**

Genetic Analysis of the aggA Locus Involved in Agglutination and Adherence of 'Pseudomonas putida', a Beneficial Fluorescent Pseudomonad.
PB93-205029/REB 93-04 PC **A03**/MF **A01**

Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
PB93-205037/REB 93-04 PC **A02**/MF **A01**

Characterization of Catalase Activities in a Root-Colonizing Isolate of 'Pseudomonas putida' (Revised).
PB93-205052/REB 93-04 PC **A02**/MF **A01**

**PSEUDOMONAS SYRINGAE**
Effect of Aeroelization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC **A02**/MF **A01**

Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC **A02**/MF **A01**

Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.
PB93-212645/REB 93-04 PC **A02**/MF **A01**

Relationship of Total Viable and Culturable Cells in Epiphytic Populations of 'Pseudomonas syringae'.
PB93-222826/REB 93-04 PC **A02**/MF **A01**

**PSEUDOTSUGA MENGIESII**
Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
PB93-212652/REB 93-04 PC **A03**/MF **A01**

**PUBLIC ACCESS GUIDE**
Public Access: A How To Guide.
PB93-111029/REB 93-01 PC **A09**/MF **A03**

**PUBLIC HEALTH**
Technical Support Document for the Surface Disposal of Sewage Sludge.
PB93-110591/REB 93-01 PC **A15**/MF **A03**

Human Health Risk Assessment for the Use and Disposal of Sewage Sludge: Benefits of Regulation.
PB93-111540/REB 93-04 PC **A14**/MF **A03**

Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC **A05**/MF **A01**

Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

Modeling Individual Exposure from Indoor Sources.
PB93-119840/REB 93-01 PC **A03**/MF **A01**

Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02**/MF **A01**

Occurrence Assessment for Disinfectants and Disinfection By-Products (Phase 6a) in Public Drinking Water.
PB93-134377/REB 93-01 PC **A04**/MF **A01**

Simulation of Microbial Occurrence, Exposure and Health Risks after Drinking Water Treatment Processes.
PB93-134393/REB 93-01 PC **A05**/MF **A02**

Status Report on the Development of Draft MCLGs for Disinfectants and By-Products.
PB93-134906/REB 93-01 PC **A05**/MF **A01**

Use of Microbial Risk Assessment in Setting U.S. Drinking Water Standards.
PB93-134930/REB 93-01 PC **A03**/MF **A01**

Health Effects of Arsenic in Drinking Water: Research Needs.
PB93-141331/REB 93-01 PC **A02**/MF **A01**

Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03**/MF **A01**

Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC **A24**/MF **A04**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Human Health (February 1993 Draft).
PB93-154660/REB 93-01 PC **A09**/MF **A03**

Great Lakes Water Quality Initiative Technical Support Document for Human Health Criteria and Values (January 1993 Draft).
PB93-154698/REB 93-01 PC **A05**/MF **A01**

Air Quality Criteria for Carbon Monoxide.
PB93-167492/REB 93-01 PC **A99**/MF **A06**

Economic Benefits of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-168797/REB 93-01 PC **A08**/MF **A02**

Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC **A03**/MF **A01**

Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC **A02**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diethylarsine (692-42-2).
PB93-184877/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Asbestos (1332-21-4).
PB93-184885/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Auramine (492-80-8).
PB93-184893/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Azaserine (115-02-6).
PB93-184901/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chloromethyl Methyl Ether (Technical Grade) (107-30-2).
PB93-185122/REB 93-01 PC **A03**/MF **A01**

Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03**/MF **A01**

Background Information Document to Support NESHAPS Rulemaking on Nuclear Power Reactors.
PB93-199321/REB 93-01 PC **A14**/MF **A03**

Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC **A03**/MF **A01**

Characterization of Selected Public Health Issues in Galveston Bay.
PB93-205771/REB 93-04 PC **A08**/MF **A02**

Revision of Methodology for Deriving National Ambient Water Quality Criteria for the Protection of Human Health: Report of Workshop and EPA's Preliminary Recommendations for Revision.
PB93-213494/REB 93-04 PC **A06**/MF **A02**

Comparative Health Effects Assessment of Drinking Water Treatment Technologies: Report to Congress.
PB93-216950/REB 93-04 PC **A03**/MF **A01**

Drinking Water Informaticn Guide.
PB93-222958/REB 93-04 PC **A06**/MF **A02**

Public Health Action Agenda for the Gulf of Mexico: Frame Work for Action.
PB93-223428/REB 93-04 PC **A06**/MF **A02**

Assessment and Control of Bioconcentratable Contaminants in Surface Waters.
PB93-229813/REB 93-04 PC **A13**/MF **A03**

Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1. Fish Sampling and Analysis.
PB93-237899/REB 93-04 PC **A16**/MF **A03**

Health Effects Assessment Summary Tables.
PB93-921100/REB 93-01 Standing Order

**PUBLIC INFORMATION**

Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC **A09**/MF **A02**

Opportunities and Challenges for Local Emergency Planning Committees: Bestseller in EPCRA.
PB93-234789/REB 93-04 PC **A02**/MF **A01**

**PUBLIC-PRIVATE PARTNERSHIPS**

Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.
PB93-212033/REB 93-04 PC **A01**/MF **A01**

**PUBLIC RELATIONS**

Water Employees Together with America's Youth (WET WAY). Celebration of the 20th Anniversary of the Clean Water Act and Promotion of National Geography Awareness Week.
PB93-222941/REB 93-04 PC **A07**/MF **A02**

**PUBLIC UTILITIES**

Use of Expert System in a Water Utility.
PB93-123081/REB 93-01 PC **A04**/MF **A01**

**PUBLIC WATER SYSTEM**

Guidance on Enforcement of the Requirements of the Surface Water Treatment Rule.
PB93-186633/REB 93-01 PC **A03**/MF **A01**

Surface Water Treatment Rule. Implementation Manual (Including Appendix D).
PB93-186641/REB 93-01 PC **A07**/MF **A02**

**PUBLIC WATER SYSTEMS**

Institutional Solutions to Drinking Water Problems: Maine Case Studies.
PB93-180834/REB 93-01 PC **A03**/MF **A01**

Total Coliform Rule: Implementation Manual (Including Appendix D).
PB93-186658/REB 93-01 PC **A05**/MF **A02**

**PUBLICLY OWNED TREATMENT WORKS**

Municipal Water Pollution Prevention Bibliography: 1992, the Year of Clean Water. Celebration and Commitment.
PB93-141083/REB 93-01 PC **A03**/MF **A01**

**PUBLICLY OWNED TREATMENT WORKS (POTW)**

Guidance Manual for POTW Pretreatment Program Development.
PB93-186112/REB 93-01 PC **A14**/MF **A03**

**PUERTO RICO**

National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC **A04**/MF **A01**

**PUGET SOUND**

Maritime Industrial Waste Project Reduction of Toxicant Pollution from the Maritime Industry in Puget Sound.
PB93-119568/REB 93-01 PC **A08**/MF **A02**

Nutrients and Phytoplankton in Puget Sound.
PB93-119576/REB 93-01 PC **A08**/MF **A02**

Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC **A06**/MF **A02**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound.
PB93-122208/REB 93-01 PC **A09**/MF **A02**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound, Appendices.
PB93-122216/REB 93-01 PC **A16**/MF **A03**

Taxonomic Level Sufficient for Assessing a Moderate Impact on Macrobenthic Communities in Puget Sound, Washington, USA.
PB93-185858/REB 93-01 PC **A02**/MF **A01**

**PULMONARY NEOPLASMS**

Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC **A03**/MF **A01**

Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.
PB93-222061/REB 93-04 PC **A03**/MF **A01**

**PULP MILLS**

Effects of Kraft Mill Effluent on the Sexuality of Fishes: An Environmental Early Warning.
PB93-168847/REB 93-01 PC **A03**/MF **A01**

Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02**/MF **A01**

**PULSE COMBUSTION**

Applications of Pulse Combustion in Industrial and Incineration Processes.
PB93-131639/REB 93-01 PC **A03**/MF **A01**

**PUMPING**

Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC **A03**/MF **A01**

**PUMPS**

Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC **A02**/MF **A01**

Comparison of Ground-Water Sampling Devices Based on Equilibration of Water Quality Indicator Parameters.
PB93-149201/REB 93-01 PC **A03**/MF **A01**

**PURCHASING**

Pilot Project for Vehicle Scrapping in Illinois.
PB93-232890/REB 93-04 PC **A08**/MF **A02**

**PURIFICATION**

Isolation and Purification of Bacterial DNA from Soil.
PB93-149276/REB 93-01 PC **A04**/MF **A01**

**PYDRAUL 50E**

Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

**PYRENE/INDENO**

Evaluation of the Potential Carcinogenicity of Indeno(1,2,3-CD)Pyrene (193-39-5).
PB93-190536/REB 93-01 PC **A03**/MF **A01**

**PYRETHRINS**

Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
PB93-229599/REB 93-04 PC **A03**/MF **A01**

**PYRIDATE**

Pesticide Fact Sheet Number 236: Pyridate.
PB93-130441/REB 93-01 PC **A03**/MF **A01**

**PYROLYSIS**

Engineering Bulletin: Pyrolysis Treatment.
PB93-105583/REB 93-01 PC **A02**/MF **A01**

**QUALITY ASSURANCE**

National Pesticide Survey: Glossary.
PB93-115970/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Project Summary.
PB93-115988/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Summary Results of EPA's National Survey of Pesticides in Drinking Water Wells.
PB93-115996/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Survey Design.
PB93-116002/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Survey Analytes.
PB93-116010/REB 93-01 PC **A03**/MF **A01**

Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03**/MF **A01**

Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC **A11**/MF **A03**

U.S. EPA's QA/QC Program for Waste Management Facilities. Proceedings of the GRI Seminar (6th), MQC/MQA and CQC/CQA of Geosynthetics. Held in Philadelphia, Pennsylvania on December 10-11, 1992.
PB93-149219/REB 93-01 PC **A02**/MF **A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit.
PB93-168839/REB 93-01 PC **A02**/MF **A01**

EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02**/MF **A01**

Recommended Quality Assurance Procedures for Opacity Continuous Emission Monitoring Systems.
PB93-199263/REB 93-01 PC **A05**/MF **A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit (May 1993).
PB93-221869/REB 93-04 PC **A03**/MF **A01**

Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC **A08**/MF **A02**

**QUALITY CONTROL**

U.S. EPA's QA/QC Program for Waste Management Facilities. Proceedings of the GRI Seminar (6th), MQC/MQA and CQC/CQA of Geosynthetics. Held in Philadelphia, Pennsylvania on December 10-11, 1992.
PB93-149219/REB 93-01 PC **A02**/MF **A01**

Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC **A08**/MF **A02**

**QUANTITATIVE CHEMICAL ANALYSIS**

Metal concentrations of the mor layer.
DE92563061/REB 93-01 PC **A05**/MF **A01**

**QUEBEC**

Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC **A03**/MF **A01**

**QUESTIONNAIRES**

NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC **A02**/MF **A01**

**RADIANT FLUX DENSITY**

UV Monitoring Program at US EPA.
PB93-212272/REB 93-04 PC **A03**/MF **A01**

**RADIATION DOSES**

Frequency and Nature of Specific-Locus Mutations Induced in Female Mice by Radiations and Chemicals: A Review.
PB93-194447/REB 93-01 PC **A03**/MF **A01**

Background Information Document to Support NESHAPS Rulemaking on Nuclear Power Reactors.
PB93-199321/REB 93-01 PC **A14**/MF **A03**

**RADIATION MONITORING**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
PB93-100907/REB 93-01 PC **A07**/MF **A02**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

Radon/Radon Progeny Measurement Proficiency Program: Cumulative Proficiency Report (Revised September 1987).
PB93-203909/REB 93-04 PC **A03**/MF **A01**

**RADIOACTIVE CONTAMINATION**

Environmental Characteristics of EPA, NRC, and DOE Sites Contaminated with Radioactive Substances.
PB93-185551/REB 93-01 PC **A05**/MF **A01**

**RADIOACTIVE ISOTOPES**

Radionuclides in Drinking Water. National Primary Drinking Water Regulations for Radionuclides. Proposed Rules.
PB93-194058/REB 93-01 PC **A03**/MF **A01**

**RADIOACTIVE MATERIALS**

Babcock and Wilcox Cyclone Furnace Vitrification. Technology Demonstration Summary.
PB93-145621/REB 93-01 PC **A02**/MF **A01**

Removal of Radionuclides by Electrokinetic Soil Processing.
PB93-222875/REB 93-04 PC **A02**/MF **A01**

**RADIOACTIVE WASTE DISPOSAL**

Transport of Low-Level Radioactive Soil at Deep-Ocean Disposal Site.
PB93-199487/REB 93-01 PC **A03**/MF **A01**

Identification of Cost Factors for the Ocean Disposal Alternative for Low-Level Radioactive Waste.
PB93-203917/REB 93-04 PC **A03**/MF **A01**

**RADIOACTIVE WASTES**

Environmental Characteristics of EPA, NRC, and DOE Sites Contaminated with Radioactive Substances.
PB93-185551/REB 93-01 PC **A05**/MF **A01**

On-Board Corrosion Analysis of a Recovered Nuclear Waste Container.
PB93-202927/REB 93-01 PC **A03**/MF **A01**

Health Effects Assessment Summary Tables.
PB93-921100/REB 93-01 Standing Order

**RADIOECOLOGICAL CONCENTRATION**

Bladder-wrack (Fucus vesiculosus L) as an indicator for radionuclides in the environment of Swedish nuclear power plants.
DE93603681/REB 93-01 PC **A03**/MF **A01**

**RADIOECOLOGY**

Radioecology in Nordic limnic systems - present knowledge and future prospects.
DE92643948/REB 93-01 PC **A04**/MF **A01**

**RADIOMETERS**

Rice Field Inventory Using AVHRR Data.
PB93-135697/REB 93-01 PC **A03**/MF **A01**

**RADIORESPIROMETRY**

UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

**RADON**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
PB93-100907/REB 93-01 PC **A07**/MF **A02**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

Measurement and Distribution of Radon and Radon Progeny: An Overview of Indoor Radon Risk Reduction in the United States.
PB93-107092/REB 93-01 PC **A02**/MF **A01**

Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04**/MF **A01**

Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
PB93-121259/REB 93-01 PC **A02**/MF **A01**

Recommended Performance Standard of the Florida Radon Research Program.
PB93-122281/REB 93-01 PC **A03**/MF **A01**

Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

Design of New Schools and Other Large Buildings Which Are Radon Resistant and Easy to Mitigate.
PB93-131662/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Indoor Radon Modeling Workshop, Florida Radon Research Program. Held in Tampa, Florida on April 16-17, 1991.
PB93-172922/REB 93-01 PC **A09**/MF **A02**

Indoor Radon Reduction in Crawl-Space Houses: A Review of Alternative Approaches.
PB93-173177/REB 93-01 PC **A03**/MF **A01**

Alternate Performance Standard Project: Interpreting the Post-Construction Test.
PB93-175529/REB 93-01 PC **A03**/MF **A01**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
PB93-199388/REB 93-01 PC **A03**/MF **A01**

Radon/Radon Progeny Measurement Proficiency Program: Cumulative Proficiency Report (Revised September 1987).
PB93-203909/REB 93-04 PC **A03**/MF **A01**

Report to the United States Congress on Radionuclides in Drinking Water: Multimedia Risk and Cost Assessment of Radon in Drinking Water.
PB93-209427/REB 93-04 PC **A08**/MF **A02**

National Radon Measurement Proficiency Program: Individual Proficiency Report.
PB93-209989/REB 93-04 PC **A16**/MF **A03**

National Radon Contractor Proficiency (RCP) Program. Proficiency Report, July 1993.
PB93-209997/REB 93-04 PC **A11**/MF **A03**

Preliminary Diagnostic Procedures for Radon Control. Project Summary.
PB93-222545/REB 93-04 PC **A01**/MF **A01**

Clinton, New Jersey, Radon Mitigation Follow-Up and Long-Term Monitoring. Project Summary.
PB93-222594/REB 93-04 PC **A02**/MF **A01**

Measurement of the Surface Permeability of Basement Concretes.
PB93-232114/REB 93-04 PC **A03**/MF **A01**

Radon Measurement in Schools: Revised Edition.
PB93-237493/REB 93-04 PC **A04**/MF **A01**

**RAINBOW REPORT**

Status of Pesticides in Reregistration and Special Review (Rainbow Report), June 1993.
PB93-230629/REB 93-04 PC **A17**/MF **A03**

**RAINFALL - RUNOFF RELATIONSHIPS**

Maumee River Basin Pilot Watershed Study. Volume 5. Continued Watershed Monitoring (1981-1985) and Rainulator Study - Detailed Data (1986).
PB93-128098/REB 93-01 PC **A10**/MF **A03**

Characterizing the Distribution of Observed Precipitation and Runoff over the Continental United States.
PB93-141570/REB 93-01 PC **A03**/MF **A01**

**RAMSEY COUNTY (MINNESOTA)**

Superfund Record of Decision (EPA Region 5): New Brighton/Arden Hills, Ramsey County, MN. (Eighth Remedial Action), September 1992.
PB93-964131/REB 93-04 PC **A07**/MF **A02**

**RANKING**

Pilot-Scale Evaluation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02**/MF **A01**

**RATS**

Twenty-Four Hour Rhythms of Selected Ambient Temperature in Rat and Hamster.
PB93-175727/REB 93-01 PC **A02**/MF **A01**

**RCRA (RESOURCE CONSERVATION AND RECOVERY ACT)**

RCRA Implementation Plan, FY 1993.
PB93-176956/REB 93-01 PC **A05**/MF **A02**

RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC **A05**/MF **A01**

**RCRIS (RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM)**

Instruction Manual for the Resource Conservation and Recovery Information System (RCRIS) Extract Data Tapes.
PB93-183499/REB 93-04 PC **A03**/MF **A01**

Resource Conservation and Recovery Information System (RCRIS) Extract Tapes.
PB93-592570/REB 93-04 SubscriptionPC**$2540.00**

**REACTION KINETICS**

Reaction Kinetics of Ca-Based Sorbents with HCl.
PB93-131860/REB 93-01 PC **A03**/MF **A01**

Determination of Rates of Reaction in the Gas-Phase in the Troposphere. Theory and Practice. 5. Rate of Indirect Photoreaction.
PB93-149334/REB 93-01 PC **A08**/MF **A02**

Reactive Plume Model IV (RPM-IV) User's Guide.
PB93-217412/REB 93-04 PC **A23**/MF **A04**

**REACTIVE PLUME MODELS**

Reactive Plume Model IV (RPM-IV) User's Guide.
PB93-217412/REB 93-04 PC **A23**/MF **A04**

**REAL-TIME AIR MONITORS**

Air/Superfund National Technical Guidance Study Series: Compilation of Information on Real-Time Air Monitoring for Use at Superfund Sites.
PB93-199222/REB 93-04 PC **A05**/MF **A02**

**REAL TIME OPERATION**

Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
PB93-204063/REB 93-01 PC **A02**/MF **A01**

**REASONABLE AVAILABLE CONTROL TECHNOLOGY**

Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
PB93-122307/REB 93-01 PC **A03**/MF **A01**

**RECIRCULATORS**

Electrophoresis Gel Buffer Recirculator for under Twenty Dollars.
PB93-181014/REB 93-01 PC **A01**/MF **A01**

**RECORD OF DECISION**

Superfund Records of Decision Update. Volume 7, Number 2, November 1992.
PB93-963256/REB 93-01 PC **A02**/MF **A01**

Compendium of ROD Language for FY 1993 Focus Areas.
PB93-963328/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 1): Darling Hill Dump, Lyndon, VT. (First Remedial Action), June 1992.
PB93-963702/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Revere Textile Prints, Sterling, CT. (First Remedial Action), September 1992.
PB93-963703/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Otis Air National Guard/Camp Edwards, MA. (First Remedial Action), May 1992.
PB93-963704/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 1): Town Garage Radio Beacon, Londonderry, NH. (First Remedial Action), September 1992.
PB93-963705/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 1): Brunswick Naval Air Station, Operable Unit 2, ME. (Second Remedial Action), June 1992.
PB93-963706/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 1): Newport Naval Education/Training Center, Newport, RI. (First Remedial Action), September 1992.
PB93-963707/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 1): PSC Resources Site, Palmer, MA. (First Remedial Action), September 1992.
PB93-963708/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 1): Tibbetts Road, Barrington, NH. (First Remedial Action), September 1992.
PB93-963709/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 2): Ramapo Landfill Site, Rockland County, NY. (First Remedial Action), March 1992.
PB93-963801/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Pasley Solvents and Chemicals, Town of Hempstead, Nassau County, NY. (First Remedial Action), April 1992.
PB93-963805/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 2): Bioclinical Laboratories, Town of Islip, Suffolk County, NY. (First Remedial Action), September 1992.
PB93-963807/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): FAA Technical Center, Atlantic County, Atlantic City International Airport, NJ. (Third Remedial Action), September 1992.
PB93-963808/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 5), Lakehurst, NJ. (Sixth Remedial Action), January 1992.
PB93-963809/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 6), Lakehurst, NJ. (Fifth Remedial Action), December 1991.
PB93-963810/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): North Sea Municipal Landfill, Suffolk County, Southampton, NY. (Second Remedial Action), September 1992.
PB93-963811/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Witco Chemical (Oakland Plant), Bergen County, Oakland, NJ. (First Remedial Action), September 1992.
PB93-963812/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Higgins Farm, Franklin Township, Somerset County, NJ. (Second Remedial Action), September 1992.
PB93-963813/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Evor Phillips Leasing Company, Old Bridge Township, Middlesex County, NJ. (First Remedial Action), September 1992.
PB93-963814/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 1), Clinton County, NY. (First Remedial Action), September 1992.
PB93-963815/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 3), Clinton County, NY. (Second Remedial Action), September 1992.
PB93-963816/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Preferred Plating, Suffolk County, Farmingdale, NY. (Second Remedial Action), September 1992.
PB93-963817/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Cosden Chemical Coatings, City of Beverly, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963818/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Dover Municipal Well 4, Morris County, Dover, NJ. (First Remedial Action), September 1992.
PB93-963819/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Ellis Property, Sharp Road, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963820/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Endicott Village Well Field, Broome County, NY. (Third Remedial Action), September 1992.
PB93-963821/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Facet Enterprises, Village of Elmira Heights, Chemung County, NY. (First Remedial Action), September 1992.
PB93-963822/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 2): Imperial Oil/Champion Chemicals, Monmouth County, NJ. (Second Remedial Action), September 1992.
PB93-963823/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Industrial Latex, Bergen County, Wallington, NJ. (First Remedial Action), September 1992.
PB93-963824/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Islip Municipal Sanitary Landfill, Town of Islip, NY. (First Remedial Action), September 1992.
PB93-963825/REB 93-04 PC **A05**/MF **A02**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 7), Ocean County, NJ. (Seventh Remedial Action), March 1992.
PB93-963826/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Rowe Industries Groundwater Contamination, Sag Harbor, NY. (First Remedial Action), September 1992.
PB93-963827/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, (Operable Unit 5), Richmond, VA. (First Remedial Action), March 1992.
PB93-963901/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Raymark Site, Operable Unit 1, Montgomery County, PA. (First Remedial Action), December 1991.
PB93-963902/REB 93-01 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 3): Dublin Water Supply, Bucks County, PA. (First Remedial Action), December 1991.
PB93-963903/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 3): MW Manufacturing Site, Montour County, PA. (Subsequent Remedial Action), June 1992.
PB93-963904/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Dixie Caverns Landfill Site, Operable Unit 2, Roanoke County, VA. (Second Remedial Action), September 1992.
PB93-963907/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.
PB93-963912/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.
PB93-963913/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Eastern Diversified Metals Site, Schuylkill County, Hometown, PA. (Second Remedial Action), July 1992.
PB93-963914/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): USA Aberdeen, Operable Unit One, Michaelsville, MD. (Second Remedial Action), June 1992.
PB93-963915/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Strasburg Landfill, Newlin Township, Chester County, PA. (Third Remedial Action), March 1992.
PB93-963916/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Abex Corporation, Portsmouth, VA. (First Remedial Action), September 1992.
PB93-963917/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Brown's Battery Breaking, Tilden Township, Berks County, PA. (Second Remedial Action), July 1992.
PB93-963918/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Butz Landfill, Pocono and Jackson Townships, Monroe County, PA. (Second Remedial Action), June 1992.
PB93-963919/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Rhinehart Tire Fire Dump, Operable Unit 2, Winchester, VA. (Second Remedial Action), September 1992.
PB93-963921/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Tonolli Corporation, Nesquehoning Borough, Carbon County, PA. (First Remedial Action), September 1992.
PB93-963922/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, Operable Unit 1, Richmond, VA. (First Remedial Action), May 1992.
PB93-963923/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964009/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.
PB93-964010/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964011/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.
PB93-964012/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), A/M Area Groundwater Operable Unit 3, Aiken County, SC. (Third Remedial Action), June 1992.
PB93-964013/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Standard Auto Bumper Site, Dade County, Hialeah, FL. (First Remedial Action), September 1992.
PB93-964014/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Yellow Water Road Dump, Duval County, Baldwin, FL. (Second Remedial Action), June 1992.
PB93-964015/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): National Electric Coil/Cooper Industries, KY. (First Remedial Action), September 1992.
PB93-964016/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Agrico Chemical, Escambia County, Pensacola, FL. (First Remedial Action), September 1992.
PB93-964017/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Benfield Industries, Haywood County, Hazelwood, NC. (First Remedial Action), July 1992.
PB93-964018/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 4): Carrier Air Conditioning, Collierville, TN. (First Remedial Action), September 1992.
PB93-964019/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Florida Steel Corporation, Martin County, Indiantown, FL. (First Remedial Action), June 1992.
PB93-964020/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Madison County Sanitary Landfill, Madison, FL. (First Remedial Action), September 1992.
PB93-964021/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Milan Army Ammunition Plant, TN. (First Remedial Action), September 1992.
PB93-964022/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 1, SC. (First Remedial Action), June 1992.
PB93-964023/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 2, SC. (Second Remedial Action), June 1992.
PB93-964024/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation, Operable Unit 6, Roane County, TN. (Fourth Remedial Action), September 1992.
PB93-964025/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): USMC Camp Lejeune Military Reservation, NC. (First Remedial Action), September 1992.
PB93-964026/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Grand Traverse Overall Supply Site, Greilickville, MI. (First Remedial Action), February 1992.
PB93-964101/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Midco II, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964102/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): Twin Cities AF Reserve (SAR Landfill), MN. (First Remedial Action), March 1992.
PB93-964103/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Columbus Old Municipal Landfill, Columbus, IN. (First Remedial Action), March 1992.
PB93-964104/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Clare Water Supply Site, Clare County, Clare, MI. (Second Remedial Action), September 1992.
PB93-964106/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Kohler Landfill, Kohler, WI. (First Remedial Action), March 1992.
PB93-964111/REB 93-01 PC **A05**/MF **A02**

Superfund Record of Decision (EPA Region 5): Metal Working Shop, Benzie County, Lake Ann, MI. (First Remedial Action), June 1992.
PB93-964113/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Savanna Army Depot, Savanna, IL. (First Remedial Action), March 1992.
PB93-964116/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Torch Lake Site, Operable Units 1 and 3, Houghton County, MI. (First Remedial Action), September 1992.
PB93-964120/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Alsco Anaconda Site, Gnadenhutten, OH. (Second Remedial Action), September 1992.
PB93-964121/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Butterworth No. 2 Landfill Site, Grand Rapids, MI. (First Remedial Action), September 1992.
PB93-964122/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 1, Anoka County, Andover, MN. (Second Remedial Action), (Amendment), June 1992.
PB93-964123/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Reilly Tar and Chemical, St. Louis Park, MN. (Fourth Remedial Action), September 1992.
PB93-964124/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): American Chemical Services, Griffith, IN. (First Remedial Action), September 1992.
PB93-964125/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): Cannelton Industries Site, Sault Sainte Marie, MI. (First Remedial Action), September 1992.
PB93-964126/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Central Illinois Public Service, Taylorville Manufactured Gas Plant Site, Christian County, IL. (First Remedial Action), September 1992.
PB93-964127/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): City Disposal Sanitary Landfill, Dane County, WI. (First Remedial Action), September 1992.
PB93-964128/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): H. Brown Company, Walker, MI. (First Remedial Action), September 1992.
PB93-964129/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): MIDCO I, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964130/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): New Brighton/Arden Hills, Ramsey County, MN. (Eighth Remedial Action), September 1992.
PB93-964131/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 2, Anoka County, Andover, MN. (Second Remedial Action), December 1992.
PB93-964132/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Tri County/Elgin Landfill Site, Elgin, IL. (First Remedial Action), September 1992.
PB93-964133/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 2), Vermilion Parish, LA. (First Remedial Action), September 1992.
PB93-964206/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 1), Vermilion Parish, LA. (Second Remedial Action), September 1992.
PB93-964207/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 6): Koppers (Texarkana Plant), TX. (First Remedial Action), (Amendment), March 1992.
PB93-964208/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 6): Prewitt Abandoned Refinery, Prewitt, NM. (First Remedial Action), September 1992.
PB93-964209/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 6): Double Eagle Refinery, Oklahoma City, OK. (First Remedial Action), September 1992.
PB93-964210/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.
PB93-964304/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 7): Pester Refinery, Butler County, El Dorado, KS. (First Remedial Action), September 1992.
PB93-964305/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Denver Radium, Operable Unit 9, Denver, CO. (Eighth Remedial Action), December 1991.
PB93-964402/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Hill Air Force Base, UT. (Second Remedial Action), September 1992.
PB93-964403/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), (Operable Unit 4), Golden, CO. (Third Remedial Action), April 1992.
PB93-964404/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 8): Denver Radium Site, Operable Unit 8, Denver, CO. (Ninth Remedial Action), January 1992.
PB93-964405/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 8): Idaho Pole National Priorities List Site, Bozeman, MT. (First Remedial Action), September 1992.
PB93-964406/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 1, Weber County, UT. (Second Remedial Action), June 1992.
PB93-964407/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 3, Weber County, UT. (Fourth Remedial Action), September 1992.
PB93-964408/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 4, UT. (Third Remedial Action), September 1992.
PB93-964409/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 8): Portland Cement Co. (Kiln Dust No. 2 and No. 3), Operable Unit 2, Salt Lake City, UT. (Second Remedial Action), March 1992.
PB93-964410/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), Operable Unit 2, Golden, CO. (Fourth Remedial Action), September 1992.
PB93-964411/REB 93-04 PC **A19**/MF **A04**

Superfund Record of Decision (EPA Region 8): Silver Bow Creek/Butte Area, MT. (Second Remedial Action), June 1992.
PB93-964412/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 9): Westinghouse Electric (Sunnyvale Plant), Sunnyvale, CA. (First Remedial Action), October 1991.
PB93-964501/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 9): Hassayampa Landfill, AZ. (First Remedial Action), August 1992.
PB93-964505/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 9): Iron Mountain Mine, Shasta County, CA. (Second Remedial Action), September 1992.
PB93-964506/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 9): Jasco Chemical Company, Mountain View, CA. (First Remedial Action), September 1992.
PB93-964507/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 9): Purity Oil Sales, Fresno County, CA. (Second Remedial Action), September 1992.
PB93-964508/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 3, Sacramento, CA. (Second Remedial Action), December 1991.
PB93-964509/REB 93-04 PC **A09**/MF **A03**

Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 4, Sacramento, CA. (Third Remedial Action), September 1992.
PB93-964510/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 10): Elmendorf Air Force Base, Operable Unit 2, Source Area ST41, Anchorage, AK. (First Remedial Action), September 1992.
PB93-964604/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Arrcom (Drexler Enterprise), Rathdrum, ID. (First Remedial Action), June 1992.
PB93-964606/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Fort Lewis Military Reservation, Landfill No. 5, Pierce County, WA. (First Remedial Action), July 1992.
PB93-964607/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 10): Pesticide Laboratory, Yakima, WA. (First Remedial Action), September 1992.
PB93-964608/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 10): Naval Air Station Whidbey Island - Ault Field, (Operable Unit 1, Area 6), Oak Harbor, WA. (First Remedial Action), April 1992.
PB93-964609/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 10): Umatilla Army Depot (Lagoons), Soils Operable Unit 2, Hermiston, OR. (First Remedial Action), September 1992.
PB93-964610/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 10): Bunker Hill Mining and Metallurgical Complex, Shoshone County, ID. (Second Remedial Action), September 1992.
PB93-964611/REB 93-04 PC **A08/MF A02**

Superfund Record of Decision (EPA Region 10): Eielson Air Force Base, AK. (First Remedial Action), September 1992.
PB93-964612/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 10): Joseph Forest Products, Wallowa County, OR. (First Remedial Action), September 1992.
PB93-964613/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 10): McChord AFB, Washrack Treatment Area, WA. (First Remedial Action), September 1992.
PB93-964614/REB 93-04 PC **A04/MF A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 2, ID. (Third Remedial Action), September 1992.
PB93-964615/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 22, ID. (Fourth Remedial Action), September 1992.
PB93-964616/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 23, ID. (Second Remedial Action), June 1992.
PB93-964617/REB 93-04 PC **A03/MF A01**

Superfund Record of Decision (EPA Region 10): Wyckoff/Eagle Harbor, WA. (First Remedial Action), September 1992.
PB93-964618/REB 93-04 PC **A07/MF A02**

**RECOVERY**

Recovery of DNA from Soils and Sediments.
PB93-222634/REB 93-04 PC **A02/MF A01**

**RECYCLED MATERIALS**

Markets for Recovered Glass.
PB93-169845/REB 93-01 PC **A03/MF A01**

Glass Markets Information System; Application Summary Reports.
PB93-197887/REB 93-01 PC **A05/MF A01**

**RECYCLING**

Mobile On-Site Recycling of Metalworking Fluids.
PB93-216562/REB 93-04 PC **A04/MF A01**

**REDUCTION**

Maritime Industrial Waste Project Reduction of Toxicant Pollution from the Maritime Industry in Puget Sound.
PB93-119568/REB 93-01 PC **A08/MF A02**

Waste Reduction Activities and Options for a Manufacturer of Commercial Dry Cleaning Equipment.
PB93-126225/REB 93-01 PC **A02/MF A01**

**REFERENCE MATERIALS**

Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02/MF A01**

Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01/MF A01**

**REFERENCE STANDARDS**

Characterization of Reference Artemia III for Marine Toxicological Studies.
PB93-212595/REB 93-04 PC **A03/MF A01**

**REFERENCES (STANDARDS)**

EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02/MF A01**

**REFINING**

Economic Impact Analysis of Effluent Limitations and Standards for the Nonferrous Metals Smelting and Refining Industry, Phase 2.
PB93-167781/REB 93-01 PC **A09/MF A03**

**REFRIGERANTS**

Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
PB93-106821/REB 93-01 PC **A03/MF A01**

Simplified Cycle Simulation Model for the Performance Rating of Refrigerants and Refrigerant Mixtures.
PB93-130383 93-01 Not available NTIS

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131686/REB 93-01 PC **A03/MF A01**

Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
PB93-173102/REB 93-01 PC **A03/MF A01**

R-245ca: A Potential Far-Term Alternative for R-11.
PB93-173144/REB 93-01 PC **A02/MF A01**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
PB93-173664/REB 93-01 PC **A02/MF A01**

**REFRIGERATING MACHINERY**

Recovery of CFCs from refrigeration equipment. Current processes.
DE93778476/REB 93-01 PC **A04/MF A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
PB93-123198/REB 93-01 PC **A02/MF A01**

**REFRIGERATION**

New technology for refrigeration and heating plants.
DE93721673/REB 93-01 PC **A03/MF A01**

**REFRIGERATORS**

Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
PB93-106821/REB 93-01 PC **A03/MF A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
PB93-123198/REB 93-01 PC **A02/MF A01**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131686/REB 93-01 PC **A03/MF A01**

Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC **A03/MF A01**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
PB93-173664/REB 93-01 PC **A02/MF A01**

**REGIONAL ACID DEPOSITION MODEL**

Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03/MF A01**

**REGIONAL ANALYSIS**

Regional Modeling Analysis of the Dependencies of Atmospheric Oxidants to Perturbations in NOx and Hydrocarbon Emissions.
PB93-180925/REB 93-01 PC **A02/MF A01**

Regional Interim Emission Inventories (1987-1991). Volume 1. Development Methodologies.
PB93-236107/REB 93-04 PC **A07/MF A02**

Regional Interim Emission Inventories (1987-1991). Volume 2. Emission Summaries.
PB93-236115/REB 93-04 PC **A06/MF A02**

**REGIONAL PLANNING**

Cost of Providing Government Services to Alternative Residential Patterns.
PB93-207728/REB 93-04 PC **A09/MF A02**

**REGISTRATION**

General Information on Applying for Registration of Pesticides in the United States.
PB93-115939/REB 93-01 PC **A08/MF A02**

Pesticide Fact Sheet Number 236: Pyridate.
PB93-130441/REB 93-01 PC **A03/MF A01**

PR Notice 86-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144012/REB 93-01 PC **A01/MF A01**

PR Notice 86-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144020/REB 93-01 PC **A01/MF A01**

PR Notice 86-3. Notice to Producers, Registrants, and Formulators.
PB93-144038/REB 93-01 PC **A01/MF A01**

PR Notice 86-4. Notice to Registrants of Pesticides, and Applicants for Pesticide Registration.
PB93-144046/REB 93-01 PC **A02/MF A01**

PR Notice 86-5. Notice to Producers, Formulators, Distributors and Registrants.
PB93-144053/REB 93-01 PC **A03/MF A01**

PR Notice 87-2. Notice to Procedures, Registrants, and Formulators.
PB93-144061/REB 93-01 PC **A01/MF A01**

PR Notice 87-3. Notice to Manufacturers, Formulators, Distributors and Registrants of Pesticide Products.
PB93-144079/REB 93-01 PC **A01/MF A01**

PR Notice 87-5. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-144087/REB 93-01 PC **A03/MF A01**

PR Notice 87-6. Notice to Manufacturers, Formulators, Procedures, and Registrants of Pesticide Products.
PB93-144095/REB 93-01 PC **A02/MF A01**

PR Notice 87-7. Notice to Producers, Formulators and Registrants of Pesticides.
PB93-146108/REB 93-01 PC **A02/MF A01**

PR Notice 87-8. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-147015/REB 93-01 PC **A02/MF A01**

PR Notice 87-9. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149151/REB 93-01 PC **A01/MF A01**

PR Notice 87-10. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149169/REB 93-01 PC **A01/MF A01**

PR Notice 87-11. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-149664/REB 93-01 PC **A01/MF A01**

Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC **A09/MF A02**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants.
PB93-156495/REB 93-01 PC **A04/MF A01**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants, July 1986.
PB93-156503/REB 93-01 PC **A05/MF A01**

Economic Impacts of RCRA Regulations on the Plating and Polishing Industry.
PB93-158988/REB 93-01 PC **A07/MF A02**

Pesticide Fact Sheet: Polyhedral Occlusion Bodies of the Nuclear Polyhedrosis Virus of 'Spodoptera exigua'.
PB93-206779/REB 93-01 PC **A02/MF A01**

Pesticide Fact Sheet: 'Metarhizium anisopliae' Strain ESF1.
PB93-206787/REB 93-01 PC **A01/MF A01**

PR Notice 92-5. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219509/REB 93-04 PC **A01/MF A01**

PR Notice 92-6. Notice to Manufacturers, Producers, Formulators and Registrants of Pesticides.
PB93-219517/REB 93-04 PC **A01/MF A01**

**REGULATIONS**

Index to the Monthly Hotline Report Questions (June 1982 to December 1991).
PB92-131374/REB 93-01 PC **A07/MF A02**

Lead in Drinking Water Regulation: Public Education Guidance (Guidance for Conducting a Community-Based Public Education Program on Lead in Drinking Water).
PB93-101079/REB 93-01 PC **A04/MF A01**

Landfill Containment Systems Regulations.
PB93-106722/REB 93-01 PC **A03/MF A01**

Technical Support Document for the Surface Disposal of Sewage Sludge.
PB93-110591/REB 93-01 PC **A15/MF A03**

Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC **A07/MF A02**

Occurrence Assessment for Disinfectants and Disinfection By-Products (Phase 6a) in Public Drinking Water.
PB93-134377/REB 93-01 PC **A04/MF A01**

Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03/MF A01**

Simulation of Raw Water and Treatment Parameters in Support of the Disinfection By-Products Regulatory Impact Analysis.
PB93-134401/REB 93-01 PC **A03/MF A01**

Status Report on Development of Regulations for Disinfectants and Disinfection By-Products.
PB93-134914/REB 93-01 PC **A03/MF A01**

PR Notice 86-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144012/REB 93-01 PC **A01/MF A01**

PR Notice 86-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144020/REB 93-01 PC **A01/MF A01**

PR Notice 86-3. Notice to Producers, Registrants, and Formulators.
PB93-144038/REB 93-01 PC **A01/MF A01**

PR Notice 86-4. Notice to Registrants of Pesticides, and Applicants for Pesticide Registration.
PB93-144046/REB 93-01 PC **A02/MF A01**

PR Notice 86-5. Notice to Producers, Formulators, Distributors and Registrants.
PB93-144053/REB 93-01 PC **A03/MF A01**

PR Notice 87-2. Notice to Procedures, Registrants, and Formulators.
PB93-144061/REB 93-01 PC **A01/MF A01**

PR Notice 87-3. Notice to Manufacturers, Formulators, Distributors and Registrants of Pesticide Products.
PB93-144079/REB 93-01 PC **A01/MF A01**

PR Notice 87-5. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-144087/REB 93-01 PC **A03/MF A01**

PR Notice 87-6. Notice to Manufacturers, Formulators, Procedures, and Registrants of Pesticide Products.
PB93-144095/REB 93-01 PC **A02/MF A01**

PR Notice 87-7. Notice to Producers, Formulators and Registrants of Pesticides.
PB93-146108/REB 93-01 PC **A02/MF A01**

PR Notice 87-8. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-147015/REB 93-01 PC **A02/MF A01**

PR Notice 87-9. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149151/REB 93-01 PC **A01/MF A01**

PR Notice 87-10. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149169/REB 93-01 PC **A01/MF A01**

PR Notice 87-11. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-149664/REB 93-01 PC **A01/MF A01**

Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC **A09/MF A02**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants.
PB93-156495/REB 93-01 PC **A04/MF A01**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants, July 1986.
PB93-156503/REB 93-01 PC **A05/MF A01**

Economic Impacts of RCRA Regulations on the Plating and Polishing Industry.
PB93-158988/REB 93-01 PC **A07/MF A02**

Inside the Hotline: A Compilation of 1992 Monthly Hotline Reports.
PB93-159572/REB 93-01 PC **A05**/MF **A01**

Proposed Water Quality Guidance for the Great Lakes System.
PB93-164515/REB 93-01 PC **A14**/MF **A03**

General Public Notification for Public Water Systems.
PB93-167096/REB 93-01 PC **A05**/MF **A01**

Regulatory Applications of Sediment Criteria.
PB93-174472/REB 93-01 PC **A03**/MF **A01**

Regulatory Impact Analysis of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-174613/REB 93-01 PC **A06**/MF **A02**

Evaluation of Environmental Marketing Terms in the United States.
PB93-175784/REB 93-01 PC **A10**/MF **A03**

Pesticide Reregistration Progress Report.
PB93-178994/REB 93-01 PC **A03**/MF **A01**

Federal Register, Volume 58, No. 72. Part 2. Environmental Protection Agency, 40 CFR Parts 122 et al. Water Quality Guidance for the Great Lakes System and Correction; Proposed Rules.
PB93-183002/REB 93-01 PC **A11**/MF **A03**

Learning Guide for State/Local Drinking Water Agreements.
PB93-185601/REB 93-01 PC **A07**/MF **A02**

Guidance Manual for POTW Pretreatment Program Development.
PB93-186112/REB 93-01 PC **A14**/MF **A03**

Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance.
PB93-193795/REB 93-01 PC **A05**/MF **A01**

Environmental Management Inventory of Galveston Bay.
PB93-205797/REB 93-04 PC **A06**/MF **A02**

Pesticide Reregistration, March 1991.
PB93-205896/REB 93-04 PC **A03**/MF **A01**

Pesticide Reregistration Progress Report, October 1991.
PB93-206605/REB 93-04 PC **A03**/MF **A01**

Pesticide Fact Sheet Number 239: Cimectacarb.
PB93-206753/REB 93-04 PC **A02**/MF **A01**

PR Notice 92-1. Notice to Manufacturers, Formulators, Producers, and Registrants of Pesticide Products.
PB93-219467/REB 93-04 PC **A02**/MF **A01**

PR Notice 92-4. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219491/REB 93-04 PC **A01**/MF **A01**

Dredged Material Ocean Dumping Reference Document.
PB93-223568/REB 93-04 PC **A04**/MF **A01**

Preamble and Final Sludge Rule (for Microcomputers).
PB93-500478/REB 93-01 CP **D01**

Facility Response Plans.
PB93-963408/REB 93-01 PC **A01**/MF **A01**

**REGULATORY GUIDES**

Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources. March 1991 Edition.
PB93-222933/REB 93-04 PC **A24**/MF **A04**

**REGULATORY IMPACT ANALYSIS**

Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC **A07**/MF **A02**

Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

Regulatory Impact Analysis for the National Emissions Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Seven Other Processes.
PB93-143972/REB 93-01 PC **A09**/MF **A02**

Regulatory Impact Analysis of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-174613/REB 93-01 PC **A06**/MF **A02**

**REITERATED GENES**

Characterization of the Alkane-Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis': Identification of a New P450 Gene Family.
PB93-229268/REB 93-04 PC **A03**/MF **A01**

**REJECTION RATE ANALYSIS**

Pesticide Reregistration Rejection Rate Analysis Residue Chemistry. Follow-up Guidance for Generating Storage Stability Data; Submission of Raw Data; Maximum Theoretical Concentration Factors; Flowchart Diagrams.
PB93-193696/REB 93-01 PC **A04**/MF **A01**

Pesticide Reregistration Rejection Rate Analysis Residue Chemistry/Environmental Fate Follow Up Guidance for Conducting Rotational Crop Studies.
PB93-194041/REB 93-01 PC **A03**/MF **A01**

**REMEDIAL ACTION**

Sanering av Jaernsjoen i Emaan. Huvudstudie. (Remediation of lake Jaernsjoen in the Emaan river. Main report).
DE93711213/REB 93-01 PC **A04**/MF **A01**

Superfund Accelerated Cleanup Model (SACM). Volume 1, Number 4, November 1992.
PB92-963287/REB 93-01 PC **A01**/MF **A01**

Superfund: Report of the EPA Superfund Revitalization Public Meeting Held on June 24, 1992. Volumes 1 and 2.
PB92-963288/REB 93-01 PC **A06**/MF **A02**

Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC **A09**/MF **A02**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Valley of the Drums, Bullitt County, Kentucky).
PB92-963618/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (American Thermostat Corporation, New York).
PB92-963627/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Wide Beach Section of Brant, New York).
PB92-963628/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Krysowaty Farm, Hillsborough, New Jersey).
PB92-963629/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Ciba-Geigy Corporation, McIntosh, Alabama).
PB92-963630/REB 93-01 PC **A02**/MF **A01**

Demonstration of a Trial Excavation at the McColl Superfund Site.
PB93-100121/REB 93-01 PC **A04**/MF **A01**

Engineering Bulletin: Pyrolysis Treatment.
PB93-105583/REB 93-01 PC **A02**/MF **A01**

Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC **A03**/MF **A01**

Technical Guidance Document: Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems.
PB93-105625/REB 93-01 PC **A05**/MF **A02**

Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC **A02**/MF **A01**

Handbook: Remediation of Contaminated Sediments.
PB93-116275/REB 93-01 PC **A04**/MF **A01**

Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC **A03**/MF **A01**

Use of Inoculation in Bioremediation.
PB93-121150/REB 93-01 PC **A03**/MF **A01**

UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

Bioremediation as a Technology: Experiences with the Exxon Valdez Oil Spill.
PB93-121226/REB 93-01 PC **A03**/MF **A01**

Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC **A02**/MF **A01**

Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
PB93-121333/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Symposium on Soil Venting. Held in Houston, Texas on April 29-May 1, 1991.
PB93-122323/REB 93-01 PC **A15**/MF **A03**

Bioremediation: An Information Update on Applying Bioremediation to Site Cleanup.
PB93-126175/REB 93-01 PC **A03**/MF **A01**

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Remedy Selection. Interim Guidance.
PB93-126597/REB 93-01 PC **A03**/MF **A01**

Superfund Innovative Technology Evaluation Program: Progress and Accomplishments Fiscal Year 1991. A 5th Report to Congress.
PB93-126613/REB 93-01 PC **A05**/MF **A01**

Guide for Conducting Treatability Studies under CERCLA.
PB93-126787/REB 93-01 PC **A05**/MF **A01**

Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC **A02**/MF **A01**

Innovative Treatment Technologies: Semi-Annual Status Report (Fourth Edition).
PB93-133387/REB 93-01 PC **A05**/MF **A01**

Restoration of the Anacostia River.
PB93-136364/REB 93-01 PC **A05**/MF **A01**

Air/Superfund National Technical Guidance Study Series: Applicability of Open Path Monitors for Superfund.
PB93-138154/REB 93-01 PC **A07**/MF **A02**

Applied Geologic, Microbiological, and Engineering Constraints of In-situ BTEX Bioremediation.
PB93-141513/REB 93-01 PC **A03**/MF **A01**

Synopses of Federal Demonstrations of Innovative Site Remediation Technologies.
PB93-144111/REB 93-01 PC **A11**/MF **A03**

Technologies and Options for UST Corrective Actions: Overview of Current Practice.
PB93-145589/REB 93-01 PC **A05**/MF **A01**

Restoration Potential of Diked Estuarine Wetlands in Washington and Oregon. Phase 2: Identification of Candidate Sites in Puget Sound.
PB93-145597/REB 93-01 PC **A04**/MF **A01**

Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

In-situ Bioremediation of Ground Water.
PB93-146850/REB 93-01 PC **A01**/MF **A01**

Bioremediation.
PB93-149193/REB 93-01 PC **A03**/MF **A01**

Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC **A03**/MF **A01**

Surfactants and Subsurface Remediation.
PB93-149854/REB 93-01 PC **A02**/MF **A01**

Extraction and Recovery of Lead Species from Soil.
PB93-150142/REB 93-01 PC **A02**/MF **A01**

Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC **A03**/MF **A01**

Evaluation of Mitigation for Acid Aluminum Leachate from a Highway Fill in Garrett County, Maryland.
PB93-180321/REB 93-01 PC **A04**/MF **A01**

Commencement Bay Nearshore/Tideflats Feasibility Study. Executive Summary.
PB93-181220/REB 93-01 PC **A06**/MF **A02**

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
PB93-181238/REB 93-01 PC **A25**/MF **A06**

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 2. Appendices.
PB93-181246/REB 93-01 PC **A18**/MF **A04**

Commencement Bay Nearshore/Tideflats Feasibility Study. Development of Sediment Cleanup Goals.
PB93-181253/REB 93-01 PC **A05**/MF **A01**

Program for Providing Engineering Technical Assistance to Site Remediation Managers.
PB93-185809/REB 93-01 PC **A02**/MF **A01**

Online Guided Tour of the Cleanup Information Bulletin Board System. (CLU-IN: Cleanup Information Bulletin Board).
PB93-193704/REB 93-01 PC **A03**/MF **A01**

In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03**/MF **A01**

Bioremediation in the Field: Number 1, November 1990.
PB93-206340/REB 93-04 PC **A03**/MF **A01**

International Evaluation of In-situ Biorestoration of Contaminated Soil and Groundwater (September 1990)--Translation.
PB93-207553/REB 93-04 PC **A03**/MF **A01**

Geotechnical Systems for Structures on Contaminated Sites: A Technical Guidance Document.
PB93-209419/REB 93-04 PC **A08**/MF **A02**

Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.
PB93-212363/REB 93-04 PC **A02**/MF **A01**

Technology Evaluation Report: Site Program Demonstration Test. Accutech Pneumatic Fracturing Extraction and Hot Gas Injection, Phase 1. Volume 1.
PB93-216596/REB 93-04 PC **A08**/MF **A02**

Superfund Records of Decision Update. Volume 7, Number 2, November 1992.
PB93-963256/REB 93-01 PC **A02**/MF **A01**

Superfund Accelerated Cleanup Model (SACM): Questions and Answers.
PB93-963286/REB 93-04 PC **A01**/MF **A01**

HSED SACM Report. Volume 1, Number 1, January 1993.
PB93-963289/REB 93-01 PC **A01**/MF **A01**

Compendium of ROD Language for FY 1993 Focus Areas.
PB93-963328/REB 93-01 PC **A04**/MF **A01**

Guidance on Implementation of the 'Contribute to Remedial Performance' Provision.
PB93-963413/REB 93-04 PC **A02**/MF **A01**

Superfund Record of Decision (EPA Region 1): Darling Hill Dump, Lyndon, VT. (First Remedial Action), June 1992.
PB93-963702/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Ramapo Landfill Site, Rockland County, NY. (First Remedial Action), March 1992.
PB93-963801/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Pasley Solvents and Chemicals, Town of Hempstead, Nassau County, NY. (First Remedial Action), April 1992.
PB93-963805/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, (Operable Unit 5), Richmond, VA. (First Remedial Action), March 1992.
PB93-963901/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Dublin Water Supply, Bucks County, PA. (First Remedial Action), December 1991.
PB93-963903/REB 93-01 PC A06/MF A02

Superfund Record of Decision (EPA Region 3): MW Manufacturing Site, Montour County, PA. (Subsequent Remedial Action), June 1992.
PB93-963904/REB 93-01 PC A05/MF A01

Superfund Record of Decision (EPA Region 3): Dixie Caverns Landfill Site, Operable Unit 2, Roanoke County, VA. (Second Remedial Action), September 1992.
PB93-963907/REB 93-01 PC A03/MF A01

Superfund Record of Decision (EPA Region 5): Grand Traverse Overall Supply Site, Greilickville, MI. (First Remedial Action), February 1992.
PB93-964101/REB 93-01 PC A03/MF A01

Superfund Record of Decision (EPA Region 5): Midco II, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964102/REB 93-01 PC A05/MF A01

Superfund Record of Decision (EPA Region 5): Twin Cities AF Reserve (SAR Landfill), MN. (First Remedial Action), March 1992.
PB93-964103/REB 93-01 PC A04/MF A01

Superfund Record of Decision (EPA Region 5): Columbus Old Municipal Landfill, Columbus, IN. (First Remedial Action), March 1992.
PB93-964104/REB 93-01 PC A03/MF A01

Superfund Record of Decision (EPA Region 5): Clare Water Supply Site, Clare County, Clare, MI. (Second Remedial Action), September 1992.
PB93-964106/REB 93-01 PC A04/MF A01

Superfund Record of Decision (EPA Region 5): Kohler Landfill, Kohler, WI. (First Remedial Action), March 1992.
PB93-964111/REB 93-01 PC A05/MF A02

Superfund Record of Decision (EPA Region 5): Metal Working Shop, Benzie County, Lake Ann, MI. (First Remedial Action), June 1992.
PB93-964113/REB 93-01 PC A03/MF A01

Superfund Record of Decision (EPA Region 5): Savanna Army Depot, Savanna, IL. (First Remedial Action), March 1992.
PB93-964116/REB 93-01 PC A04/MF A01

Superfund Record of Decision (EPA Region 5): Torch Lake Site, Operable Units 1 and 3, Houghton County, MI. (First Remedial Action), September 1992.
PB93-964120/REB 93-01 PC A04/MF A01

Superfund Record of Decision (EPA Region 9): Westinghouse Electric (Sunnyvale Plant), Sunnyvale, CA. (First Remedial Action), October 1991.
PB93-964501/REB 93-01 PC A05/MF A01

Superfund Record of Decision (EPA Region 10): Elmendorf Air Force Base, Operable Unit 2, Source Area ST41, Anchorage, AK. (First Remedial Action), September 1992.
PB93-964604/REB 93-01 PC A03/MF A01

**REMEDIAL DESIGNS**

Technical Guidance Document: Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems.
PB93-105625/REB 93-01 PC A05/MF A02

**REMEDIATION**

In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC A12/MF A03

RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC A05/MF A01

Control of Air Emissions from Superfund Sites.
PB93-215614/REB 93-04 PC A08/MF A02

Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215622/REB 93-04 PC A04/MF A01

Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215630/REB 93-04 PC A04/MF A01

Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.
PB93-215648/REB 93-04 PC A03/MF A01

Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215655/REB 93-04 PC A04/MF A01

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC A07/MF A02

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 1: Pages 1 through 662.
PB93-218246/REB 93-04 PC A99/MF A06

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 2: Pages 663 through 1389.
PB93-218253/REB 93-04 PC A99/MF A06

Presumptive Remedy for CERCLA Municipal Landfill Sites.
PB93-963339/REB 93-04 PC A03/MF A01

Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA.
PB93-963402/REB 93-04 PC A04/MF A01

**REMOTE SENSING**

Rice Field Inventory Using AVHRR Data.
PB93-135697/REB 93-01 PC A03/MF A01

Ecotoxicological Principles for Avian Field Studies Using Radiotelemetry or Remote Sensing.
PB93-212793/REB 93-04 PC A02/MF A01

Optical Remote Measurement of Toxic Gases.
PB93-229409/REB 93-04 PC A03/MF A01

**REMOVAL**

Consideration of ARARs during Removal Actions.
PB92-963410/REB 93-01 PC A02/MF A01

**RENEWABLE ENERGY**

Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 1.
PB93-198950/REB 93-01 PC A17/MF A04

**REPAIR SHOPS**

Guides to Pollution Prevention: The Mechanical Equipment Repair Industry.
PB93-121317/REB 93-01 PC A03/MF A01

Waste Reduction Activities and Options for an Autobody Repair Facility.
PB93-123156/REB 93-01 PC A01/MF A01

Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
PB93-123230/REB 93-01 PC A02/MF A01

**REPLACING**

Preliminary Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease.
PB93-214344/REB 93-04 PC A05/MF A02

**REPORTING**

Emergency Planning and Community Right-to-Know Act: Section 313 Release Reporting Requirements (August 1991).
PB93-205847/REB 93-04 PC A03/MF A01

Toxics Release Inventory: Public Release Data, 1991.
PB93-219968/REB 93-04 PC A16/MF A03

**REPORTING REQUIREMENTS**

Toxic Chemical Release Inventory Reporting Form R and Instructions. Revised 1992 Version. Section 313 of the Emergency Planning and Community Right-to-Know Act.
PB93-194140/REB 93-01 PC A06/MF A02

Questions and Answers on Release Notification Requirements and Reportable Quantity Adjustments.
PB93-963411/REB 93-01 PC A03/MF A01

**REPRODUCTION (BIOLOGY)**

Biologic Markers in Reproductive Toxicology.
PB93-100980/REB 93-01 PC A18/MF A04

Review of the Literature on Potential Reproductive and Developmental Toxicity of Electric and Magnetic Fields.
PB93-141307/REB 93-01 PC A03/MF A01

Developing Improved Strategies to Determine Male Reproductive Risk from Environmental Toxins.
PB93-167286/REB 93-01 PC A03/MF A01

Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC A03/MF A01

Effect of Methoxychlor on Ovarian Steroidogenesis: Role in Early Pregnancy Loss.
PB93-181030/REB 93-01 PC A02/MF A01

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.
PB93-222693/REB 93-04 PC A06/MF A02

Spawning Periodicity of the Inland Silverside, 'Menidia beryllina' (Pisces: Atherinidae) in the Laboratory: Relationship to Lunar Cycles.
PB93-236297/REB 93-04 PC A02/MF A01

Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.
PB93-236347/REB 93-04 PC A02/MF A01

**REQUIREMENTS**

Draft Ground-Water Disinfection Rule.
PB93-134351/REB 93-01 PC A05/MF A01

Pesticide Reregistration Rejection Rate Analysis Residue Chemistry. Follow-up Guidance for Generating Storage Stability Data; Submission of Raw Data; Maximum Theoretical Concentration Factors; Flowchart Diagrams.
PB93-193696/REB 93-01 PC A04/MF A01

Small Community Water and Wastewater Treatment.
PB93-215606/REB 93-04 PC A05/MF A01

**REREGISTRATION**

RED Facts: Ethylene.
PB93-100345/REB 93-01 PC A02/MF A01

Reregistration Eligibility Document (RED) 'Nosema locustae'.
PB93-100360/REB 93-01 PC A07/MF A02

Reregistration Eligibility Document (RED): Streptomycin and Streptomycin Sulfate.
PB93-100386/REB 93-01 PC A09/MF A02

Reregistration Eligibility Document (RED): Capsaicin. (List D, Case 4018).
PB93-101434/REB 93-01 PC A08/MF A02

RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC A02/MF A01

Reregistration Eligibility Document (RED) Zinc Salts.
PB93-101657/REB 93-01 PC A11/MF A03

RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC A02/MF A01

Reregistration Eligibility Document (RED) Soap Salts.
PB93-101673/REB 93-01 PC A13/MF A03

RED Facts: Sodium Hydroxide.
PB93-124683/REB 93-01 PC A02/MF A01

Reregistration Eligibility Document (RED): Sodium Hydroxide.
PB93-124691/REB 93-01 PC A07/MF A02

Reregistration Eligibility Document (RED): Oxalic Acid.
PB93-169100/REB 93-01 PC A06/MF A02

RED Facts: Oxalic Acid.
PB93-173953/REB 93-01 PC A02/MF A01

Pesticide Reregistration Progress Report.
PB93-178994/REB 93-01 PC A03/MF A01

Pesticide Reregistration Rejection Rate Analysis Residue Chemistry. Follow-up Guidance for Generating Storage Stability Data; Submission of Raw Data; Maximum Theoretical Concentration Factors; Flowchart Diagrams.
PB93-193696/REB 93-01 PC A04/MF A01

Reregistration Eligibility Document (RED): Iron Salts.
PB93-200780/REB 93-01 PC A05/MF A02

Pesticide Reregistration, March 1991.
PB93-205896/REB 93-04 PC A03/MF A01

Pesticide Reregistration Progress Report, October 1991.
PB93-206605/REB 93-04 PC A03/MF A01

**RESEARCH**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
PB93-100907/REB 93-01 PC A07/MF A02

Opportunities for Pollution Prevention Research to Support the 33/50 Program.
PB93-107266/REB 93-01 PC A06/MF A02

Development of Size-Specific Data from Particulate Control Technology Research Reports.
PB93-131456/REB 93-01 PC A03/MF A01

Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC A03/MF A01

Pollution Prevention for Cleaner Air: EPA's Air and Energy Engineering Research Laboratory.
PB93-173730/REB 93-01 PC A03/MF A01

**RESEARCH AND DEVELOPMENT**

Results of U.S. EPA Research Waste Combustion Residues.
PB93-106672/REB 93-01 PC A03/MF A01

Development of an Improved Urban Airshed Modeling System.
PB93-120889/REB 93-01 PC A03/MF A01

Proceedings: 1991 SO2 Control Symposium. Volume 1. Opening Session and Sessions 1-3.
PB93-196095/REB 93-01 PC A19/MF A04

Proceedings: 1991 SO2 Control Symposium. Volume 2. Sessions 4 and 5A.
PB93-196103/REB 93-01 PC A22/MF A04

Proceedings: 1991 SO2 Control Symposium. Volume 3. Sessions 5B and 6.
PB93-196111/REB 93-01 PC A20/MF A04

Proceedings: 1991 SO2 Control Symposium. Volume 4. Session 7.
PB93-196129/REB 93-01 PC A15/MF A03

Proceedings: 1991 SO2 Control Symposium. Volume 5. Session 8.
PB93-196137/REB 93-01 PC A13/MF A03

**RESEARCH GAS MATERIALS PROGRAM**

Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC A02/MF A01

**RESEARCH GAS MIXTURE**

Two New Gas Standards Programs at the National Institute of Standards and Technology.
PB93-191427/REB 93-01 PC A02/MF A01

**RESEARCH PROGRAMS**

Establishing Priorities in the U.S. EPA's Indoor Air Engineering Research Program.
PB93-221984/REB 93-04 PC A02/MF A01

Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC A02/MF A01

**RESEARCH PROJECTS**

Protecting the Environment: A Research Strategy for the 1990s.
PB93-115954/REB 93-01 PC A04/MF A01

Strategy for Environmental Health Research at EPA.
PB93-116168/REB 93-01 PC A06/MF A02

Proceedings of the 1989 Midwest Pollution Control Biologists Meeting. Held in Chicago, Illinois on February 14-17, 1989.
PB93-143691/REB 93-01 PC A08/MF A02

Storm and Combined Sewer Overflow: An Overview of EPA's Research Program.
PB93-185957/REB 93-01 PC A03/MF A01

Summary of Implementation and Demonstration Projects in Bays and Estuaries.
PB93-194637/REB 93-01 PC **A07**/MF **A02**

Control Technology Center FY92: A Summary of Program Accomplishments.
PB93-199230/REB 93-01 PC **A03**/MF **A01**

National Air Toxics Information Clearinghouse: Ongoing Research and Regulatory Development Projects, July 1992.
PB93-206563/REB 93-04 PC **A14**/MF **A03**

National Air Toxics Information Clearinghouse: NATICH Data Base Report of Federal, State, Local and EPA Air Toxics Activities.
PB93-206589/REB 93-04 PC **A99**/MF **E08**

Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC **A09**/MF **A02**

**RESEARCH TO IMPROVE HEALTH RISK ASSESSMENTS**

Research to Improve Health Risk Assessments (RIHRA) Program.
PB93-116226/REB 93-01 PC **A06**/MF **A02**

**RESEARCH TRIANGLE PARK (NORTH CAROLINA)**

Control Technology Center FY92: A Summary of Program Accomplishments.
PB93-199230/REB 93-01 PC **A03**/MF **A01**

**RESERVOIRS**

Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC **A08**/MF **A02**

Lake and Reservoir Restoration Guidance Manual: Second Edition.
PB93-207926/REB 93-04 PC **A15**/MF **A03**

Commitment to Watershed Protection: A Review of the Clean Lakes Program.
PB93-210300/REB 93-04 PC **A04**/MF **A01**

Fish and Fisheries Management in Lakes and Reservoirs. Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-210375/REB 93-04 PC **A15**/MF **A03**

**RESIDENCE TIME**

Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.
PB93-236586/REB 93-04 PC **A03**/MF **A01**

**RESIDENTIAL BUILDINGS**

Technical Information Document for Residential Wood Combustion Best Available Control Measures.
PB93-122224/REB 93-01 PC **A05**/MF **A01**

Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
PB93-199388/REB 93-01 PC **A03**/MF **A01**

Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC **A02**/MF **A01**

**RESIDUES**

Results of U.S. EPA Research Waste Combustion Residues.
PB93-106672/REB 93-01 PC **A03**/MF **A01**

Characterization of Emissions from the Simulated Open-Burning of Non-Metallic Automobile Shredder Residue.
PB93-172914/REB 93-01 PC **A05**/MF **A01**

**RESOURCE CONSERVATION**

Global Oceans Directory. A Compendium of Organizations Dedicated to Marine Conservation.
PB93-206555/REB 93-04 PC **A08**/MF **A02**

**RESOURCE CONSERVATION AND RECOVERY ACT**

RCRA Ground-Water Monitoring: Draft Technical Guidance.
PB93-139350/REB 93-01 PC **A10**/MF **A03**

Economic Impacts of RCRA Regulations on the Plating and Polishing Industry.
PB93-158968/REB 93-01 PC **A07**/MF **A02**

Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
PB93-217784/REB 93-04 PC **A07**/MF **A02**

**RESOURCE MANAGEMENT**

Living Resources Monitoring Plan: Annual Progress Report.
PB93-116580/REB 93-01 PC **A03**/MF **A01**

**RESOURCES MANAGEMENT**

Global Oceans Directory. A Compendium of Organizations Dedicated to Marine Conservation.
PB93-206555/REB 93-04 PC **A08**/MF **A02**

**RESPIRATION**

Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC **A02**/MF **A01**

Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-228864/REB 93-04 PC **A02**/MF **A01**

**RESPIRATORY AIRFLOW**

Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-228815/REB 93-04 PC **A02**/MF **A01**

Predictors of Individual Differences in Acute Response to Ozone Exposure.
PB93-228849/REB 93-04 PC **A02**/MF **A01**

**RESPIRATORY DISEASES**

Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders.
PB93-134419/REB 93-01 PC**$29.00**/MF **A04**

**RESPIRATORY FUNCTION TESTS**

Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC **A02**/MF **A01**

**RESPIRATORY SYNCYTIAL VIRUS**

Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
PB93-175677/REB 93-01 PC **A02**/MF **A01**

Cytokine (Tumor Necrosis Factor, IL-6, and IL-8) Production by Respiratory Syncytial Virus-Infected Human Alveolar Macrophages.
PB93-181006/REB 93-01 PC **A02**/MF **A01**

**RESPIRATORY SYSTEM**

Human Upper Respiratory Tract Responses to Inhaled Pollutants with Emphasis on Nasal Lavage.
PB93-181089/REB 93-01 PC **A02**/MF **A01**

**RESPIRATORY TRACT**

Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC **A02**/MF **A01**

**RESPIRATORY TRACT INFECTIONS**

Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC **A02**/MF **A01**

**RESPONSES**

Proposed Revisions to Ocean Dumping Criteria: Final Environmental Impact Statement. Volume 2.
PB93-206548/REB 93-04 PC **A99**/MF **A06**

**RESTORATION**

Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
PB93-143709/REB 93-01 PC **A08**/MF **A02**

Fish and Fisheries Management in Lakes and Reservoirs. Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-210375/REB 93-04 PC **A15**/MF **A03**

**RESTRUCTURING**

Restructuring Manual: A Training Manual for State Drinking Water Personnel as They Meet the Challenges of the 1986 Safe Drinking Water Act Amendments.
PB93-180842/REB 93-01 PC **A04**/MF **A01**

**RESUSPENSION RATES**

Measurement of Sediment Resuspension Rates in Long Island Sound.
PB93-222115/REB 93-04 PC **A01**/MF **A01**

**REVERSE OSMOSIS**

Recycling Nickel Electroplating Rinse Waters by Low Temperature Evaporation and Reverse Osmosis.
PB93-218865/REB 93-04 PC **A04**/MF **A01**

Watts Nickel and Rinse Water Recovery via an Advanced Reverse Osmosis System.
PB93-229011/REB 93-04 PC **A05**/MF **A01**

**REVIEWS**

Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.
DE93014387/REB 93-04 PC **A03**/MF **A01**

**RFP (REASONABLE FURTHER PROGRESS)**

EPA's Information Management System for Tracking Reasonable Further Progress.
PB93-212389/REB 93-04 PC **A03**/MF **A01**

**RHODE ISLAND**

National Priorities List Sites: Rhode Island, 1992.
PB93-963239/REB 93-01 PC **A04**/MF **A01**

**RICE PLANTS**

Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC **A05**/MF **A01**

Rice Field Inventory Using AVHRR Data.
PB93-135697/REB 93-01 PC **A03**/MF **A01**

Influence of Elevated CO2 and Temperature on Wetland Rice Root Dynamics.
PB93-141141/REB 93-01 PC **A02**/MF **A01**

Effects of CO2 and Temperature on Five Rice Cultivars.
PB93-141158/REB 93-01 PC **A02**/MF **A01**

Impacts of Climate Change on Rice Yield: A Comparison of Four Model Performances.
PB93-191526/REB 93-01 PC **A03**/MF **A01**

Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC **A07**/MF **A02**

**RIHRA PROGRAM**

Research to Improve Health Risk Assessments (RIHRA) Program.
PB93-116226/REB 93-01 PC **A06**/MF **A02**

**RING FISSION**

Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC **A02**/MF **A01**

**RISK**

Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.
PB93-222081/REB 93-04 PC **A03**/MF **A01**

**RISK ASSESSMENT**

Risk assessment, Health-Environment. A research programme during the period 1992/93-1994/95.
DE93711214/REB 93-01 PC **A03**/MF **A01**

AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
PB93-100113/REB 93-01 PC **A10**/MF **A03**

Framework for Ecological Risk Assessment.
PB93-102192/REB 93-01 PC **A04**/MF **A01**

Report on the Ecological Risk Assessment Guidelines Strategic Planning Workshop. Held in Miami, Florida on April 30-May 2, 1991.
PB93-102200/REB 93-01 PC **A05**/MF **A01**

Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

Human Health Risk Assessment for the Use and Disposal of Sewage Sludge: Benefits of Regulation.
PB93-111540/REB 93-04 PC **A14**/MF **A03**

Research to Improve Health Risk Assessments (RIHRA) Program.
PB93-116226/REB 93-01 PC **A06**/MF **A02**

Simulation of Microbial Occurrence, Exposure and Health Risks after Drinking Water Treatment Processes.
PB93-134393/REB 93-01 PC **A05**/MF **A02**

Use of Microbial Risk Assessment in Setting U.S. Drinking Water Standards.
PB93-134930/REB 93-01 PC **A03**/MF **A01**

Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC **A24**/MF **A04**

Process for Regional Assessment of Wetland Risk.
PB93-146793/REB 93-01 PC **A09**/MF **A02**

Report of the Neurotoxicity Risk Assessment Guidelines Peer Review Workshop. Held in Washington, DC. on June 2-3, 1992.
PB93-146918/REB 93-01 PC **A08**/MF **A02**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Human Health (February 1993 Draft).
PB93-154680/REB 93-01 PC **A09**/MF **A03**

Great Lakes Water Quality Initiative Technical Support Document for Human Health Criteria and Values (January 1993 Draft).
PB93-154698/REB 93-01 PC **A05**/MF **A01**

Economic Benefits of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-168797/REB 93-01 PC **A08**/MF **A02**

Air/Superfund National Technical Guidance Study Series. Volume 1. Overview of Air Pathway Assessments for Superfund Sites (Revised).
PB93-173987/REB 93-01 PC **A05**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diethylarsine (692-42-2).
PB93-184877/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Asbestos (1332-21-4).
PB93-184885/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Auramine (492-80-8).
PB93-184893/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Aziridine (151-56-4).
PB93-184919/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzene (71-43-2).
PB93-184943/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzidine and Its Salt (92-87-5).
PB93-184976/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzo(b)fluoranthene (00205-99-2).
PB93-184984/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzo(k)fluoranthene (207-08-9).
PB93-184992/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzotrichloride (97-07-7).
PB93-185015/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzyl Chloride (100-44-7).
PB93-185023/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
PB93-185031/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Alpha-Hexachlorocyclohexane (319-84-6).
PB93-185049/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Beta-Hexachlorocyclohexane (319-85-7).
PB93-185056/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(2-Chloroethyl)Ether (111-44-4).
PB93-185072/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(2-Ethylhexyl)Phthalate (117-81-7).
PB93-185098/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 4-Chloro-o-Toluidine Hydrochloride (3165-93-3).
PB93-185130/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chrysene (218-01-9).
PB93-185155/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Coke Oven Emissions.
PB93-185163/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Daunomycin (20830-81-3).
PB93-185197/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDD (72-54-8).
PB93-185205/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlorambucil (305-03-3).
PB93-185213/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlordane (57-74-9).
PB93-185221/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDE (72-55-9).
PB93-185247/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDT (50-29-3).
PB93-185254/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diaminotoluene (Mixed) (95-80-7).
PB93-185270/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dibromo-3-Chloropropane (96-12-8).
PB93-185304/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dihydrosafrole (94-58-6).
PB93-185312/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachloroethane (76-01-7).
PB93-185320/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethylaminoazobenzene (60-11-7).
PB93-185338/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dimethylhydrazine (540-73-8).
PB93-185387/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dinitrotoluene (Mixture) (25321-14-6).
PB93-185395/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,4-Dinitrotoluene (121-14-2).
PB93-185403/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,6-Dinitrotoluene (606-20-2).
PB93-185411/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,4-Dioxane (123-91-1).
PB93-185429/REB 93-01 PC **A03**/MF **A01**

Incineration of Hazardous Waste: A Critical Review Update.
PB93-185916/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Heptachlor (76-44-8).
PB93-190478/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Heptachlor Epoxide (1024-57-3).
PB93-190486/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachlorobenzene (118-74-1).
PB93-190494/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachloroethane (67-72-1).
PB93-190510/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hydrazine (302-01-2).
PB93-190528/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Indeno(1,2,3-CD)Pyrene (193-39-5).
PB93-190536/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Isosafrole (120-58-1).
PB93-190544/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Kepone Chlordecone (143-50-0).
PB93-190569/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Diphenylhydrazine (122-66-7).
PB93-192326/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Epichlorohydrin (106-89-8).
PB93-192334/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl Carbamate (Urethane) (51-79-6).
PB93-192342/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl 4,4'-Dichlorobenzilate (510-15-6).
PB93-192359/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylene Dibromide (106-93-4).
PB93-192367/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylene Oxide (75-21-8).
PB93-192375/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylenethiourea (96-45-7).
PB93-193589/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl Methanesulfonate (62-50-0).
PB93-193597/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Formaldehyde (50-00-0).
PB93-193605/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Glycidylaldehyde (765-34-4).
PB93-193613/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chloroform (67-66-3).
PB93-194249/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3,3'-Dichlorobenzidine (91-94-1).
PB93-194256/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dichloroethane (107-06-2).
PB93-194264/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2:3,4-Diepoxybutane (1464-53-5).
PB93-194280/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Diethylhydrazine (1615-80-1).
PB93-194298/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diethylstilbestrol (56-53-1).
PB93-194306/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3,3'-Dimethoxybenzidine (119-90-4).
PB93-194314/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethyl Sulfate (77-78-1).
PB93-194322/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Melphalan (148-82-3).
PB93-196301/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methyl Chloride (74-87-3).
PB93-196319/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3-Methylcholanthrene (59-49-5).
PB93-196327/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methyl Iodide (74-88-4).
PB93-196343/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methylthiouracil (56-04-2).
PB93-196368/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Mitomycin C (50-07-7).
PB93-196376/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1-Naphthylamine (134-32-7).
PB93-196384/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2-Naphthylamine (91-59-8).
PB93-196392/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Nickel (7740-02-0).
PB93-196400/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2-Nitropropane (79-46-9).
PB93-196418/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Butylamine (924-16-3).
PB93-196426/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodiethanolamine (1116-54-7).
PB93-196434/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodiethylamine (55-18-5).
PB93-196442/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodimethylamine (62-75-9).
PB93-196459/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Ethylurea (759-73-9).
PB93-196475/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurea (684-93-5).
PB93-196483/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurethane (165-53-2).
PB93-196491/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosomethylvinylamine (4549-40-0).
PB93-196509/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosopiperidine (100-75-4).
PB93-196517/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosopyrrolidine.
PB93-196525/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 5-Nitro-O-Toluidine (99-55-8).
PB93-196533/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachloronitrobenzene (82-68-8).
PB93-196541/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachlorophenol (87-86-5).
PB93-196558/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Phenacetin (62-44-2).
PB93-196566/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Polychlorinated Biphenyls (1336-36-3) Including Specific Aroclors.
PB93-196574/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,3-Propane Sultone (1120-71-4).
PB93-196582/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Propylenimine (75-55-8).
PB93-196590/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity Saccharin (81-07-2).
PB93-196608/REB 93-01 PC **A03**/MF **A01**

Risk Communication About Chemicals in Your Community. Facilitator's Manual and Guide.
PB93-200541/REB 93-01 PC **A05**/MF **A02**

Low-Level and NARM Radioactive Wastes. Draft Environmental Impact Statement for Proposed Rules. Volume 1. Background Information Document.
PB93-200673/REB 93-01 PC **A99**/MF **A06**

Evaluation of the Potential Carcinogenicity of p-Toluidine (106-49-0).
PB93-201192/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of o-Toluidine (95-53-4).
PB93-201200/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Thiourea (62-56-6).
PB93-201218/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Thioacetamide (62-55-5).
PB93-201226/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Tetrachloroethylene (127-18-4).
PB93-201234/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1,2,2-Tetrachloroethane (79-34-5).
PB93-201242/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1,1,2-Tetrachloroethane (630-20-6).
PB93-201259/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (1746-01-6).
PB93-201267/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Streptozotocin (18883-66-4).
PB93-201275/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Selenium Sulfide (Selenium Disulfide) (7488-56-4).
PB93-201283/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Safrole (94-59-7).
PB93-201291/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Vinyl Chloride (75-01-4).
PB93-202257/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Uracil Mustard (66-75-1).
PB93-202265/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trypan Blue (72-57-1).
PB93-202273/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Tris(2,3-Dibromopropyl) Phosphate (126-72-7).
PB93-202281/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,4,6-Trichlorophenol (88-06-2).
PB93-202299/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,4,5-Trichlorophenol (95-95-4).
PB93-202307/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trichlorophenol (Mixed) (2516-78-22).
PB93-202315/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trichloroethylene (79-01-6).
PB93-202323/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Toxaphene (8001-35-2).
PB93-202331/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of o-Toluidine Hydrochloride (636-21-5).
PB93-202349/REB 93-01 PC **A03**/MF **A01**

Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202828/REB 93-01 PC **A08**/MF **A02**

Evaluation of the Potential Carcinogenicity of 1,1,2-Trichloroethane (79-00-5).
PB93-204584/REB 93-01 PC **A03**/MF **A01**

Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03**/MF **A01**

Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances.
PB93-206449/REB 93-04 PC **A06**/MF **A02**

Report to the United States Congress on Radionuclides in Drinking Water: Multimedia Risk and Cost Assessment of Radon in Drinking Water.
PB93-209427/REB 93-04 PC **A08**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. (Chapters 1 through 8).
PB93-222644/REB 93-04 PC **E99**/MF **E99**

Armitage-Doll Two-Stage Model: Implications and Extension.
PB93-222842/REB 93-04 PC **A02**/MF **A01**

Exposure Modeling of Acid Aerosols.
PB93-228559/REB 93-04 PC **A02**/MF **A01**

Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03**/MF **A01**

EPA's Reassessment of Dioxin Risk: Directed Health Research.
PB93-228922/REB 93-04 PC **A02**/MF **A01**

Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC **A02**/MF **A01**

Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
PB93-229565/REB 93-04 PC **A02**/MF **A01**

Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04**/MF **A01**

Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.
PB93-234540/REB 93-04 PC **A04**/MF **A01**

Landscape-Scale Effects of Toxic Events for Ecological Risk Assessment.
PB93-236628/REB 93-04 PC **A03**/MF **A01**

AutoMOUSE (Modular Oriented Uncertainty SystEm) - An Improvement to the MOUSE Computerized Uncertainty Analysis Program (for Microcomputers).
PB93-500007/REB 93-01 CP **D03**

ATSDR Health Consultations under CERCLA.
PB93-963334/REB 93-01 PC **A01**/MF **A01**

Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA.
PB93-963402/REB 93-04 PC **A04**/MF **A01**

Determination of Imminent and Substantial Endangerment for Removal Actions.
PB93-963416/REB 93-04 PC **A01**/MF **A01**

**RISK REDUCTION ENGINEERING LABORATORY**

Pollution Prevention Research Ongoing: EPA's Risk Reduction Engineering Laboratory.
PB93-212447/REB 93-04 PC **A02**/MF **A01**

Risk Reduction Engineering Laboratory Site Remediation Technical Support Program: FY92 Annual Report.
PB93-217651/REB 93-04 PC **A03**/MF **A01**

**RISK REDUCTION ENGINEERING LABORATORY PROGRAM**

Program for Providing Engineering Technical Assistance to Site Remediation Managers.
PB93-185809/REB 93-01 PC **A02**/MF **A01**

**RIVER BASINS**

Use of Ecoregions in Biological Monitoring.
PB93-106730/REB 93-01 PC **A03**/MF **A01**

Dynamic River Basin Water Quality Model.
PB93-190890/REB 93-01 PC **A05**/MF **A01**

**RIVERS**

Sampling, Characterizing and Mapping Contaminated Sediments in River Harbors.
PB93-135705/REB 93-01 PC **A02**/MF **A01**

**RIVERSIDE (CALIFORNIA)**

Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC **A02**/MF **A01**

**RIVULUS MARMORATUS**

Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC **A02**/MF **A01**

**ROADS**

Evaluation of CO Intersection Modeling Techniques Using a New York City Database.
PB93-105559/REB 93-01 PC **A10**/MF **A03**

Characterization of PM-10 Emissions from Antiskid Materials Applied to Ice- and Snow-Covered Roadways.
PB93-150209/REB 93-01 PC **A05**/MF **A01**

**ROASTERS**

Calciners and Dryers in Mineral Industries: Background Information for Promulgated Standards.
PB93-122448/REB 93-01 PC **A04**/MF **A01**

Enabling Document for New Source Performance Standards for Calciners and Dryers in Mineral Industries.
PB93-122455/REB 93-01 PC **A04**/MF **A01**

**ROBOTS**

Field Applications of Robotic Systems in Hazardous Environments, p1-29 1993. See also PB86-176344 and PB92-166743.
PB93-229755/REB 93-04 PC **A03**/MF **A01**

**ROCKY MOUNTAIN REGION (UNITED STATES)**

Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP **D03**

**ROLLER COMPRESSION EXTRACTORS**

Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC **A04**/MF **A01**

**ROOMS**

Evaluation of Ventilation Performance for Indoor Space.
PB93-212751/REB 93-04 PC **A02**/MF **A01**

**ROOT SYSTEMS**

Influence of Elevated CO2 and Temperature on Wetland Rice Root Dynamics.
PB93-141141/REB 93-01 PC **A02**/MF **A01**

**ROTATIONS**

Pesticide Reregistration Rejection Rate Analysis Residue Chemistry/Environmental Fate Follow Up Guidance for Conducting Rotational Crop Studies.
PB93-194041/REB 93-01 PC **A03**/MF **A01**

**ROTAVIRUSES**

Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
PB93-168946/REB 93-01 PC **A02**

**RRT (REGIONAL RESPONSE TEAMS)**

Criteria for Review of Hazardous Materials Emergency Plans.
PB93-207348/REB 93-04 PC **A03**/MF **A01**

**RUBBER INDUSTRY**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Rubber Production and Compounding.
PB93-206092/REB 93-04 PC **A03**/MF **A01**

**RUNOFF**

Characterizing the Distribution of Observed Precipitation and Runoff over the Continental United States.
PB93-141570/REB 93-01 PC **A03**/MF **A01**

Urban Runoff Management Information/Education Products. Version 1.
PB93-190932/REB 93-01 PC **A09**/MF **A03**

Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC **A02**/MF **A01**

**RUSSIA**

Forest Management in Russia: Challenges and Opportunities in the Era of Perestroika.
PB93-106961/REB 93-01 PC **A02**/MF **A01**

Forest Fires in Russia: Carbon Dioxide Emissions to the Atmosphere.
PB93-229664/REB 93-04 PC **A02**/MF **A01**

**RYAN LAKE**

Vertical Diffusion in Small Stratified Lake: Data and Error Analysis.
PB93-149185/REB 93-01 PC **A03**/MF **A01**

**SACCHARIN**

Evaluation of the Potential Carcinogenicity Saccharin (81-07-2).
PB93-196608/REB 93-01 PC **A03**/MF **A01**

**SACCHAROMYCES CEREVISIAE**

Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
PB93-229243/REB 93-04 PC **A03**/MF **A01**

Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC **A02**/MF **A01**

Disruption of the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.
PB93-229276/REB 93-04 PC **A03**/MF **A01**

Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC **A03**/MF **A01**

Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
PB93-229482/REB 93-04 PC **A03**/MF **A01**

**SACM (SUPERFUND ACCELERATED CLEANUP MODEL)**

Superfund Accelerated Cleanup Model (SACM): Questions and Answers.
PB93-963286/REB 93-04 PC **A01**/MF **A01**

Further Direction on Implementing the Superfund Accelerated Cleanup Model (SACM).
PB93-963291/REB 93-01 PC **A02**/MF **A01**

**SAFE DRINKING WATER ACT AMENDMENTS OF 1986**

Indian Primacy Procedures Handbook for the Public Water System Supervision (PWSS) Program and the Underground Injection Control (UIC) Program.
PB93-185585/REB 93-01 PC **A09**/MF **A02**

**SAFROLE**

Evaluation of the Potential Carcinogenicity of Safrole (94-59-7).
PB93-201291/REB 93-01 PC **A03**/MF **A01**

**SAFROLE/DIHYDRO**

Evaluation of the Potential Carcinogenicity of Dihydrosafrole (94-58-6).
PB93-185312/REB 93-01 PC **A03**/MF **A01**

**SAGINAW CONFINED DISPOSAL FACILITY**

Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC **A03**/MF **A01**

**SAID (SITE ASSESSMENT INFORMATION DIRECTORY)**

Site Assessment Information Directory (SAID) Region 1 (for Microcomputers). Date of Coverage: October 1991.
PB93-506111/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 2 (for Microcomputers). Date of Coverage: October 1991.
PB93-506129/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 3 (for Microcomputers). Date of Coverage: October 1991.
PB93-506137/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 4 (for Microcomputers). Date of Coverage: October 1991.
PB93-506145/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 5 (for Microcomputers). Date of Coverage: 1991.
PB93-506152/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 6 (for Microcomputers). Date of Coverage: October 1991.
PB93-506160/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 7 (for Microcomputers). Date of Coverage: October 1991.
PB93-506178/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 8 (for Microcomputers). Date of Coverage: 1991.
PB93-506186/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 9 (for Microcomputers). Date of Coverage: October 1991.
PB93-506194/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 10 (for Microcomputers). Date of Coverage: October 1991.
PB93-506202/REB 93-04 CP **D03**

**SALINITY**

Oligohaline Areas in Tampa Bay Tributaries: Spatial Extent and Species Lists.
PB93-191179/REB 93-01 PC **A03**/MF **A01**

**SALMON**

Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03**/MF **A01**

**SALMON RIVER**

Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
PB93-143709/REB 93-01 PC **A08**/MF **A02**

**SALMONELLA**

Genotoxicity of 2,4,5-Trichlorophenoxyacetic Acid Biodegradation Products in the 'Salmonella' Reversion and Lambda Prophage-Induction Bioassays.
PB93-107175/REB 93-01 PC **A02**/MF **A01**

**SALMONELLA INFECTIONS**

Pathogenicity of 'Salmonella pullorum' in Northern Bobwhite Quail and Mallard Ducks.
PB93-135739/REB 93-01 PC **A03**/MF **A01**

**SALT MARSHES**

Environmental Monitoring and Assessment Program: Gulf Coast Salt Marsh Pilot Study.
PB93-122398/REB 93-01 PC **A03**/MF **A01**

Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC **A11**/MF **A03**

Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
PB93-143709/REB 93-01 PC **A08**/MF **A02**

**SAMPLE PREPARATION**

Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
PB93-141554/REB 93-01 PC **A02**/MF **A01**

**SAMPLING**

Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies.
PB92-220532/REB 93-04 PC **A08**/MF **A02**

Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC **A02**/MF **A01**

Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03**/MF **A01**

Air/Superfund National Technical Guidance Study Series. Air Emissions from Area Sources: Estimating Soil and Soil-Gas Sample Number Requirements.
PB93-173995/REB 93-01 PC **A04**/MF **A01**

Outreach to Manufacturers of Lead Test Kits.
PB93-216570/REB 93-04 PC **A03**/MF **A01**

Role of Ecological Sample Surveys in the Implementation of Biocriteria.
PB93-234524/REB 93-04 PC **A03**/MF **A01**

**SAMPLING THEORY**

New Approaches to Estimation of Solid-Waste Quantity and Composition.
PB93-185908/REB 93-01 PC **A02**/MF **A01**

**SAND DOLLARS**

Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

**SCHISTOSOMA MANSONI**

Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
PB93-229607/REB 93-04 PC **A02**/MF **A01**

**SCHOOL BUILDINGS**

Guide to Performing Reinspections under the Asbestos Hazard Emergency Response Act (AHERA).
PB93-128007/REB 93-01 PC **A06**/MF **A02**

Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC **A03**/MF **A01**

Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.
PB93-218501/REB 93-04 PC **A07**/MF **A02**

Radon Measurement in Schools: Revised Edition.
PB93-237493/REB 93-04 PC **A04**/MF **A01**

Course 2. Model Curriculum for School Building Inspectors (Training Manual).
PB93-780823/REB 93-01 PC$136.00

Course 3. Model Curriculum for School Asbestos Management Planners (Training Manual).
PB93-780672/REB 93-01 PC$81.00

Course 5. Presentation to Accompany 'Guidance for Controlling Asbestos-Containing Materials in Buildings' (Training Manual).
PB93-780971/REB 93-01 PC$41.00

**SCHOTTKY RECTIFIERS**

Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC **A02**/MF **A01**

**SCIATIC NERVE**

Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC **A02**/MF **A01**

**SCOPOLAMINE**

Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-228880/REB 93-04 PC **A03**/MF **A01**

**SCREEN2 COMPUTER MODEL**

SCREEN2 Model User's Guide.
PB93-216865/REB 93-04 PC **A04**/MF **A01**

Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised.
PB93-219095/REB 93-04 PC **A05**/MF **A01**

**SCREENING LEVEL CONCENTRATIONS**

Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

**SCRUBBERS**

Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.
PB93-227205/REB 93-04 PC **A04**/MF **A01**

**SEA-SURFACE MICROLAYER**

Proceeding of the Workshop on the Sea-Surface Microlayer in Relation to Ocean Disposal. Held in Airlie, Virginia on December 18-19, 1985.
PB93-206993/REB 93-04 PC **A06**/MF **A02**

**SEA URCHINS**

Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-196966/REB 93-01 PC **A03**/MF **A01**

**SEA WATER**

Methods for the Determination of Chemical Substances in Marine and Estuarine Environmental Samples.
PB93-182913/REB 93-01 PC **A05**/MF **A01**

Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02**/MF **A01**

**SEA WATER CORROSION**

On-Board Corrosion Analysis of a Recovered Nuclear Waste Container.
PB93-202927/REB 93-01 PC **A03**/MF **A01**

**SEABIRDS**

Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

**SEAMING**

Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC **A03**/MF **A01**

**SECOND REMEDIAL ACTION**

Superfund Record of Decision (EPA Region 1): Brunswick Naval Air Station, Operable Unit 2, ME. (Second Remedial Action), June 1992.
PB93-963706/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): North Sea Municipal Landfill, Suffolk County, Southampton, NY. (Second Remedial Action), September 1992.
PB93-963811/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Higgins Farm, Franklin Township, Somerset County, NJ. (Second Remedial Action), September 1992.
PB93-963813/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 3), Clinton County, NY. (Second Remedial Action), September 1992.
PB93-963816/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Preferred Plating, Suffolk County, Farmingdale, NY. (Second Remedial Action), September 1992.
PB93-963817/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Eastern Diversified Metals Site, Schuylkill County, Hometown, PA. (Second Remedial Action), July 1992.
PB93-963914/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): USA Aberdeen, Operable Unit One, Michaelsville, MD. (Second Remedial Action), June 1992.
PB93-963915/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Brown's Battery Breaking, Tilden Township, Berks County, PA. (Second Remedial Action), July 1992.
PB93-963918/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Butz Landfill, Pocono and Jackson Townships, Monroe County, PA. (Second Remedial Action), June 1992.
PB93-963919/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Yellow Water Road Dump, Duval County, Baldwin, FL. (Second Remedial Action), June 1992.
PB93-964015/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 2, SC. (Second Remedial Action), June 1992.
PB93-964024/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Alsco Anaconda Site, Gnadenhutten, OH. (Second Remedial Action), September 1992.
PB93-964121/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 1, Anoka County, Andover, MN. (Second Remedial Action), (Amendment), June 1992.
PB93-964123/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 1), Vermilion Parish, LA. (Second Remedial Action), September 1992.
PB93-964207/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 8): Hill Air Force Base, UT. (Second Remedial Action), September 1992.
PB93-964403/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 1, Weber County, UT. (Second Remedial Action), June 1992.
PB93-964407/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Portland Cement Co. (Kiln Dust No. 2 and No. 3), Operable Unit 2, Salt Lake City, UT. (Second Remedial Action), March 1992.
PB93-964410/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Silver Bow Creek/Butte Area, MT. (Second Remedial Action), June 1992.
PB93-964412/REB 93-04 PC **A07**/MF **A02**

**SEDIMENT QUALITY CRITERIA**

Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

Regulatory Applications of Sediment Criteria.
PB93-174472/REB 93-01 PC **A03**/MF **A01**

**SEDIMENT TRANSPORT**

Measurement of Sediment Resuspension Rates in Long Island Sound.
PB93-222115/REB 93-04 PC **A01**/MF **A01**

**SEDIMENT-WATER INTERFACES**

Regulatory Applications of Sediment Criteria.
PB93-174472/REB 93-01 PC **A03**/MF **A01**

Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

**SEDIMENTS**

Release of PCB and mercury from fibre sediments.
DE93778469/REB 93-01 PC **A05**/MF **A01**

Sediment Classification Methods Compendium.
PB93-115186/REB 93-01 PC **A11**/MF **A03**

Handbook: Remediation of Contaminated Sediments.
PB93-116275/REB 93-01 PC **A04**/MF **A01**

Proceedings of the EPA's Contaminated Sediment Management Strategy Forums.
PB93-126399/REB 93-01 PC **A10**/MF **A03**

Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08**/MF **A02**

Sampling, Characterizing and Mapping Contaminated Sediments in River Harbors.
PB93-135705/REB 93-01 PC **A02**/MF **A01**

Vertical Diffusion in Small Stratified Lake: Data and Error Analysis.
PB93-149185/REB 93-01 PC **A03**/MF **A01**

Proceedings: Tiered Testing Issues for Freshwater and Marine Sediments. Held in Washington, DC. on September 16-18, 1992.
PB93-152619/REB 93-01 PC **A22**/MF **A04**

Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02**/MF **A01**

Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03**/MF **A01**

Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03**/MF **A01**

Commencement Bay Nearshore/Tideflats Feasibility Study. Executive Summary.
PB93-181220/REB 93-01 PC **A06**/MF **A02**

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
PB93-181238/REB 93-01 PC **A25**/MF **A06**

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 2. Appendices.
PB93-181246/REB 93-01 PC **A18**/MF **A04**

Commencement Bay Nearshore/Tideflats Feasibility Study. Development of Sediment Cleanup Goals.
PB93-181253/REB 93-01 PC **A05**/MF **A01**

Physical and Chemical Parameters of Sediment Extraction and Fractionation That Influence Toxicity, as Evaluated by Microtox (Trade Name).
PB93-185882/REB 93-01 PC **A03**/MF **A01**

Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03**/MF **A01**

Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02**/MF **A01**

Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11**/MF **A03**

Ambient Water and Sediment Quality of Galveston Bay: Present Status and Historical Trends. Volume 1.
PB93-205789/REB 93-04 PC **A09**/MF **A03**

Contaminated Sediments News: Number 5, April, 1992.
PB93-207413/REB 93-04 PC **A02**/MF **A01**

Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.
PB93-212769/REB 93-04 PC **A03**/MF **A01**

Selecting Remediation Techniques for Contaminated Sediment.
PB93-216273/REB 93-04 PC **A10**/MF **A03**

Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03**/MF **A01**

Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).
PB93-221836/REB 93-04 PC **A03**/MF **A01**

Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.
PB93-222362/REB 93-04 PC **A03**/MF **A01**

**SEEDS**

Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
PB93-141463/REB 93-01 PC **A02**/MF **A01**

**SEEPS**
Global Flux of Methane from Shallow Submarine Sediments.
PB93-222388/REB 93-04 PC **A03**/MF **A01**

**SELENIUM SULFIDES**
Evaluation of the Potential Carcinogenicity of Selenium Sulfide (Selenium Disulfide) (7488-56-4).
PB93-201283/REB 93-01 PC **A03**/MF **A01**

**SEMICONDUCTORS**
Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
PB93-123222/REB 93-01 PC **A02**/MF **A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Semiconductor Manufacturing.
PB93-206001/REB 93-04 PC **A02**/MF **A01**

**SEMIVOLATILE ORGANIC COMPOUNDS**
Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02**/MF **A01**

**SEMIVOST METHOD**
Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC **A03**/MF **A01**

**SENECIO JACOBAEA**
Bacillus thuringiensis var. kurstaki Affects a Beneficial Insect, the Cinnabar Moth (Lepidoptera: Arctidae).
PB93-199651/REB 93-01 PC **A02**/MF **A01**

**SEPARATION**
Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC **A03**/MF **A01**

**SEPARATION PROCESSES**
Carver-Greenfield Process (Trade Name) Dehydro-Tech Corporation. Applications Analysis Report.
PB93-101152/REB 93-01 PC **A03**/MF **A01**

**SEROTONIN**
Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02**/MF **A01**

**SERVICE LIFE**
Life Cycle Design Guidance Manual. Environmental Requirements and the Product System.
PB93-164507/REB 93-04 PC **A09**/MF **A03**

EPA's Life Cycle Methodology: Guidelines for Use in Development of Packaging.
PB93-194199/REB 93-01 PC **A03**/MF **A01**

Broad-Based Environmental Life Cycle Assessment.
PB93-199495/REB 93-01 PC **A02**/MF **A01**

EPA's Research in LCA Methodology.
PB93-212439/REB 93-04 PC **A03**/MF **A01**

**SERVICES**
Financing Models for Environmental Protection: Helping Communities Meet Their Environmental Goals.
PB93-124998/REB 93-01 PC **A05**/MF **A01**

**SEVENTH REMEDIAL ACTION**
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 7), Ocean County, NJ. (Seventh Remedial Action), March 1992.
PB93-963826/REB 93-04 PC **A04**/MF **A01**

**SEWAGE SLUDGE**
Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

Technical Support Document for the Surface Disposal of Sewage Sludge.
PB93-110591/REB 93-01 PC **A15**/MF **A03**

Technical Support for the Incineration of Sewage Sludge.
PB93-110617/REB 93-01 PC **A11**/MF **A03**

Human Health Risk Assessment for the Use and Disposal of Sewage Sludge: Benefits of Regulation.
PB93-111540/REB 93-04 PC **A14**/MF **A03**

Summary of the 1987 Carver-Greenfield Sludge Drying Technology Workshop: Problems and Solutions. Held in Los Angeles, California on March 10-11, 1987.
PB93-174506/REB 93-01 PC **A04**/MF **A01**

What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC **A03**/MF **A01**

Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC **A01**/MF **A01**

Guidance for Writing Permits for the Use or Disposal of Sewage Sludge.
PB93-217537/REB 93-04 PC **A18**/MF **A04**

Analytical Methods for the National Sewage Sludge Survey.
PB93-236024/REB 93-04 PC **A12**/MF **A03**

Preamble and Final Sludge Rule (for Microcomputers).
PB93-500478/REB 93-01 CP **D01**

**SEWAGE TREATMENT**
Technical Support for the Incineration of Sewage Sludge.
PB93-110617/REB 93-01 PC **A11**/MF **A03**

Constructed Wetland Design: the First Generation.
PB93-131753/REB 93-01 PC **A02**/MF **A01**

Quality Assurance Plan for 1991 Pilot Study of the Ecological Condition of Municipal Wastewater Constructed Wetland Treatment Systems.
PB93-134674/REB 93-01 PC **A05**/MF **A01**

Quality Assurance Field Operations Report for the Pilot Study Evaluating the Habitat Value of Wetland Treatment Systems.
PB93-134682/REB 93-01 PC **A04**/MF **A01**

Habitat Quality Assessment of Two Wetland Treatment Systems in Mississippi: A Pilot Study.
PB93-135614/REB 93-01 PC **A06**/MF **A02**

Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC **A02**/MF **A01**

Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC **A03**/MF **A01**

Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.
PB93-212033/REB 93-04 PC **A01**/MF **A01**

Small Community Water and Wastewater Treatment.
PB93-215606/REB 93-04 PC **A05**/MF **A01**

Habitat Quality Assessment of Two Wetland Treatment Systems in the Arid West: A Pilot Study.
PB93-222305/REB 93-04 PC **A06**/MF **A02**

**SEWAGE TREATMENT EFFLUENTS**
Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC **A03**/MF **A01**

**SEWAGE TREATMENT PLANTS**
Fate of Priority Pollutants in Publicly Owned Treatment Works. Pilot Study.
PB93-203974/REB 93-04 PC **A03**/MF **A01**

Sewage Treatment Plant NSPS: Responses to Comments on April 1986 Proposed Revisions.
PB93-223584/REB 93-04 PC **A03**/MF **A01**

**SHELLFISH**
Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16**/MF **A03**

Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04**/MF **A01**

Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1. Fish Sampling and Analysis.
PB93-237899/REB 93-04 PC **A16**/MF **A03**

**SHIPBUILDING**
Marine Industry Characterization Report.
PB93-216174/REB 93-04 PC **A10**/MF **A03**

**SHIPS**
Commercial Marine Vessel Contributions to Emission Inventories.
PB93-173961/REB 93-01 PC **A07**/MF **A02**

**SHORE POLLUTION CONTROL**
Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203693/REB 93-04 PC **A07**/MF **A02**

Chemical Shoreline Cleaning Agents for Oil Spills: Update State-of-the-Art on Mechanisms of Action and Factors Influencing Performance.
PB93-203701/REB 93-04 PC **A04**/MF **A01**

**SHORE PROTECTION**
Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC **A03**/MF **A01**

**SHORT TERM EXPOSURE**
Air/Superfund National Technical Guidance Study Series: Evaluation of Short-Term Air Action Levels for Superfund Sites.
PB93-200913/REB 93-01 PC **A14**/MF **A03**

**SHRIMP**
Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02**/MF **A01**

**SILICATE TECHNOLOGY CORPORATION**
Applications Analysis Report: Silicate Technology Corporation's Solidification/Stabilization Technology for Organic and Inorganic Contaminants in Soils.
PB93-172948/REB 93-01 PC **A07**/MF **A02**

**SILICON CONTROLLED RECTIFIERS**
Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC **A02**/MF **A01**

**SILVER**
Ambient Aquatic Life Water Quality Criteria for Silver.
PB93-202604/REB 93-01 PC **A06**/MF **A02**

RED Facts: Silver.
PB93-232924/REB 93-04 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED): Silver.
PB93-232973/REB 93-04 PC **A05**/MF **A02**

**SINKS**
Validation of Source and Sink Models: Problems and Possible Solutions.
PB93-106789/REB 93-01 PC **A03**/MF **A01**

**SISTER CHROMATID EXCHANGE**
DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

**SITE CHARACTERIZATION**
DNAPL Site Evaluation.
PB93-150217/REB 93-01 PC **A16**/MF **A03**

Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites with Volatile Organic Compounds in Soils.
PB93-963346/REB 93-04 PC **A03**/MF **A01**

**SITE (SUPERFUND INNOVATIVE TECHNOLOGY EVALUATION)**
SITE Program Demonstration of the SBP Technologies, Inc., Membrane Filtration System on Creosote-Contaminated Water.
PB93-228567/REB 93-04 PC **A02**/MF **A01**

**SITE SURVEYS**
Guidance for Performing Site Inspections under CERCLA.
PB92-963375/REB 93-01 PC **A11**/MF **A03**

Survey of Data from the Continuous Sites of the 1990 Atlanta Ozone Precursor Study.
PB93-124618/REB 93-01 PC **A04**/MF **A01**

Analysis of Acid Precipitation Samples Collected by State Agencies. Sampling Period: January-December 1990.
PB93-144152/REB 93-01 PC **A12**/MF **A03**

Restoration Potential of Diked Estuarine Wetlands in Washington and Oregon. Phase 2: Identification of Candidate Sites in Puget Sound.
PB93-145597/REB 93-01 PC **A04**/MF **A01**

PA-Score (Preliminary Assessment Score), Version 2.1, 5 1/4 inch (for Microcomputers).
PB93-500346/REB 93-01 CP **D02**

PA-Score (Preliminary Assessment Score), Version 2.1, 3 1/2 inch (for Microcomputers).
PB93-500353/REB 93-01 CP **D02**

Guidance on Setting Priorities for NPL Candidate Sites.
PB93-963333/REB 93-01 PC **A02**/MF **A01**

Summary of GIS Support to Superfund.
PB93-963506/REB 93-04 PC **A04**/MF **A01**

**SITES**
Geophysics Advisor Expert System, Version 2.0.
PB93-163285/REB 93-01 PC **A03**/MF **A01**

Site Enforcement Tracking System (SETS): PRP Listing by Site for Region 4.
PB93-177178/REB 93-01 PC **A99**

Geotechnical Systems for Structures on Contaminated Sites: A Technical Guidance Document.
PB93-209419/REB 93-04 PC **A08**/MF **A02**

Geophysics Advisor Expert System (Version 2.0) (for Microcomputers).
PB93-505162/REB 93-01 CP **D02**

Guide to Community Involvement for Site Assessment Managers.
PB93-963348/REB 93-04 PC **A02**/MF **A01**

**SIXTH REMEDIAL ACTION**
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 5), Lakehurst, NJ. (Sixth Remedial Action), January 1992.
PB93-963809/REB 93-04 PC **A03**/MF **A01**

**SIZE DETERMINATION**
Spray Characteristics of Two Types of Fuel Injectors.
PB93-180859/REB 93-01 PC **A03**/MF **A01**

**SKELETON**
Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03**/MF **A01**

**SKF-38393**
Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Industion of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC **A03**/MF **A01**

**SKID RESISTANCE**
Characterization of PM-10 Emissions from Antiskid Materials Applied to Ice- and Snow-Covered Roadways.
PB93-150209/REB 93-01 PC **A05**/MF **A01**

**SKIN ABSORPTION**
Dermal Penetration of ((14)C)Captan in Young and Adult Rats.
PB93-107142/REB 93-01 PC **A03**/MF **A01**

Maturational Changes in Dermal Absorption of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Fischer 344 Rats.
PB93-229490/REB 93-04 PC **A02**/MF **A01**

**SKIN (ANATOMY)**
Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
PB93-141356/REB 93-01 PC **A03**/MF **A01**

**SLAGS**

Horsehead Resource Development Company, Inc., Flame Reactor Technology. Technology Demonstration Summary.
PB93-145639/REB 93-01 PC **A02**/MF **A01**

**SLUDGE**

Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

**SLUDGE DISPOSAL**

State Sludge Management Program Guidance Manual.
PB93-126122/REB 93-01 PC **A06**/MF **A02**

What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC **A03**/MF **A01**

Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC **A03**/MF **A01**

Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC **A03**/MF **A01**

Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC **A01**/MF **A01**

Preamble and Final Sludge Rule (for Microcomputers).
PB93-500478/REB 93-01 CP **D01**

**SLUDGE DRYING**

Summary of the 1987 Carver-Greenfield Sludge Drying Technology Workshop: Problems and Solutions. Held in Los Angeles, California on March 10-11, 1987.
PB93-174506/REB 93-01 PC **A04**/MF **A01**

**SLUG LOADINGS**

Guidance Manual for Control of Slug Loadings to POTWs.
PB93-202745/REB 93-01 PC **A06**/MF **A02**

**SLURRIES**

On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC **A09**/MF **A02**

Evaluation of Carbon Black Slurries as Clean Burning Fuels.
PB93-222057/REB 93-04 PC **A03**/MF **A01**

**SLURRY WALLS**

Engineering Bulletin: Slurry Walls.
PB93-105575/REB 93-01 PC **A02**/MF **A01**

**SMALL BUSINESSES**

Community Right-to-Know and Small Business: Understanding Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act of 1986.
PB93-207538/REB 93-04 PC **A03**/MF **A01**

Mentor-Protege Program.
PB93-963251/REB 93-01 PC **A02**/MF **A01**

**SMALL SYSTEMS**

Florida Small Systems Compliance Project.
PB93-115855/REB 93-01 PC **A04**/MF **A01**

Sanitary Survey Training: Instructor's Guide for Inspectors of Small Water Systems.
PB93-115871/REB 93-01 PC **A05**/MF **A01**

Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC **A02**/MF **A01**

Restructuring Manual: A Training Manual for State Drinking Water Personnel as They Meet the Challenges of the 1986 Safe Drinking Water Act Amendments.
PB93-180642/REB 93-01 PC **A04**/MF **A01**

Small Community Water and Wastewater Treatment.
PB93-215606/REB 93-04 PC **A05**/MF **A01**

**SMELL**

Olfactory Evoked Responses to Odorous Stimuli of Different Intensities.
PB93-141315/REB 93-01 PC **A02**/MF **A01**

**SMELTING**

Economic Impact Analysis of Effluent Limitations and Standards for the Nonferrous Metals Smelting and Refining Industry, Phase 2.
PB93-167761/REB 93-01 PC **A09**/MF **A03**

Supplemental for Pretreatment to the Interim Final Development Document for the Secondary Aluminum Segment of the Nonferrous Metals Manufacturing, Point Source Category.
PB93-232122/REB 93-04 PC **A07**/MF **A02**

**SMOKE**

Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-226906/REB 93-04 PC **A01**/MF **A01**

**SMOKELESS TOBACCO**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC **A03**/MF **A01**

**SNOW**

Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-226500/REB 93-04 PC **A02**/MF **A01**

**SOAP SALTS**

RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED) Soap Salts.
PB93-101673/REB 93-01 PC **A13**/MF **A03**

**SOAPS**

Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC **A07**/MF **A02**

**SODIUM HYDROXIDES**

RED Facts: Sodium Hydroxide.
PB93-124683/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED): Sodium Hydroxide.
PB93-124691/REB 93-01 PC **A07**/MF **A02**

**SODIUM NITRITE**

Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02**/MF **A01**

**SODIUM TETRATHIOCARBONATE**

Pesticide Fact Sheet: GY-81/Enzone.
PB93-219848/REB 93-04 PC **A03**/MF **A01**

**SOFTWARE**

Environmental Monitoring Methods Index. Version 1.0 Software. User's Manual.
PB92-169648/REB 93-01 PC **A06**/MF **A02**

AutoMOUSE (Modular Oriented Uncertainty SystEm) - An Improvement to the MOUSE Computerized Uncertainty Analysis Program (for Microcomputers).
PB93-500007/REB 93-01 CP **D03**

Industrial Source Complex Short Term (ISCST) (for Microcomputers).
PB93-500221/REB 93-01 CP **D03**

Industrial Source Complex LongTerm (ISCLT) (for Microcomputers).
PB93-500239/REB 93-01 CP **D03**

MESOPUFF (for Microcomputers).
PB93-500247/REB 93-01 CP **D02**

CALINE: California Line Source Model (for Microcomputers).
PB93-500254/REB 93-01 CP **D02**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 3) (for Microcomputers).
PB93-500270/REB 93-01 CP **D02**

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 2) (for Microcomputers).
PB93-500288/REB 93-01 CP **D02**

PA-Score (Preliminary Assessment Score), Version 2.1, 5 1/4 inch (for Microcomputers).
PB93-500346/REB 93-01 CP **D02**

PA-Score (Preliminary Assessment Score), Version 2.1, 3 1/2 inch (for Microcomputers).
PB93-500353/REB 93-01 CP **D02**

ADL Migration Estimation Model (for Microcomputers) (Release Number 1).
PB93-500684/REB 93-01 CP **D02**

Flexible Membrane Liner Advisory Expert System (FLEX) (for Microcomputers) (Version 3.0).
PB93-502631/REB 93-01 CP **D02**

COMPLEX1 (for Microcomputers).
PB93-504538/REB 93-01 CP **D05**

Crosswalk/Air Toxic Emission Factor Data Base Management System (XATEF) Version 2.0 (for Microcomputers).
PB93-504793/REB 93-01 CP **D02**

Geo-EAS: Software for Geostatistics 1.2.1 (5 1/4 Inch Version) (for Microcomputers).
PB93-504959/REB 93-01 CP **D02**

Geo-EAS: Software for Geostatistics 1.2.1 (3 1/2 inch Version) (for Microcomputers).
PB93-504967/REB 93-01 CP **D02**

ASESS 1.01A (3 1/2 Inch Diskette) (for Microcomputers).
PB93-505154/REB 93-01 CP **D02**

Geophysics Advisor Expert System (Version 2.0) (for Microcomputers).
PB93-505162/REB 93-01 CP **D02**

Volatile Organic Compound/Particulate Matter Speciation Data Base Management System (SPECIATE), Version 1.5 (for Microcomputers).
PB93-505238/REB 93-01 CP **D02**

ASSESS 1.01A (5 1/4 Inch Diskette) (for Microcomputers).
PB93-505295/REB 93-01 CP **D02**

SCOUT: A Data Analysis Program (Version 1.40) (for Microcomputers).
PB93-505303/REB 93-01 CP **D02**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 4) (for Microcomputers).
PB93-505345/REB 93-04 CP **D02**

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 3) (for Microcomputers).
PB93-505352/REB 93-04 CP **D02**

Regulatory Impact Analysis (RIA) for the Proposed Great Lakes Water Quality Guidance (for Microcomputers).
PB93-505386/REB 93-04 CP **D02**

Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Initiative Guidance (for Microcomputers).
PB93-505394/REB 93-04 CP **D02**

Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study Technical Background Document (for Microcomputers).
PB93-505402/REB 93-04 CP **D04**

Economic Growth Analysis System (E-GAS) for all EPA Regions (I through X) (for Microcomputers).
PB93-505469/REB 93-04 CP **D18**

Economic Growth Analysis System (E-GAS) for EPA Region I - New England States (for Microcomputers).
PB93-505477/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
PB93-505485/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).
PB93-505493/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).
PB93-505501/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).
PB93-505519/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).
PB93-505527/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).
PB93-505543/REB 93-04 CP **D03**

Preliminary Ranking Evaluation Score (PREscore) Version 2.0 (for Microcomputers).
PB93-505915/REB 93-04 CP **D02**

PRELIM, Version 4.0 (for Microcomputers).
PB93-505980/REB 93-04 CP **D03**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 5) (for Microcomputers).
PB93-506053/REB 93-04 CP **D02**

Protocol-A Computerized Solid Waste Quantity and Composition Estimation System (Version 1.02) (for Microcomputers).
PB93-506061/REB 93-04 CP **D03**

EPA Model Pretreatment Ordinance (for Microcomputers).
PB93-506079/REB 93-04 CP **D02**

Site Assessment Information Directory (SAID) Region 1 (for Microcomputers). Date of Coverage: October 1991.
PB93-506111/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 2 (for Microcomputers). Date of Coverage: October 1991.
PB93-506129/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 3 (for Microcomputers). Date of Coverage: October 1991.
PB93-506137/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 4 (for Microcomputers). Date of Coverage: October 1991.
PB93-506145/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 5 (for Microcomputers). Date of Coverage: 1991.
PB93-506152/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 6 (for Microcomputers). Date of Coverage: October 1991.
PB93-506160/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 7 (for Microcomputers). Date of Coverage: October 1991.
PB93-506178/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 8 (for Microcomputers). Date of Coverage: 1991.
PB93-506186/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 9 (for Microcomputers). Date of Coverage: October 1991.
PB93-506194/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 10 (for Microcomputers). Date of Coverage: October 1991.
PB93-506202/REB 93-04 CP **D03**

Evaporative Emission Model (EVAP 3.0) (for Microcomputers).
PB93-506301/REB 93-04 CP **D02**

Field Certification Tracking System (FCTS), Version 2.1 (for Microcomputers).
PB93-506582/REB 93-04 CP **D02**

**SOIL ANALYSIS**

Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies.
PB92-220532/REB 93-04 PC **A06**/MF **A02**

Behavior of Metals in Soils.
PB93-131480/REB 93-01 PC **A03**/MF **A01**

Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
PB93-141554/REB 93-01 PC **A02**/MF **A01**

ASSESS User's Guide.
PB93-163251/REB 93-01 PC **A03**/MF **A01**

Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02**/MF **A01**

ASESS 1.01A (3 1/2 Inch Diskette) (for Microcomputers).
PB93-505154/REB 93-01 CP **D02**

ASSESS 1.01A (5 1/4 Inch Diskette) (for Microcomputers).
PB93-505295/REB 93-01 CP **D02**

**SOIL BACTERIA**

Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02**/MF **A01**

**SOIL CHEMISTRY**

Metal concentrations of the mor layer.
DE92563061/REB 93-01 PC **A05**/MF **A01**

Trace elements in agricultural soils. Fluxes, balances and background values.
DE93778470/REB 93-01 PC **A03**/MF **A01**

Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
PB93-135671/REB 93-01 PC **A01**/MF **A01**

Soil-Mediated Effects of Atmospheric Deposition on Eastern U.S. Spruce-Fir Forests.
PB93-141125/REB 93-01 PC **A03**/MF **A01**

Characterization of Eastern U.S. Spruce-Fir Soils.
PB93-141133/REB 93-01 PC **A03**/MF **A01**

Kinetics of Chemical Weathering in B Horizon Spodosol Fraction.
PB93-141539/REB 93-01 PC **A02**/MF **A01**

Role of Soil Organic Acids in Mineral Weathering Processes (Chapter 6).
PB93-149268/REB 93-01 PC **A04**/MF **A01**

Rapid Phase Indentification of Mixed Crystalline Solids.
PB93-212355/REB 93-04 PC **A03**/MF **A01**

Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02**/MF **A01**

Dissolved Organic Carbon and Sulfate Sorption by Spodosol Mineral Horizons.
PB93-229631/REB 93-04 PC **A02**/MF **A01**

In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC **A03**/MF **A01**

**SOIL CONSERVATION**

Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

Northeast Indiana Conservation Tillage Demonstration Project. Final Report (1981-1985).
PB93-128056/REB 93-01 PC **A03**/MF **A01**

Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
PB93-128114/REB 93-01 PC **A04**/MF **A01**

Conservation Tillage Impacts on National Soil and Atmospheric Carbon Levels.
PB93-191500/REB 93-01 PC **A03**/MF **A01**

**SOIL CONTAMINATION**

Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
PB93-141257/REB 93-01 PC **A02**/MF **A01**

Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02**/MF **A01**

Application of the 'Tradescantia micronucleus' Assay for the Genetic Evaluation of Chemical Mixtures in Soil and Aqueous Media.
PB93-141380/REB 93-01 PC **A02**/MF **A01**

Biodegradation of 2,4,5-Trichlorophenoxyacetic Acid in Liquid Culture and in Soil by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191542/REB 93-01 PC **A02**/MF **A01**

X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.
PB93-203156/REB 93-04 PC **A03**/MF **A01**

International Evaluation of In-situ Biorestoration of Contaminated Soil and Groundwater (September 1990)--Translation.
PB93-207553/REB 93-04 PC **A03**/MF **A01**

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC **A07**/MF **A02**

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 1: Pages 1 through 662.
PB93-218246/REB 93-04 PC **A99**/MF **A06**

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 2: Pages 663 through 1389.
PB93-218253/REB 93-04 PC **A99**/MF **A06**

Performance of Pilot Scale Bioventing at an Aviation Gasoline Spill Site.
PB93-221943/REB 93-04 PC **A02**/MF **A01**

Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.
PB93-221950/REB 93-04 PC **A01**/MF **A01**

Removal of Radionuclides by Electrokinetic Soil Processing.
PB93-222875/REB 93-04 PC **A02**/MF **A01**

Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC **A03**/MF **A01**

Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites with Volatile Organic Compounds in Soils.
PB93-963346/REB 93-04 PC **A03**/MF **A01**

**SOIL EROSION**

Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.
PB93-229649/REB 93-04 PC **A03**/MF **A01**

**SOIL GASES**

Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC **A02**/MF **A01**

Column Vapor Extraction Experiments on Gasoline Contaminated Soil.
PB93-131514/REB 93-01 PC **A03**/MF **A01**

Air/Superfund National Technical Guidance Study Series. Air Emissions from Area Sources: Estimating Soil and Soil-Gas Sample Number Requirements.
PB93-173995/REB 93-01 PC **A04**/MF **A01**

Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC **A03**/MF **A01**

Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03**/MF **A01**

**SOIL MICROBIOLOGY**

Application of DNA Probes to Analysis of Bacteriophage Distribution Patterns in the Environment.
PB93-121200/REB 93-01 PC **A02**/MF **A01**

Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02**/MF **A01**

Isolation and Purification of Bacterial DNA from Soil.
PB93-149276/REB 93-01 PC **A04**/MF **A01**

Recovery of DNA from Soils and Sediments.
PB93-222834/REB 93-04 PC **A02**/MF **A01**

**SOIL PROPERTIES**

Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC **A03**/MF **A01**

VIRTUS, a Model of Virus Transport in Unsaturated Soils.
PB93-185890/REB 93-01 PC **A02**/MF **A01**

Soil Biology and Ecology.
PB93-199453/REB 93-01 PC **A03**/MF **A01**

Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02**/MF **A01**

**SOIL STABILIZATION**

Proceedings: Interagency Symposium (2nd) on Stabilization of Soils and Other Materials. Held in Metairie, Louisiana on November 2-5, 1992.
PB93-131977/REB 93-01 PC **A17**/MF **A04**

**SOIL SURVEYS**

Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC **A02**/MF **A01**

Mineral Dissolution Rates: A Comparison of Laboratory and Field Studies.
PB93-141182/REB 93-01 PC **A01**/MF **A01**

Air/Superfund National Technical Guidance Study Series. Air Emissions from Area Sources: Estimating Soil and Soil-Gas Sample Number Requirements.
PB93-173995/REB 93-01 PC **A04**/MF **A01**

**SOIL TREATMENT**

Engineering Bulletin: Pyrolysis Treatment.
PB93-105583/REB 93-01 PC **A02**/MF **A01**

Engineering Bulletin: Technology Preselection Data Requirements.
PB93-105591/REB 93-01 PC **A02**/MF **A01**

Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC **A03**/MF **A01**

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 1.
PB93-115160/REB 93-01 PC **A09**/MF **A02**

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 2.
PB93-115178/REB 93-01 PC **A15**/MF **A03**

Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC **A02**/MF **A01**

Superfund Engineering Issue: Considerations for Evaluating the Impact of Metals Partitioning during the Incineration of Contaminated Soils from Superfund Sites.
PB93-121341/REB 93-01 PC **A03**/MF **A01**

Babcock and Wilcox Cyclone Furnace Vitrification Technology: Applications Analysis Report.
PB93-122315/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Symposium on Soil Venting. Held in Houston, Texas on April 29-May 1, 1991.
PB93-122323/REB 93-01 PC **A15**/MF **A03**

Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC **A02**/MF **A01**

Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC **A02**/MF **A01**

Babcock and Wilcox Cyclone Furnace Vitrification. Technology Demonstration Summary.
PB93-145621/REB 93-01 PC **A02**/MF **A01**

Extraction and Recovery of Lead Species from Soil.
PB93-150142/REB 93-01 PC **A02**/MF **A01**

Applications Analysis Report: Silicate Technology Corporation's Solidification/Stabilization Technology for Organic and Inorganic Contaminants in Soils.
PB93-172948/REB 93-01 PC **A07**/MF **A02**

Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03**/MF **A01**

In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03**/MF **A01**

Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC **A05**/MF **A01**

Technology Evaluation Report: Site Program Demonstration Test. Accutech Pneumatic Fracturing Extraction and Hot Gas Injection, Phase 1. Volume 1.
PB93-216596/REB 93-04 PC **A08**/MF **A02**

**SOIL VACUUM EXTRACTION**

Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC **A02**/MF **A01**

**SOIL VAPOR EXTRACTION**

Technology Assessment of Soil Vapor Extraction and Air Sparging.
PB93-100154/REB 93-01 PC **A04**/MF **A01**

Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC **A03**/MF **A01**

Technology Evaluation Report: Site Program Demonstration Test. Accutech Pneumatic Fracturing Extraction and Hot Gas Injection, Phase 1. Volume 1.
PB93-216596/REB 93-04 PC **A08**/MF **A02**

**SOIL VENTING**

Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC **A02**/MF **A01**

Proceedings of the Symposium on Soil Venting. Held in Houston, Texas on April 29-May 1, 1991.
PB93-122323/REB 93-01 PC **A15**/MF **A03**

Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03**/MF **A01**

In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03**/MF **A01**

Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC **A05**/MF **A01**

Bioremediation of Chlorinated Solvents in the Vadose Zone.
PB93-221935/REB 93-04 PC **A02**/MF **A01**

Performance of Pilot Scale Bioventing at an Aviation Gasoline Spill Site.
PB93-221943/REB 93-04 PC **A02**/MF **A01**

Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.
PB93-221968/REB 93-04 PC **A02**/MF **A01**

**SOILS**

Critical concentrations of heavy metals in the mor horizon of Swedish forests.
DE93778471/REB 93-01 PC **A03**/MF **A01**

Heavy metal concentrations in agricultural soils critical to microorganisms.
DE93778472/REB 93-01 PC **A03**/MF **A01**

Long-term forest fertilization experiments in Finland and Sweden - their use for vitality and nutrient balance studies.
DE93778473/REB 93-01 PC **A07**/MF **A02**

Innovative Treatment Technologies: Semi-Annual Status Report (Fourth Edition).
PB93-133387/REB 93-01 PC **A05**/MF **A01**

Role of Soil Organic Acids in Mineral Weathering Processes (Chapter 6).
PB93-149268/REB 93-01 PC **A04**/MF **A01**

LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC **A02**/MF **A01**

On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC **A09**/MF **A02**

Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
PB93-185536/REB 93-01 PC **A11**/MF **A03**

Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03**/MF **A01**

Technology Evaluation Report: Pilot-Scale Demonstration of a Slurry-Phase Biological Reactor for Creosote-Contaminated Soil. Volume 1.
PB93-205532/REB 93-04 PC **A09**/MF **A02**

Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC A03/MF A01

Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
PB93-222776/REB 93-04 PC A02/MF A01

**SOLAR CELLS**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 1.
PB93-174761/REB 93-01 PC A24/MF A04

**SOLAR COLLECTORS**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
PB93-174787/REB 93-01 PC A99/MF A06

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 2.
PB93-174795/REB 93-01 PC A99/MF A06

**SOLAR COOLING SYSTEMS**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
PB93-174787/REB 93-01 PC A99/MF A06

**SOLAR ENERGY**

Photochemical Conversion of Solar Energy in the Environment.
PB93-167187/REB 93-01 PC A03/MF A01

**SOLAR ENERGY CONVERSION**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 1.
PB93-174761/REB 93-01 PC A24/MF A04

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 2.
PB93-174779/REB 93-01 PC A25/MF A06

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
PB93-174787/REB 93-01 PC A99/MF A06

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 2.
PB93-174795/REB 93-01 PC A99/MF A06

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 1.
PB93-174803/REB 93-01 PC A99/MF A06

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 2.
PB93-174811/REB 93-01 PC A99/MF A06

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 4.
PB93-174829/REB 93-01 PC A13/MF A03

**SOLAR HOUSES**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 1.
PB93-174803/REB 93-01 PC A99/MF A06

**SOLAR RADIATION**

Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
PB93-212454/REB 93-04 PC A03/MF A01

**SOLAR ULTRAVIOLET RADIATION**

UV Monitoring Program at US EPA.
PB93-212272/REB 93-04 PC A03/MF A01

**SOLAR WATER HEATING**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
PB93-174787/REB 93-01 PC A99/MF A06

**SOLID WASTE ABATEMENT**

Slowing the Waste Behemoth: Source Reduction is Overshadowed by Recycling's Success.
PB93-194546/REB 93-01 PC A02/MF A01

**SOLID WASTE DISPOSAL**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Solid Waste Data.
PB92-228568/REB 93-01 PC A05/MF A01

Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC A04/MF A01

User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC A03/MF A01

Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
PB93-217784/REB 93-04 PC A07/MF A02

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC A10/MF A03

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC A15/MF A03

RCRA Public Involvement Manual.
PB93-231066/REB 93-04 PC A11/MF A03

Flexible Membrane Liner Advisory Expert System (FLEX) (for Microcomputers) (Version 3.0).
PB93-502631/REB 93-01 CP D02

**SOLID WASTE MANAGEMENT**

Instruction Manual for the Resource Conservation and Recovery Information System (RCRIS) Extract Data Tapes.
PB93-183499/REB 93-04 PC A03/MF A01

Resource Conservation and Recovery Information System (RCRIS) Data Element Dictionary.
PB93-192656/REB 93-04 PC A24/MF A04

Slowing the Waste Behemoth: Source Reduction is Overshadowed by Recycling's Success.
PB93-194546/REB 93-01 PC A02/MF A01

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 4) (for Microcomputers).
PB93-505345/REB 93-04 CP D02

Protocol-A Computerized Solid Waste Quantity and Composition Estimation System (Version 1.02) (for Microcomputers).
PB93-506061/REB 93-04 CP D03

Resource Conservation and Recovery Information System (RCRIS) Extract Tapes.
PB93-592570/REB 93-04 SubcriptionPC$2540.00

**SOLID WASTES**

New Approaches to Estimation of Solid-Waste Quantity and Composition.
PB93-185908/REB 93-01 PC A02/MF A01

**SOLIDIFICATION**

Applications Analysis Report: Silicate Technology Corporation's Solidification/Stabilization Technology for Organic and Inorganic Contaminants in Soils.
PB93-172948/REB 93-01 PC A07/MF A02

Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC A05/MF A01

Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215622/REB 93-04 PC A04/MF A01

Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.
PB93-229870/REB 93-04 PC A25/MF A06

**SOLIDS**

Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC A02/MF A01

**SOLVENT EXTRACTION**

Carver-Greenfield Process (Trade Name) Dehydro-Tech Corporation. Applications Analysis Report.
PB93-101152/REB 93-01 PC A03/MF A01

Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC A02/MF A01

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 1.
PB93-227122/REB 93-04 PC A08/MF A02

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 1.
PB93-227130/REB 93-04 PC A24/MF A04

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grant Calumet River, Gary, Indiana. Volume 2. Part 2.
PB93-227148/REB 93-04 PC A99/MF A06

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 3.
PB93-227155/REB 93-04 PC A11/MF A03

**SOLVENTS**

Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC A02/MF A01

Using a Neural Network to Estimate Solvent Consumption.
PB93-173110/REB 33-01 PC A02/MF A01

Bioremediation of Chlorinated Solvents in the Vadose Zone.
PB93-221935/REB 93-04 PC A02/MF A01

Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC A03/MF A01

**SOMATOSENSORY CORTEX**

Mechanisms Underlying Somatosensory Cortical Dynamics: 1. In vivo Studies.
PB93-107217/REB 93-01 PC A03/MF A01

Mechanisms Underlying Somatosensory Cortical Dynamics: 2. In vitro Studies.
PB93-107225/REB 93-01 PC A03/MF A01

**SOMATOSENSORY EVOKED POTENTIALS**

Summary of Workshop III: Evoked Potentials.
PB93-175610/REB 93-01 PC A01/MF A01

**SOOT**

Volatile Organic Sampling Train Soot Interference Report.
PB93-144145/REB 93-01 PC A04/MF A01

**SORBENT INJECTION PROCESSES**

Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC A04/MF A01

**SORBENT PADS**

Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC A04/MF A01

**SORBENTS**

Reaction Kinetics of Ca-Based Sorbents with HCl.
PB93-131860/REB 93-01 PC A03/MF A01

Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC A04/MF A01

Evaluation of FGD Dry Injection Sorbents and Additives. Volume 1. Development of High Reactivity Sorbents. Project Summary.
PB93-228484/REB 93-04 PC A02/MF A01

**SORPTION**

Basic Concepts of Contaminant Sorption.
PB93-146835/REB 93-01 PC A01/MF A01

Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC A02/MF A01

Sorption and Reemission of Formaldehyde by Gypsum Wallboard.
PB93-180917/REB 93-01 PC A03/MF A01

Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC A02/MF A01

**SOURCE REDUCTION**

Opportunities for Pollution Prevention Research to Support the 33/50 Program.
PB93-107266/REB 93-01 PC A06/MF A02

Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
PB93-123016/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
PB93-123222/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
PB93-123230/REB 93-01 PC A02/MF A01

Slowing the Waste Behemoth: Source Reduction is Overshadowed by Recycling's Success.
PB93-194546/REB 93-01 PC A02/MF A01

**SOURCE TERMS**

Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC A04/MF A01

**SOUTH CAIRO (NEW YORK)**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (American Thermostat Corporation, New York).
PB92-963627/REB 93-01 PC A02/MF A01

**SOUTH CAROLINA**

National Priorities List Sites: South Carolina, 1992.
PB93-963240/REB 93-01 PC A05/MF A01

**SOUTH CENTRAL REGION (KANSAS)**

Applied Geologic, Microbiological, and Engineering Constraints of In-situ BTEX Bioremediation.
PB93-141513/REB 93-01 PC A03/MF A01

**SOUTH DAKOTA**

National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC A04/MF A01

**SOUTHEAST REGION (UNITED STATES)**

General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC A04/MF A01

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC A03/MF A01

Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).
PB93-505493/REB 93-04 CP D03

**SOUTHERN CALIFORNIA BIGHT**

Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC A03/MF A01

**SOUTHERN OCEAN**
What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.
PB93-211985/REB 93-04 PC **A21**/MF **A04**

**SOUTHERN REGION (ILLINOIS)**
Lake Water Quality Assessment Program: Southern Illinois Lakes.
PB93-215929/REB 93-04 PC **A03**/MF **A01**

**SOUTHERN REGION (UNITED STATES)**
General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC **A04**/MF **A01**

**SOUTHWEST REGION (UNITED STATES)**
Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).
PB93-505519/REB 93-04 CP **D03**

**SOYBEAN PLANTS**
Cost Effective Corn and Soybean Production Without Tillage: Fact or Fiction (May 1988).
PB93-157568/REB 93-01 PC **A03**/MF **A01**

**SPACE HEATERS**
Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02**/MF **A01**

**SPACE HVAC SYSTEMS**
Building and HVAC Characterization for Commercial Building Indoor Air Quality Investigations.
PB93-198844/REB 93-01 PC **A07**/MF **A02**

**SPARGING**
Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.
PB93-221968/REB 93-04 PC **A02**/MF **A01**

**SPARK IGNITION ENGINES**
Formation and Control of Combustion Pollutants from Gasoline-Fueled Spark-Ignition Motor Vehicle Engines. (Revised November 1992).
PB93-141042/REB 93-01 PC **A04**/MF **A01**

**SPARTINA ALTERNAFLORA**
Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC **A01**/MF **A01**

**SPATIAL DISTRIBUTION**
Oligohaline Areas in Tampa Bay Tributaries: Spatial Extent and Species Lists.
PB93-191179/REB 93-01 PC **A03**/MF **A01**

**SPECIATE SYSTEM**
Volatile Organic Compound/Particulate Matter Speciation Data Base Management System (SPECIATE), Version 1.5 (for Microcomputers).
PB93-505238/REB 93-01 CP **D02**

**SPECIES DIVERSITY**
EMAP and Other Tools for Measuring Biodiversity, Habitat Conditions, and Environmental Trends.
PB93-106748/REB 93-01 PC **A03**/MF **A01**

Biodiversity and Management of Natural Resources: The Issues.
PB93-106912/REB 93-01 PC **A01**/MF **A01**

Who Will Speak for Biodiversity.
PB93-135762/REB 93-01 PC **A01**/MF **A01**

Interspecies Modeling of Inhaled Particle Deposition Patterns.
PB93-181121/REB 93-01 PC **A03**/MF **A01**

**SPECIFICATIONS**
Toxic Chemical Release Inventory Magnetic Media Submission Instructions. Section 313 of the Emergency Planning and Community Right-to-Know Act (Revised 1990 Version).
PB93-116127/REB 93-01 PC **A03**/MF **A01**

**SPECTROPHOTOMETRY**
Measurements of total ozone.
DE92563059/REB 93-01 PC **A04**/MF **A01**

Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.
PB93-228492/REB 93-04 PC **A02**/MF **A01**

**SPECTRUM ANALYSIS**
Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.
PB93-229383/REB 93-04 PC **A03**/MF **A01**

**SPERMATOGENESIS**
Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Bensidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC **A02**/MF **A01**

**SPERMATOZOA**
Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC **A03**/MF **A01**

Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence In situ Hybridization.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

**SPERMINE**
DNA Isolation from Small Tissue Samples Using Salt and Spermine.
PB93-181048/REB 93-01 PC **A01**/MF **A01**

**SPINAL CORD**
Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

**SPOD-X**
Pesticide Fact Sheet: Polyhedral Occlusion Bodies of the Nuclear Polyhedrosis Virus of 'Spodoptera exigua'.
PB93-206779/REB 93-01 PC **A02**/MF **A01**

**SPORT FISHING**
Recreational Fishery By-Catch in the Galveston Bay System.
PB93-205805/REB 93-04 PC **A06**/MF **A02**

**SPRAY COATING**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Spray Application of Organic Coatings.
PB93-205995/REB 93-04 PC **A02**/MF **A01**

**SPRAYS**
Spray Characteristics of Two Types of Fuel Injectors.
PB93-180859/REB 93-01 PC **A03**/MF **A01**

**SPRUCES**
Soil-Mediated Effects of Atmospheric Deposition on Eastern U.S. Spruce-Fir Forests.
PB93-141125/REB 93-01 PC **A03**/MF **A01**

Characterization of Eastern U.S. Spruce-Fir Soils.
PB93-141133/REB 93-01 PC **A03**/MF **A01**

**STABILIZATION**
Proceedings: Interagency Symposium (2nd) on Stabilization of Soils and Other Materials. Held in Metairie, Louisiana on November 2-5, 1992.
PB93-131977/REB 93-01 PC **A17**/MF **A04**

Applications Analysis Report: Silicate Technology Corporation's Solidification/Stabilization Technology for Organic and Inorganic Contaminants in Soils.
PB93-172948/REB 93-01 PC **A07**/MF **A02**

Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC **A05**/MF **A01**

Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215622/REB 93-04 PC **A04**/MF **A01**

Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.
PB93-229870/REB 93-04 PC **A25**/MF **A06**

**STABLE ISOTOPES**
Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC **A02**/MF **A01**

**STAGED COMBUSTION**
Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC **A03**/MF **A01**

**STAGNATION MODEL ANALYSIS PROGRAM**
Stagnation Diffusion Observed in a Deeply Pooling Valley during STAGMAP.
PB93-120897/REB 93-01 PC **A02**/MF **A01**

**STAGNATION POINT**
Stagnation Diffusion Observed in a Deeply Pooling Valley during STAGMAP.
PB93-120897/REB 93-01 PC **A02**/MF **A01**

**STAINS**
Characterization of Organic Emission from a Wood Finishing Product-Wood Stain.
PB93-150100/REB 93-01 PC **A02**/MF **A01**

**STANDARD REFERENCE MATERIALS**
Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03**/MF **A01**

**STANDARDS**
Dry Flue Gas Cleaning Processes for Achieving Air Pollutant Emissions Requirements.
PB93-131605/REB 93-01 PC **A03**/MF **A01**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1A. National Impacts Assessment.
PB93-156552/REB 93-01 PC **A08**/MF **A02**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1B. Control Technologies.
PB93-156560/REB 93-01 PC **A13**/MF **A03**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1C. Model Emission Sources.
PB93-156578/REB 93-01 PC **A11**/MF **A03**

Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC **A02**/MF **A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit.
PB93-168839/REB 93-01 PC **A02**/MF **A01**

Alternate Performance Standard Project: Interpreting the Post-Construction Test.
PB93-175529/REB 93-01 PC **A03**/MF **A01**

Two New Gas Standards Programs at the National Institute of Standards and Technology.
PB93-191427/REB 93-01 PC **A02**/MF **A01**

Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit (May 1993).
PB93-221869/REB 93-04 PC **A03**/MF **A01**

Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03**/MF **A01**

**STANDARDS COMPLIANCE**
Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Guidance.
PB93-154730/REB 93-01 PC **A10**/MF **A03**

Summary of the 1987 EPA National Performance Audit Program on Source Measurements.
PB93-223444/REB 93-04 PC **A03**/MF **A01**

Pesticide Reregistration Progress Report, April 1993.
PB93-226199/REB 93-04 PC **A03**/MF **A01**

Guidance on Evaluation, Resolution, and Documentation of Analytical Problems Associated with Compliance Monitoring.
PB93-229847/REB 93-04 PC **A03**/MF **A01**

**STARCHES**
Weatherability of Enhanced-Degradable Plastics.
PB93-229789/REB 93-04 PC **A14**/MF **A03**

**STARTING**
Cold Starting an Alcohol-Fueled Engine with Ultrasonic Fuel Atomization.
PB93-206597/REB 93-04 PC **A03**/MF **A01**

**STATE GOVERNMENT**
State Sludge Management Program Guidance Manual.
PB93-128122/REB 93-01 PC **A06**/MF **A02**

Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance.
PB93-193795/REB 93-01 PC **A05**/MF **A01**

Volunteer Water Monitoring: A Guide for State Managers.
PB93-202596/REB 93-01 PC **A05**/MF **A01**

Obligation of Funds under Superfund State Contracts.
PB93-963326/REB 93-04 PC **A01**/MF **A01**

**STATE IMPLEMENTATION PLANS**
Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
PB93-122307/REB 93-01 PC **A03**/MF **A01**

Guidance on the Adjusted Base Year Emissions Inventory and the 1996 Target for the 15 Percent Rate of Progress Plans.
PB93-122356/REB 93-01 PC **A04**/MF **A01**

Guidelines for Estimating and Applying Rule Effectiveness for Ozone CO State Implementation Plan Base Year Inventories.
PB93-131498/REB 93-01 PC **A05**/MF **A01**

Guidance for Growth Factors, Projections, and Control Strategies for the 15 Percent Rate-of-Progress Plans.
PB93-186476/REB 93-01 PC **A09**/MF **A03**

**STATE PROGRAMS**
State Air Pollution Control Programs: A Profile Report.
PB93-122364/REB 93-01 PC **A03**/MF **A01**

Overview of Existing State Alternative Financing Programs: Financing Drinking Water System Capital Needs in the 1990's.
PB93-132637/REB 93-01 PC **A05**/MF **A01**

**STATES (UNITED STATES)**
Hazardous Waste Management Planning Needs and Practices: A Review of Several State Agency Approaches.
PB93-193225/REB 93-04 PC **A04**/MF **A01**

Quality of Our Nation's Water: 1990.
PB93-205904/REB 93-04 PC **A03**/MF **A01**

**STATIONARY GASES**
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 2. Sessions 4 and 5.
PB93-212850/REB 93-04 PC **A20**/MF **A04**

**STATIONARY POLLUTANT SOURCES**
Compilation of Air Pollutant Emission Factors. Volume 1. Stationary Point and Area Sources. Supplement E.
PB93-157105/REB 93-01 PC **A10**/MF **A03**

Using Method 301 to Validate Sampling and Analytical Methods for Selected CAAA Compounds.
PB93-191419/REB 93-01 PC **A03**/MF **A01**

**STATIONARY SOURCES**
Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127801/REB 93-01 PC **A06**/MF **A02**

Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
PB93-135663/REB 93-01 PC **A07**/MF **A02**

Control Techniques for Volatile Organic Compound Emissions from Stationary Sources, December 1992.
PB93-150258/REB 93-01 PC **A20**/MF **A04**

Procedures for Identifying Reasonably Available Control Technology for Stationary Sources of PM-10.
PB93-175776/REB 93-01 PC **A08/MF A02**

Standards of Performance for New Stationary Sources. Volume 1. Introduction, Summary and Standards: A Compilation as of December 31, 1985.
PB93-199297/REB 93-01 PC **A08/MF A02**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991.
PB93-212835/REB 93-04 PC **E99/MF E99**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 1. Sessions 1-3.
PB93-212843/REB 93-04 PC **A15/MF A03**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 3. Sessions 6-8.
PB93-212868/REB 93-04 PC **A19/MF A04**

SCREEN2 Model User's Guide.
PB93-216885/REB 93-04 PC **A04/MF A01**

Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised.
PB93-219095/REB 93-04 PC **A05/MF A01**

EPA's Indoor Air/Pollution Prevention Workshop.
PB93-222065/REB 93-04 PC **A03/MF A01**

**STATISTICAL ANALYSIS**

Methods for Analyzing Extreme Events Under Climate Change.
PB93-146827/REB 93-01 PC **A03/MF A01**

Comparison of Systematic and Random Sampling for Estimating the Accuracy of Maps Generated from Remotely Sensed Data.
PB93-191443/REB 93-01 PC **A02/MF A01**

Comparing Sampling Designs for Monitoring Ecological Status and Trends: Impact of Temporal Patterns (Chapter 3).
PB93-222289/REB 93-04 PC **A03/MF A01**

**STATISTICAL DATA**

Setting an Agenda for Research in the Federal Statistical System: Needs for Statistical Disclosure Limitation Procedures.
PB93-204097/REB 93-04 PC **A03/MF A01**

**STATISTICAL TESTS**

Comparison of Mid-Bay and Lateral Station Water Quality Data in the Chesapeake Bay Mainstem: Chesapeake Bay Program.
PB93-208288/REB 93-04 PC **A05/MF A01**

**STATISTICS**

Statistical Problems Arising from Environmental Issues.
PB93-185718/REB 93-01 PC **A01/MF A01**

**STEADY STATE**

Rapid Measurement of Aqueous Hydroxyl Radical Concentrations in Steady-State HO Flux Systems.
PB93-131779/REB 93-01 PC **A03/MF A01**

**STEEL CABINETS**

Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
PB93-123164/REB 93-01 PC **A02/MF A01**

**STERILIZATION**

Ethylene Oxide Emissions from Commercial Sterilization/Fumigation Operations: Background Information for Proposed Standards.
PB93-226744/REB 93-04 PC **A13/MF A03**

**STEROIDS**

Steroidogenic Assessment Using Ovary Culture in Cycling Rats: Effects of Bis(2-Diethylhexyl) Phthalate on Ovarian Steroid Production.
PB93-181022/REB 93-01 PC **A03/MF A01**

Effect of Methoxychlor on Ovarian Steroidogenesis: Role in Early Pregnancy Loss.
PB93-181030/REB 93-01 PC **A02/MF A01**

**STIMULUS (PSYCHOPHYSIOLOGY)**

Olfactory Evoked Responses to Odorous Stimuli of Different Intensities.
PB93-141315/REB 93-01 PC **A02/MF A01**

**STOCHASTIC PROCESSES**

Stochastic Methodology for Regional Wind-Field Modeling.
PB93-229391/REB 93-04 PC **A03/MF A01**

**STORAGE TANKS**

Technologies and Options for UST Corrective Actions: Overview of Current Practice.
PB93-145589/REB 93-01 PC **A05/MF A01**

Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC **A02/MF A01**

Characteristics of Non-Petroleum Underground Storage Tanks.
PB93-185775/REB 93-01 PC **A03/MF A01**

Location of Leaks in Pressurized Petroleum Pipelines by Means of Passive-Acoustic Sensing Methods.
PB93-185783/REB 93-01 PC **A03/MF A01**

Screening Methodology for Assessing Leaking UST Sites and Clean Up Technologies.
PB93-199404/REB 93-01 PC **A03/MF A01**

**STORM DRAINS**

Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC **A05/MF A02**

**STORM SEWERS**

Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC **A05/MF A02**

Storm and Combined Sewer Overflow: An Overview of EPA's Research Program.
PB93-185957/REB 93-01 PC **A03/MF A01**

Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC **A02/MF A01**

**STORM WATER RUNOFF**

Reclamation of Urban Stormwater.
PB93-185791/REB 93-01 PC **A03/MF A01**

Storm and Combined Sewer Overflow: An Overview of EPA's Research Program.
PB93-185957/REB 93-01 PC **A03/MF A01**

NPDES Storm Water Program. Question and Answer Document. Volume 1.
PB93-223410/REB 93-04 PC **A03/MF A01**

Storm Water Management for Construction Activities. Developing Pollution Prevention Plans and Best Management Practices. Summary Guidance.
PB93-223550/REB 93-04 PC **A03/MF A01**

Methodology for Analysis of Detention Basins for Control of Urban Runoff Quality.
PB93-223576/REB 93-04 PC **A04/MF A01**

National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges (40CFR Parts 122, 123, and 124 Final Rule).
PB93-226728/REB 93-04 PC **A06/MF A02**

Federal Register Volume 57 No. 175 Wednesday, September 9, 1992 Notices. Part 2. Final NPDES General Permits for Storm Water Discharges from Construction Sites; Fact Sheet.
PB93-227635/REB 93-04 PC **A03/MF A01**

**STOVES**

Evaluation of Emissions from Masonry Heaters and Masonry Fireplaces in Homes.
PB93-173078/REB 93-01 PC **A03/MF A01**

**STRATEGIC PLANNING**

Overview of Strategic Planning at the Environmental Protection Agency.
PB93-128064/REB 93-01 PC **A03/MF A01**

**STRATIFICATION**

Vertical Diffusion in Small Stratified Lake: Data and Error Analysis.
PB93-149185/REB 93-01 PC **A03/MF A01**

**STRATOSPHERE**

Subjective-Probability-Based Scenarios for Uncertain Input Parameters: Stratospheric Ozone Depletion, December 1990.
PB93-143741/REB 93-01 PC **A03/MF A01**

**STREAM FLOW**

Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC **A04/MF A01**

**STREAM POLLUTION**

Biological and Water Quality Survey of Sugar Creek and Tributaries Crawford County, Illinois, August and September 1992.
PB93-217180/REB 93-04 PC **A04/MF A01**

**STREAM PROCEDURES**

STREAM: An Exposure Assessment Methodology for Agricultural Pesticide Runoff.
PB93-106868/REB 93-01 PC **A03/MF A01**

**STREAMS**

Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC **A02/MF A01**

Relationship between Water Temperatures and Air Temperatures for Central U.S. Streams.
PB93-135655/REB 93-01 PC **A07/MF A02**

Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC **A02/MF A01**

Role of Nitrate in the Acidification of Streams in the Catskill Mountains of New York.
PB93-150167/REB 93-01 PC **A03/MF A01**

Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).
PB93-222586/REB 93-04 PC **A01/MF A01**

Region 10 In-Stream Biological Monitoring Handbook: For Wadable Streams in the Pacific Northwest.
PB93-226611/REB 93-04 PC **A05/MF A01**

**STREPTOCOCCUS ZOOEPIDEMICUS**

Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC **A02/MF A01**

**STREPTOMYCIN SULFATE**

RED Facts: Streptomycin and Streptomycin Sulfate.
PB93-100378/REB 93-01 PC **A02/MF A01**

Reregistration Eligibility Document (RED): Streptomycin and Streptomycin Sulfate.
PB93-100386/REB 93-01 PC **A09/MF A02**

**STREPTOMYCINS**

RED Facts: Streptomycin and Streptomycin Sulfate.
PB93-100378/REB 93-01 PC **A02/MF A01**

Reregistration Eligibility Document (RED): Streptomycin and Streptomycin Sulfate.
PB93-100386/REB 93-01 PC **A09/MF A02**

**STREPTOZOCIN**

Evaluation of the Potential Carcinogenicity of Streptozotocin (18883-66-4).
PB93-201275/REB 93-01 PC **A03/MF A01**

**STRIPED MULLET**

Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC **A03/MF A01**

**STRIPPING**

Technology Assessment of Soil Vapor Extraction and Air Sparging.
PB93-100154/REB 93-01 PC **A04/MF A01**

**STRONGYLOCENTROTUS PURPURATUS**

Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-196988/REB 93-01 PC **A03/MF A01**

**STRUCTURAL DESIGN**

Geotechnical Systems for Structures on Contaminated Sites: A Technical Guidance Document.
PB93-209419/REB 93-04 PC **A08/MF A02**

**STRUCTURAL ENGINEERING**

Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC **A03/MF A01**

**STRUCTURAL GENES**

Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
PB93-229482/REB 93-04 PC **A03/MF A01**

**STRUCTURAL IRON**

Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02/MF A01**

**STRUCTURE-ACTIVITY RELATIONSHIPS**

In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with In vivo Data.
PB93-107167/REB 93-01 PC **A03/MF A01**

Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC **A03/MF A01**

**STUDY ESTIMATES**

Using a Neural Network to Estimate Solvent Consumption.
PB93-173110/REB 93-01 PC **A02/MF A01**

**STYRENE**

Locating and Estimating Air Emissions from Sources of Styrene.
PB93-207520/REB 93-04 PC **A08/MF A02**

Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC **A03/MF A01**

Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03/MF A01**

**SUB-SLAB DEPRESSURIZATION**

Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07/MF A02**

**SUBMEMBRANE DEPRESSURIZATION SYSTEMS**

Indoor Radon Reduction in Crawl-Space Houses: A Review of Alternative Approaches.
PB93-173177/REB 93-01 PC **A03/MF A01**

**SUBMERGED PLANTS**

Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC **A12/MF A03**

**SUBSLAB DEPRESSURIZATION SYSTEMS**

Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04/MF A01**

**SUBSTITUTES**

Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03/MF A01**

Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03/MF A01**

Use of Alternative Materials for Daily Cover at Municipal Solid Waste Landfills.
PB93-227197/REB 93-04 PC **A08/MF A02**

**SUBSTITUTION**

Simulation of Performance of Chlorine-Free Fluorinated Ethers and Fluorinated Hydrocarbons to Replace CFC-11 and CFC-114 in Chillers.
PB93-175511/REB 93-01 PC **A03/MF A01**

**SUBSURFACE INVESTIGATIONS**

Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3, Hydraulic Conductivity Variability and Calculated Macrodispersivities.
PB93-107050/REB 93-01 PC **A03/MF A01**

Surfactants and Subsurface Remediation.
PB93-149854/REB 93-01 PC **A02/MF A01**

Screening Methodology for Assessing Leaking UST Sites and Clean Up Technologies.
PB93-199404/REB 93-01 PC **A03**/MF **A01**

**SUFFOLK COUNTY (NEW YORK)**
Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC **A03**/MF **A01**

**SUILLUS LUTEUS**
Synthesis of Ectomycorrhizae on Northern Red Oak Seedlings in a Michigan Nursery.
PB93-212678/REB 93-04 PC **A02**/MF **A01**

**SULFATE ACID AEROSOLS**
Deposition of Sulfate Acid Aerosols in the Developing Human Lung.
PB93-236388/REB 93-04 PC **A03**/MF **A01**

**SULFATE PULPING**
Model Pollution Prevention Plan for the Kraft Segment of the Pulp and Paper Industry.
PB93-145605/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention for the Kraft Pulp and Paper Industry.
PB93-145613/REB 93-01 PC **A04**/MF **A01**

**SULFATE-REDUCING BACTERIA**
Genus- and Group-Specific Hybridization Probes for Determinative and Environmental Studies of Sulfate-Reducing Bacteria.
PB93-168987/REB 93-01 PC **A02**/MF **A01**

**SULFATES**
Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
PB93-141554/REB 93-01 PC **A02**/MF **A01**

Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03**/MF **A01**

Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC **A07**/MF **A02**

**SULFIDE/CHLOROPHENYL METHYL**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

**SULFONE/CHLOROPHENYL METHYL**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

**SULFOXIDE/CHLOROPHENYL METHYL**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

**SULFUR**
Regulatory Impact Analysis: Control of Sulfur and Aromatics Contents of on-Highway Diesel Fuel.
PB93-207660/REB 93-04 PC **A12**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC **A18**/MF **A04**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC **A14**/MF **A03**

**SULFUR DIOXIDE**
Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107043/REB 93-01 PC **A02**/MF **A01**

Proceedings: 1991 SO2 Control Symposium. Volume 1. Opening Session and Sessions 1-3.
PB93-196095/REB 93-01 PC **A19**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 2. Sessions 4 and 5A.
PB93-196103/REB 93-01 PC **A22**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 3. Sessions 5B and 6.
PB93-196111/REB 93-01 PC **A20**/MF **A04**

Proceedings: 1991 SO2 Control Symposium. Volume 4. Session 7.
PB93-196129/REB 93-01 PC **A15**/MF **A03**

Proceedings: 1991 SO2 Control Symposium. Volume 5. Session 8.
PB93-196137/REB 93-01 PC **A13**/MF **A03**

**SULFUR ISOTOPES**
Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC **A02**/MF **A01**

**SULFUR OXIDES**
Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

**SUPERFUND**
ARARs Fact Sheet: Compliance with the Clean Air Act and Associated Air Quality Requirements.
PB92-963282/REB 93-01 PC **A03**/MF **A01**

Superfund: Qualified Disadvantaged Business Utilization in State Response.
PB92-963283/REB 93-01 PC **A01**/MF **A01**

Superfund Accelerated Cleanup Model (SACM). Volume 1, Number 4, November 1992.
PB92-963287/REB 93-01 PC **A01**/MF **A01**

Superfund: Report of the EPA Superfund Revitalization Public Meeting Held on June 24, 1992. Volumes 1 and 2.
PB92-963288/REB 93-01 PC **A06**/MF **A02**

Guidance for Performing Site Inspections under CERCLA.
PB92-963375/REB 93-01 PC **A11**/MF **A03**

Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC **A22**/MF **A04**

Consideration of ARARs during Removal Actions.
PB92-963410/REB 93-01 PC **A02**/MF **A01**

Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC **A09**/MF **A02**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Valley of the Drums, Bullitt County, Kentucky).
PB92-963618/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (American Thermostat Corporation, New York).
PB92-963627/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Wide Beach Section of Brant, New York).
PB92-963628/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Krysowaty Farm, Hillsborough, New Jersey).
PB92-963629/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Ciba-Geigy Corporation, McIntosh, Alabama).
PB92-963630/REB 93-01 PC **A02**/MF **A01**

Demonstration of a Trial Excavation at the McColl Superfund Site.
PB93-100121/REB 93-01 PC **A04**/MF **A01**

Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC **A12**/MF **A03**

Engineering Bulletin: Slurry Walls.
PB93-105575/REB 93-01 PC **A02**/MF **A01**

Engineering Bulletin: Pyrolysis Treatment.
PB93-105583/REB 93-01 PC **A02**/MF **A01**

Engineering Bulletin: Technology Preselection Data Requirements.
PB93-105591/REB 93-01 PC **A02**/MF **A01**

Technical Guidance Document: Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems.
PB93-105625/REB 93-01 PC **A05**/MF **A02**

Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC **A02**/MF **A01**

PA-Score (Preliminary Assessment Score) User's Manual and Tutorial. Version 2.1.
PB93-108322/REB 93-01 PC **A05**/MF **A01**

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 1.
PB93-115160/REB 93-01 PC **A09**/MF **A02**

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 2.
PB93-115178/REB 93-01 PC **A15**/MF **A03**

Superfund Innovative Technology Evaluation (SITE) Program.
PB93-116093/REB 93-01 PC **A03**/MF **A01**

Evaluation of Commercially-Available Portable Gas Chromatographs.
PB93-121051/REB 93-01 PC **A02**/MF **A01**

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Quick Reference Fact Sheet.
PB93-121325/REB 93-01 PC **A02**/MF **A01**

Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
PB93-121333/REB 93-01 PC **A03**/MF **A01**

Superfund Engineering Issue: Considerations for Evaluating the Impact of Metals Partitioning during the Incineration of Contaminated Soils from Superfund Sites.
PB93-121341/REB 93-01 PC **A03**/MF **A01**

Assessing Potential Indoor Air Impacts for Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-122257/REB 93-01 PC **A09**/MF **A03**

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Remedy Selection. Interim Guidance.
PB93-126597/REB 93-01 PC **A03**/MF **A01**

Guide for Conducting Treatability Studies under CERCLA.
PB93-126787/REB 93-01 PC **A05**/MF **A01**

Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC **A02**/MF **A01**

Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC **A02**/MF **A01**

Innovative Treatment Technologies: Semi-Annual Status Report (Fourth Edition).
PB93-133387/REB 93-01 PC **A05**/MF **A01**

Air/Superfund National Technical Guidance Study Series: Applicability of Open Path Monitors for Superfund.
PB93-138154/REB 93-01 PC **A07**/MF **A02**

Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC **A02**/MF **A01**

OSWER Source Book. Volume 1. Training and Technology Transfer Resources, 1992-1993.
PB93-143980/REB 93-01 PC **A10**/MF **A03**

OSWER Source Book. Volume 2. Training and Technology Transfer Resources, 1992-1993.
PB93-144129/REB 93-01 PC **A11**/MF **A03**

Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC **A03**/MF **A01**

Air/Superfund National Technical Guidance Study Series. Volume 1. Overview of Air Pathway Assessments for Superfund Sites (Revised).
PB93-173987/REB 93-01 PC **A05**/MF **A01**

RCRA Implementation Plan, FY 1993.
PB93-176956/REB 93-01 PC **A05**/MF **A02**

Site Enforcement Tracking System (SETS): PRP Listing by Site for Region 4.
PB93-177178/REB 93-01 PC **A99**

Commencement Bay Nearshore/Tideflats Feasibility Study. Executive Summary.
PB93-181220/REB 93-01 PC **A06**/MF **A02**

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
PB93-181238/REB 93-01 PC **A25**/MF **A06**

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 2. Appendices.
PB93-181246/REB 93-01 PC **A18**/MF **A04**

Commencement Bay Nearshore/Tideflats Feasibility Study. Development of Sediment Cleanup Goals.
PB93-181253/REB 93-01 PC **A05**/MF **A01**

Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-183440/REB 93-04 PC **A05**/MF **A01**

Environmental Characteristics of EPA, NRC, and DOE Sites Contaminated with Radioactive Substances.
PB93-185551/REB 93-01 PC **A05**/MF **A01**

Air/Superfund National Technical Guidance Study Series. Models for Estimating Air Emission Rates from Superfund Remedial Actions.
PB93-186807/REB 93-01 PC **A08**/MF **A02**

PREscore Software: Users Manual and Tutorial Version 2.0.
PB93-192698/REB 93-04 PC **A05**/MF **A01**

Toxic Chemical Release Inventory Reporting Form R and Instructions. Revised 1992 Version. Section 313 of the Emergency Planning and Community Right-to-Know Act.
PB93-194140/REB 93-01 PC **A06**/MF **A02**

Air/Superfund National Technical Guidance Study Series. Volume 4. Guidance for Ambient Air Monitoring at Superfund Sites (Revised).
PB93-199214/REB 93-01 PC **A08**/MF **A02**

Air/Superfund National Technical Guidance Study Series: Compilation of Information on Real-Time Air Monitoring for Use at Superfund Sites.
PB93-199222/REB 93-04 PC **A05**/MF **A02**

Air/Superfund National Technical Guidance Study Series: Evaluation of Short-Term Air Action Levels for Superfund Sites.
PB93-200913/REB 93-01 PC **A14**/MF **A03**

Technology Evaluation Report: Pilot-Scale Demonstration of a Slurry-Phase Biological Reactor for Creosote-Contaminated Soil. Volume 1.
PB93-205532/REB 93-04 PC **A09**/MF **A02**

Abstract Proceedings: Superfund Technical Support Project General Meeting. Held in Athens, Georgia on December 3-6, 1990.
PB93-205862/REB 93-04 PC **A03**/MF **A01**

Superfund: Environmental Progress.
PB93-206209/REB 93-04 PC **A03**/MF **A01**

# KEYWORD INDEX


Toxics Release Inventory. Public Data Release. State Fact Sheets, 1991.
PB93-208668/REB 93-04 PC **A06**/MF **A02**

Guidance for Capacity Assurance Planning. Capacity Planning Pursuant to CERCLA Section 104(c)(9).
PB93-209898/REB 93-04 PC **A09**/MF **A02**

Control of Air Emissions from Superfund Sites.
PB93-215614/REB 93-04 PC **A08**/MF **A02**

Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215622/REB 93-04 PC **A04**/MF **A01**

Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215630/REB 93-04 PC **A04**/MF **A01**

Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.
PB93-215648/REB 93-04 PC **A03**/MF **A01**

Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215655/REB 93-04 PC **A04**/MF **A01**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 1.
PB93-227122/REB 93-04 PC **A08**/MF **A02**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 1.
PB93-227130/REB 93-04 PC **A24**/MF **A04**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grant Calumet River, Gary, Indiana. Volume 2. Part 2.
PB93-227148/REB 93-04 PC **A99**/MF **A06**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 3.
PB93-227155/REB 93-04 PC **A11**/MF **A03**

SITE Program Demonstration of the SBP Technologies, Inc., Membrane Filtration System on Creosote-Contaminated Water.
PB93-228567/REB 93-04 PC **A02**/MF **A01**

Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04**/MF **A01**

Emerging Technology Report: Metals Treatment at Superfund Sites by Absorptive Filtration.
PB93-231165/REB 93-04 PC **A04**/MF **A01**

In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC **A03**/MF **A01**

PA-Score (Preliminary Assessment Score), Version 2.1, 5 1/4 inch (for Microcomputers).
PB93-500346/REB 93-01 CP **D02**

PA-Score (Preliminary Assessment Score), Version 2.1, 3 1/2 inch (for Microcomputers).
PB93-500353/REB 93-01 CP **D02**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 4) (for Microcomputers).
PB93-505345/REB 93-04 CP **D02**

Toxic Release Inventory, (TRI), 1991.
PB93-505873/REB 93-04 CP **T14**

Preliminary Ranking Evaluation Score (PREscore) Version 2.0 (for Microcomputers).
PB93-505915/REB 93-04 CP **D02**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 5) (for Microcomputers).
PB93-506053/REB 93-04 CP **D02**

Site Assessment Information Directory (SAID) Region 1 (for Microcomputers). Date of Coverage: October 1991.
PB93-506111/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 2 (for Microcomputers). Date of Coverage: October 1991.
PB93-506129/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 3 (for Microcomputers). Date of Coverage: October 1991.
PB93-506137/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 4 (for Microcomputers). Date of Coverage: October 1991.
PB93-506145/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 5 (for Microcomputers). Date of Coverage: 1991.
PB93-506152/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 6 (for Microcomputers). Date of Coverage: October 1991.
PB93-506160/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 7 (for Microcomputers). Date of Coverage: October 1991.
PB93-506178/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 8 (for Microcomputers). Date of Coverage: 1991.
PB93-506186/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 9 (for Microcomputers). Date of Coverage: October 1991.
PB93-506194/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 10 (for Microcomputers). Date of Coverage: October 1991.
PB93-506202/REB 93-04 CP **D03**

Superfund: Environmental Response and Health and Safety (Training Materials).
PB93-963100/REB 93-01 Standing Order

National Priorities List Sites: Alabama, 1992.
PB93-963201/REB 93-01
see individual report for order number and price

National Priorities List Sites: Alaska, 1992.
PB93-963202/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Arkansas, 1992.
PB93-963205/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC **A12**/MF **A03**

National Priorities List Sites: Colorado, 1992.
PB93-963207/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Connecticut, 1992.
PB93-963208/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Delaware, 1992.
PB93-963209/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Florida, 1992.
PB93-963210/REB 93-01 PC **A08**/MF **A02**

National Priorities List Sites: Georgia, 1992.
PB93-963211/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Idaho, 1992.
PB93-963212/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Illinois, 1992.
PB93-963213/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Indiana, 1992.
PB93-963214/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Iowa, 1992.
PB93-963215/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Kansas, 1992.
PB93-963216/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Kentucky, 1992.
PB93-963217/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Louisiana, 1992.
PB93-963218/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Maine, 1992.
PB93-963219/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Maryland, 1992.
PB93-963220/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Massachusetts, 1992.
PB93-963221/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Michigan, 1992.
PB93-963222/REB 93-01 PC **A10**/MF **A03**

National Priorities List Sites: Minnesota, 1992.
PB93-963223/REB 93-01 PC **A07**/MF **A02**

National Priorities List Sites: Mississippi, 1992.
PB93-963224/REB 93-01 PC **A03**/MF **A01**

National Priorities List Sites: Missouri, 1992.
PB93-963225/REB 93-01 PC **A05**/MF **A02**

National Priorities List Sites: Montana, 1992.
PB93-963226/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Nebraska, 1992.
PB93-963227/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: New Hampshire, 1992.
PB93-963228/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: New Jersey, 1992.
PB93-963229/REB 93-01 PC **A14**/MF **A03**

National Priorities List Sites: New Mexico, 1992.
PB93-963230/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: New York, 1992.
PB93-963231/REB 93-01 PC **A11**/MF **A03**

National Priorities List Sites: North Carolina, 1992.
PB93-963232/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Ohio, 1992.
PB93-963234/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Oklahoma, 1992.
PB93-963235/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Oregon, 1992.
PB93-963236/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Pennsylvania, 1992.
PB93-963237/REB 93-01 PC **A12**/MF **A03**

National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Rhode Island, 1992.
PB93-963239/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: South Carolina, 1992.
PB93-963240/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Tennessee, 1992.
PB93-963241/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Texas, 1992.
PB93-963242/REB 93-01 PC **A06**/MF **A02**

National Priorities List Sites: Utah, 1992.
PB93-963243/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Vermont, 1992.
PB93-963244/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Virginia, 1992.
PB93-963245/REB 93-01 PC **A05**/MF **A01**

National Priorities List Sites: Washington, 1992.
PB93-963246/REB 93-01 PC **A08**/MF **A02**

National Priorities List Sites: West Virginia, 1992.
PB93-963247/REB 93-01 PC **A04**/MF **A01**

National Priorities List Sites: Wisconsin, 1992.
PB93-963248/REB 93-01 PC **A07**/MF **A02**

National Priorities List Sites: Wyoming, 1992.
PB93-963249/REB 93-01 PC **A03**/MF **A01**

Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP.
PB93-963252/REB 93-01 PC **A03**/MF **A01**

Exercising Flexibility through the Superfund Accelerated Cleanup Model (SACM).
PB93-963253/REB 93-01 PC **A01**/MF **A01**

Superfund Progress: Fall/Winter 1992.
PB93-963254/REB 93-01 PC **A03**/MF **A01**

Superfund Progress. Aficionado's Version. Progress as of September 30, 1992.
PB93-963255/REB 93-01 PC **A03**/MF **A01**

Superfund Records of Decision Update. Volume 7, Number 2, November 1992.
PB93-963256/REB 93-01 PC **A02**/MF **A01**

Required Contracts Management Training for Regional Superfund Personnel.
PB93-963258/REB 93-01 PC **A01**/MF **A01**

Overview of the Outyear Liability Model (OLM).
PB93-963259/REB 93-01 PC **A02**/MF **A01**

Highlights: Superfund Program Management. Fiscal Year 1993.
PB93-963261/REB 93-01 PC **A03**/MF **A01**

Standard Document for Remedial Site Assessment Decisions.
PB93-963268/REB 93-01 PC **A01**/MF **A01**

Superfund: EPA/ICMA Superfund Revitalization Conference. Held in Chicago, Illinois on November 12-13, 1992.
PB93-963274/REB 93-01 PC **A04**/MF **A01**

Initiatives to Streamline the Alternative Remedial Contracting Strategy (ARCS) Contracts' Award Fee Process.
PB93-963275/REB 93-01 PC **A03**/MF **A01**

Performance Tracking under ARCS Contracts.
PB93-963276/REB 93-01 PC **A01**/MF **A01**

Amendment to Historical Definitions of NPL Deletion Start and Completion Dates.
PB93-963278/REB 93-01 PC **A01**/MF **A01**

Identification of a Senior Superfund Official for Addressing Special NPL Site-Related Issues.
PB93-963279/REB 93-01 PC **A01**/MF **A01**

Guidance on Program Management Activities under ARCS.
PB93-963280/REB 93-01 PC **A03**/MF **A01**

Clarification of Delegation to Approve Consistency Exemptions at NPL Sites.
PB93-963281/REB 93-01 PC **A01**/MF **A01**

Use of Time and Materials and Cost Reimbursement Subcontracts for Remedial Actions under the Alternative Remedial Contracting Strategy Contracts.
PB93-963282/REB 93-01 PC **A02**/MF **A01**

Smart Moves in Superfund - Regional Pilots and Initiatives. Volume 1, Number 2, September 1992.
PB93-963283/REB 93-01 PC **A01**/MF **A01**

Smart Moves in Superfund - Revitalization One Year Later. Volume 1, Number 3, January 1993.
PB93-963284/REB 93-01 PC **A01**/MF **A01**

Response Action Contractor Final Indemnification Guidelines. Volume 2, Number 1, March 1993.
PB93-963290/REB 93-01 PC **A01**/MF **A01**

Further Direction on Implementing the Superfund Accelerated Cleanup Model (SACM).
PB93-963291/REB 93-01 PC **A02**/MF **A01**

Superfund Response Action Contracts.
PB93-963292/REB 93-01 PC **A01**/MF **A01**

Superfund Administrative Improvements. Executive Summary.
PB93-963294/REB 93-04 PC **A03**/MF **A01**

Superfund Administrative Improvements. Final Report.
PB93-963295/REB 93-04 PC **A04**/MF **A01**

Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis.
PB93-963297/REB 93-04 PC **A03**/MF **A01**

Superfund Reauthorization: NACEPT Subcommittee Handbook.
PB93-963298/REB 93-04 PC **A05**/MF **A02**

Cost of Remedial Action Model.
PB93-963304/REB 93-04 PC **A01**/MF **A01**

Cost of Remedial Actions (CORA) Model: Overview and Applications.
PB93-963318/REB 93-04 PC **A03**/MF **A01**

SARA '200' Remedial Action Starts Requirement.
PB93-963324/REB 93-01 PC **A01**/MF **A01**

Permits and Permit 'Equivalency' Processes for CERCLA On-Site Response Actions.
PB93-963325/REB 93-01 PC **A02**/MF **A01**

Obligation of Funds under Superfund State Contracts.
PB93-963326/REB 93-04 PC **A01**/MF **A01**

NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC **A01**/MF **A01**

Compendium of ROD Language for FY 1993 Focus Areas.
PB93-963328/REB 93-01 PC **A04**/MF **A01**

Technology Selection Guide for Wood Treater Sites.
PB93-963329/REB 93-04 PC **A02**/MF **A01**

Guidance on Setting Priorities for NPL Candidate Sites.
PB93-963333/REB 93-01 PC **A02**/MF **A01**

ATSDR Health Consultations under CERCLA.
PB93-963334/REB 93-01 PC **A01**/MF **A01**

Ensuring the Adequacy of Cost Share Provisions in Superfund State Contracts.
PB93-963336/REB 93-01 PC **A03**/MF **A01**

Presumptive Remedy for CERCLA Municipal Landfill Sites.
PB93-963339/REB 93-04 PC **A03**/MF **A01**

PA Review Checklist.
PB93-963342/REB 93-04 PC **A03**/MF **A01**

Presumptive Remedies: Policy and Procedures.
PB93-963345/REB 93-04 PC **A02**/MF **A01**

Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites with Volatile Organic Compounds in Soils.
PB93-963346/REB 93-04 PC **A03**/MF **A01**

Site Assessment: Evaluating Risks at Superfund Sites.
PB93-963347/REB 93-04 PC **A02**/MF **A01**

OSWER Integrated Health and Safety Standard Operating Practices.
PB93-963401/REB 93-01 PC **A01**/MF **A01**

Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA.
PB93-963402/REB 93-04 PC **A04**/MF **A01**

Expedited Response Actions.
PB93-963410/REB 93-01 PC **A02**/MF **A01**

Questions and Answers on Release Notification Requirements and Reportable Quantity Adjustments.
PB93-963411/REB 93-01 PC **A03**/MF **A01**

Guidance for Federal Facilities on Release Notification Requirements under CERCLA and SARA Title III.
PB93-963412/REB 93-01 PC **A03**/MF **A01**

Guidance on Implementation of the 'Contribute to Remedial Performance' Provision.
PB93-963413/REB 93-04 PC **A02**/MF **A01**

Field Certification Tracking System (FCTS). User's Guide. Version 2.1.
PB93-963415/REB 93-04 PC **A04**/MF **A01**

Determination of Imminent and Substantial Endangerment for Removal Actions.
PB93-963416/REB 93-04 PC **A01**/MF **A01**

Effect of OSHA's Bloodborne Pathogens Standard on Hazardous Waste Cleanup Activities.
PB93-963419/REB 93-04 PC **A02**/MF **A01**

Reassignment of CLP Transportation Functions.
PB93-963501/REB 93-01 PC **A01**/MF **A01**

Extending the Tracking of Analytical Services to Potentially Responsible Party-Lead Superfund Sites (Supplemental Guidance on OSWER Directive 9240.0-2A).
PB93-963502/REB 93-01 PC **A03**/MF **A01**

Summary of GIS Support to Superfund.
PB93-963506/REB 93-04 PC **A04**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Harvey and Knott Drum Site, New Castle County, Delaware).
PB93-963614/REB 93-04 PC **A01**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Fulton Terminals Site Profile, Oswego County, NY).
PB93-963616/REB 93-04 PC **A02**/MF **A01**

Guidance on CERCLA Settlements with De Micromis Waste Contributors.
PB93-963619/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Darling Hill Dump, Lyndon, VT. (First Remedial Action), June 1992.
PB93-963702/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Revere Textile Prints, Sterling, CT. (First Remedial Action), September 1992.
PB93-963703/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 1): Otis Air National Guard/Camp Edwards, MA. (First Remedial Action), May 1992.
PB93-963704/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 1): Town Garage Radio Beacon, Londonderry, NH. (First Remedial Action), September 1992.
PB93-963705/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 1): Brunswick Naval Air Station, Operable Unit 2, ME. (Second Remedial Action), June 1992.
PB93-963706/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 1): Newport Naval Education/Training Center, Newport, RI. (First Remedial Action), September 1992.
PB93-963707/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 1): PSC Resources Site, Palmer, MA. (First Remedial Action), September 1992.
PB93-963708/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 1): Tibbetts Road, Barrington, NH. (First Remedial Action), September 1992.
PB93-963709/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 2): Ramapo Landfill Site, Rockland County, NY. (First Remedial Action), March 1992.
PB93-963801/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Pasley Solvents and Chemicals, Town of Hempstead, Nassau County, NY. (First Remedial Action), April 1992.
PB93-963805/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 2): Bioclinical Laboratories, Town of Islip, Suffolk County, NY. (First Remedial Action), September 1992.
PB93-963807/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): FAA Technical Center, Atlantic County, Atlantic City International Airport, NJ. (Third Remedial Action), September 1992.
PB93-963808/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 5), Lakehurst, NJ. (Sixth Remedial Action), January 1992.
PB93-963809/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 6), Lakehurst, NJ. (Fifth Remedial Action), December 1991.
PB93-963810/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): North Sea Municipal Landfill, Suffolk County, Southampton, NY. (Second Remedial Action), September 1992.
PB93-963811/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Witco Chemical (Oakland Plant), Bergen County, Oakland, NJ. (First Remedial Action), September 1992.
PB93-963812/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Higgins Farm, Franklin Township, Somerset County, NJ. (Second Remedial Action), September 1992.
PB93-963813/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Evor Phillips Leasing Company, Old Bridge Township, Middlesex County, NJ. (First Remedial Action), September 1992.
PB93-963814/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 1), Clinton County, NY. (First Remedial Action), September 1992.
PB93-963815/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 3), Clinton County, NY. (Second Remedial Action), September 1992.
PB93-963816/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Preferred Plating, Suffolk County, Farmingdale, NY. (Second Remedial Action), September 1992.
PB93-963817/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Cosden Chemical Coatings, City of Beverly, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963818/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Dover Municipal Well 4, Morris County, Dover, NJ. (First Remedial Action), September 1992.
PB93-963819/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Ellis Property, Sharp Road, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963820/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Endicott Village Well Field, Broome County, NY. (Third Remedial Action), September 1992.
PB93-963821/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Facet Enterprises, Village of Elmira Heights, Chemung County, NY. (First Remedial Action), September 1992.
PB93-963822/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 2): Imperial Oil/Champion Chemicals, Monmouth County, NJ. (Second Remedial Action), September 1992.
PB93-963823/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Industrial Latex, Bergen County, Wallington, NJ. (First Remedial Action), September 1992.
PB93-963824/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Islip Municipal Sanitary Landfill, Town of Islip, NY. (First Remedial Action), September 1992.
PB93-963825/REB 93-04 PC **A05**/MF **A02**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 7), Ocean County, NJ. (Seventh Remedial Action), March 1992.
PB93-963826/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Rowe Industries Groundwater Contamination, Sag Harbor, NY. (First Remedial Action), September 1992.
PB93-963827/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, (Operable Unit 5), Richmond, VA. (First Remedial Action), March 1992.
PB93-963901/REB 93-C1 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Raymark Site, Operable Unit 1, Montgomery County, PA. (First Remedial Action), December 1991.
PB93-963902/REB 93-01 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 3): Dublin Water Supply, Bucks County, PA. (First Remedial Action), December 1991.
PB93-963903/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 3): MW Manufacturing Site, Montour County, PA. (Subsequent Remedial Action), June 1992.
PB93-963904/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Dixie Caverns Landfill Site, Operable Unit 2, Roanoke County, VA. (Second Remedial Action), September 1992.
PB93-963907/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.
PB93-963912/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.
PB93-963913/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Eastern Diversified Metals Site, Schuylkill County, Hometown, PA. (Second Remedial Action), July 1992.
PB93-963914/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): USA Aberdeen, Operable Unit One, Michaelsville, MD. (Second Remedial Action), June 1992.
PB93-963915/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Strasburg Landfill, Newlin Township, Chester County, PA. (Third Remedial Action), March 1992.
PB93-963916/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Abex Corporation, Portsmouth, VA. (First Remedial Action), September 1992.
PB93-963917/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Brown's Battery Breaking, Tilden Township, Berks County, PA. (Second Remedial Action), July 1992.
PB93-963918/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Butz Landfill, Pocono and Jackson Townships, Monroe County, PA. (Second Remedial Action), June 1992.
PB93-963919/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Commodore Semiconductor Group, Lower Providence Township, PA. (First Remedial Action), September 1992.
PB93-963920/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 3): Rhinehart Tire Fire Dump, Operable Unit 2, Winchester, VA. (Second Remedial Action), September 1992.
PB93-963921/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Tonolli Corporation, Nesquehoning Borough, Carbon County, PA. (First Remedial Action), September 1992.
PB93-963922/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, Operable Unit 1, Richmond, VA. (First Remedial Action), May 1992.
PB93-963923/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964009/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.
PB93-964010/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964011/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.
PB93-964012/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), A/M Area Groundwater Operable Unit 3, Aiken County, SC. (Third Remedial Action), June 1992.
PB93-964013/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Standard Auto Bumper Site, Dade County, Hialeah, FL. (First Remedial Action), September 1992.
PB93-964014/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Yellow Water Road Dump, Duval County, Baldwin, FL. (Second Remedial Action), June 1992.
PB93-964015/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): National Electric Coil/Cooper Industries, KY. (First Remedial Action), September 1992.
PB93-964016/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Agrico Chemical, Escambia County, Pensacola, FL. (First Remedial Action), September 1992.
PB93-964017/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Benfield Industries, Haywood County, Hazelwood, NC. (First Remedial Action), July 1992.
PB93-964018/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 4): Carrier Air Conditioning, Collierville, TN. (First Remedial Action), September 1992.
PB93-964019/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Florida Steel Corporation, Martin County, Indiantown, FL. (First Remedial Action), June 1992.
PB93-964020/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Madison County Sanitary Landfill, Madison, FL. (First Remedial Action), September 1992.
PB93-964021/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Milan Army Ammunition Plant, TN. (First Remedial Action), September 1992.
PB93-964022/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 1, SC. (First Remedial Action), June 1992.
PB93-964023/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 2, SC. (Second Remedial Action), June 1992.
PB93-964024/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation, Operable Unit 6, Roane County, TN. (Fourth Remedial Action), September 1992.
PB93-964025/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): USMC Camp Lejeune Military Reservation, NC. (First Remedial Action), September 1992.
PB93-964026/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Grand Traverse Overall Supply Site, Grellickville, MI. (First Remedial Action), February 1992.
PB93-964101/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Midco II, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964102/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): Twin Cities AF Reserve (SAR Landfill), MN. (First Remedial Action), March 1992.
PB93-964103/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Columbus Old Municipal Landfill, Columbus, IN. (First Remedial Action), March 1992.
PB93-964104/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Clare Water Supply Site, Clare County, Clare, MI. (Second Remedial Action), September 1992.
PB93-964106/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Kohler Landfill, Kohler, WI. (First Remedial Action), March 1992.
PB93-964111/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 5): Metal Working Shop, Benzie County, Lake Ann, MI. (First Remedial Action), June 1992.
PB93-964113/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Savanna Army Depot, Savanna, IL. (First Remedial Action), March 1992.
PB93-964116/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Torch Lake Site, Operable Units 1 and 3, Houghton County, MI. (First Remedial Action), September 1992.
PB93-964120/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Alsco Anaconda Site, Gnadenhutten, OH. (Second Remedial Action), September 1992.
PB93-964121/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Butterworth No. 2 Landfill Site, Grand Rapids, MI. (First Remedial Action), September 1992.
PB93-964122/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 1, Anoka County, Andover, MN. (Second Remedial Action), (Amendment), June 1992.
PB93-964123/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Reilly Tar and Chemical, St. Louis Park, MN. (Fourth Remedial Action), September 1992.
PB93-964124/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): American Chemical Services, Griffith, IN. (First Remedial Action), September 1992.
PB93-964125/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): Cannelton Industries Site, Sault Sainte Marie, MI. (First Remedial Action), September 1992.
PB93-964126/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Central Illinois Public Service, Taylorville Manufactured Gas Plant Site, Christian County, IL. (First Remedial Action), September 1992.
PB93-964127/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): City Disposal Sanitary Landfill, Dane County, WI. (First Remedial Action), September 1992.
PB93-964128/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): H. Brown Company, Walker, MI. (First Remedial Action), September 1992.
PB93-964129/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): MIDCO I, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964130/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): New Brighton/Arden Hills, Ramsey County, MN. (Eighth Remedial Action), September 1992.
PB93-964131/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 2, Anoka County, Andover, MN. (Second Remedial Action), December 1992.
PB93-964132/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Tri County/Elgin Landfill Site, Elgin, IL. (First Remedial Action), September 1992.
PB93-964133/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 2), Vermilion Parish, LA. (First Remedial Action), September 1992.
PB93-964206/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 1), Vermilion Parish, LA. (Second Remedial Action), September 1992.
PB93-964207/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 6): Koppers (Texarkana Plant), TX. (First Remedial Action), (Amendment), March 1992.
PB93-964208/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 6): Prewitt Abandoned Refinery, Prewitt, NM. (First Remedial Action), September 1992.
PB93-964209/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 6): Double Eagle Refinery, Oklahoma City, OK. (First Remedial Action), September 1992.
PB93-964210/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.
PB93-964304/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 7): Pester Refinery, Butler County, El Dorado, KS. (First Remedial Action), September 1992.
PB93-964305/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Denver Radium, Operable Unit 9, Denver, CO. (Eighth Remedial Action), December 1991.
PB93-964402/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Hill Air Force Base, UT. (Second Remedial Action), September 1992.
PB93-964403/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), (Operable Unit 4), Golden, CO. (Third Remedial Action), April 1992.
PB93-964404/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 8): Denver Radium Site, Operable Unit 8, Denver, CO. (Ninth Remedial Action), January 1992.
PB93-964405/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 8): Idaho Pole National Priorities List Site, Bozeman, MT. (First Remedial Action), September 1992.
PB93-964406/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 1, Weber County, UT. (Second Remedial Action), June 1992.
PB93-964407/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 3, Weber County, UT. (Fourth Remedial Action), September 1992.
PB93-964408/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 4, UT. (Third Remedial Action), September 1992.
PB93-964409/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 8): Portland Cement Co. (Kiln Dust No. 2 and No. 3), Operable Unit 2, Salt Lake City, UT. (Second Remedial Action), March 1992.
PB93-964410/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), Operable Unit 2, Golden, CO. (Fourth Remedial Action), September 1992.
PB93-964411/REB 93-04 PC **A19**/MF **A04**

Superfund Record of Decision (EPA Region 8): Silver Bow Creek/Butte Area, MT. (Second Remedial Action), June 1992.
PB93-964412/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 9): Westinghouse Electric (Sunnyvale Plant), Sunnyvale, CA. (First Remedial Action), October 1991.
PB93-964501/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 9): Hassayampa Landfill, AZ. (First Remedial Action), August 1992.
PB93-964505/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 9): Jasco Chemical Company, Mountain View, CA. (First Remedial Action), September 1992.
PB93-964507/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 9): Purity Oil Sales, Fresno County, CA. (Second Remedial Action), September 1992.
PB93-964508/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 3, Sacramento, CA. (Second Remedial Action), December 1991.
PB93-964509/REB 93-04 PC **A09**/MF **A03**

Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 4, Sacramento, CA. (Third Remedial Action), September 1992.
PB93-964510/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 10): Elmendorf Air Force Base, Operable Unit 2, Source Area ST41, Anchorage, AK. (First Remedial Action), September 1992.
PB93-964604/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Arrcom (Drexler Enterprise), Rathdrum, ID. (First Remedial Action), June 1992.
PB93-964606/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Fort Lewis Military Reservation, Landfill No. 5, Pierce County, WA. (First Remedial Action), July 1992.
PB93-964607/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Pesticide Laboratory, Yakima, WA. (First Remedial Action), September 1992.
PB93-964608/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Naval Air Station Whidbey Island - Ault Field, (Operable Unit 1, Area 6), Oak Harbor, WA. (First Remedial Action), April 1992.
PB93-964609/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Umatilla Army Depot (Lagoons), Soils Operable Unit 2, Hermiston, OR. (First Remedial Action), September 1992.
PB93-964610/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Bunker Hill Mining and Metallurgical Complex, Shoshone County, ID. (Second Remedial Action), September 1992.
PB93-964611/REB 93-04 PC **A08**/MF **A02**

Superfund Record of Decision (EPA Region 10): Eielson Air Force Base, AK. (First Remedial Action), September 1992.
PB93-964612/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Joseph Forest Products, Wallowa County, OR. (First Remedial Action), September 1992.
PB93-964613/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): McChord AFB, Washrack Treatment Area, WA. (First Remedial Action), September 1992.
PB93-964614/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 2, ID. (Third Remedial Action), September 1992.
PB93-964615/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 22, ID. (Fourth Remedial Action), September 1992.
PB93-964616/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 23, ID. (Second Remedial Action), June 1992.
PB93-964617/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Wyckoff/Eagle Harbor, WA. (First Remedial Action), September 1992.
PB93-964618/REB 93-04 PC **A07**/MF **A02**

Superfund Accelerated Cleanup Model (SACM) Coordination Strategy.
PB94-963201/REB 93-04 PC **A01**/MF **A01**

**SUPERFUND ACCELERATED CLEANUP MODEL**
Superfund Accelerated Cleanup Model (SACM). Volume 1, Number 4, November 1992.
PB92-963287/REB 93-01 PC **A01**/MF **A01**

Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP.
PB93-963252/REB 93-01 PC **A03**/MF **A01**

Exercising Flexibility through the Superfund Accelerated Cleanup Model (SACM).
PB93-963253/REB 93-01 PC **A01**/MF **A01**

Smart Moves in Superfund - Regional Pilots and Initiatives. Volume 1, Number 2, September 1992.
PB93-963283/REB 93-01 PC **A01**/MF **A01**

**SUPERFUND ACCELERATED CLEANUP MODEL (SACM)**
HSED SACM Report. Volume 1, Number 1, January 1993.
PB93-963289/REB 93-01 PC **A01**/MF **A01**

**SUPERFUND COMPREHENSIVE ACCOMPLISHMENTS PLAN**
Amendment to Historical Definitions of NPL Deletion Start and Completion Dates.
PB93-963278/REB 93-01 PC **A01**/MF **A01**

**SUPERFUND INNOVATIVE TECHNOLOGY EVALUATION PROGRAM**
Superfund Innovative Technology Evaluation Program: Progress and Accomplishments Fiscal Year 1991. A 5th Report to Congress.
PB93-126613/REB 93-01 PC **A05**/MF **A01**

SITE-Emerging Technologies: Laser Induced Photochemical Oxidative Destruction of Toxic Organics in Leachates and Groundwaters.
PB93-131431/REB 93-01 PC **A04**/MF **A01**

Babcock and Wilcox Cyclone Furnace Vitrification. Technology Demonstration Summary.
PB93-145621/REB 93-01 PC **A02**/MF **A01**

Horsehead Resource Development Company, Inc., Flame Reactor Technology. Technology Demonstration Summary.
PB93-145639/REB 93-01 PC **A02**/MF **A01**

Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC **A03**/MF **A01**

**SUPERFUND PROGRAM**
OSWER Superfund Telephone Directory.
PB92-963289/REB 93-01 PC **A03**/MF **A01**

Health Effects Assessment Summary Tables.
PB93-921100/REB 93-01 Standing Order

**SUPERNOVAE**
Search for Radiative Neutrino Decay from Supernovae.
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

**SUPEROXIDE DISMUTASE**
Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
PB93-205037/REB 93-04 PC **A02**/MF **A01**

**SUPPLYING**
Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03**/MF **A01**

**SURFACE ANALYSIS**
EPA Bibliography on Surface Contamination.
PB93-168904/REB 93-01 PC **A02**/MF **A01**

**SURFACE CHEMISTRY**
Behavior of Metals in Soils.
PB93-131480/REB 93-01 PC **A03**/MF **A01**

Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-226575/REB 93-04 PC **A03**/MF **A01**

**SURFACE COATING FREE MATERIALS**
Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
PB93-101160/REB 93-01 PC **A06**/MF **A02**

*Use of Surface-Coating-Free Materials for Reduction of* Volatile Organic Compound Emissions from Coating Operations.
PB93-106839/REB 93-01 PC **A03**/MF **A01**

**SURFACE CONTAMINATION**
EPA Bibliography on Surface Contamination.
PB93-168904/REB 93-01 PC **A02**/MF **A01**

**SURFACE DRAINAGE**
Reclamation of Urban Stormwater.
PB93-185791/REB 93-01 PC **A03**/MF **A01**

**SURFACE-GROUND WATER RELATIONSHIPS**
Consensus Method for Determining Groundwaters under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA).
PB93-180818/REB 93-01 PC **A04**/MF **A01**

**SURFACE IMPOUNDMENT**
LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC **A05**/MF **A01**

**SURFACE IMPOUNDMENTS**
Landfill Containment and Cover Systems.
PB93-106698/REB 93-01 PC **A03**/MF **A01**

**SURFACE MINING**
Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC **A03**/MF **A01**

**SURFACE PROPERTIES**
Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC **A03**/MF **A01**

**SURFACE WASHING AGENTS**
Evaluation of Laboratory Tests to Determine the Effectiveness of Chemical Surface Washing Agents.
PB93-194215/REB 93-01 PC **A02**/MF **A01**

**SURFACE WASTE DISPOSAL**
Technical Support Document for the Surface Disposal of Sewage Sludge.
PB93-110591/REB 93-01 PC **A15**/MF **A03**

**SURFACE WATERS**
Modelling Episodic Acidification of Surface Waters: The State of Science.
PB93-106920/REB 93-01 PC **A03**/MF **A01**

Introduction to Nonpoint Source Pollution and Wetland Mitigation.
PB93-106953/REB 93-01 PC **A03**/MF **A01**

Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC **A10**/MF **A03**

Surface Waters Component of the Environmental Monitoring and Assessment Program (EMAP): An Overview.
PB93-121267/REB 93-01 PC **A02**/MF **A01**

Trace Organic Contaminants in Anthropogenically Acidified Surface Waters.
PB93-135689/REB 93-01 PC **A03**/MF **A01**

Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC **A03**/MF **A01**

Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03**/MF **A01**

Sampling and Assessment Issues in Using Fish as Indicators of Ecological Condition in Lakes: A Workshop Report. (3rd Draft Report).
PB93-186278/REB 93-01 PC **A03**/MF **A01**

Guidance on Enforcement of the Requirements of the Surface Water Treatment Rule.
PB93-186633/REB 93-01 PC **A03**/MF **A01**

Surface Water Treatment Rule. Implementation Manual (Including Appendix D).
PB93-186641/REB 93-01 PC **A07**/MF **A02**

Clean Water and the American Economy. Proceedings: Surface Water. Volume 1. Held on October 19-21, 1992.
PB93-202612/REB 93-01 PC **A14**/MF **A03**

Introduction to Water Quality-Based Toxics Control for the NPDES Program.
PB93-207967/REB 93-04 PC **A03**/MF **A01**

Commitment to Watershed Protection: A Review of the Clean Lakes Program.
PB93-210300/REB 93-04 PC **A04**/MF **A01**

Lake Water Quality Assessment Program: Southern Illinois Lakes.
PB93-215929/REB 93-04 PC **A03**/MF **A01**

Direct/Delayed Response Project: Future Effects of *Long-Term Sulfur Deposition on Surface Water Chemistry* in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC **A18**/MF **A04**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC **A14**/MF **A03**

Assessment and Control of Bioconcentratable Contaminants in Surface Waters.
PB93-229813/REB 93-04 PC **A13**/MF **A03**

Inter-Regional Comparison of Patterns and Trends in Surface Water Acidification Across the United States.
PB93-236453/REB 93-04 PC **A03**/MF **A01**

Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

**SURFACES**
Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
PB93-105534/REB 93-01 PC **A04**/MF **A01**

**SURFACTANTS**
Surfactants and Subsurface Remediation.
PB93-149854/REB 93-01 PC **A02**/MF **A01**

Evaluation of Laboratory Tests to Determine the Effectiveness of Chemical Surface Washing Agents.
PB93-194215/REB 93-01 PC **A02**/MF **A01**

**SURVEYS**
Florida Small Systems Compliance Project.
PB93-115855/REB 93-01 PC **A04**/MF **A01**

Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC **A03**/MF **A01**

Protecting Confidentiality in Establishment Surveys.
PB93-180958/REB 93-01 PC **A03**/MF **A01**

Discussion: Response to Internal Reviews of My Paper, 1993 Census Bureau Annual Research Conference.
PB93-191385/REB 93-01 PC **A02**/MF **A01**

Outreach to Manufacturers of Lead Test Kits.
PB93-216570/REB 93-04 PC **A03**/MF **A01**

Analytical Methods for the National Sewage Sludge Survey.
*PB93-236024/REB* 93-04 PC **A12**/MF **A03**

**SURVIVAL**
Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC **A02**/MF **A01**

Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.
PB93-212645/REB 93-04 PC **A02**/MF **A01**

**SURVIVAL ANALYSIS**
Effect of Aerosolization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC **A02**/MF **A01**

**SUSPENDED SEDIMENTS**
Measurement of Sediment Resuspension Rates in Long Island Sound.
PB93-222115/REB 93-04 PC **A01**/MF **A01**

**SUSTAINABLE AGRICULTURE**
Sustainable Agriculture and the Environment in the Humid Tropics.
PB93-173920/REB 93-01 PC **A99**/MF **A06**

Integrating Sustainable Agriculture, Ecology, and Environmental Policy. Conference Proceedings.
PB93-191492/REB 93-01 PC **A02**/MF **A01**

Future Context of Sustainable Agriculture: Planning for Uncertainty.
PB93-191518/REB 93-01 PC **A03**/MF **A01**

**SWAMPS**
Irrigated Wetlands of the Colorado Plateau: Information Synthesis and Habitat Evaluation Method.
PB93-186260/REB 93-01 PC **A05**/MF **A02**

Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC **A09**/MF **A02**

Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).
PB93-212470/REB 93-04 PC **A03**/MF **A01**

Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC **A01**/MF **A01**

Establishing Quantitative Performance Criteria for Wetland Restoration.
*PB93-236610/REB* 93-04 PC **A01**/MF **A01**

**SWELLING**
Molecular Size Exclusion by Soil Organic Materials Estimated from Their Swelling in Organic Solvents.
PB93-228583/REB 93-04 PC **A02**/MF **A01**

**SYMPATHETIC NERVOUS SYSTEM**
Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

**SYNTHETIC CHLORINATED COMPOUNDS**
Microbial Degradation of Synthetic Chlorinated Compounds: *Evolutionary Implications (Chapter 8).*
PB93-204139/REB 93-01 PC **A03**/MF **A01**

**SYNTHETIC ELASTOMERS**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Rubber Production and Compounding.
PB93-206092/REB 93-04 PC **A03**/MF **A01**

**SYNTHETIC FIBERS**
Supplement to the OCPSF Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category.
PB93-186096/REB 93-04 PC **A11**/MF **A03**

**SYNTHETIC ORGANIC CHEMICALS**
Phase II Fact Sheet: National Primary Drinking Water Regulations for 38 Inorganic and Synthetic Organic Chemicals.
PB93-193787/REB 93-01 PC **A03**/MF **A01**

**SYSTEMATICS**
Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

**T-LYMPHOCYTE GENE REARRANGEMENT**

V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02**/MF **A01**

**TAIWAN**

Heavy-Duty Engine Testing Report Cummins/EPA/Taiwan Correlation Test Results, 1993.
PB93-236172/REB 93-04 PC **A03**/MF **A01**

**TAMPA BAY**

Review of Tampa Bay Information for Interim Nutrient Budgets and Historical Loadings of Bay Segments.
PB93-191187/REB 93-01 PC **A03**/MF **A01**

Database of Benthic Sampling Locations in Tampa Bay.
PB93-191211/REB 93-01 PC **A05**/MF **A01**

Distribution of Selected Fish Species in Tampa Bay.
PB93-191229/REB 93-01 PC **A04**/MF **A01**

Framework for Characterization. (Revised Final Report March 1992).
PB93-191237/REB 93-01 PC **A04**/MF **A01**

Compendium of Current Monitoring Programs in Tampa Bay and Its Watershed.
PB93-191666/REB 93-01 PC **A05**/MF **A01**

Design of a Basinwide Monitoring Program for the Tampa Bay Estuary.
PB93-194694/REB 93-01 PC **A05**/MF **A01**

Synthesis of Basic Life Histories of Tampa Bay Species.
PB93-196012/REB 93-01 PC **A12**/MF **A03**

**TAMPA BAY NATIONAL ESTUARY PROGRAM**

Distribution of Selected Fish Species in Tampa Bay.
PB93-191229/REB 93-01 PC **A04**/MF **A01**

Framework for Characterization. (Revised Final Report March 1992).
PB93-191237/REB 93-01 PC **A04**/MF **A01**

**TANNING MATERIALS**

Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
PB93-123115/REB 93-01 PC **A02**/MF **A01**

**TAXONOMY**

Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

**TCDD**

Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

**TCDD (DIOXIN/TETRACHLORODIBENZO)**

Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202828/REB 93-01 PC **A08**/MF **A02**

**TECHNICAL ASSISTANCE**

*Technical Assistance Document:* Corrosion, Its Detection and Control in Injection Wells.
PB93-115897/REB 93-01 PC **A04**/MF **A01**

Successful Practices in Title III Implementation. Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Cameron County, Texas; Bucks County, Pennsylvania; Harford County, Maryland; Dallas County, Texas. Series 6, Number 7.
PB93-130086/REB 93-01 PC **A03**/MF **A01**

Superfund Response Action Contracts.
PB93-963292/REB 93-01 PC **A01**/MF **A01**

**TECHNICAL INFORMATION CENTERS**

Control Technology Center FY92: A Summary of Program Accomplishments.
PB93-199230/REB 93-01 PC **A03**/MF **A01**

**TECHNOLOGY ASSESSMENT**

Technological Considerations for Planning the Global Carbon Future.
PB93-222008/REB 93-04 PC **A03**/MF **A01**

Removal Efficiencies in Terms of Particle Size and Concentration in a Suburban Home of Console Air Cleaners.
PB93-222016/REB 93-04 PC **A03**/MF **A01**

Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites with Volatile Organic Compounds in Soils.
PB93-963346/REB 93-04 PC **A03**/MF **A01**

**TECHNOLOGY INNOVATION**

Synopses of Federal Demonstrations of Innovative Site Remediation Technologies.
PB93-144111/REB 93-01 PC **A11**/MF **A03**

Technologies and Options for UST Corrective Actions: Overview of Current Practice.
PB93-145589/REB 93-01 PC **A05**/MF **A01**

Babcock and Wilcox Cyclone Furnace Vitrification. Technology Demonstration Summary.
PB93-145621/REB 93-01 PC **A02**/MF **A01**

Horsehead Resource Development Company, Inc., Flame Reactor Technology. Technology Demonstration Summary.
PB93-145639/REB 93-01 PC **A02**/MF **A01**

Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC **A03**/MF **A01**

**TECHNOLOGY TRANSFER**

OSWER Source Book. Volume 1. Training and Technology Transfer Resources, 1992-1993.
PB93-143960/REB 93-01 PC **A10**/MF **A03**

OSWER Source Book. Volume 2. Training and Technology Transfer Resources, 1992-1993.
PB93-144129/REB 93-01 PC **A11**/MF **A03**

Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC **A03**/MF **A01**

Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC **A02**/MF **A01**

**TELEPHONE SETS**

OSWER Superfund Telephone Directory.
PB92-963289/REB 93-01 PC **A03**/MF **A01**

**TEM CLEARANCE AIR TEST**

Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC **A03**/MF **A01**

**TEMPERATURE**

Thermal Influences on Nervous System Function.
PB93-107159/REB 93-01 PC **A03**/MF **A01**

Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC **A02**/MF **A01**

Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
PB93-222776/REB 93-04 PC **A02**/MF **A01**

Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03**/MF **A01**

**TEMPERATURE MEASUREMENT**

Relationship between Water Temperatures and Air Temperatures for Central U.S. Streams.
PB93-135655/REB 93-01 PC **A07**/MF **A02**

**TEMPORAL DISTRIBUTION**

*Temporal Changes in the Benthos along a Pollution Gradient:* Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC **A03**/MF **A01**

**TENNESSEE**

National Priorities List Sites: Tennessee, 1992.
PB93-963241/REB 93-01 PC **A04**/MF **A01**

**TERATOGENIC COMPOUNDS**

Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC **A03**/MF **A01**

In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with In vivo Data.
PB93-107167/REB 93-01 PC **A03**/MF **A01**

Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.
PB93-226872/REB 93-04 PC **A03**/MF **A01**

Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02**/MF **A01**

Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC **A01**/MF **A01**

Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC **A03**/MF **A01**

**TERATOLOGY**

Review of the Literature on Potential Reproductive and Developmental Toxicity of Electric and Magnetic Fields.
PB93-141307/REB 93-01 PC **A03**/MF **A01**

**TERMITES**

Interim Protocol for Testing the Effects of Microbial Pathogens on Subterranean Termites ('Isoptera: rhinotermitidae').
PB93-124634/REB 93-01 PC **A03**/MF **A01**

**TERRESTRIAL ECOSYSTEMS**

Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC **A12**/MF **A03**

Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC **A05**/MF **A01**

Soil-Mediated Effects of Atmospheric Deposition on Eastern U.S. Spruce-Fir Forests.
PB93-141125/REB 93-01 PC **A03**/MF **A01**

Characterization of Eastern U.S. Spruce-Fir Soils.
PB93-141133/REB 93-01 PC **A03**/MF **A01**

Equilibrium Analysis of Carbon Pools and Fluxes of Forest Biomes in the Former Soviet Union.
PB93-191484/REB 93-01 PC **A02**/MF **A01**

Proceedings of the International Workshop on Carbon Cycling in Boreal Forest and Sub-Arctic Ecosystems: Biospheric Responses and Feedbacks to Global Climate Change.
PB93-205540/REB 93-04 PC **A13**/MF **A03**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC **A07**/MF **A02**

Landscape-Scale Effects of Toxic Events for Ecological Risk Assessment.
PB93-236628/REB 93-04 PC **A03**/MF **A01**

**TERRITORIAL SEAS**

Guidance Manual for the Review of Permitted and Civil Works Projects for the Ocean Disposal of Dredged Material.
PB93-223048/REB 93-04 PC **A14**/MF **A03**

**TEST CHAMBERS**

Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC **A03**/MF **A01**

**TEST EQUIPMENT**

Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.
PB93-216604/REB 93-04 PC **A06**/MF **A02**

Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.
PB93-222362/REB 93-04 PC **A03**/MF **A01**

**TEST FACILITIES**

Risk Reduction Engineering Laboratory Site Remediation Technical Support Program: FY92 Annual Report.
PB93-217651/REB 93-04 PC **A03**/MF **A01**

**TEST KIT MANUFACTURERS**

Outreach to Manufacturers of Lead Test Kits.
PB93-216570/REB 93-04 PC **A03**/MF **A01**

**TEST METHODS**

Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC **A02**/MF **A01**

**TESTING**

Replacement of Charcoal Sorbent in the VOST.
PB93-221893/REB 93-04 PC **A03**/MF **A01**

**TESTIS**

Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Bensidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC **A02**/MF **A01**

**TESTS**

Sediment Classification Methods Compendium.
PB93-115186/REB 93-01 PC **A11**/MF **A03**

**TETRACHLORODIBENZODIOXIN**

Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. (Chapters 1 through 8).
PB93-222644/REB 93-04 PC **E99**/MF **E99**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 1. Disposition and Pharmacokinetics.
PB93-222651/REB 93-04 PC **A07**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 2. Mechanisms of Toxic Actions.
PB93-222669/REB 93-04 PC **A03**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 3. Acute, Subchronic, and Chronic Toxicity.
PB93-222677/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 4. Immunotoxic Effects.
PB93-222685/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.
PB93-222693/REB 93-04 PC **A06**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 6. Carcinogenicity of TCDD in Animals.
PB93-222701/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 7. Epidemiology/Human Data.
PB93-222719/REB 93-04 PC **A07**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 8. Dose-Response Relationships.
PB93-222727/REB 93-04 PC **A11**/MF **A03**

Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03**/MF **A01**

Maturational Changes in Dermal Absorption of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Fischer 344 Rats.
PB93-229490/REB 93-04 PC **A02**/MF **A01**

**TETRACHLOROETHYLENE**

Evaluation of the Potential Carcinogenicity of Tetrachloroethylene (127-18-4).
PB93-201234/REB 93-01 PC **A03**/MF **A01**

**TETRACYCLINES**

RED Facts: Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-232916/REB 93-04 PC **A02**/MF **A01**

**TEXAS**

Proceedings: Galveston Bay Characterization Workshop. Held on February 21-23, 1991.
PB93-205672/REB 93-04 PC **A11**/MF **A03**

Regulatory Effectiveness Study for the Armand Bayou Coastal Preserve.
PB93-205680/REB 93-04 PC **A08**/MF **A02**

Regulatory Effectiveness Study for the Christmas Bay Coastal Preserve.
PB93-205698/REB 93-04 PC **A09**/MF **A03**

Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1. Technical Report.
PB93-205722/REB 93-04 PC **A11**/MF **A03**

Segmentation Development for Galveston Bay.
PB93-205748/REB 93-04 PC **A07**/MF **A02**

National Priorities List Sites: Texas, 1992.
PB93-963242/REB 93-01 PC **A06**/MF **A02**

**TEXTILE INDUSTRY**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Textile Dyeing.
PB93-206035/REB 93-04 PC **A02**/MF **A01**

**THERMAL CONDUCTIVITY**

Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.
DE93014387/REB 93-04 PC **A03**/MF **A01**

Vertical Diffusion in Small Stratified Lake: Data and Error Analysis.
PB93-149185/REB 93-01 PC **A03**/MF **A01**

**THERMAL DEGRADATION**

Thermal Degradation Characteristics of Environmentally Sensitive Pesticide Products.
PB93-201127/REB 93-01 PC **A04**/MF **A01**

**THERMAL DESORPTION**

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Remedy Selection. Interim Guidance.
PB93-126597/REB 93-01 PC **A03**/MF **A01**

Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215630/REB 93-04 PC **A04**/MF **A01**

**THERMAL INSULATION**

Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.
DE93014387/REB 93-04 PC **A03**/MF **A01**

**THERMODYNAMIC CYCLES**

Simplified Cycle Simulation Model for the Performance Rating of Refrigerants and Refrigerant Mixtures.
PB93-130383 93-01 Not available NTIS

**THERMOPHYSICAL PROPERTIES**

Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

**THIN LAYER CHROMATOGRAPHY**

Short Communication: Improved Thin-Layer Chromatographic Separation of 32P-Postlabeled DNA Adducts.
PB93-229615/REB 93-04 PC **A02**/MF **A01**

**THIOACETAMIDE**

Evaluation of the Potential Carcinogenicity of Thioacetamide (62-55-5).
PB93-201226/REB 93-01 PC **A03**/MF **A01**

**THIOUREA**

Evaluation of the Potential Carcinogenicity of Thiourea (62-56-6).
PB93-201218/REB 93-01 PC **A03**/MF **A01**

**THIRAM**

Dithicarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.
PB93-228989/REB 93-04 PC **A02**/MF **A01**

**THIRD REMEDIAL ACTION**

Superfund Record of Decision (EPA Region 2): FAA Technical Center, Atlantic County, Atlantic City International Airport, NJ. (Third Remedial Action), September 1992.
PB93-963808/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Strasburg Landfill, Newlin Township, Chester County, PA. (Third Remedial Action), March 1992.
PB93-963916/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), A/M Area Groundwater Operable Unit 3, Aiken County, SC. (Third Remedial Action), June 1992.
PB93-964013/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), (Operable Unit 4), Golden, CO. (Third Remedial Action), April 1992.
PB93-964404/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 4, UT. (Third Remedial Action), September 1992.
PB93-964409/REB 93-04 PC **A05**/MF **A01**

**THREE DIMENSIONAL FLOW**

3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
PB93-217669/REB 93-04 PC **A12**/MF **A03**

**THYROID GLAND**

Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.
PB93-236347/REB 93-04 PC **A02**/MF **A01**

**TIDEWATER**

Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
PB93-143709/REB 93-01 PC **A08**/MF **A02**

Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC **A01**/MF **A01**

**TISSUES (BIOLOGY)**

DNA Isolation from Small Tissue Samples Using Salt and Spermine.
PB93-181048/REB 93-01 PC **A01**/MF **A01**

Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-228831/REB 93-04 PC **A03**/MF **A01**

**TITANIUM DIOXIDE**

Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC **A01**/MF **A01**

**TOBACCO**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: A Field Test in Snuff Users.
PB93-141448/REB 93-01 PC **A03**/MF **A01**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC **A03**/MF **A01**

Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-228906/REB 93-04 PC **A01**/MF **A01**

**TOBACCO SMOKE POLLUTION**

Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders.
PB93-134419/REB 93-01 PC**$29.00**/MF **A04**

**TOLERANCES (PHYSIOLOGY)**

Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.
PB93-212645/REB 93-04 PC **A02**/MF **A01**

Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03**/MF **A01**

**TOLUENE/DIAMINO**

Evaluation of the Potential Carcinogenicity of Diaminotoluene (Mixed) (95-80-7).
PB93-185270/REB 93-01 PC **A03**/MF **A01**

**TOLUIDINE/CHLORO- (HYDROCHLORIDE)**

Evaluation of the Potential Carcinogenicity of 4-Chloro-o-Toluidine Hydrochloride (3165-93-3).
PB93-185130/REB 93-01 PC **A03**/MF **A01**

**TOLUIDINE HYDROCHLORIDE**

Evaluation of the Potential Carcinogenicity of o-Toluidine Hydrochloride (636-21-5).
PB93-202349/REB 93-01 PC **A03**/MF **A01**

**TOLUIDINES**

Evaluation of the Potential Carcinogenicity of 5-Nitro-O-Toluidine (99-55-8).
PB93-196533/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of p-Toluidine (106-49-0).
PB93-201192/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of o-Toluidine (95-53-4).
PB93-201200/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of o-Toluidine Hydrochloride (636-21-5).
PB93-202349/REB 93-01 PC **A03**/MF **A01**

**TONOLLI (PENNSYLVANIA)**

Superfund Record of Decision (EPA Region 3): Tonolli Corporation, Nesquehoning Borough, Carbon County, PA. (First Remedial Action), September 1992.
PB93-963922/REB 93-04 PC **A05**/MF **A01**

**TORONTO (CANADA)**

Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
PB93-216067/REB 93-04 PC **A07**/MF **A02**

**TOTAL SUSPENDED PARTICULATES**

Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or Inhalable Particulate Data (Draft).
PB93-200640/REB 93-01 PC **A04**/MF **A01**

**TOXAPHENE**

Evaluation of the Potential Carcinogenicity of Toxaphene (8001-35-2).
PB93-202331/REB 93-01 PC **A03**/MF **A01**

**TOXIC EQUIVALENCY FACTORS**

Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC **A02**/MF **A01**

**TOXIC RELEASE INVENTORY**

Toxics Release Inventory: Public Release Data, 1991.
PB93-219988/REB 93-04 PC **A16**/MF **A03**

**TOXIC SUBSTANCES**

RED Facts: Capsaicin.
PB93-100311/REB 93-01 PC **A02**/MF **A01**

RED Facts: Ethylene.
PB93-100345/REB 93-01 PC **A02**/MF **A01**

RED Facts: 'Nosema locustae'.
PB93-100352/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED) 'Nosema locustae'.
PB93-100360/REB 93-01 PC **A07**/MF **A02**

RED Facts: Streptomycin and Streptomycin Sulfate.
PB93-100378/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED): Streptomycin and Streptomycin Sulfate.
PB93-100386/REB 93-01 PC **A09**/MF **A02**

Reregistration Eligibility Document (RED): Capsaicin. (List D, Case 4018).
PB93-101434/REB 93-01 PC **A08**/MF **A02**

RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED) Zinc Salts.
PB93-101657/REB 93-01 PC **A11**/MF **A03**

RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED) Soap Salts.
PB93-101673/REB 93-01 PC **A13**/MF **A03**

Air Toxics: The Research Challenge of the 1990 Clean Air Act Amendments.
PB93-106664/REB 93-01 PC **A02**/MF **A01**

EPA Pesticide RED FACTS Sheets: Indole-3-Butyric Acid.
PB93-107282/REB 93-01 PC **A02**/MF **A01**

Toxic Chemical Release Inventory Magnetic Media Submission Instructions. Section 313 of the Emergency Planning and Community Right-to-Know Act (Revised 1990 Version).
PB93-116127/REB 93-01 PC **A03**/MF **A01**

Research to Improve Health Risk Assessments (RIHRA) Program.
PB93-116226/REB 93-01 PC **A06**/MF **A02**

Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC **A02**/MF **A01**

Proceedings of the EPA/A and WMA International Symposium (1992), Measurement of Toxic and Related Air Pollutants. Held in Durham, North Carolina on May 4-9, 1992.
PB93-121093/REB 93-01 PC **A01**/MF **A01**

Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC **A06**/MF **A02**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound.
PB93-122208/REB 93-01 PC **A09**/MF **A02**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound, Appendices.
PB93-122216/REB 93-01 PC **A16**/MF **A03**

Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 1.
PB93-122331/REB 93-01 PC **A99**/MF **A06**

Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 2.
PB93-122349/REB 93-01 PC **A99**/MF **A06**

RED Facts: Sodium Hydroxide.
PB93-124683/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED): Sodium Hydroxide.
PB93-124691/REB 93-01 PC **A07**/MF **A02**

Pesticide Fact Sheet Number 236: Pyridate.
PB93-130441/REB 93-01 PC **A03**/MF **A01**

Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03**/MF **A01**

Pesticide Fact Sheet Number 20.2: Amitrole.
PB93-144368/REB 93-01 PC **A02**/MF **A01**

Pesticide Fact Sheet Number 20.1: Amitrole.
PB93-149680/REB 93-01 PC **A02**/MF **A01**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Human Health (February 1993 Draft).
PB93-154680/REB 93-01 PC **A09**/MF **A03**

Great Lakes Water Quality Initiative Technical Support Document for Human Health Criteria and Values (January 1993 Draft).
PB93-154698/REB 93-01 PC **A05/MF A01**

EPA Bibliography on Surface Contamination.
PB93-168904/REB 93-01 PC **A02/MF A01**

Reregistration Eligibility Document (RED): Oxalic Acid.
PB93-169100/REB 93-01 PC **A06/MF A02**

Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC **A02/MF A01**

RED Facts: Oxalic Acid.
PB93-173953/REB 93-01 PC **A02/MF A01**

International Validation of a Neurobehavioral Screening Battery: The IPCS/WHO Collaborative Study.
PB93-175594/REB 93-01 PC **A02**

Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC **A03/MF A01**

Pesticide Reregistration Progress Report.
PB93-178994/REB 93-01 PC **A03/MF A01**

Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-183440/REB 93-04 PC **A05/MF A01**

Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.
PB93-184620/REB 93-01 PC **A03/MF A01**

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Atmospheric Deposition of Critical Issue Forum. Held in Annapolis, Maryland on November 5, 1992.
PB93-193738/REB 93-01 PC **A03/MF A01**

Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03/MF A01**

Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-196988/REB 93-01 PC **A03/MF A01**

Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (1991).
PB93-205854/REB 93-04 PC **A03/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Monofilament Fiber Manufacturing.
PB93-205961/REB 93-04 PC **A02/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Printing Operations.
PB93-205979/REB 93-04 PC **A02/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electrodeposition of Organic Coatings.
PB93-205987/REB 93-04 PC **A02/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Spray Application of Organic Coatings.
PB93-205995/REB 93-04 PC **A02/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Semiconductor Manufacturing.
PB93-206001/REB 93-04 PC **A02/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Formulation of Aqueous Solutions.
PB93-206019/REB 93-04 PC **A02/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electroplating Operations.
PB93-206027/REB 93-04 PC **A02/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Textile Dyeing.
PB93-206035/REB 93-04 PC **A02/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Presswood and Laminated Wood Products Manufacturing.
PB93-206043/REB 93-04 PC **A02/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Roller, Knife, and Gravure Coating Operations.
PB93-206050/REB 93-04 PC **A03/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Paper and Paperboard Production.
PB93-206068/REB 93-04 PC **A03/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Leather Tanning and Finishing.
PB93-206076/REB 93-04 PC **A03/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Wood Preserving Operations.
PB93-206084/REB 93-04 PC **A03/MF A01**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Rubber Production and Compounding.
PB93-206092/REB 93-04 PC **A03/MF A01**

National Air Toxics Information Clearinghouse: Ongoing Research and Regulatory Development Projects, July 1992.
PB93-206563/REB 93-04 PC **A14/MF A03**

National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Index, 1992.
PB93-206571/REB 93-04 PC **A99/MF A06**

National Air Toxics Information Clearinghouse: NATICH Data Base Report of Federal, State, Local and EPA Air Toxics Activities.
PB93-206589/REB 93-04 PC **A99/MF E08**

Pesticide Fact Sheet Number 239: Cimectacarb.
PB93-206753/REB 93-04 PC **A02/MF A01**

Pesticide Fact Sheet: Polyhedral Occlusion Bodies of the Nuclear Polyhedrosis Virus of 'Spodoptera exigua'.
PB93-206779/REB 93-01 PC **A02/MF A01**

Pesticide Fact Sheet: 'Metarhizium anisopliae' Strain ESF1.
PB93-206787/REB 93-01 PC **A01/MF A01**

National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Volume 6. Citations, 1992.
PB93-207652/REB 93-04 PC **A10/MF A03**

Toxics Release Inventory. Public Data Release. State Fact Sheets, 1991.
PB93-208668/REB 93-04 PC **A06/MF A02**

Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.
PB93-222628/REB 93-04 PC **A01/MF A01**

Optical Remote Measurement of Toxic Gases.
PB93-229409/REB 93-04 PC **A03/MF A01**

Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.
PB93-229425/REB 93-04 PC **A03/MF A01**

Chemical Emergency Preparedness and Prevention Advisory: Hydrogen Fluoride, Series 8, No. 3.
PB93-234797/REB 93-04 PC **A02/MF A01**

Toxic Release Inventory (TRI), 1987-1990 (on CD-ROM).
PB93-500742/REB 93-01 CD-ROM$45.00

Toxic Release Inventory, (TRI), 1991.
PB93-505873/REB 93-04 CP **T14**

**TOXIC SUBSTANCES CONTROL ACT**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, June 1992. Record and Data Element Description.
PB93-100261/REB 93-01 PC **A03/MF A01**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, January 1993, Documentation.
PB93-155166/REB 93-01 PC **A03/MF A01**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, June 1992.
PB93-500197/REB 93-01 CP **T05**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, January 1993.
PB93-504595/REB 93-01 CP **T05**

**TOXICITY**

Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC **A03/MF A01**

Ninety-Day Toxicity Study of Sodium Monochloroacetate in Sprague-Dawley Rats.
PB93-107100/REB 93-01 PC **A03/MF A01**

Ninety-Day Toxicity Study of Chloral Hydrate in the Sprague-Dawley Rat.
PB93-107118/REB 93-01 PC **A03/MF A01**

Macromolecular Adduction by Trichloroacetonitrile in the Fischer 344 Rat Following Oral Gavage.
PB93-107134/REB 93-01 PC **A03/MF A01**

In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with In vivo Data.
PB93-107167/REB 93-01 PC **A03/MF A01**

Metabolism and Disposition of Inorganic Arsenic in Laboratory Animals and Humans.
PB93-107183/REB 93-01 PC **A02/MF A01**

Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC **A02/MF A01**

Drinking Water Toxicity Profiles.
PB93-122406/REB 93-01 PC **A09/MF A02**

Effects of 'Beauveria bassiana' on Embryos of the Inland Silverside Fish ('Menidia beryllina').
PB93-131811/REB 93-01 PC **A02/MF A01**

Periphyton Photosynthesis as an Indicator of Effluent Toxicity: Relationship to Effects on Animal Test Species.
PB93-131829/REB 93-01 PC **A02/MF A01**

Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02/MF A01**

Direct Effects of Ethane Dimethanesulphonate on Epididymal Function in Adult Rats. An In vitro Demonstration.
PB93-141281/REB 93-01 PC **A03/MF A01**

Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02/MF A01**

Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC **A03/MF A01**

Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
PB93-141463/REB 93-01 PC **A02/MF A01**

Proceedings: Tiered Testing Issues for Freshwater and Marine Sediments. Held in Washington, DC. on September 16-18, 1992.
PB93-152619/REB 93-01 PC **A22/MF A04**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC **A04/MF A01**

Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03/MF A01**

Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC **A02/MF A01**

Olfactory Toxicity of Beta,Beta'-Iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC **A02/MF A01**

Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC **A02/MF A01**

Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02/MF A01**

Gonadal Effects of Fetal Exposure to the Azo Dye Congo Red in Mice: Infertility in Female but Not Male Offspring.
PB93-181071/REB 93-01 PC **A03/MF A01**

Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Acetamide, N-Fluoren-2-yl (53-96-3).
PB93-181626/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Acrylonitrile (107-13-1).
PB93-181634/REB 93-01 PC **A03/MF AC1**

Evaluation of the Potential Carcinogenicity of Aldrin (309-00-2).
PB93-181642/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Amitrole (61-82-5).
PB93-181659/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Arsenic and Inorganic Arsenic Compounds.
PB93-181667/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Cacodylic Acid (75-60-5).
PB93-184851/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Dichlorophenylarsine (696-28-6).
PB93-184869/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Aziridine (151-56-4).
PB93-184919/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benz(c)acridine (225-51-4).
PB93-184927/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benz(a)anthracene (00056-55-3).
PB93-184935/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzene (71-43-2).
PB93-184943/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzidine and Its Salt (92-87-5).
PB93-184976/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzo(b)fluoranthene (00205-99-2).
PB93-184984/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzo(k)fluoranthene (207-08-9).
PB93-184992/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzo(a)Pyrene (50-32-8).
PB93-185007/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzotrichloride (97-07-7).
PB93-185015/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Benzyl Chloride (100-44-7).
PB93-185023/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
PB93-185031/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Alpha-Hexachlorocyclohexane (319-84-6).
PB93-185049/REB 93-01 PC **A03/MF A01**

Evaluation of the Potential Carcinogenicity of Beta-Hexachlorocyclohexane (319-85-7).
PB93-185056/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Gamma-Hexachlorocyclohexane (Lindane) (58-89-9).
PB93-185064/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(2-Chloroethyl)Ether (111-44-4).
PB93-185072/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(Chloromethyl)Ether (542-88-1).
PB93-185080/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(2-Ethylhexyl)Phthalate (117-81-7).
PB93-185098/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Cadmium (7740-43-9), Cadium Acetate (543-90-8), Cadmium Bromide (7789-42-6), Cadmium Chloride (10108-64-2).
PB93-185106/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Carbon Tetrachloride (56-23-5).
PB93-185114/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 4-Chloro-o-Toluidine Hydrochloride (3165-93-3).
PB93-185130/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chromium and Hexavalent Chromium Compounds.
PB93-185148/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chrysene (218-01-9).
PB93-185155/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Coke Oven Emissions.
PB93-185163/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Creosote (8001-58-9).
PB93-185171/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Cyclophosphamide (50-18-0).
PB93-185189/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Daunomycin (20830-81-3).
PB93-185197/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDD (72-54-8).
PB93-185205/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlorambucil (305-03-3).
PB93-185213/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlordane (57-74-9).
PB93-185221/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlornaphazine (494-03-1).
PB93-185239/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDE (72-55-9).
PB93-185247/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDT (50-29-3).
PB93-185254/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diallate (2303-16-4).
PB93-185262/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diaminotoluene (Mixed) (95-80-7).
PB93-185270/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dibenz(a,h)Anthracene (53-70-3).
PB93-185288/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2:7,8-Dibenzopyrene (189-55-9).
PB93-185296/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dibromo-3-Chloropropane (96-12-8).
PB93-185304/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dihydrosafrole (94-58-6).
PB93-185312/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachloroethane (76-01-7).
PB93-185320/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethylaminoazobenzene (60-11-7).
PB93-185338/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 7,12-Dimethylbenz(a)anthracene (57-97-6).
PB93-185346/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3,3'-Dimethylbenzidine (119-93-7).
PB93-185353/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethylcarbamoyl Chlo.
PB93-185361/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1 Dimethylhydrazine (57-14-7).
PB93-185379/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dimethylhydrazine (540-73-8).
PB93-185387/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dinitrotoluene (Mixture) (25321-14-6).
PB93-185395/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,4-Dinitrotoluene (121-14-2).
PB93-185403/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,6-Dinitrotoluene (606-20-2).
PB93-185411/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,4-Dioxane (123-91-1).
PB93-185429/REB 93-01 PC **A03**/MF **A01**

Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

Physical and Chemical Parameters of Sediment Extraction and Fractionation That Influence Toxicity, as Evaluated by Microtox (Trade Name).
PB93-185882/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Heptachlor (76-44-8).
PB93-190478/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Heptachlor Epoxide (1024-57-3).
PB93-190486/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachlorobenzene (118-74-1).
PB93-190494/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachlorobutadiene (87-68-3).
PB93-190502/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachloroethane (67-72-1).
PB93-190510/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hydrazine (302-01-2).
PB93-190528/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Indeno(1,2,3-CD)Pyrene (193-39-5).
PB93-190536/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Isosafrole (120-58-1).
PB93-190544/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Kepone Chlordecone (143-50-0).
PB93-190569/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Lasiocarpine (303-34-4).
PB93-190577/REB 93-01 PC **A03**/MF **A01**

Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC **A02**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Diphenylhydrazine (122-66-7).
PB93-192326/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Epichlorohydrin (106-89-8).
PB93-192334/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl Carbamate (Urethane) (51-79-6).
PB93-192342/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl 4,4'-Dichlorobenzilate (510-15-6).
PB93-192359/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylene Dibromide (106-93-4).
PB93-192367/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylene Oxide (75-21-8).
PB93-192375/REB 93-01 PC **A03**/MF **A01**

Aquatic Toxicity Information Retrieval Data Base: A Technical Support Document. (Revised July 1992).
PB93-192631/REB 93-04 PC **A03**/MF **A01**

Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-192755/REB 93-04 PC **A05**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylenethiourea (96-45-7).
PB93-193589/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl Methanesulfonate (62-50-0).
PB93-193597/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Formaldehyde (50-00-0).
PB93-193605/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Glycidylaldehyde (765-34-4).
PB93-193613/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chloroform (67-66-3).
PB93-194249/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3,3'-Dichlorobenzidine (91-94-1).
PB93-194256/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dichloroethane (107-06-2).
PB93-194264/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2:3,4-Diepoxybutane (1464-53-5).
PB93-194280/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Diethylhydrazine (1615-80-1).
PB93-194298/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diethylstilbestrol (56-53-1).
PB93-194306/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3,3'-Dimethoxybenzidine (119-90-4).
PB93-194314/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethyl Sulfate (77-78-1).
PB93-194322/REB 93-01 PC **A03**/MF **A01**

Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11**/MF **A03**

Evaluation of the Potential Carcinogenicity of Melphalan (148-82-3).
PB93-196301/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methyl Chloride (74-87-3).
PB93-196319/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3-Methylcholanthrene (59-49-5).
PB93-196327/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methyl Iodide (74-88-4).
PB93-196343/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methylthiouracil (56-04-2).
PB93-196368/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Mitomycin C (50-07-7).
PB93-196376/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1-Naphthylamine (134-32-7).
PB93-196384/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2-Naphthylamine (91-59-8).
PB93-196392/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Nickel (7740-02-0).
PB93-196400/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2-Nitropropane (79-46-9).
PB93-196418/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Butylamine (924-16-3).
PB93-196426/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodiethanolamine (1116-54-7).
PB93-196434/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodiethylamine (55-18-5).
PB93-196442/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodimethylamine (62-75-9).
PB93-196459/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Ethylurea (759-73-9).
PB93-196475/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurea (684-93-5).
PB93-196483/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurethane (165-53-2).
PB93-196491/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosomethylvinylamine (4549-40-0).
PB93-196509/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosopiperidine (100-75-4).
PB93-196517/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosopyrrolidine.
PB93-196525/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 5-Nitro-O-Toluidine (99-55-8).
PB93-196533/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachloronitrobenzene (82-68-8).
PB93-196541/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachlorophenol (87-86-5).
PB93-196558/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Phenacetin (62-44-2).
PB93-196566/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Polychlorinated Biphenyls (1336-36-3) Including Specific Aroclors.
PB93-196574/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,3-Propane Sultone (1120-71-4).
PB93-196582/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Propylenimine (75-55-8).
PB93-196590/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity Saccharin (81-07-2).
PB93-196608/REB 93-01 PC **A03**/MF **A01**

RED Facts: Iron Salts.
PB93-196703/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED): Iron Salts.
PB93-200780/REB 93-01 PC **A05**/MF **A02**

Evaluation of the Potential Carcinogenicity of p-Toluidine (106-49-0).
PB93-201192/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of o-Toluidine (95-53-4).
PB93-201200/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Thiourea (62-56-6).
PB93-201218/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Thioacetamide (62-55-5).
PB93-201226/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Tetrachloroethylene (127-18-4).
PB93-201234/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1,2,2-Tetrachloroethane (79-34-5).
PB93-201242/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1,1,2-Tetrachloroethane (630-20-6).
PB93-201259/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (1746-01-6).
PB93-201267/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Streptozotocin (18883-66-4).
PB93-201275/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Selenium Sulfide (Selenium Disulfide) (7488-56-4).
PB93-201283/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Safrole (94-59-7).
PB93-201291/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Vinyl Chloride (75-01-4).
PB93-202257/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Uracil Mustard (66-75-1).
PB93-202265/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trypan Blue (72-57-1).
PB93-202273/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Tris(2,3-Dibromopropyl) Phosphate (126-72-7).
PB93-202281/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,4,6-Trichlorophenol (88-06-2).
PB93-202299/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,4,5-Trichlorophenol (95-95-4).
PB93-202307/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trichlorophenol (Mixed) (2516-78-22).
PB93-202315/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trichloroethylene (79-01-6).
PB93-202323/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Toxaphene (8001-35-2).
PB93-202331/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of o-Toluidine Hydrochloride (636-21-5).
PB93-202349/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Silver.
PB93-202604/REB 93-01 PC **A06**/MF **A02**

Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202828/REB 93-01 PC **A08**/MF **A02**

Evaluation of the Potential Carcinogenicity of 1,1,2-Trichloroethane (79-00-5).
PB93-204584/REB 93-01 PC **A03**/MF **A01**

Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows ('Cyprinodon variegatus').
PB93-204998/REB 93-04 PC **A03**/MF **A01**

Pesticide Reregistration, March 1991.
PB93-205896/REB 93-04 PC **A03**/MF **A01**

Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances.
PB93-206449/REB 93-04 PC **A06**/MF **A02**

Pesticide Reregistration Progress Report, October 1991.
PB93-206605/REB 93-04 PC **A03**/MF **A01**

Introduction to Water Quality-Based Toxics Control for the NPDES Program.
PB93-207967/REB 93-04 PC **A03**/MF **A01**

Proceedings and Summary of the Workshop on Finfish as Indicators of Toxic Contamination. Held in Airlie, Virginia on July 27-28, 1986.
PB93-208320/REB 93-04 PC **A06**/MF **A02**

Workbook of Screening Techniques for Assessing Impacts of Toxic Air Pollutants (Revised).
PB93-210367/REB 93-04 PC **A14**/MF **A03**

Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.
PB93-212769/REB 93-04 PC **A03**/MF **A01**

PR Notice 92-1. Notice to Manufacturers, Formulators, Producers, and Registrants of Pesticide Products.
PB93-219467/REB 93-04 PC **A02**/MF **A01**

Genetic Damage In vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04**/MF **A01**

DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03**/MF **A01**

Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).
PB93-221836/REB 93-04 PC **A03**/MF **A01**

Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.
PB93-222362/REB 93-04 PC **A03**/MF **A01**

Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.
PB93-222404/REB 93-04 PC **A02**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. (Chapters 1 through 8).
PB93-222644/REB 93-04 PC **E99**/MF **E99**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 2. Mechanisms of Toxic Actions.
PB93-222669/REB 93-04 PC **A03**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 3. Acute, Subchronic, and Chronic Toxicity.
PB93-222677/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 4. Immunotoxic Effects.
PB93-222685/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.
PB93-222693/REB 93-04 PC **A06**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 6. Carcinogenicity of TCDD in Animals.
PB93-222701/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 7. Epidemiology/Human Data.
PB93-222719/REB 93-04 PC **A07**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 8. Dose-Response Relationships.
PB93-222727/REB 93-04 PC **A11**/MF **A03**

Strain Comparisons of DFP Neurotoxicity in Rats.
PB93-228609/REB 93-04 PC **A03**/MF **A01**

Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-228831/REB 93-04 PC **A03**/MF **A01**

Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.
PB93-228872/REB 93-04 PC **A03**/MF **A01**

Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.
PB93-228948/REB 93-04 PC **A03**/MF **A01**

Acute and Delayed Effects of Diisopropyl Fluorophosphate on Body Temperature, Heart Rate and Motor Activity in the Awake, Unrestrained Rat.
PB93-228971/REB 93-04 PC **A03**/MF **A01**

Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02**/MF **A01**

Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03**/MF **A01**

Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC **A03**/MF **A01**

Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC **A03**/MF **A01**

Maturational Changes in Dermal Absorption of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Fischer 344 Rats.
PB93-229490/REB 93-04 PC **A02**/MF **A01**

Using Neuroblastoma Cell Lines to Examine Organophosphate Neurotoxicity.
PB93-229508/REB 93-04 PC **A02**/MF **A01**

Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC **A02**/MF **A01**

Assessment and Control of Bioconcentratable Contaminants in Surface Waters.
PB93-229813/REB 93-04 PC **A13**/MF **A03**

Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC **A02**/MF **A01**

RED Facts: 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-232908/REB 93-04 PC **A02**/MF **A01**

RED Facts: Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-232916/REB 93-04 PC **A02**/MF **A01**

RED Facts: Silver.
PB93-232924/REB 93-04 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED): Silver.
PB93-232973/REB 93-04 PC **A05**/MF **A02**

Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02**/MF **A01**

Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC **A02**/MF **A01**

Aquatic Toxicity Information Retrieval Data Base (AQUIRE).
PB93-505725/REB 93-04 CP **T02**

Aquatic Toxicity Information on VAX VMS Backup (AQUIRE for VMS).
PB93-505733/REB 93-01 CP **T02**

Toxic Release Inventory, 1991 Reporting Facilities Names and Addresses.
PB93-505881/REB 93-04 CP **T02**

Toxic Release Inventory (TRI), 1987.
PB93-506004/REB 93-04 CP **T16**

Toxic Release Inventory (TRI), 1988.
PB93-506012/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1989.
PB93-506020/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1990.
PB93-506038/REB 93-04 CP **T14**

**TOXICOLOGY**

Biologic Markers in Reproductive Toxicology.
PB93-100980/REB 93-01 PC **A18**/MF **A04**

Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC **A05**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Tetranitromethane (TNM).
PB93-116994/REB 93-01 PC **A03**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Diethylene Glycol Dinitrate (DEGDN).
PB93-117000/REB 93-01 PC **A03**/MF **A01**

Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC **A02**/MF **A01**

Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03**/MF **A01**

DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

Behavioral Development Following Daily Episodes of Mother-Infant Separation in the Rat.
PB93-141406/REB 93-01 PC **A01**/MF **A01**

Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomega-

lovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC **A03**/MF **A01**

In vitro Mammalian Mutagenesis as a Model for Genetic Lesions in Human Cancer.
PB93-141471/REB 93-01 PC **A02**/MF **A01**

Report of the Neurotoxicity Risk Assessment Guidelines Peer Review Workshop. Held in Washington, DC. on June 2-3, 1992.
PB93-146918/REB 93-01 PC **A08**/MF **A02**

Developing Improved Strategies to Determine Male Reproductive Risk from Environmental Toxins.
PB93-167286/REB 93-01 PC **A03**/MF **A01**

Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

Importance of Experimenter-Blind Procedure in Neurotoxicology (Mini-Review).
PB93-175628/REB 93-01 PC **A02**/MF **A01**

Genetic Toxicology of Putative Nongenotoxic Carcinogens.
PB93-175636/REB 93-01 PC **A03**/MF **A01**

Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC **A03**/MF **A01**

Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Bensidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC **A02**/MF **A01**

Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC **A03**/MF **A01**

Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-180990/REB 93-01 PC **A03**/MF **A01**

Steroidogenic Assessment Using Ovary Culture in Cycling Rats: Effects of Bis(2-Diethylhexyl) Phthalate on Ovarian Steroid Production.
PB93-181022/REB 93-01 PC **A03**/MF **A01**

Effect of Methoxychlor on Ovarian Steroidogenesis: Role in Early Pregnancy Loss.
PB93-181030/REB 93-01 PC **A02**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dieldrin (60-57-1).
PB93-194272/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 4,4'-Methylenebis (1-Chloroaniline) (101-14-4).
PB93-196335/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Methyl-N'-Nitro-N-Nitrosoguanidine (70-25-7).
PB93-196350/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Propylamine (621-64-7).
PB93-196467/REB 93-01 PC **A03**/MF **A01**

Pesticide Fact Sheet Number 240: Dimethenamid. SAN 582H/Frontier (Trade Name) Herbicide.
PB93-198695/REB 93-01 PC **A03**/MF **A01**

Pesticide Fact Sheet: Arsenic Acid (H3AsO4).
PB93-198711/REB 93-01 PC **A02**/MF **A01**

Stress Proteins in Aquatic Organisms: An Environmental Perspective.
PB93-199578/REB 93-01 PC **A03**/MF **A01**

Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC **A02**/MF **A01**

Pesticide Fact Sheet: 1-Indole-3-Butanethioic Acid, S-Phenyl Ester.
PB93-219822/REB 93-04 PC **A02**/MF **A01**

Pesticide Fact Sheet: Glufosinate Ammonium.
PB93-219830/REB 93-04 PC **A03**/MF **A01**

Pesticide Fact Sheet: GY-81/Enzone.
PB93-219848/REB 93-04 PC **A03**/MF **A01**

Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
PB93-229599/REB 93-04 PC **A03**/MF **A01**

Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC **A03**/MF **A01**

Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03**/MF **A01**

**TRACE ELEMENTS**

Trace elements in agricultural soils. Fluxes, balances and background values.
DE93778470/REB 93-01 PC **A03**/MF **A01**

Methods for the Determination of Chemical Substances in Marine and Estuarine Environmental Samples.
PB93-182913/REB 93-01 PC **A05**/MF **A01**

Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03**/MF **A01**

**TRACE GASES**

Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC **A03**/MF **A01**

**TRACER TECHNIQUES**

Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3, Hydraulic Conductivity Variability and Calculated Macrodispersivities.
PB93-107050/REB 93-01 PC **A03**/MF **A01**

**TRACHEA**

Role of Ozone in Tracheal Cell Transformation.
PB93-179935/REB 93-01 PC **A03**/MF **A01**

Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
PB93-179950/REB 93-01 PC **A03**/MF **A01**

**TRACTOR ENGINES**

Heavy-Duty Engine Testing Report Non-Road Engine Configurations Injection Timing Effects Test Results, 1992.
PB93-236164/REB 93-04 PC **A05**/MF **A01**

**TRADESCANTIA**

Application of the 'Tradescantia micronucleus' Assay for the Genetic Evaluation of Chemical Mixtures in Soil and Aqueous Media.
PB93-141380/REB 93-01 PC **A02**/MF **A01**

**TRAINING**

OSWER Source Book. Volume 1. Training and Technology Transfer Resources, 1992-1993.
PB93-143980/REB 93-01 PC **A10**/MF **A03**

OSWER Source Book. Volume 2. Training and Technology Transfer Resources, 1992-1993.
PB93-144129/REB 93-01 PC **A11**/MF **A03**

Drinking Water Training Resources Directory: A National Training Coalition Directory of Current Training Materials. First Edition.
PB93-202802/REB 93-01 PC **A07**/MF **A02**

Field Certification Tracking System (FCTS), Version 2.1 (for Microcomputers).
PB93-506582/REB 93-04 CP **D02**

Superfund: Environmental Response and Health and Safety (Training Materials).
PB93-963100/REB 93-01 Standing Order

Required Contracts Management Training for Regional Superfund Personnel.
PB93-963258/REB 93-01 PC **A01**/MF **A01**

**TRAINING DEVICES**

Sanitary Survey Training: Instructor's Guide for Inspectors of Small Water Systems.
PB93-115871/REB 93-01 PC **A05**/MF **A01**

Sanitary Survey Training: Instructor's Guide for Sanitarians of Micronesia.
PB93-115889/REB 93-01 PC **A09**/MF **A02**

Restructuring Manual: A Training Manual for State Drinking Water Personnel as They Meet the Challenges of the 1986 Safe Drinking Water Act Amendments.
PB93-180842/REB 93-01 PC **A04**/MF **A01**

Course 1. Model Curriculum for Training Asbestos Abatement Contractors and Supervisors (Training Manual).
PB93-780773/REB 93-01 PC**$182.00**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Student Notebook. Course 1 (Training Manual).
PB93-780781/REB 93-01 PC **A21**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Instructor's Course Syllabus. Course 1 (Training Manual).
PB93-780799/REB 93-01 PC **A09**

Course 2. Model Curriculum for School Building Inspectors (Training Manual).
PB93-780823/REB 93-01 PC**$136.00**

Model EPA Curriculum for Training Building Inspectors. Student Notebook. Course 2 (Training Manual).
PB93-780831/REB 93-01 PC **A17**

Model EPA Curriculum for Training Building Inspectors. Instructor's Course Syllabus. Course 2 (Training Manual).
PB93-780849/REB 93-01 PC **A07**

Course 3. Model Curriculum for School Asbestos Management Planners (Training Manual).
PB93-780872/REB 93-01 PC**$81.00**

Model EPA Curriculum for Training Management Planners. Student Notebook. Course 3 (Training Manual).
PB93-780880/REB 93-01 PC **A07**

Model EPA Curriculum for Training Management Planners. Instructor's Course Syllabus. Course 3 (Training Manual).
PB93-780898/REB 93-01 PC **A04**

Course 4. Model Curriculum for Asbestos Abatement Workers (English Version) (Training Manual).
PB93-780922/REB 93-01 PC**$235.00**

EPA Model Asbestos Worker Training Manual. Course 4 (English Version).
PB93-780930/REB 93-01 PC **A14**

EPA Model Asbestos Worker Training Course. Instructor's Manual. Course 4 (English Version) (Training Manual).
PB93-780948/REB 93-01 PC **A15**

EPA Model Asbestos Worker Training Instructor's Resources. Course 4 (English Version) (Training Manual).
PB93-780955/REB 93-01 PC **A09**

Course 5. Presentation to Accompany 'Guidance for Controlling Asbestos-Containing Materials in Buildings' (Training Manual).
PB93-780971/REB 93-01 PC**$41.00**

Superfund Progress: Fall/Winter 1992.
PB93-963254/REB 93-01 PC **A03**/MF **A01**

**TRAINING PROGRAMS**

U.S. EPA NPDES: Basic Permit Writers' Course. Workbook.
PB93-185619/REB 93-01 PC **A17**/MF **A03**

**TRANSFECTION**

Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02**/MF **A01**

**TRANSIENT PUFFS**

Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

**TRANSLOCATION (GENETICS)**

Quantification of Germ-Cell Risk Associated with the Induction of Heritable Translocations.
PB93-199677/REB 93-01 PC **A03**/MF **A01**

**TRANSMISSION ELECTRON MICROSCOPY**

Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
PB93-131761/REB 93-01 PC **A02**/MF **A01**

**TRANSPORT**

Geostatistical Environmental Assessment Software: User's Guide. GEO-EAS 1.2.1.
PB93-163236/REB 93-01 PC **A07**/MF **A02**

MULTIMED: The Multimedia Exposure Assessment Model for Evaluating the Land Disposal of Wastes-Model Theory.
PB93-186252/REB 93-01 PC **A07**/MF **A02**

Geo-EAS: Software for Geostatistics 1.2.1 (3 1/2 inch Version) (for Microcomputers).
PB93-504967/REB 93-01 CP **D02**

**TRANSPORT THEORY**

Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
PB93-131845/REB 93-01 PC **A03**/MF **A01**

**TRANSPORTATION MODELS**

Issues and Approaches to Improving Transportation Modeling for Air Quality Analysis.
PB93-194066/REB 93-01 PC **A05**/MF **A02**

**TREES (PLANTS)**

Biologic Markers of Air-Pollution Stress and Damage in Forests.
PB93-110187/REB 93-01 PC **A17**/MF **A03**

**TRETINOIN**

Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

**TRI (TOXIC RELEASE INVENTORY)**

Toxic Release Inventory (TRI), 1987-1990 (on CD-ROM).
PB93-500742/REB 93-01 CD-ROM$45.00

**TRIBUTARIES**

Oligohaline Areas in Tampa Bay Tributaries: Spatial Extent and Species Lists.
PB93-191179/REB 93-01 PC **A03**/MF **A01**

**TRICHLOROETHANES**

Evaluation of the Potential Carcinogenicity of 1,1,2-Trichloroethane (79-00-5).
PB93-204584/REB 93-01 PC **A03**/MF **A01**

**TRICHLOROETHYLENE**

Selection of a 'Pseudomonas cepacia' Strain Constitutive for the Degradation of Trichloroethylene.
PB93-169027/REB 93-01 PC **A02**/MF **A01**

Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-180990/REB 93-01 PC **A03**/MF **A01**

Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC **A03**/MF **A01**

**TRICHLOROPHENOXYACETIC ACIDS**

Genotoxicity of 2,4,5-Trichlorophenoxyacetic Acid Biodegradation Products in the 'Salmonella' Reversion and Lambda Prophage-Induction Bioassays.
PB93-107175/REB 93-01 PC **A02**/MF **A01**

Biodegradation of 2,4,5-Trichlorophenoxyacetic Acid in Liquid Culture and in Soil by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191542/REB 93-01 PC **A02**/MF **A01**

**TRISOMY**

Maternal Age Effect: The Enigma of Down Syndrome and Other Trisomic Conditions.
PB93-194421/REB 93-01 PC **A03**/MF **A01**

**TRITOLYL PHOSPHATES**

Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC **A02**/MF **A01**

**TROPICAL REGIONS**

Sustainable Agriculture and the Environment in the Humid Tropics.
PB93-173920/REB 93-01 PC **A99**/MF **A06**

Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.
PB93-229680/REB 93-04 PC **A03**/MF **A01**

**TROPOSPHERE**

Determination of Rates of Reaction in the Gas-Phase in the Troposphere. Theory and Practice. 5. Rate of Indirect Photoreaction.
PB93-149334/REB 93-01 PC **A08**/MF **A02**

Role of Ozone Precursors in Tropospheric Ozone Formation and Control: A Report to Congress.
PB93-226694/REB 93-04 PC **A04**/MF **A01**

Summary of Public Comments and EPA Responses on the Draft Report: The Role of Ozone Precursors in Tropospheric Ozone Formation and Control.
PB93-226702/REB 93-04 PC **A03**/MF **A01**

**TROUT**

Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

**TRUST TERRITORIES**

National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC **A04**/MF **A01**

**TRYPAN BLUE**

Evaluation of the Potential Carcinogenicity of Trypan Blue (72-57-1).
PB93-202273/REB 93-01 PC **A03**/MF **A01**

**TSCA (TOXIC SUBSTANCES CONTROL ACT)**

TSCA Confidential Business Information Security Manual.
PB93-184844/REB 93-01 PC **A07**/MF **A02**

**TURBULENCE**

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119873/REB 93-01 PC **A02**/MF **A01**

Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119881/REB 93-01 PC **A03**/MF **A01**

**ULTRAVIOLET RADIATION**

Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC **A02**/MF **A01**

Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC **A05**/MF **A01**

Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.
PB93-205383/REB 93-04 PC **A03**/MF **A01**

Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
PB93-212454/REB 93-04 PC **A03**/MF **A01**

Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC **A07**/MF **A02**

**ULTRAVIOLET RAYS**

Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC **A02**/MF **A01**

Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
PB93-229607/REB 93-04 PC **A02**/MF **A01**

**UNBURNED FUELS**

Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02**/MF **A01**

**UNCERTAINTY**

Uncertainties in Countrywide Forest Biomass Estimates.
PB93-149250/REB 93-01 PC **A03**/MF **A01**

**UNDERGROUND INJECTION CONTROL PROGRAM**

Underground Injection Control Program.
PB93-115905/REB 93-01 PC **A03**/MF **A01**

**UNDERGROUND STORAGE**

Technologies and Options for UST Corrective Actions: Overview of Current Practice.
PB93-145589/REB 93-01 PC **A05**/MF **A01**

Characteristics of Non-Petroleum Underground Storage Tanks.
PB93-185775/REB 93-01 PC **A03**/MF **A01**

**UNITED STATES**

General Information on Applying for Registration of Pesticides in the United States.
PB93-115939/REB 93-01 PC **A08**/MF **A02**

Seminar Publication. Medical and Institutional Waste Incineration: Regulations, Management, Technology, Emissions, and Operations.
PB93-116283/REB 93-01 PC **A03**/MF **A01**

Quality Assurance Field Operations Report for the Pilot Study Evaluating the Habitat Value of Wetland Treatment Systems.
PB93-134682/REB 93-01 PC **A04**/MF **A01**

Characterizing the Distribution of Observed Precipitation and Runoff over the Continental United States.
PB93-141570/REB 93-01 PC **A03**/MF **A01**

PR Notice 87-5. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-144087/REB 93-01 PC **A03**/MF **A01**

Enabling Document for Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants.
PB93-147007/REB 93-01 PC **A07**/MF **A02**

National Emission Standards for Hazardous Air Pollutants Compliance Extensions for Early Reductions: Background Information for Promulgated Standards.
PB93-149425/REB 93-01 PC **A08**/MF **A02**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1A. National Impacts Assessment.
PB93-156552/REB 93-01 PC **A08**/MF **A02**

Agricultural Pesticide Emissions Associated with Common Crops in the United States.
PB93-173136/REB 93-01 PC **A03**/MF **A01**

Evaluation of Environmental Marketing Terms in the United States.
PB93-175784/REB 93-01 PC **A10**/MF **A03**

Spatiotemporal Variability of Non-Urban Ozone Concentrations Over the Eastern United States and Its Potential Replication by Satellite Data.
PB93-191328/REB 93-01 PC **A03**/MF **A01**

Conservation Tillage Impacts on National Soil and Atmospheric Carbon Levels.
PB93-191500/REB 93-01 PC **A03**/MF **A01**

Future Context of Sustainable Agriculture: Planning for Uncertainty.
PB93-191518/REB 93-01 PC **A03**/MF **A01**

Forest Sector Carbon Budget of the United States: Carbon Pools and Flux under Alternative Policy Options.
PB93-196996/REB 93-01 PC **A10**/MF **A03**

Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).
PB93-222586/REB 93-04 PC **A01**/MF **A01**

Guidance Manual for the Review of Permitted and Civil Works Projects for the Ocean Disposal of Dredged Material.
PB93-223048/REB 93-04 PC **A14**/MF **A03**

Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC **A03**/MF **A01**

Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC **A03**/MF **A01**

International Trade in Environmental Protection Equipment: An Assessment of Existing Data.
PB93-236206/REB 93-04 PC **A04**/MF **A01**

**UNITED STATES GOVERNMENT**

Guide to Federal Water Quality Programs and Information: A Guide with Computer Software Developed by the Interagency Work Group on Water Quality.
PB93-186245/REB 93-01 PC **A09**/MF **A02**

**UNSATURATED SOILS**

VIRTUS, a Model of Virus Transport in Unsaturated Soils.
PB93-185890/REB 93-01 PC **A02**/MF **A01**

**URACIL MUSTARD**

Evaluation of the Potential Carcinogenicity of Uracil Mustard (66-75-1).
PB93-202265/REB 93-01 PC **A03**/MF **A01**

**URACILS**

Evaluation of the Potential Carcinogenicity of Uracil Mustard (66-75-1).
PB93-202265/REB 93-01 PC **A03**/MF **A01**

**URBAN AIRSHED MODE**

User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC **A99**/MF **A06**

**URBAN AIRSHED MODEL**

Development of an Improved Urban Airshed Modeling System.
PB93-120889/REB 93-01 PC **A03**/MF **A01**

**URBAN AREAS**

Air pollutants in urban areas. A bibliography 1985-1991.
DE93769990/REB 93-01 PC **A04**/MF **A01**

Laboratory Simulation of Turbulent Convection Over an Urban Heat Island.
PB93-120871/REB 93-01 PC **A02**/MF **A01**

Application of a Data-Assimilating Prognostic Meteorological Model to Two Urban Areas.
PB93-126571/REB 93-01 PC **A05**/MF **A01**

Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC **A03**/MF **A01**

Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03**/MF **A01**

Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC **A02**/MF **A01**

Study of Highway Vehicle Emission Inventory Procedures for Selected Urban Areas.
PB93-185577/REB 93-01 PC **A04**/MF **A01**

Source Apportionment of Air Pollution in China: Extending the Usefulness of Receptor Modeling by Combining Multivariate and Chemical Mass Balance Models.
PB93-185726/REB 93-01 PC **A03**/MF **A01**

Storm and Combined Sewer Overflow: An Overview of EPA's Research Program.
PB93-185957/REB 93-01 PC **A03**/MF **A01**

Urban Runoff Management Information/Education Products. Version 1.
PB93-190932/REB 93-01 PC **A09**/MF **A03**

Methodology for Analysis of Detention Basins for Control of Urban Runoff Quality.
PB93-223576/REB 93-04 PC **A04**/MF **A01**

Role of Ozone Precursors in Tropospheric Ozone Formation and Control: A Report to Congress.
PB93-226694/REB 93-04 PC **A04**/MF **A01**

Summary of Public Comments and EPA Responses on the Draft Report: The Role of Ozone Precursors in Tropospheric Ozone Formation and Control.
PB93-226702/REB 93-04 PC **A03**/MF **A01**

Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC **A02**/MF **A01**

**URBAN INTERSECTIONS**

Guideline for Modeling Carbon Monoxide from Roadway Intersections.
PB93-210391/REB 93-04 PC **A04**/MF **A01**

**URBAN RUNOFF**

Urban Runoff Management Information/Education Products. Version 1.
PB93-190932/REB 93-01 PC **A09**/MF **A03**

**URETHANE**

Evaluation of the Potential Carcinogenicity of Ethyl Carbamate (Urethane) (51-79-6).
PB93-192342/REB 93-01 PC **A03**/MF **A01**

**URINALYSIS**

Immunoassay for p-Nitrophenol in Urine (Chapter XX).
PB93-175552/REB 93-01 PC **A03**/MF **A01**

**US EPA**

Environmental Monitoring Methods Index. Version 1.0 Software. User's Manual.
PB92-169648/REB 93-01 PC **A06**/MF **A02**

Public Access: A How To Guide.
PB93-111029/REB 93-01 PC **A09**/MF **A03**

Information Technology Architecture.
PB93-122430/REB 93-01 PC **A03**/MF **A01**

Overview of Strategic Planning at the Environmental Protection Agency.
PB93-128064/REB 93-01 PC **A03**/MF **A01**

Enforcement Four-Year Strategic Plan: Enhanced Environmental Enforcement for the 1990's.
PB93-129724/REB 93-01 PC **A05**/MF **A01**

U.S. Environmental Protection Agency Advisory Committees Charters, Rosters and Accomplishments.
PB93-130094/REB 93-01 PC **A05**/MF **A01**

OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC **A04**/MF **A01**

Federal Policies and Technological Problem-Solving.
PB93-142107/REB 93-01 PC **A03**/MF **A01**

PR Notice 87-8. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-147015/REB 93-01 PC **A02**/MF **A01**

PR Notice 87-9. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149151/REB 93-01 PC **A01**/MF **A01**

PR Notice 87-10. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149169/REB 93-01 PC **A01**/MF **A01**

Highlights of the EPA Innovative Regulatory Strategies Workshop: Market-Based Incentives and other Innovations for Air Pollution Control. Summary of Workshop Discussion Sessions. Held in Washington, DC. on January 15-17, 1992.
PB93-150290/REB 93-01 PC **A05**/MF **A01**

Marine and Estuarine Protection: Programs and Activities.
PB93-179000/REB 93-01 PC **A03**/MF **A01**

TSCA Confidential Business Information Security Manual.
PB93-184844/REB 93-01 PC **A07**/MF **A02**

EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02**/MF **A01**

Risk Reduction Engineering Laboratory Site Remediation Technical Support Program: FY92 Annual Report.
PB93-217651/REB 93-04 PC **A03**/MF **A01**

Establishing Priorities in the U.S. EPA's Indoor Air Engineering Research Program.
PB93-221984/REB 93-04 PC **A02**/MF **A01**

Water Employees Together with America's Youth (WET WAY). Celebration of the 20th Anniversary of the Clean Water Act and Promotion of National Geography Awareness Week.
PB93-222941/REB 93-04 PC **A07**/MF **A02**

Office of Wastewater Enforcement and Compliance Strategic Plan.
PB93-223204/REB 93-04 PC **A03**/MF **A01**

Office of Wastewater Enforcement and Compliance (OWEC): Primer.
PB93-226736/REB 93-04 PC **A05**/MF **A01**

Environmental Protection Agency Civil Enforcement Docket.
PB93-921700/REB 93-01 Subscription

Superfund Response Action Contracts.
PB93-963292/REB 93-01 PC **A01**/MF **A01**

**USER MANUALS**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, June 1992. Record and Data Element Description.
PB93-100261/REB 93-01 PC **A03**/MF **A01**

Oil and Hazardous Materials Technical Assistance Data System, (OHM-TADS) Fields and Their Definitions. Users' Guide.
PB93-111706/REB 93-01 PC **A03**/MF **A01**

User's Manual for the BLIS BBS.
PB93-122422/REB 93-01 PC **A07**/MF **A02**

Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC **A05**/MF **A02**

**USER MANUALS (COMPUTER PROGRAMS)**

AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
PB93-100113/REB 93-01 PC **A10**/MF **A03**

PA-Score (Preliminary Assessment Score) User's Manual and Tutorial. Version 2.1.
PB93-108322/REB 93-01 PC **A05**/MF **A01**

User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC **A99**/MF **A06**

User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

Economic Growth Analysis System: User's Guide.
PB93-183416/REB 93-04 PC **A04**/MF **A01**

User's Manual for the Plume Visibility Model PLUVUE II (Revised).
PB93-188233/REB 93-01 PC **A06**/MF **A02**

PRELIM Version 4.0 Users Guide. Documentation for the EPA Computer Program for Development of Local Discharge Limitations under the Pretreatment Program. Data Tape Documentation.
PB93-192748/REB 93-04 PC **A05**/MF **A01**

**USSR**

Equilibrium Analysis of Carbon Pools and Fluxes of Forest Biomes in the Former Soviet Union.
PB93-191484/REB 93-01 PC **A02**/MF **A01**

**UTAH**

National Priorities List Sites: Utah, 1992.
PB93-963243/REB 93-01 PC **A04**/MF **A01**

**UTILITIES**

Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194181/REB 93-01 PC **A03**/MF **A01**

**UTILIZATION**

Investigation of Possible Uses of Surplus CFC/Halon Chemicals.
PB93-229771/REB 93-04 PC **A07**/MF **A02**

**V (D)J RECOMBINASE**

V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

**VACUUM EVAPORATION**

Recycling Nickel Electroplating Rinse Waters by Low Temperature Evaporation and Reverse Osmosis.
PB93-218865/REB 93-04 PC **A04**/MF **A01**

**VADOSE ZONE**

Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC **A03**/MF **A01**

**VALIDATION**

Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC **A03**/MF **A01**

**VAPOR DEPOSITION**

Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
PB93-123222/REB 93-01 PC **A02**/MF **A01**

**VAPORS**

Guidelines for Mercury Measurements from Stationary Sources: Quality Assurance Handbook. Section 3.19. Volume 3.
PB93-131209/REB 93-01 PC **A08**/MF **A02**

**VARIATION (GENETICS)**

Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC **A02**/MF **A01**

**VEGETATION**

Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).
PB93-212470/REB 93-04 PC **A03**/MF **A01**

Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.
PB93-229680/REB 93-04 PC **A03**/MF **A01**

**VEGETATION ESTABLISHMENT**

Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC **A03**/MF **A01**

**VENTILATION**

Modeling of Indoor Air Quality for a Personal Computer.
PB93-106771/REB 93-01 PC **A03**/MF **A01**

ASHRAE Standard 62: Ventilation for Acceptable Indoor Air Quality.
PB93-106797/REB 93-01 PC **A03**/MF **A01**

Evaluation of Ventilation Performance for Indoor Space.
PB93-212751/REB 93-04 PC **A02**/MF **A01**

Status of ASHRAE Standard 62. Ventilation for Acceptable Indoor Air Quality.
PB93-222040/REB 93-04 PC **A02**/MF **A01**

**VERMONT**

Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.
PB93-236438/REB 93-04 PC **A03**/MF **A01**

National Priorities List Sites: Vermont, 1992.
PB93-963244/REB 93-01 PC **A04**/MF **A01**

**VERTICAL MOTION**

Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03**/MF **A01**

**VINYL CHLORIDE**

Evaluation of the Potential Carcinogenicity of Vinyl Chloride (75-01-4).
PB93-202257/REB 93-01 PC **A03**/MF **A01**

**VIRAL PROTEINS**

Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
PB93-168946/REB 93-01 PC **A02**

**VIRGIN ISLANDS**

National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC **A04**/MF **A01**

**VIRGINIA**

National Priorities List Sites: Virginia, 1992.
PB93-963245/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.
PB93-963913/REB 93-04 PC **A03**/MF **A01**

**VIRULENCE**

*Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.*
PB93-231868/REB 93-04 PC **A02**/MF **A01**

**VIRUSES**

VIRTUS, a Model of Virus Transport in Unsaturated Soils.
PB93-185890/REB 93-01 PC **A02**/MF **A01**

**VISIBILITY**

Protecting Visibility in National Parks and Wilderness Areas.
PB93-186393/REB 93-01 PC **A20**/MF **A04**

User's Manual for the Plume Visibility Model PLUVUE II (Revised).
PB93-188233/REB 93-01 PC **A06**/MF **A02**

Workbook for Plume Visual Impact Screening and Analysis (Revised).
PB93-223592/REB 93-04 PC **A08**/MF **A02**

**VISUAL EVOKED POTENTIALS**

Summary of Workshop III: Evoked Potentials.
PB93-175610/REB 93-01 PC **A01**/MF **A01**

Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC **A03**/MF **A01**

**VISUAL INSPECTION**

Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC **A03**/MF **A01**

**VITRIFICATION**

Babcock and Wilcox Cyclone Furnace Vitrification Technology: Applications Analysis Report.
PB93-122315/REB 93-01 PC **A03**/MF **A01**

Babcock and Wilcox Cyclone Furnace Vitrification. Technology Demonstration Summary.
PB93-145621/REB 93-01 PC **A02**/MF **A01**

**VOC (VOLATILE ORGANIC COMPOUND)**

Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
PB93-204063/REB 93-01 PC **A02**/MF **A01**

**VOLATILE ORGANIC COMPOUNDS**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Groundwater and Soil Data.
PB92-228576/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Surface Water Data.
PB92-228584/REB 93-01 PC **A08**/MF **A02**

Technology Assessment of Soil Vapor Extraction and Air Sparging.
PB93-100154/REB 93-01 PC **A04**/MF **A01**

Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
PB93-101160/REB 93-01 PC **A06**/MF **A02**

Use of Surface-Coating-Free Materials for Reduction of Volatile Organic Compound Emissions from Coating Operations.
PB93-106839/REB 93-01 PC **A03**/MF **A01**

Global Inventory of Volatile Organic Compound Emissions from Anthropogenic Sources.
PB93-107001/REB 93-01 PC **A03**/MF **A01**

Modeling of the Fast Organic Emissions from a Wood-Finishing Product: Floor Wax.
PB93-107027/REB 93-01 PC **A02**/MF **A01**

Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC **A02**/MF **A01**

Evaluation of a Sorbent-Based Preconcentrated for Analysis of VOCs in Air Using Gas Chromatography-Atomic Emission Detection.
PB93-121077/REB 93-01 PC **A02**/MF **A01**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC **A02**/MF **A01**

Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
PB93-122307/REB 93-01 PC **A03**/MF **A01**

*Column Vapor Extraction Experiments on Gasoline Contaminated Soil.*
PB93-131514/REB 93-01 PC **A03**/MF **A01**

Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC **A03**/MF **A01**

Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC **A02**/MF **A01**

Volatile Organic Sampling Train Soot Interference Report.
PB93-144145/REB 93-01 PC **A04**/MF **A01**

Characterization of Organic Emission from a Wood Finishing Product-Wood Stain.
PB93-150100/REB 93-01 PC **A02**/MF **A01**

Control Techniques for Volatile Organic Compound Emissions from Stationary Sources, December 1992.
PB93-150258/REB 93-01 PC **A20**/MF **A04**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1A. National Impacts Assessment.
PB93-156552/REB 93-01 PC **A08**/MF **A02**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1B. Control Technologies.
PB93-156560/REB 93-01 PC **A13**/MF **A03**

Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1C. Model Emission Sources.
PB93-156578/REB 93-01 PC **A11**/MF **A03**

Compilation of Air Pollutant Emission Factors. Volume 1. Stationary Point and Area Sources. Supplement E.
PB93-157105/REB 93-01 PC **A10**/MF **A03**

Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

*Evaluation of Portable Gas Chromatographs.*
PB93-168813/REB 93-01 PC **A03**/MF **A01**

Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC **A03**/MF **A01**

Evaluation of Portable Multisorbent Air Samplers for Use with an Automated Multitube Analyzer.
PB93-172930/REB 93-01 PC **A05**/MF **A01**

Assessing Potential Exposures from Routine Use of VOC-Contaminated Groundwater.
PB93-173060/REB 93-01 PC **A02**/MF **A01**

Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC **A02**/MF **A01**

Alternative Control Technology Document: Carbon Reactivation Processes.
PB93-180826/REB 93-01 PC **A06**/MF **A02**

*Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.*
PB93-180891/REB 93-01 PC **A03**/MF **A01**

Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02**/MF **A01**

Field-Deployable Monitors for Volatile Organic Compounds in Air. (Essential Capabilities of a Portable Gas Chromatograph).
PB93-185700/REB 93-01 PC **A03**/MF **A01**

Air/Superfund National Technical Guidance Study Series. Models for Estimating Air Emission Rates from Superfund Remedial Actions.
PB93-186807/REB 93-01 PC A08/MF A02

VOC/HAP Emissions from Marine Vessel Loading Operations. Technical Support Document for Proposed Standards.
PB93-193910/REB 93-01 PC A13/MF A03

Alternative Control Technology Document: Control of VOC Emissions from the Application of Agricultural Pesticides.
PB93-199131/REB 93-01 PC A12/MF A03

Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC A11/MF A03

Recent Advances in Measuring Exhaled Breath and Estimating Exposure and Body Burden for Volatile Organic Compounds (VOCS).
PB93-212314/REB 93-04 PC A03/MF A01

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-214419/REB 93-04 PC A05/MF A01

Technology Evaluation Report: Site Program Demonstration Test. Accutech Pneumatic Fracturing Extraction and Hot Gas Injection, Phase 1. Volume 1.
PB93-216596/REB 93-04 PC A08/MF A02

VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC A02/MF A01

Fundamental Mass Transfer Models for Indoor Air Pollution Sources.
PB93-221992/REB 93-04 PC A02/MF A01

International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.
PB93-222073/REB 93-04 PC A02/MF A01

Volatile Organic Compound Model Quality Assurance and Sensitivity Testing (Version 1.8).
PB93-223022/REB 93-04 PC A01/MF A01

Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.
PB93-229363/REB 93-04 PC A03/MF A01

Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.
PB93-229425/REB 93-04 PC A03/MF A01

Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC A02/MF A01

Total Volatile Organic Concentrations in 2700 Personal, Indoor, and Outdoor Air Samples Collected in the US EPA Team Studies.
PB93-229730/REB 93-04 PC A03/MF A01

Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC A03/MF A01

Volatile Organic Compound/Particulate Matter Speciation Data Base Management System (SPECIATE), Version 1.5 (for Microcomputers).
PB93-505238/REB 93-01 CP D02

Superfund Record of Decision (EPA Region 2): Coeden Chemical Coatings, City of Beverly, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963618/REB 93-04 PC A04/MF A01

Superfund Record of Decision (EPA Region 2): Dover Municipal Well 4, Morris County, Dover, NJ. (First Remedial Action), September 1992.
PB93-963619/REB 93-04 PC A04/MF A01

Superfund Record of Decision (EPA Region 2): Ellis Property, Sharp Road, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963620/REB 93-04 PC A04/MF A01

Superfund Record of Decision (EPA Region 2): Endicott Village Well Field, Broome County, NY. (Third Remedial Action), September 1992.
PB93-963621/REB 93-04 PC A06/MF A01

Superfund Record of Decision (EPA Region 2): Facet Enterprises, Village of Elmira Heights, Chemung County, NY. (First Remedial Action), September 1992.
PB93-963622/REB 93-04 PC A07/MF A02

**VOLATILITY**

Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
PB93-204063/REB 93-01 PC A02/MF A01

Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.
PB93-210383/REB 93-04 PC A07/MF A02

**VOST METHOD**

Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180691/REB 93-01 PC A03/MF A01

**VOST (VOLATILE ORGANIC SAMPLING TRAIN)**

Replacement of Charcoal Sorbent in the VOST.
PB93-221893/REB 93-04 PC A03/MF A01

**WASHINGTON**

Taxonomic Level Sufficient for Assessing a Moderate Impact on Macrobenthic Communities in Puget Sound, Washington, USA.
PB93-185858/REB 93-01 PC A02/MF A01

**WASHINGTON (STATE)**

National Priorities List Sites: Washington, 1992.
PB93-963246/REB 93-01 PC A06/MF A02

**WASTE CODISPOSAL**

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC A10/MF A03

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC A15/MF A03

**WASTE DISPOSAL**

Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC A12/MF A03

Landfill Containment and Cover Systems.
PB93-106698/REB 93-01 PC A03/MF A01

Technical Support Document for the Surface Disposal of Sewage Sludge.
PB93-110591/REB 93-01 PC A15/MF A03

Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells.
PB93-115897/REB 93-01 PC A04/MF A01

Bioremediation of Hazardous Wastes.
PB93-116143/REB 93-01 PC A04/MF A01

Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC A03/MF A01

Development of Good Combustion Practice for Municipal Waste Combustors.
PB93-131613/REB 93-01 PC A03/MF A01

Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC A02/MF A01

Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC A02/MF A01

Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC A04/MF A01

Volatile Organic Sampling Train Soot Interference Report.
PB93-144145/REB 93-01 PC A04/MF A01

DNAPL Site Evaluation.
PB93-150217/REB 93-01 PC A16/MF A03

Inside the Hotline: A Compilation of 1992 Monthly Hotline Reports.
PB93-159572/REB 93-01 PC A05/MF A01

Commencement Bay Nearshore/Tideflats Feasibility Study. Executive Summary.
PB93-181220/REB 93-01 PC A06/MF A02

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
PB93-181238/REB 93-01 PC A25/MF A06

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 2. Appendices.
PB93-181246/REB 93-01 PC A18/MF A04

Commencement Bay Nearshore/Tideflats Feasibility Study. Development of Sediment Cleanup Goals.
PB93-181253/REB 93-01 PC A05/MF A01

Instruction Manual for the Resource Conservation and Recovery Information System (RCRIS) Extract Data Tapes.
PB93-183499/REB 93-04 PC A03/MF A01

Resource Conservation and Recovery Information System (RCRIS) Data Element Dictionary.
PB93-192656/REB 93-04 PC A24/MF A04

PREscore Software: Users Manual and Tutorial Version 2.0.
PB93-192698/REB 93-04 PC A05/MF A01

Hazardous Waste Management Planning Needs and Practices: A Review of Several State Agency Approaches.
PB93-193225/REB 93-04 PC A04/MF A01

Reporting and Recordkeeping Requirements for Waste Disposal: A Field Guide.
PB93-199115/REB 93-01 PC A03/MF A01

Air/Superfund National Technical Guidance Study Series. Volume 4. Guidance for Ambient Air Monitoring at Superfund Sites (Revised).
PB93-199214/REB 93-01 PC A08/MF A02

Air/Superfund National Technical Guidance Study Series: Compilation of Information on Real-Time Air Monitoring for Use at Superfund Sites.
PB93-199222/REB 93-04 PC A05/MF A02

Guide to the Asbestos NESHAP as Revised November 1990.
PB93-199362/REB 93-01 PC A04/MF A01

Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC A03/MF A01

Air/Superfund National Technical Guidance Study Series: Evaluation of Short-Term Air Action Levels for Superfund Sites.
PB93-200913/REB 93-01 PC A14/MF A03

INSEA User's Manual Environmental Performance Model of Incineration at Sea Operations.
PB93-206977/REB 93-04 PC A07/MF A02

Geotechnical Systems for Structures on Contaminated Sites: A Technical Guidance Document.
PB93-209419/REB 93-04 PC A08/MF A02

Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC A19/MF A04

Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212538/REB 93-04 PC A03/MF A01

Comparison of Methods for Estimating Global Methane Emissions from Landfills.
PB93-212561/REB 93-04 PC A03/MF A01

Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC A02/MF A01

Assessment and Control of Bioconcentratable Contaminants in Surface Waters.
PB93-229813/REB 93-04 PC A13/MF A03

Recent Developments in Cleanup Technologies.
PB93-236289/REB 93-04 PC A03/MF A01

PA-Score (Preliminary Assessment Score), Version 2.1, 5 1/4 inch (for Microcomputers).
PB93-500346/REB 93-01 CP D02

PA-Score (Preliminary Assessment Score), Version 2.1, 3 1/2 inch (for Microcomputers).
PB93-500353/REB 93-01 CP D02

Resource Conservation and Recovery Information System (RCRIS) Extract Tapes.
PB93-592570/REB 93-04 SubscriptionPC$2540.00

Standard Document for Remedial Site Assessment Decisions.
PB93-963268/REB 93-01 PC A01/MF A01

Superfund Accelerated Cleanup Model (SACM): Questions and Answers.
PB93-963286/REB 93-04 PC A01/MF A01

Response Action Contractor Final Indemnification Guidelines. Volume 2, Number 1, March 1993.
PB93-963290/REB 93-01 PC A01/MF A01

Further Direction on Implementing the Superfund Accelerated Cleanup Model (SACM).
PB93-963291/REB 93-01 PC A02/MF A01

Superfund Administrative Improvements. Executive Summary.
PB93-963294/REB 93-04 PC A03/MF A01

Superfund Administrative Improvements. Final Report.
PB93-963295/REB 93-04 PC A04/MF A01

Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis.
PB93-963297/REB 93-04 PC A03/MF A01

Cost of Remedial Action Model.
PB93-963304/REB 93-04 PC A01/MF A01

Cost of Remedial Actions (CORA) Model: Overview and Applications.
PB93-963318/REB 93-04 PC A03/MF A01

Technology Selection Guide for Wood Treater Sites.
PB93-963329/REB 93-04 PC A02/MF A01

ATSDR Health Consultations under CERCLA.
PB93-963334/REB 93-01 PC A01/MF A01

Ensuring the Adequacy of Cost Share Provisions in Superfund State Contracts.
PB93-963336/REB 93-01 PC A03/MF A01

PA Review Checklist.
PB93-963342/REB 93-04 PC A03/MF A01

Site Assessment: Evaluating Risks at Superfund Sites.
PB93-963347/REB 93-04 PC A02/MF A01

Expedited Response Actions.
PB93-963410/REB 93-01 PC A02/MF A01

Guidance on Implementation of the 'Contribute to Remedial Performance' Provision.
PB93-963413/REB 93-04 PC A02/MF A01

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Harvey and Knott Drum Site, New Castle County, Delaware).
PB93-963614/REB 93-04 PC A01/MF A01

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Fulton Terminals Site Profile, Oswego County, NY).
PB93-963616/REB 93-04 PC A02/MF A01

Guidance on CERCLA Settlements with De Micromis Waste Contributors.
PB93-963619/REB 93-04 PC A03/MF A01

Superfund Record of Decision (EPA Region 1): Darling Hill Dump, Lyndon, VT. (First Remedial Action), June 1992.
PB93-963702/REB 93-01 PC A03/MF A01

Superfund Record of Decision (EPA Region 1): Revere Textile Prints, Sterling, CT. (First Remedial Action), September 1992.
PB93-963703/REB 93-04 PC A03/MF A01

Superfund Record of Decision (EPA Region 1): Otis Air National Guard/Camp Edwards, MA. (First Remedial Action), May 1992.
PB93-963704/REB 93-04 PC A05/MF A01

Superfund Record of Decision (EPA Region 1): Town Garage Radio Beacon, Londonderry, NH. (First Remedial Action), September 1992.
PB93-963705/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 1): Brunswick Naval Air Station, Operable Unit 2, ME. (Second Remedial Action), June 1992.
PB93-963706/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 1): Newport Naval Education/Training Center, Newport, RI. (First Remedial Action), September 1992.
PB93-963707/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 1): PSC Resources Site, Palmer, MA. (First Remedial Action), September 1992.
PB93-963708/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 1): Tibbetts Road, Barrington, NH. (First Remedial Action), September 1992.
PB93-963709/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 2): Ramapo Landfill Site, Rockland County, NY. (First Remedial Action), March 1992.
PB93-963801/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Pasley Solvents and Chemicals, Town of Hempstead, Nassau County, NY. (First Remedial Action), April 1992.
PB93-963805/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 2): Bioclinical Laboratories, Town of Islip, Suffolk County, NY. (First Remedial Action), September 1992.
PB93-963807/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): FAA Technical Center, Atlantic County, Atlantic City International Airport, NJ. (Third Remedial Action), September 1992.
PB93-963808/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 5), Lakehurst, NJ. (Sixth Remedial Action), January 1992.
PB93-963809/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 6), Lakehurst, NJ. (Fifth Remedial Action), December 1991.
PB93-963810/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): North Sea Municipal Landfill, Suffolk County, Southampton, NY. (Second Remedial Action), September 1992.
PB93-963811/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Witco Chemical (Oakland Plant), Bergen County, Oakland, NJ. (First Remedial Action), September 1992.
PB93-963812/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Higgins Farm, Franklin Township, Somerset County, NJ. (Second Remedial Action), September 1992.
PB93-963813/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Evor Phillips Leasing Company, Old Bridge Township, Middlesex County, NJ. (First Remedial Action), September 1992.
PB93-963814/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 1), Clinton County, NY. (First Remedial Action), September 1992.
PB93-963815/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 3), Clinton County, NY. (Second Remedial Action), September 1992.
PB93-963816/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Preferred Plating, Suffolk County, Farmingdale, NY. (Second Remedial Action), September 1992.
PB93-963817/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 2): Facet Enterprises, Village of Elmira Heights, Chemung County, NY. (First Remedial Action), September 1992.
PB93-963822/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 2): Imperial Oil/Champion Chemicals, Monmouth County, NJ. (Second Remedial Action), September 1992.
PB93-963823/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Industrial Latex, Bergen County, Wallington, NJ. (First Remedial Action), September 1992.
PB93-963824/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Islip Municipal Sanitary Landfill, Town of Islip, NY. (First Remedial Action), September 1992.
PB93-963825/REB 93-04 PC **A05**/MF **A02**

Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 7), Ocean County, NJ. (Seventh Remedial Action), March 1992.
PB93-963826/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Rowe Industries Groundwater Contamination, Sag Harbor, NY. (First Remedial Action), September 1992.
PB93-963827/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, (Operable Unit 5), Richmond, VA. (First Remedial Action), March 1992.
PB93-963901/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Dublin Water Supply, Bucks County, PA. (First Remedial Action), December 1991.
PB93-963903/REB 93-01 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 3): MW Manufacturing Site, Montour County, PA. (Subsequent Remedial Action), June 1992.
PB93-963904/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Dixie Caverns Landfill Site, Operable Unit 2, Roanoke County, VA. (Second Remedial Action), September 1992.
PB93-963907/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.
PB93-963912/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.
PB93-963913/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Eastern Diversified Metals Site, Schuylkill County, Hometown, PA. (Second Remedial Action), July 1992.
PB93-963914/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): USA Aberdeen, Operable Unit One, Michaelsville, MD. (Second Remedial Action), June 1992.
PB93-963915/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Strasburg Landfill, Newlin Township, Chester County, PA. (Third Remedial Action), March 1992.
PB93-963916/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Abex Corporation, Portsmouth, VA. (First Remedial Action), September 1992.
PB93-963917/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 3): Brown's Battery Breaking, Tilden Township, Berks County, PA. (Second Remedial Action), July 1992.
PB93-963918/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Butz Landfill, Pocono and Jackson Townships, Monroe County, PA. (Second Remedial Action), June 1992.
PB93-963919/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Commodore Semiconductor Group, Lower Providence Township, PA. (First Remedial Action), September 1992.
PB93-963920/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 3): Rhinehart Tire Fire Dump, Operable Unit 2, Winchester, VA. (Second Remedial Action), September 1992.
PB93-963921/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 3): Tonolli Corporation, Nesquehoning Borough, Carbon County, PA. (First Remedial Action), September 1992.
PB93-963922/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, Operable Unit 1, Richmond, VA. (First Remedial Action), May 1992.
PB93-963923/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964009/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.
PB93-964010/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964011/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.
PB93-964012/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), A/M Area Groundwater Operable Unit 3, Aiken County, SC. (Third Remedial Action), June 1992.
PB93-964013/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Standard Auto Bumper Site, Dade County, Hialeah, FL. (First Remedial Action), September 1992.
PB93-964014/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Yellow Water Road Dump, Duval County, Baldwin, FL. (Second Remedial Action), June 1992.
PB93-964015/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): National Electric Coil/Cooper Industries, KY. (First Remedial Action), September 1992.
PB93-964016/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Agrico Chemical, Escambia County, Pensacola, FL. (First Remedial Action), September 1992.
PB93-964017/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Benfield Industries, Haywood County, Hazelwood, NC. (First Remedial Action), July 1992.
PB93-964018/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 4): Carrier Air Conditioning, Collierville, TN. (First Remedial Action), September 1992.
PB93-964019/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Florida Steel Corporation, Martin County, Indiantown, FL. (First Remedial Action), June 1992.
PB93-964020/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Madison County Sanitary Landfill, Madison, FL. (First Remedial Action), September 1992.
PB93-964021/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 4): Milan Army Ammunition Plant, TN. (First Remedial Action), September 1992.
PB93-964022/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 1, SC. (First Remedial Action), June 1992.
PB93-964023/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 2, SC. (Second Remedial Action), June 1992.
PB93-964024/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation, Operable Unit 6, Roane County, TN. (Fourth Remedial Action), September 1992.
PB93-964025/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): USMC Camp Lejeune Military Reservation, NC. (First Remedial Action), September 1992.
PB93-964026/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Grand Traverse Overall Supply Site, Greilickville, MI. (First Remedial Action), February 1992.
PB93-964101/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Midco II, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964102/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): Twin Cities AF Reserve (SAR Landfill), MN. (First Remedial Action), March 1992.
PB93-964103/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Columbus Old Municipal Landfill, Columbus, IN. (First Remedial Action), March 1992.
PB93-964104/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Clare Water Supply Site, Clare County, Clare, MI. (Second Remedial Action), September 1992.
PB93-964106/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Kohler Landfill, Kohler, WI. (First Remedial Action), March 1992.
PB93-964111/REB 93-01 PC **A05**/MF **A02**

Superfund Record of Decision (EPA Region 5): Metal Working Shop, Benzie County, Lake Ann, MI. (First Remedial Action), June 1992.
PB93-964113/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Savanna Army Depot, Savanna, IL. (First Remedial Action), March 1992.
PB93-964116/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Torch Lake Site, Operable Units 1 and 3, Houghton County, MI. (First Remedial Action), September 1992.
PB93-964120/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Alsco Anaconda Site, Gnadenhutten, OH. (Second Remedial Action), September 1992.
PB93-964121/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Butterworth No. 2 Landfill Site, Grand Rapids, MI. (First Remedial Action), September 1992.
PB93-964122/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 1, Anoka County, Andover, MN. (Second Remedial Action), (Amendment), June 1992.
PB93-964123/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Reilly Tar and Chemical, St. Louis Park, MN. (Fourth Remedial Action), September 1992.
PB93-964124/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): American Chemical Services, Griffith, IN. (First Remedial Action), September 1992.
PB93-964125/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): Cannelton Industries Site, Sault Sainte Marie, MI. (First Remedial Action), September 1992.
PB93-964126/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): Central Illinois Public Service, Taylorville Manufactured Gas Plant Site, Christian County, IL. (First Remedial Action), September 1992.
PB93-964127/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): City Disposal Sanitary Landfill, Dane County, WI. (First Remedial Action), September 1992.
PB93-964128/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): H. Brown Company, Walker, MI. (First Remedial Action), September 1992.
PB93-964129/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): MIDCO I, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964130/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 5): New Brighton/Arden Hills, Ramsey County, MN. (Eighth Remedial Action), September 1992.
PB93-964131/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 2, Anoka County, Andover, MN. (Second Remedial Action), December 1992.
PB93-964132/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 5): Tri County/Elgin Landfill Site, Elgin, IL. (First Remedial Action), September 1992.
PB93-964133/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 2), Vermilion Parish, LA. (First Remedial Action), September 1992.
PB93-964206/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 1), Vermilion Parish, LA. (Second Remedial Action), September 1992.
PB93-964207/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 6): Koppers (Texarkana Plant), TX. (First Remedial Action), (Amendment), March 1992.
PB93-964208/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 6): Prewitt Abandoned Refinery, Prewitt, NM. (First Remedial Action), September 1992.
PB93-964209/REB 93-04 PC **A09**/MF **A02**

Superfund Record of Decision (EPA Region 6): Double Eagle Refinery, Oklahoma City, OK. (First Remedial Action), September 1992.
PB93-964210/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.
PB93-964304/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 7): Pester Refinery, Butler County, El Dorado, KS. (First Remedial Action), September 1992.
PB93-964305/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Denver Radium, Operable Unit 9, Denver, CO. (Eighth Remedial Action), December 1991.
PB93-964402/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Hill Air Force Base, UT. (Second Remedial Action), September 1992.
PB93-964403/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), (Operable Unit 4), Golden, CO. (Third Remedial Action), April 1992.
PB93-964404/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 8): Denver Radium Site, Operable Unit 8, Denver, CO. (Ninth Remedial Action), January 1992.
PB93-964405/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 8): Idaho Pole National Priorities List Site, Bozeman, MT. (First Remedial Action), September 1992.
PB93-964406/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 1, Weber County, UT. (Second Remedial Action), June 1992.
PB93-964407/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 3, Weber County, UT. (Fourth Remedial Action), September 1992.
PB93-964408/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 4, UT. (Third Remedial Action), September 1992.
PB93-964409/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 8): Portland Cement Co. (Kiln Dust No. 2 and No. 3), Operable Unit 2, Salt Lake City, UT. (Second Remedial Action), March 1992.
PB93-964410/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), Operable Unit 2, Golden, CO. (Fourth Remedial Action), September 1992.
PB93-964411/REB 93-04 PC **A19**/MF **A04**

Superfund Record of Decision (EPA Region 8): Silver Bow Creek/Butte Area, MT. (Second Remedial Action), June 1992.
PB93-964412/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 9): Westinghouse Electric (Sunnyvale Plant), Sunnyvale, CA. (First Remedial Action), October 1991.
PB93-964501/REB 93-01 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 9): Hassayampa Landfill, AZ. (First Remedial Action), August 1992.
PB93-964505/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 9): Iron Mountain Mine, Shasta County, CA. (Second Remedial Action), September 1992.
PB93-964506/REB 93-04 PC **A06**/MF **A02**

Superfund Record of Decision (EPA Region 9): Jasco Chemical Company, Mountain View, CA. (First Remedial Action), September 1992.
PB93-964507/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 9): Purity Oil Sales, Fresno County, CA. (Second Remedial Action), September 1992.
PB93-964508/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 3, Sacramento, CA. (Second Remedial Action), December 1991.
PB93-964509/REB 93-04 PC **A09**/MF **A03**

Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 4, Sacramento, CA. (Third Remedial Action), September 1992.
PB93-964510/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 10): Elmendorf Air Force Base, Operable Unit 2, Source Area ST41, Anchorage, AK. (First Remedial Action), September 1992.
PB93-964604/REB 93-01 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Arrcom (Drexler Enterprise), Rathdrum, ID. (First Remedial Action), June 1992.
PB93-964606/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Fort Lewis Military Reservation, Landfill No. 5, Pierce County, WA. (First Remedial Action), July 1992.
PB93-964607/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Pesticide Laboratory, Yakima, WA. (First Remedial Action), September 1992.
PB93-964608/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Naval Air Station Whidbey Island - Ault Field, (Operable Unit 1, Area 6), Oak Harbor, WA. (First Remedial Action), April 1992.
PB93-964609/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Umatilla Army Depot (Lagoons), Soils Operable Unit 2, Hermiston, OR. (First Remedial Action), September 1992.
PB93-964610/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Bunker Hill Mining and Metallurgical Complex, Shoshone County, ID. (Second Remedial Action), September 1992.
PB93-964611/REB 93-04 PC **A08**/MF **A02**

Superfund Record of Decision (EPA Region 10): Eielson Air Force Base, AK. (First Remedial Action), September 1992.
PB93-964612/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): Joseph Forest Products, Wallowa County, OR. (First Remedial Action), September 1992.
PB93-964613/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): McChord AFB, Washrack Treatment Area, WA. (First Remedial Action), September 1992.
PB93-964614/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 2, ID. (Third Remedial Action), September 1992.
PB93-964615/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 22, ID. (Fourth Remedial Action), September 1992.
PB93-964616/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 23, ID. (Second Remedial Action), June 1992.
PB93-964617/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 10): Wyckoff/Eagle Harbor, WA. (First Remedial Action), September 1992.
PB93-964618/REB 93-04 PC **A07**/MF **A02**

**WASTE MANAGEMENT**

Index to the Monthly Hotline Report Questions (June 1982 to December 1991).
PB92-131374/REB 93-01 PC **A07**/MF **A02**

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown Refinery. Refinery Release Inventory.
PB92-228550/REB 93-01 PC **A12**/MF **A03**

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown, Virginia. Ecological Impacts of the Yorktown Refinery on the York River Estuarine Environment.
PB92-228634/REB 93-01 PC **A05**/MF **A01**

ARARs Fact Sheet: Compliance with the Clean Air Act and Associated Air Quality Requirements.
PB92-963282/REB 93-01 PC **A03**/MF **A01**

Superfund: Qualified Disadvantaged Business Utilization in State Response.
PB92-963283/REB 93-01 PC **A01**/MF **A01**

Superfund Accelerated Cleanup Model (SACM). Volume 1, Number 4, November 1992.
PB92-963287/REB 93-01 PC **A01**/MF **A01**

Superfund: Report of the EPA Superfund Revitalization Public Meeting Held on June 24, 1992. Volumes 1 and 2.
PB92-963288/REB 93-01 PC **A06**/MF **A02**

Guidance for Performing Site Inspections under CERCLA.
PB92-963375/REB 93-01 PC **A11**/MF **A03**

Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC **A22**/MF **A04**

Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC **A09**/MF **A02**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Valley of the Drums, Bullitt County, Kentucky).
PB92-963618/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (American Thermostat Corporation, New York).
PB92-963627/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Wide Beach Section of Brant, New York).
PB92-963628/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Krysowaty Farm, Hillsborough, New Jersey).
PB92-963629/REB 93-01 PC **A02**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Ciba-Geigy Corporation, McIntosh, Alabama).
PB92-963630/REB 93-01 PC **A02**/MF **A01**

Guides to Pollution Prevention: The Metal Finishing Industry.
PB93-100105/REB 93-04 PC **A04**/MF **A01**

Technical Guidance Document: Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems.
PB93-105625/REB 93-01 PC **A05**/MF **A02**

Results of U.S. EPA Research Waste Combustion Residues.
PB93-106672/REB 93-01 PC **A03**/MF **A01**

FLEX: An Expert System for Reviewing the Chemical Resistance of Flexible Membrane Liners for Waste Management.
PB93-106706/REB 93-01 PC **A03**/MF **A01**

Resistance of Membranes in Cover Systems to Root Penetration by Grass and Trees.
PB93-106714/REB 93-01 PC **A02**/MF **A01**

Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC **A02**/MF **A01**

Opportunities for Pollution Prevention Research to Support the 33/50 Program.
PB93-107266/REB 93-01 PC **A06**/MF **A02**

PA-Score (Preliminary Assessment Score) User's Manual and Tutorial. Version 2.1.
PB93-108322/REB 93-01 PC **A05**/MF **A01**

Technology Needs and Emerging Technologies (Joint Environmental Restoration and Waste Management Activities).
PB93-111052/REB 93-01 PC **A10**/MF **A03**

Use of Inoculation in Bioremediation.
PB93-121150/REB 93-01 PC **A03**/MF **A01**

Guides to Pollution Prevention: The Mechanical Equipment Repair Industry.
PB93-121317/REB 93-01 PC **A03**/MF **A01**

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Quick Reference Fact Sheet.
PB93-121325/REB 93-01 PC **A02**/MF **A01**

Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
PB93-121333/REB 93-01 PC **A03**/MF **A01**

Superfund Engineering Issue: Considerations for Evaluating the Impact of Metals Partitioning during the Incineration of Contaminated Soils from Superfund Sites.
PB93-121341/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Symposium on Soil Venting. Held in Houston, Texas on April 29-May 1, 1991.
PB93-122323/REB 93-01 PC **A15**/MF **A03**

Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
PB93-123016/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
PB93-123024/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Penny Blanks and Zinc Products.
PB93-123107/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
PB93-123115/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
PB93-123123/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
PB93-123131/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
PB93-123149/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for an Autobody Repair Facility.
PB93-123156/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
PB93-123164/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Artists Supply Paints.
PB93-123172/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Wire Stock Used for Production of Metal Items.
PB93-123180/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
PB93-123198/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
PB93-123206/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
PB93-123214/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
PB93-123222/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
PB93-123230/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
PB93-123248/REB 93-01 PC **A02**/MF **A01**

Bioremediation: An Information Update on Applying Bioremediation to Site Cleanup.
PB93-126175/REB 93-01 PC **A03**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Hardened Steel Gears.
PB93-126282/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
PB93-126290/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fine Chemicals Using Batch Processes.
PB93-126308/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of General Purpose Paints and Painting Supplies.
PB93-126316/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Printing Plate Preparation Section of a Newspaper.
PB93-126563/REB 93-01 PC **A02**/MF **A01**

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Remedy Selection. Interim Guidance.
PB93-126597/REB 93-01 PC **A03**/MF **A01**

Waste Minimization Assessment for a Manufacturer Producing Printed Circuit Boards.
PB93-126621/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for an Electrical Utility Transmission System Monitoring and Maintenance Facility.
PB93-126639/REB 93-01 PC **A02**/MF **A01**

Opportunities for the Use of Geosynthetics in Waste Management Facilities.
PB93-131670/REB 93-01 PC **A03**/MF **A01**

Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC **A03**/MF **A01**

Proceedings: Interagency Symposium (2nd) on Stabilization of Soils and Other Materials. Held in Metairie, Louisiana on November 2-5, 1992.
PB93-131977/REB 93-01 PC **A17**/MF **A04**

RCRA Ground-Water Monitoring: Draft Technical Guidance.
PB93-139350/REB 93-01 PC **A10**/MF **A03**

OSWER Source Book. Volume 1. Training and Technology Transfer Resources, 1992-1993.
PB93-143980/REB 93-01 PC **A10**/MF **A03**

OSWER Source Book. Volume 2. Training and Technology Transfer Resources, 1992-1993.
PB93-144129/REB 93-01 PC **A11**/MF **A03**

Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention Opportunity Assessment: USDA Beltsville Agricultural Research Center.
PB93-146843/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention Opportunity Assessment: Manufacturing and Fabrication Repair Laboratory at Sandia National Laboratories.
PB93-146868/REB 93-01 PC **A03**/MF **A01**

Pollution Prevention Opportunity Assessment: Geochemistry Laboratory, Sandia National Laboratories.
PB93-146900/REB 93-01 PC **A03**/MF **A01**

U.S. EPA's QA/QC Program for Waste Management Facilities. Proceedings of the GRI Seminar (6th), MQC/MQA and CQC/CQA of Geosynthetics. Held in Philadelphia, Pennsylvania on December 10-11, 1992.
PB93-149219/REB 93-01 PC **A02**/MF **A01**

Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC **A03**/MF **A01**

Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC **A03**/MF **A01**

Economic Impacts of RCRA Regulations on the Plating and Polishing Industry.
PB93-158988/REB 93-01 PC **A07**/MF **A02**

Inside the Hotline: A Compilation of 1992 Monthly Hotline Reports.
PB93-159572/REB 93-01 PC **A05**/MF **A01**

Life Cycle Design Guidance Manual. Environmental Requirements and the Product System.
PB93-164507/REB 93-04 PC **A09**/MF **A03**

Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC **A03**/MF **A01**

Contingency Analysis Modeling for Superfund Sites and Other Sources.
PB93-169126/REB 93-01 PC **A13**/MF **A03**

Petitions to Delist Hazardous Wastes: A Guidance Manual. Second Edition.
PB93-169365/REB 93-01 PC **A08**/MF **A02**

Proceedings of the National United States Environmental Protection Agency Conference on Household Hazardous Waste Management (7th). Held in Minneapolis, Minnesota on December 8-12, 1992.
PB93-170116/REB 93-01 PC **A99**/MF **A06**

RCRA Implementation Plan, FY 1993.
PB93-176956/REB 93-01 PC **A05**/MF **A02**

Site Enforcement Tracking System (SETS): PRP Listing by Site for Region 4.
PB93-177178/REB 93-01 PC **A99**

LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC **A05**/MF **A01**

Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-183440/REB 93-04 PC **A05**/MF **A01**

Environmental Characteristics of EPA, NRC, and DOE Sites Contaminated with Radioactive Substances.
PB93-185551/REB 93-01 PC **A05**/MF **A01**

Planning and Progress of EPA's Pollution Prevention Research Program.
PB93-185767/REB 93-01 PC **A02**/MF **A01**

Hazardous Waste Management Planning Needs and Practices: A Review of Several State Agency Approaches.
PB93-193225/REB 93-04 PC **A04**/MF **A01**

Broad-Based Environmental Life Cycle Assessment.
PB93-199495/REB 93-01 PC **A02**/MF **A01**

Abstract Proceedings: Superfund Technical Support Project General Meeting. Held in Athens, Georgia on December 3-6, 1990.
PB93-205862/REB 93-04 PC **A03**/MF **A01**

Bioremediation in the Field: Number 1, November 1990.
PB93-206340/REB 93-04 PC **A03**/MF **A01**

Toxics Release Inventory. Public Data Release. State Fact Sheets, 1991.
PB93-208668/REB 93-04 PC **A06**/MF **A02**

Guidance for Capacity Assurance Planning. Capacity Planning Pursuant to CERCLA Section 104(c)(9).
PB93-209898/REB 93-04 PC **A09**/MF **A02**

Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.
PB93-212801/REB 93-04 PC **A03**/MF **A01**

Environmental Monitoring Issues: Results of Workshops Held in July 1992 as Part of EPA's Eighth Annual Waste Testing and Quality Assurance Symposium.
PB93-216075/REB 93-04 PC **A12**/MF **A03**

Instruction Manual for the Biennial Reporting System (BRS) NTIS Data Tape.
PB93-233740/REB 93-04 PC **A05**/MF **A01**

Hazardous Waste Report, 1991: Instructions and Forms.
PB93-233757/REB 93-04 PC **A08**/MF **A02**

Opportunities and Challenges for Local Emergency Planning Committees: Bestseller in EPCRA.
PB93-234789/REB 93-04 PC **A02**/MF **A01**

Technical Resource Document: Solidification/Stabilization and Its Application to Waste Materials.
PB93-237535/REB 93-04 PC **A16**/MF **A03**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 3) (for Microcomputers).
PB93-500270/REB 93-01 CP **D02**

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 2) (for Microcomputers).
PB93-500288/REB 93-01 CP **D02**

Toxic Release Inventory (TRI), 1987-1990 (on CD-ROM).
PB93-500742/REB 93-01 CD-ROM$45.00

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 3) (for Microcomputers).
PB93-505352/REB 93-04 CP **D02**

Toxic Release Inventory, (TRI), 1991.
PB93-505873/REB 93-04 CP **T14**

Biennial Reporting System (BRS) 1989 (Date of Coverage: 1989).
PB93-507044/REB 93-04 CP **T04**

Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP.
PB93-963252/REB 93-01 PC **A03**/MF **A01**

Exercising Flexibility through the Superfund Accelerated Cleanup Model (SACM).
PB93-963253/REB 93-01 PC **A01**/MF **A01**

Superfund Progress: Fall/Winter 1992.
PB93-963254/REB 93-01 PC **A03**/MF **A01**

Superfund Progress. Aficionado's Version. Progress as of September 30, 1992.
PB93-963255/REB 93-01 PC **A03**/MF **A01**

Superfund Records of Decision Update. Volume 7, Number 2, November 1992.
PB93-963256/REB 93-01 PC **A02**/MF **A01**

Overview of the Outyear Liability Model (OLM).
PB93-963259/REB 93-01 PC **A02**/MF **A01**

Superfund: EPA/ICMA Superfund Revitalization Conference. Held in Chicago, Illinois on November 12-13, 1992.
PB93-963274/REB 93-01 PC **A04**/MF **A01**

Initiatives to Streamline the Alternative Remedial Contracting Strategy (ARCS) Contracts' Award Fee Process.
PB93-963275/REB 93-01 PC **A03**/MF **A01**

Performance Tracking under ARCS Contracts.
PB93-963276/REB 93-01 PC **A01**/MF **A01**

Amendment to Historical Definitions of NPL Deletion Start and Completion Dates.
PB93-963278/REB 93-01 PC **A01**/MF **A01**

Identification of a Senior Superfund Official for Addressing Special NPL Site-Related Issues.
PB93-963279/REB 93-01 PC **A01**/MF **A01**

Guidance on Program Management Activities under ARCS.
PB93-963280/REB 93-01 PC **A03**/MF **A01**

Clarification of Delegation to Approve Consistency Exemptions at NPL Sites.
PB93-963281/REB 93-01 PC **A01**/MF **A01**

Use of Time and Materials and Cost Reimbursement Subcontracts for Remedial Actions under the Alternative Remedial Contracting Strategy Contracts.
PB93-963282/REB 93-01 PC **A02**/MF **A01**

Smart Moves in Superfund - Regional Pilots and Initiatives. Volume 1, Number 2, September 1992.
PB93-963283/REB 93-01 PC **A01**/MF **A01**

Smart Moves in Superfund - Revitalization One Year Later. Volume 1, Number 3, January 1993.
PB93-963284/REB 93-01 PC **A01**/MF **A01**

HSED SACM Report. Volume 1, Number 1, January 1993.
PB93-963289/REB 93-01 PC **A01**/MF **A01**

Superfund Response Action Contracts.
PB93-963292/REB 93-01 PC **A01**/MF **A01**

SARA '200' Remedial Action Starts Requirement.
PB93-963324/REB 93-01 PC **A01**/MF **A01**

Permits and Permit 'Equivalency' Processes for CERCLA On-Site Response Actions.
PB93-963325/REB 93-01 PC **A02**/MF **A01**

Compendium of ROD Language for FY 1993 Focus Areas.
PB93-963328/REB 93-01 PC **A04**/MF **A01**

Discussions with the Public Concerning NPL Listings.
PB93-963338/REB 93-01 PC **A03**/MF **A01**

OSWER Integrated Health and Safety Standard Operating Practices.
PB93-963401/REB 93-01 PC **A01**/MF **A01**

Reassignment of CLP Transportation Functions.
PB93-963501/REB 93-01 PC **A01**/MF **A01**

Extending the Tracking of Analytical Services to Potentially Responsible Party-Lead Superfund Sites (Supplemental Guidance on OSWER Directive 9240.0-2A).
PB93-963502/REB 93-01 PC **A03**/MF **A01**

Superfund Accelerated Cleanup Model (SACM) Coordination Strategy.
PB94-963201/REB 93-04 PC **A01**/MF **A01**

**WASTE MINIMIZATION**

Opportunities for Pollution Prevention Research to Support the 33/50 Program.
PB93-107266/REB 93-01 PC **A06**/MF **A02**

User's Guide: Strategic Waste Minimization Initiative (SWAMI) Version 2.0: A Software Tool to Aid in Process Analysis for Pollution Prevention.
PB93-116291/REB 93-01 PC **A05**/MF **A01**

Guides to Pollution Prevention: The Mechanical Equipment Repair Industry.
PB93-121317/REB 93-01 PC **A03**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
PB93-123016/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
PB93-123024/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Penny Blanks and Zinc Products.
PB93-123107/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
PB93-123115/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
PB93-123123/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
PB93-123131/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
PB93-123149/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for an Autobody Repair Facility.
PB93-123156/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
PB93-123164/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Artists Supply Paints.
PB93-123172/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Wire Stock Used for Production of Metal Items.
PB93-123180/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
PB93-123198/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
PB93-123206/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
PB93-123214/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
PB93-123222/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
PB93-123230/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
PB93-123248/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Orthopedic Implants.
PB93-126217/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Dry Cleaning Equipment.
PB93-126225/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Fossil Fuel Fired Electrical Generating Station.
PB93-126233/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Plastic Containers by Injection Molding.
PB93-126241/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplating Chemical Products.
PB93-126258/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Scrap Metal Recovery Facility.
PB93-126266/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Hardened Steel Gears.
PB93-126282/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
PB93-126290/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fine Chemicals Using Batch Processes.
PB93-126308/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of General Purpose Paints and Painting Supplies.
PB93-126316/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Printing Plate Preparation Section of a Newspaper.
PB93-126563/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer Producing Printed Circuit Boards.
PB93-126621/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for an Electrical Utility Transmission System Monitoring and Maintenance Facility.
PB93-126639/REB 93-01 PC **A02**/MF **A01**

Guides to Pollution Prevention: Metal Casting and Heat Treating Industry.
PB93-127793/REB 93-01 PC **A05**/MF **A01**

On-Site Waste Ink Recycling: Technology Evaluation Report.
PB93-141026/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention Opportunity Assessment: USDA Beltsville Agricultural Research Center.
PB93-146843/REB 93-01 PC **A04**/MF **A01**

**WASTE PROCESSING PLANTS**

Organic Air Emissions from Waste Management Facilities.
PB93-215598/REB 93-04 PC **A07**/MF **A02**

**WASTE RECYCLING**

On-Site Waste Ink Recycling: Technology Evaluation Report.
PB93-141026/REB 93-01 PC **A04**/MF **A01**

Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC **A04**/MF **A01**

**WASTE REDUCTION**

Slowing the Waste Behemoth: Source Reduction is Overshadowed by Recycling's Success.
PB93-194546/REB 93-01 PC **A02**/MF **A01**

**WASTE REMOVAL**

HSED SACM Report. Volume 1, Number 1, January 1993.
PB93-963289/REB 93-01 PC **A01**/MF **A01**

**WASTE SHIPMENT RECORD**

Reporting and Recordkeeping Requirements for Waste Disposal: A Field Guide.
PB93-199115/REB 93-01 PC **A03**/MF **A01**

**WASTE TREATMENT**

Demonstration of a Trial Excavation at the McColl Superfund Site.
PB93-100121/REB 93-01 PC **A04**/MF **A01**

Carver-Greenfield Process (Trade Name) Dehydro-Tech Corporation. Applications Analysis Report.
PB93-101152/REB 93-01 PC **A03**/MF **A01**

Engineering Bulletin: Slurry Walls.
PB93-105575/REB 93-01 PC **A02**/MF **A01**

Engineering Bulletin: Pyrolysis Treatment.
PB93-105583/REB 93-01 PC **A02**/MF **A01**

Engineering Bulletin: Technology Preselection Data Requirements.
PB93-105591/REB 93-01 PC **A02**/MF **A01**

Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC **A03**/MF **A01**

Technical Issues on Long-Term Performance of Solidified/Stabilized Waste Forms.
PB93-106680/REB 93-01 PC **A03**/MF **A01**

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 1.
PB93-115160/REB 93-01 PC **A09**/MF **A02**

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 2.
PB93-115178/REB 93-01 PC **A15**/MF **A03**

Superfund Innovative Technology Evaluation (SITE) Program.
PB93-116093/REB 93-01 PC **A03**/MF **A01**

Hazardous Waste Management.
PB93-116135/REB 93-01 PC **A03**/MF **A01**

Bioremediation of Hazardous Wastes.
PB93-116143/REB 93-01 PC **A04**/MF **A01**

Manual: Alternative Wastewater Collection Systems.
PB93-116259/REB 93-01 PC **A10**/MF **A03**

Seminar Publication. Medical and Institutional Waste Incineration: Regulations, Management, Technology, Emissions, and Operations.
PB93-116283/REB 93-01 PC **A03**/MF **A01**

Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
PB93-121333/REB 93-01 PC **A03**/MF **A01**

Babcock and Wilcox Cyclone Furnace Vitrification Technology: Applications Analysis Report.
PB93-122315/REB 93-01 PC **A03**/MF **A01**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 1. Sessions P, 0, 1A, 2A, 3A, 4A, 6A, 6B, 9C and 10B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124170/REB 93-01 PC **A20**/MF **A04**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 2. Sessions 1B, 2B, 3B, 4B, 7A, 7B, 8A, 8B and 9B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124188/REB 93-01 PC **A21**/MF **A04**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 3. Sessions 1C, 2C, 3C, 4C, 6C, 7C, 8C, 9A, and 10A/C. Held in Tampa, Florida on April 16-19, 1991.
PB93-124196/REB 93-01 PC **A21**/MF **A04**

Superfund Innovative Technology Evaluation Program: Progress and Accomplishments Fiscal Year 1991. A 5th Report to Congress.
PB93-126613/REB 93-01 PC **A05**/MF **A01**

Guide for Conducting Treatability Studies under CERCLA.
PB93-126787/REB 93-01 PC **A05**/MF **A01**

Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC **A02**/MF **A01**

Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC **A02**/MF **A01**

Innovative Treatment Technologies: Semi-Annual Status Report (Fourth Edition).
PB93-133387/REB 93-01 PC **A05**/MF **A01**

Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

Synopses of Federal Demonstrations of Innovative Site Remediation Technologies.
PB93-144111/REB 93-01 PC **A11**/MF **A03**

Horsehead Resource Development Company, Inc., Flame Reactor Technology. Technology Demonstration Summary.
PB93-145639/REB 93-01 PC **A02**/MF **A01**

Applications Analysis Report: Silicate Technology Corporation's Solidification/Stabilization Technology for Organic and Inorganic Contaminants in Soils.
PB93-172948/REB 93-01 PC **A07**/MF **A02**

Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
PB93-194223/REB 93-01 PC **A03**/MF **A01**

Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC **A05**/MF **A01**

Screening Methodology for Assessing Leaking UST Sites and Clean Up Technologies.
PB93-199404/REB 93-01 PC **A03**/MF **A01**

Design and Construction of Demonstration/Research Wetlands for Treatment of Dairy Farm Wastewater.
PB93-202836/REB 93-01 PC **A03**/MF **A01**

Biodegradation of Chlorinated Organic Compounds by 'Phanerochaete chrysosporium', a Wood-Rotting Fungus.
PB93-204147/REB 93-01 PC **A03**/MF **A01**

Mineralization of Recalcitrant Environmental Pollutants by a White Rot Fungus. Proceedings of the National Conference on Hazardous Wastes and Hazardous Materials. Held in Washington, DC. on March 16-18, 1987.
PB93-204154/REB 93-01 PC **A02**/MF **A01**

Alternating Current Electrocoagulation for Superfund Site Remediation.
PB93-205144/REB 93-04 PC **A02**/MF **A01**

Technology Evaluation Report: Pilot-Scale Demonstration of a Slurry-Phase Biological Reactor for Creosote-Contaminated Soil. Volume 1.
PB93-205532/REB 93-04 PC **A09**/MF **A02**

Understanding Bioremediation: A Guidebook for Citizens.
PB93-205870/REB 93-04 PC **A03**/MF **A01**

Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.
PB93-212801/REB 93-04 PC **A03**/MF **A01**

RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC **A05**/MF **A01**

Proceedings of Annual Analytical Symposium (10th). U.S. Environmental Protection Agency, Office of Water, Industrial Technology Division. Held in Norfolk, Virginia on May 13-14, 1987.
PB93-234771/REB 93-04 PC **A99**/MF **E08**

Technical Resource Document: Solidification/Stabilization and Its Application to Waste Materials.
PB93-237535/REB 93-04 PC **A16**/MF **A03**

Superfund Record of Decision (EPA Region 2): Ramapo Landfill Site, Rockland County, NY. (First Remedial Action), March 1992.
PB93-963801/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 2): Facet Enterprises, Village of Elmira Heights, Chemung County, NY. (First Remedial Action), September 1992.
PB93-963822/REB 93-04 PC **A07**/MF **A02**

Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, (Operable Unit 5), Richmond, VA. (First Remedial Action), March 1992.
PB93-963901/REB 93-01 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 10): McChord AFB, Washrack Treatment Area, WA. (First Remedial Action), September 1992.
PB93-964614/REB 93-04 PC **A04**/MF **A01**

**WASTE UTILIZATION**

Advacate-Low-Cost Process for SO2 Control.
PB93-141117/REB 93-01 PC **A02**/MF **A01**

**WASTE WATER**

Manual: Alternative Wastewater Collection Systems.
PB93-116259/REB 93-01 PC **A10**/MF **A03**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03**/MF **A01**

Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC **A03**/MF **A01**

Guidance Manual for Control of Slug Loadings to POTWs.
PB93-202745/REB 93-01 PC **A08**/MF **A02**

Supplemental Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation.
PB93-209872/REB 93-04 PC **A06**/MF **A02**

Recycling Nickel Electroplating Rinse Waters by Low Temperature Evaporation and Reverse Osmosis.
PB93-218865/REB 93-04 PC **A04**/MF **A01**

Watts Nickel and Rinse Water Recovery via an Advanced Reverse Osmosis System.
PB93-229011/REB 93-04 PC **A05**/MF **A01**

**WASTE WATER REUSE**

Guidelines for Water Use.
PB93-222180/REB 93-04 PC **A12**/MF **A03**

**WASTE WATER SOLIDS**

Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC **A02**/MF **A01**

**WATER ANALYSIS**

National Pesticide Survey: Glossary.
PB93-115970/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Project Summary.
PB93-115988/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Summary Results of EPA's National Survey of Pesticides in Drinking Water Wells.
PB93-115996/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Survey Design.
PB93-116002/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Survey Analytes.
PB93-116010/REB 93-01 PC **A03**/MF **A01**

Manual for the Certification of Laboratories Analyzing Drinking Water. Criteria and Procedures Quality Assurance (Third Edition).
PB93-145688/REB 93-01 PC **A03**/MF **A01**

Compendium of Methods for Marine and Estuarine Environmental Studies.
PB93-202570/REB 93-01 PC **A10**/MF **A03**

Proceedings of Annual Analytical Symposium (7th). Held in Norfolk, Virginia on March 28-29, 1984.
PB93-237519/REB 93-04 PC **A99**/MF **A06**

**WATER CHEMISTRY**

Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC **A02**/MF **A01**

Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC **A02**/MF **A01**

Reactions of Potential Organic Water Contaminants with Aqueous Chlorine and Monochloramine.
PB93-175040/REB 93-01 PC **A04**/MF **A01**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC **A18**/MF **A04**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC **A14**/MF **A03**

Reactions That Modify Chemistry in Lakes of the National Surface Water Survey.
PB93-229672/REB 93-04 PC **A02**/MF **A01**

Longterm Response of Lakes to Acidic Deposition.
PB93-229722/REB 93-04 PC **A02**/MF **A01**

Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.
PB93-236446/REB 93-04 PC **A03**/MF **A01**

Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

**WATER CONSERVATION**

Reclamation of Urban Stormwater.
PB93-185791/REB 93-01 PC **A03**/MF **A01**

Framework for Characterization. (Revised Final Report March 1992).
PB93-191237/REB 93-01 PC **A04**/MF **A01**

Xeriscape Landscaping: Preventing Pollution and Using Resources Efficiently.
PB93-210219/REB 93-04 PC **A03**/MF **A01**

**WATER DISTRIBUTION**

Medium Systems That Failed to Conduct Required Initial Lead Tap Monitoring and Reporting.
PB93-196632/REB 93-01 PC **A03**/MF **A01**

**WATER DISTRIBUTION (APPLIED)**

Institutional Solutions to Drinking Water Problems: Maine Case Studies.
PB93-180834/REB 93-01 PC **A03**/MF **A01**

**WATER FLOW**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03**/MF **A01**

**WATER MANAGEMENT**

Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC **A08**/MF **A02**

Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC **A07**/MF **A02**

Institutional Solutions to Drinking Water Problems: Maine Case Studies.
PB93-180834/REB 93-01 PC **A03**/MF **A01**

Volunteer Water Monitoring: A Guide for State Managers.
PB93-202596/REB 93-01 PC **A05**/MF **A01**

**WATER MANAGEMENT (APPLIED)**

Role and Function of Forest Buffers in the Chesapeake Bay Basin for Nonpoint Source Management.
PB93-207405/REB 93-04 PC **A03**/MF **A01**

**WATER MONITORING PROGRAMS**

Compendium of Current Monitoring Programs in Tampa Bay and Its Watershed.
PB93-191666/REB 93-01 PC **A05**/MF **A01**

**WATER POLLUTANTS**

Health Effects of Arsenic in Drinking Water: Research Needs.
PB93-141331/REB 93-01 PC **A02**/MF **A01**

Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.
PB93-212769/REB 93-04 PC **A03**/MF **A01**

**WATER POLLUTION**

Sanering av Jaernsjoen i Emaan. Huvudstudie. (Remediation of lake Jaernsjoen in the Emaan river. Main report).
DE93711213/REB 93-01 PC **A04**/MF **A01**

Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC **A07**/MF **A02**

Volunteer Lake Monitoring Program, 1991. Volume 5. East-Central Illinois Region.
PB93-102234/REB 93-01 PC **A04**/MF **A01**

Engineering Bulletin: Technology Preselection Data Requirements.
PB93-105591/REB 93-01 PC **A02**/MF **A01**

Modelling Epicodic Acidification of Surface Waters: The State of Science.
PB93-106920/REB 93-01 PC **A03**/MF **A01**

Introduction to Nonpoint Source Pollution and Wetland Mitigation.
PB93-106953/REB 93-01 PC **A03**/MF **A01**

Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3, Hydraulic Conductivity Variability and Calculated Macrodispersivities.
PB93-107050/REB 93-01 PC **A03**/MF **A01**

Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC **A03**/MF **A01**

National Study of Chemical Residues in Fish. Volume 2.
PB93-114999/REB 93-01 PC **E11**/MF **A04**

Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
PB93-115806/REB 93-01 PC **A05**/MF **A01**

Delineation of Wellhead Protection Areas in Fractured Rocks.
PB93-115822/REB 93-01 PC **A08**/MF **A02**

Model Calculations of the Annual Atmospheric Deposition of Toxic Metals to Lake Michigan.
PB93-120905/REB 93-01 PC **A03**/MF **A01**

Atmospheric Deposition of Toxic Metals to Lake Michigan: Preliminary Annual Model Calculations.
PB93-120954/REB 93-01 PC **E02**/MF **A01**

Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC **A02**/MF **A01**

Surface Waters Component of the Environmental Monitoring and Assessment Program (EMAP): An Overview.
PB93-121267/REB 93-01 PC **A02**/MF **A01**

Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC **A02**/MF **A01**

MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC **A02**/MF **A01**

Trends in Nitrogen in the Chesapeake Bay, 1984-1990.
PB93-122174/REB 93-01 PC **A04**/MF **A01**

Proceedings of the EPA's Contaminated Sediment Management Strategy Forums.
PB93-126399/REB 93-01 PC **A10**/MF **A03**

Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC **A04**/MF **A01**

Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04**/MF **A01**

Relationship between Water Temperatures and Air Temperatures for Central U.S. Streams.
PB93-135655/REB 93-01 PC **A07**/MF **A02**

Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC **A03**/MF **A01**

Strategic Assessment of Near Coastal Waters: Northeast Case Study.
PB93-136521/REB 93-01 PC **A06**/MF **A02**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC **A02**/MF **A01**

Mineral Dissolution Rates: A Comparison of Laboratory and Field Studies.
PB93-141182/REB 93-01 PC **A01**/MF **A01**

Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC **A02**/MF **A01**

Basic Concepts of Contaminant Sorption.
PB93-146835/REB 93-01 PC **A01**/MF **A01**

Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93-148252/REB 93-01 PC **A08**/MF **A02**

DNAPL Site Evaluation.
PB93-150217/REB 93-01 PC **A16**/MF **A03**

Publications Office of Science and Technology: Catalog.
PB93-152577/REB 93-01 PC **A06**/MF **A02**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC **A04**/MF **A01**

Effect of the Distribution System on Drinking-Water Quality.
PB93-173722/REB 93-01 PC **A03**/MF **A01**

Reactions of Potential Organic Water Contaminants with Aqueous Chlorine and Monochloramine.
PB93-175040/REB 93-01 PC **A04**/MF **A01**

Laboratory Studies on the Stability and Transport of Inorganic Colloids Through Natural Aquifer Material (Chapter 49).
PB93-175537/REB 93-01 PC A02/MF A01

Quality Assurance and Quality Control in the Development and Application of Ground-Water Models.
PB93-178226/REB 93-01 PC A08/MF A02

Comparison of the Efficiency of Polycarbonate and Mixed Cellulose Ester Filters for Use in the Filtration of Water Samples.
PB93-194363/REB 93-01 PC A02/MF A01

Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC A02/MF A01

Abstract Proceedings: Superfund Technical Support Project General Meeting. Held in Athens, Georgia on December 3-6, 1990.
PB93-205862/REB 93-04 PC A03/MF A01

Portraits of Our Coastal Waters. Supplement to the National Water Quality Inventory. Report from the EPA Regions.
PB93-207546/REB 93-04 PC A03/MF A01

Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
PB93-207561/REB 93-04 PC A03/MF A01

Great Lakes Water Quality Guidance Docket Index.
PB93-207769/REB 93-04 PC A05/MF A01

Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC A02/MF A01

Storm Water Management for Construction Activities. Developing Pollution Prevention Plans and Best Management Practices. Summary Guidance.
PB93-223550/REB 93-04 PC A03/MF A01

Private Wells: Guidance for What to Do After the Flood.
PB93-226710/REB 93-04 PC A02/MF A01

Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC A02/MF A01

Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-228500/REB 93-04 PC A02/MF A01

Municipal Water Pollution Prevention Program, National MWPP Conference. Held in Washington, DC. on April 27-28, 1993.
PB93-231140/REB 93-04 PC A03/MF A01

Supplemental for Pretreatment to the Interim Final Development Document for the Secondary Aluminum Segment of the Nonferrous Metals Manufacturing. Point Source Category.
PB93-232122/REB 93-04 PC A07/MF A02

Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC A03/MF A01

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC A03/MF A01

EPA (Environmental Protection Agency) Publications Bibliography, Quarterly Abstract Bulletin.
PB93-904200/REB 93-01 Subscription

**WATER POLLUTION ABATEMENT**

Wellhead Protection Programs: Tools for Local Governments.
PB93-101111/REB 93-01 PC A04/MF A01

Protecting the Nation's Wetlands, Oceans, and Watersheds: An Overview of Programs and Activities.
PB93-105609/REB 93-01 PC A03/MF A01

Citizen's Guide to Ground-Water Protection.
PB93-115814/REB 93-01 PC A03/MF A01

Florida Small Systems Compliance Project.
PB93-115855/REB 93-01 PC A04/MF A01

Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells.
PB93-115897/REB 93-01 PC A04/MF A01

Underground Injection Control Program.
PB93-115905/REB 93-01 PC A03/MF A01

Wellhead Protection Strategies for Confined-Aquifer Settings.
PB93-115913/REB 93-01 PC A05/MF A01

Why do Wellhead Protection. Issues and Answers in Protecting Public Drinking Water Supply Systems.
PB93-115921/REB 93-01 PC A03/MF A01

Saving Bays and Estuaries: A Primer for Establishing and Managing Estuary Programs. Appendices G, H, and I.
PB93-116077/REB 93-01 PC A05/MF A02

Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC A08/MF A02

Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC A07/MF A02

Draft Ground-Water Disinfection Rule.
PB93-134351/REB 93-01 PC A05/MF A01

Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC A05/MF A01

Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC A03/MF A01

Status Report on Analytical Methods to Support the Disinfectant/Disinfection By-Products Regulation.
PB93-134898/REB 93-01 PC A03/MF A01

Status Report on the Development of Draft MCLGs for Disinfectants and By-Products.
PB93-134906/REB 93-01 PC A05/MF A01

Status Report on Development of Regulations for Disinfectants and Disinfection By-Products.
PB93-134914/REB 93-01 PC A03/MF A01

Technologies and Costs for Control of Disinfection By-Products: Executive Summary.
PB93-134922/REB 93-01 PC A03/MF A01

Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC A11/MF A03

Municipal Water Pollution Prevention Bibliography: 1992, the Year of Clean Water. Celebration and Commitment.
PB93-141083/REB 93-01 PC A03/MF A01

Clean Water Act (Section 319): An Evaluation of Program Implementation in Region 10.
PB93-145654/REB 93-01 PC A05/MF A01

Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC A04/MF A01

Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC A04/MF A01

Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC A09/MF A02

Economic Analysis of Interim Final Effluent Guidelines for the Gum and Wood Chemicals Industry. Group 2.
PB93-167740/REB 93-01 PC A04/MF A01

Economic Analysis of Effluent Guidelines: Mineral Mining and Processing Industry.
PB93-167765/REB 93-01 PC A14/MF A03

Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC A14/MF A03

Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
PB93-173979/REB 93-01 PC A22/MF A04

Regulatory Impact Analysis of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-174613/REB 93-01 PC A06/MF A02

Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.
PB93-184620/REB 93-01 PC A03/MF A01

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Atmospheric Deposition of Critical Issue Forum. Held in Annapolis, Maryland on November 5, 1992.
PB93-193738/REB 93-01 PC A03/MF A01

Fact Sheet: National Primary Drinking Water Regulations for Lead and Copper.
PB93-193746/REB 93-01 PC A03/MF A01

Phase II Fact Sheet: National Primary Drinking Water Regulations for 38 Inorganic and Synthetic Organic Chemicals.
PB93-193787/REB 93-01 PC A03/MF A01

Guidance Manual for Control of Slug Loadings to POTWs.
PB93-202745/REB 93-01 PC A08/MF A02

News-Notes Number 23: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-204006/REB 93-01 PC A03/MF A01

Case Studies in Wellhead Protection: Ten Examples of Innovative Wellhead Protection Programs.
PB93-207363/REB 93-04 PC A03/MF A01

Supplemental Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation.
PB93-209872/REB 93-04 PC A06/MF A02

State Clean Water Strategies: Meeting the Challenges of the Future.
PB93-217628/REB 93-04 PC A03/MF A01

Training Manual for NPDES Permit Writers.
PB93-217644/REB 93-04 PC A09/MF A02

Nonpoint Source Pollution: Land Use and Water Quality.
PB93-223014/REB 93-04 PC A03

Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters.
PB93-234672/REB 93-04 PC A99/MF E06

**WATER POLLUTION CONTROL**

Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC A03/MF A01

Technology Assessment of Soil Vapor Extraction and Air Sparging.
PB93-100154/REB 93-01 PC A04/MF A01

Economic Assessment of Reducing Fluoride in Drinking Water.
PB93-115830/REB 93-01 PC A05/MF A01

Compendium of Federal Financial Assistance Programs: Targeting Programs for State and Local Ground-Water Protection.
PB93-116069/REB 93-01 PC A06/MF A02

UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC A02/MF A01

Inhibition of Alkylbenzene Biodegradation under Denitrifying Conditions by Using Acetylene Block Technique.
PB93-121242/REB 93-01 PC A02/MF A01

Environmental Pollution Control Alternatives: Reducing Water Pollution Control Costs in the Electroplating Industry. (Revised).
PB93-122240/REB 93-01 PC A04/MF A01

Guides to Pollution Prevention: Metal Casting and Heat Treating Industry.
PB93-127793/REB 93-01 PC A05/MF A01

Use of the Black Creek Database to Analyze Techniques for Estimating Nonpoint Source Loadings from Small Watersheds (May 1988).
PB93-128072/REB 93-01 PC A03/MF A01

Maumee River Basin Pilot Watershed Study. Volume 5. Continued Watershed Monitoring (1981-1985) and Rainulator Study - Detailed Data (1986).
PB93-128098/REB 93-01 PC A10/MF A03

SITE-Emerging Technologies: Laser Induced Photochemical Oxidative Destruction of Toxic Organics in Leachates and Groundwaters.
PB93-131431/REB 93-01 PC A04/MF A01

Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC A05/MF A02

Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC A03/MF A01

Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC A03/MF A01

Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC A03/MF A01

Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC A03/MF A01

Constructed Wetland Design: the First Generation.
PB93-131753/REB 93-01 PC A02/MF A01

Technologies and Costs for Control of Disinfection By-Products: Executive Summary.
PB93-134922/REB 93-01 PC A03/MF A01

Water Treatment Plant Simulation Program, Version 1.21, User's Manual.
PB93-134948/REB 93-01 PC A06/MF A02

Restoration of the Anacostia River.
PB93-136364/REB 93-01 PC A05/MF A01

Municipal Water Pollution Prevention Bibliography: 1992, the Year of Clean Water. Celebration and Commitment.
PB93-141083/REB 93-01 PC A03/MF A01

Applied Geologic, Microbiological, and Engineering Constraints of In-situ BTEX Bioremediation.
PB93-141513/REB 93-01 PC A03/MF A01

Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC A03/MF A01

Proceedings of the 1989 Midwest Pollution Control Biologists Meeting. Held in Chicago, Illinois on February 14-17, 1989.
PB93-143691/REB 93-01 PC A08/MF A02

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC A05/MF A01

Restoration Potential of Diked Estuarine Wetlands in Washington and Oregon. Phase 2: Identification of Candidate Sites in Puget Sound.
PB93-145597/REB 93-01 PC A04/MF A01

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC A03/MF A01

Proceedings of the Midwest Pollution Control Biologists Meeting, 1991. Environmental Indicators: Measurement and Assessment Endpoints. Held in Lincolnwood, Illinois on March 19-22, 1991.
PB93-145712/REB 93-01 PC A06/MF A02

In-situ Bioremediation of Ground Water.
PB93-146850/REB 93-01 PC A01/MF A01

Surfactants and Subsurface Remediation.
PB93-149854/REB 93-01 PC A02/MF A01

Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC A03/MF A01

Cost Effectiveness Analysis of Effluent Guidelines and Standards for the Aluminum Forming Category.
PB93-156107/REB 93-01 PC **A03**/MF **A01**

Proposed Water Quality Guidance for the Great Lakes System.
PB93-164515/REB 93-01 PC **A14**/MF **A03**

Research and Information Needs Related to Nonpoint *Source Pollution and Wetlands in the Watershed*: An EPA Perspective.
PB93-168862/REB 93-01 PC **A02**/MF **A01**

Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC **A14**/MF **A03**

Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC **A02**/MF **A01**

Institutional Solutions to Drinking Water Problems: Maine Case Studies.
PB93-180834/REB 93-01 PC **A03**/MF **A01**

Commencement Bay Nearshore/Tideflats Feasibility Study. Executive Summary.
PB93-181220/REB 93-01 PC **A06**/MF **A02**

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
PB93-181238/REB 93-01 PC **A25**/MF **A06**

Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 2. Appendices.
PB93-181246/REB 93-01 PC **A18**/MF **A04**

Commencement Bay Nearshore/Tideflats Feasibility Study. Development of Sediment Cleanup Goals.
PB93-181253/REB 93-01 PC **A05**/MF **A01**

Federal Register, Volume 58, No. 72. Part 2. Environmental Protection Agency, 40 CFR Parts 122 et al. Water Quality Guidance for the Great Lakes System and Correction; Proposed Rules.
PB93-183002/REB 93-01 PC **A11**/MF **A03**

Indian Primacy Procedures Handbook for the Public Water System Supervision (PWSS) Program and the Underground Injection Control (UIC) Program.
PB93-185585/REB 93-01 PC **A09**/MF **A02**

Reclamation of Urban Stormwater.
PB93-185791/REB 93-01 PC **A03**/MF **A01**

Storm and Combined Sewer Overflow: An Overview of EPA's Research Program.
PB93-185957/REB 93-01 PC **A03**/MF **A01**

Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry Using Revised *Compliance Costs. (Revised January 1992)*.
PB93-186104/REB 93-01 PC **A03**/MF **A01**

Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 1. Technical Report and Appendices A-F.
PB93-191302/REB 93-01 PC **A13**/MF **A03**

Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 2. Appendices G-N.
PB93-191310/REB 93-01 PC **A15**/MF **A03**

Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC **A03**/MF **A01**

Nutrient Movement through Beach Media: Problems and Field Results Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191344/REB 93-01 PC **A03**/MF **A01**

Baseline Point Source Load Inventory, 1985. 1991 Reevaluation Report No. 2.
PB93-193761/REB 93-01 PC **A03**/MF **A01**

Drinking Water Regulations under the Safe Drinking Water Act.
PB93-194033/REB 93-01 PC **A03**/MF **A01**

Radionuclides in Drinking Water. National Primary Drinking Water Regulations for Radionuclides. Proposed Rules.
PB93-194058/REB 93-01 PC **A03**/MF **A01**

*Chesapeake Bay Submerged Aquatic Vegetation Habitat* Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC **A12**/MF **A03**

Corrosion Control Principles and Strategies for Reducing Lead and Copper in Drinking Water Systems.
PB93-199420/REB 93-01 PC **A03**/MF **A01**

Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC **A02**/MF **A01**

Managing Nonpoint Source Pollution. Final Report to Congress on Section 319 of the Clean Water Act (1989).
PB93-200897/REB 93-01 PC **A10**/MF **A03**

Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Gold Placer Mining Industry.
PB93-203990/REB 93-04 PC **A07**/MF **A02**

News-Notes Number 23: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-204006/REB 93-01 PC **A03**/MF **A01**

News-Notes Number 21: The Condition of the Environment and the Nonpoint Sources of Water Pollution.
PB93-204030/REB 93-01 PC **A03**/MF **A01**

Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02**/MF **A01**

Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC **A06**/MF **A02**

Role and Function of Forest Buffers in the Chesapeake Bay Basin for Nonpoint Source Management.
PB93-207405/REB 93-04 PC **A03**/MF **A01**

Report to Congress on Implementation of Section 403(c) of the Federal Water Pollution Control Act.
PB93-207488/REB 93-04 PC **A07**/MF **A02**

International Evaluation of In-situ Biorestoration of Contaminated Soil and Groundwater (September 1990)--Translation.
PB93-207553/REB 93-04 PC **A03**/MF **A01**

Lake and Reservoir Restoration Guidance Manual: Second Edition.
PB93-207926/REB 93-04 PC **A15**/MF **A03**

*Introduction to Water Quality-Based Toxics Control* for the NPDES Program.
PB93-207967/REB 93-04 PC **A03**/MF **A01**

Water Quality in Illinois, 1990-1991.
PB93-210193/REB 93-04 PC **A03**/MF **A01**

Commitment to Watershed Protection: A Review of the Clean Lakes Program.
PB93-210300/REB 93-04 PC **A04**/MF **A01**

Fish and Fisheries Management in Lakes and Reservoirs. Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-210375/REB 93-04 PC **A15**/MF **A03**

Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.
PB93-212363/REB 93-04 PC **A02**/MF **A01**

In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC **A12**/MF **A03**

Wellhead Protection: A Guide for Small Communities.
PB93-215580/REB 93-04 PC **A08**/MF **A02**

Guidelines for Delineation of Wellhead Protection Areas, 1993.
PB93-215861/REB 93-04 PC **A10**/MF **A03**

Protecting Local Ground-Water Supplies through Wellhead Protection.
PB93-216109/REB 93-04 PC **A03**/MF **A01**

Turning the Tide on Trash: A Learning Guide on Marine Debris.
PB93-216992/REB 93-04 PC **A05**/MF **A01**

3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
PB93-217669/REB 93-04 PC **A12**/MF **A03**

Recycling Nickel Electroplating Rinse Waters by Low Temperature Evaporation and Reverse Osmosis.
PB93-218865/REB 93-04 PC **A04**/MF **A01**

Retrospective Performance Evaluation on In situ Bioremediation: Site Characterization.
PB93-221919/REB 93-04 PC **A03**/MF **A01**

Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC **A03**/MF **A01**

Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

Microcosm and In situ Field Studies of Enhanced Biotransformation of Trichloroethylene by Phenol-Utilizing Microorganisms.
PB93-222867/REB 93-04 PC **A02**/MF **A01**

Drinking Water Information Guide.
PB93-222958/REB 93-04 PC **A06**/MF **A02**

NPDES Storm Water Program. Question and Answer Document. Volume 1.
PB93-223410/REB 93-04 PC **A03**/MF **A01**

Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC **A04**/MF **A01**

Methodology for Analysis of Detention Basins for Control of Urban Runoff Quality.
PB93-223576/REB 93-04 PC **A04**/MF **A01**

State and Local Funding of Nonpoint Source Control Programs.
PB93-228146/REB 93-04 PC **A09**/MF **A02**

SITE Program Demonstration of the SBP Technologies, Inc., Membrane Filtration System on Creosote-Contaminated Water.
PB93-228567/REB 93-04 PC **A02**/MF **A01**

Watts Nickel and Rinse Water Recovery via an Advanced Reverse Osmosis System.
PB93-229011/REB 93-04 PC **A05**/MF **A01**

Biotransformation and Mineralization of Alkylbenzenes under Denitrifying Conditions.
PB93-229623/REB 93-04 PC **A03**/MF **A01**

Assessment and Control of Bioconcentratable Contaminants in Surface Waters.
PB93-229813/REB 93-04 PC **A13**/MF **A03**

Emerging Technology Report: Metals Treatment at Superfund Sites by Absorptive Filtration.
PB93-231165/REB 93-04 PC **A04**/MF **A01**

Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
PB93-233914/REB 93-04 PC **A12**/MF **A03**

Guide to Nonpoint Source Pollution Control. Controlling Nonpoint Source Pollution: A Guide.
PB93-234292/REB 93-04 PC **A07**/MF **A02**

In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC **A03**/MF **A01**

Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC **A02**/MF **A01**

Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC **A02**/MF **A01**

Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.
PB93-236578/REB 93-04 PC **A04**/MF **A01**

Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Harvey and Knott Drum Site, New Castle County, Delaware).
PB93-963614/REB 93-04 PC **A01**/MF **A01**

Superfund Record of Decision (EPA Region 1): Otis Air National Guard/Camp Edwards, MA. (First Remedial Action), May 1992.
PB93-963704/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 2): Higgins Farm, Franklin Township, Somerset County, NJ. (Second Remedial Action), September 1992.
PB93-963813/REB 93-04 PC **A05**/MF **A01**

Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.
PB93-963913/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964009/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 4): Savannah Rive: (USDOE), A/M Area Groundwater Operable Unit 3, Aiken County, SC. (Third Remedial Action), June 1992.
PB93-964013/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 4): Yellow Water Road Dump, Duval County, Baldwin, FL. (Second Remedial Action), June 1992.
PB93-964015/REB 93-04 PC **A05**/MF **A01**

*Superfund Record of Decision* (EPA Region 5): Alsco Anaconda Site, Gnadenhutten, OH. (Second Remedial Action), September 1992.
PB93-964121/REB 93-04 PC **A04**/MF **A01**

Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 1, Anoka County, Andover, MN. (Second Remedial Action), (Amendment), June 1992.
PB93-964123/REB 93-04 PC **A03**/MF **A01**

Superfund Record of Decision (EPA Region 8): Hill Air Force Base, UT. (Second Remedial Action), September 1992.
PB93-964403/REB 93-04 PC **A03**/MF **A01**

**WATER POLLUTION DETECTION**

*National Pesticide Survey: Glossary.*
PB93-115970/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Project Summary.
PB93-115988/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Summary Results of EPA's National Survey of Pesticides in Drinking Water Wells.
PB93-115996/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Survey Design.
PB93-116002/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Survey Analytes.
PB93-116010/REB 93-01 PC **A03**/MF **A01**

Rapid Measurement of Aqueous Hydroxyl Radical Concentrations in Steady-State HO Flux Systems.
PB93-131779/REB 93-01 PC **A03**/MF **A01**

Manual for the Certification of Laboratories Analyzing Drinking Water. Criteria and Procedures Quality Assurance (Third Edition).
PB93-145688/REB 93-01 PC **A03**/MF **A01**

Compendium of Methods for Marine and Estuarine Environmental Studies.
PB93-202570/REB 93-01 PC **A10**/MF **A03**

Preliminary Data Summary for the Pulp, Paper and Paperboard Point Source Category.
PB93-202935/REB 93-01 PC **A04**/MF **A01**

Incorporating Uncertainty Associated with Censored Water Quality Data in Parametric Trend Analysis.
PB93-208262/REB 93-04 PC **A03**/MF **A01**

Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC **A02**/MF **A01**

Region 10 In-Stream Biological Monitoring Handbook: For Wadable Streams in the Pacific Northwest.
PB93-226611/REB 93-04 PC **A05**/MF **A01**

Proceedings of Annual Analytical Symposium (7th). Held in Norfolk, Virginia on March 28-29, 1984.
PB93-237519/REB 93-04 PC **A99**/MF **A06**

# KEYWORD INDEX


**WATER POLLUTION ECONOMIC**

Economic Analysis of Pretreatment Standards: The Secondary Copper and Aluminum Subcategories of the Nonferrous Metals Manufacturing Point Source Category.
PB93-167757/REB 93-01 PC **A07**/MF **A02**

**WATER POLLUTION ECONOMICS**

Environmental Pollution Control Alternatives: Reducing Water Pollution Control Costs in the Electroplating Industry. (Revised).
PB93-122240/REB 93-01 PC **A04**/MF **A01**

Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC **A07**/MF **A02**

Economic Analysis of Interim Final Effluent Guidelines for the Gum and Wood Chemicals Industry. Group 2.
PB93-167740/REB 93-01 PC **A04**/MF **A01**

Economic Analysis of Effluent Guidelines: Mineral Mining and Processing Industry.
PB93-167765/REB 93-01 PC **A14**/MF **A03**

Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Plastics Molding and Forming Industry.
PB93-167773/REB 93-01 PC **A05**/MF **A01**

Economic Impact Analysis of Effluent Limitations and Standards for the Nonferrous Metals Smelting and Refining Industry. Phase 2.
PB93-167781/REB 93-01 PC **A09**/MF **A03**

Economic Benefits of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-168797/REB 93-01 PC **A08**/MF **A02**

Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
PB93-173979/REB 93-01 PC **A22**/MF **A04**

Clean Water and the American Economy. Proceedings: Surface Water. Volume 1. Held on October 19-21, 1992.
PB93-202612/REB 93-01 PC **A14**/MF **A03**

Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
PB93-202620/REB 93-01 PC **A07**/MF **A02**

Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Gold Placer Mining Industry.
PB93-203990/REB 93-04 PC **A07**/MF **A02**

Guide for Cost-Effectiveness and Cost-Benefit Analysis of State and Local Ground Water Protection Programs.
PB93-207397/REB 93-04 PC **A06**/MF **A02**

Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.
PB93-212033/REB 93-04 PC **A01**/MF **A01**

Benefits and Feasibility of Effluent Trading between Point Sources: An Analysis in Support of Clean Water Act Reauthorization.
PB93-217636/REB 93-04 PC **A04**/MF **A01**

**WATER POLLUTION EFFECTS**

Sediment Classification Methods Compendium.
PB93-115186/REB 93-01 PC **A11**/MF **A03**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Tetranitromethane (TNM).
PB93-116994/REB 93-01 PC **A03**/MF **A01**

Atmospheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

Potential Intertidal Habitat Restoration Sites in the Duwamish River Estuary.
PB93-122190/REB 93-01 PC **A05**/MF **A02**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound.
PB93-122208/REB 93-01 PC **A09**/MF **A02**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound, Appendices.
PB93-122216/REB 93-01 PC **A16**/MF **A03**

Transformation of Carbon Tetrachloride in the Presence of Sulfide, Biotite, and Vermiculite.
PB93-135713/REB 93-01 PC **A02**/MF **A01**

Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC **A02**/MF **A01**

Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC **A07**/MF **A02**

Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

Process for Regional Assessment of Wetland Risk.
PB93-146793/REB 93-01 PC **A09**/MF **A02**

Proceedings: Tiered Testing Issues for Freshwater and Marine Sediments. Held in Washington, DC. on September 16-18, 1992.
PB93-152619/REB 93-01 PC **A22**/MF **A04**

Economic Benefits of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-168797/REB 93-01 PC **A08**/MF **A02**

Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02**/MF **A01**

Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03**/MF **A01**

Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC **A03**/MF **A01**

Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

Regulatory Applications of Sediment Criteria.
PB93-174472/REB 93-01 PC **A03**/MF **A01**

Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03**/MF **A01**

Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03**/MF **A01**

Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-196988/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Di-2-Ethylhexyl Phthalate.
PB93-202752/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Hexachlorobenzene.
PB93-202760/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Antimony (III).
PB93-202778/REB 93-01 PC **A03**/MF **A01**

Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02**/MF **A01**

Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC **A01**/MF **A01**

Contaminated Sediments News: Number 5, April, 1992.
PB93-207413/REB 93-04 PC **A02**/MF **A01**

Proceedings and Summary of the Workshop on Finfish as Indicators of Toxic Contamination. Held in Airlie, Virginia on July 27-28, 1986.
PB93-208320/REB 93-04 PC **A06**/MF **A02**

Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
PB93-212462/REB 93-04 PC **A03**/MF **A01**

Impacts of Section 404 Permits Requiring Compensatory Mitigation on Wetlands in California (USA).
PB93-212512/REB 93-04 PC **A03**/MF **A01**

Revision of Methodology for Deriving National Ambient Water Quality Criteria for the Protection of Human Health: Report of Workshop and EPA's Preliminary Recommendations for Revision.
PB93-213494/REB 93-04 PC **A06**/MF **A02**

Habitat Quality Assessment of Two Wetland Treatment Systems in the Arid West: A Pilot Study.
PB93-222305/REB 93-04 PC **A06**/MF **A02**

Stream Indicator and Design Workshop.
PB93-222321/REB 93-04 PC **A05**/MF **A01**

Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.
PB93-222362/REB 93-04 PC **A03**/MF **A01**

Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC **A07**/MF **A02**

Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC **A03**/MF **A01**

Virginian Province Demonstration Report. EMAP-Estuaries, 1990.
PB93-229854/REB 93-04 PC **A11**/MF **A03**

Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.
PB93-234540/REB 93-04 PC **A04**/MF **A01**

Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1. Fish Sampling and Analysis.
PB93-237899/REB 93-04 PC **A16**/MF **A03**

**WATER POLLUTION EFFECTS (ANIMAL)**

Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

**WATER POLLUTION EFFECTS (ANIMALS)**

National Study of Chemical Residues in Fish. Volume 1.
PB93-114961/REB 93-01 PC **E09**/MF **A01**

Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC **A06**/MF **A02**

Periphyton Photosynthesis as an Indicator of Effluent Toxicity: Relationship to Effects on Animal Test Species.
PB93-131829/REB 93-01 PC **A02**/MF **A01**

Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC **A03**/MF **A01**

Development of Index of Biotic Integrity Expectations for the Ecoregions of Indiana. I. Central Corn Belt Plain.
PB93-149383/REB 93-01 PC **A06**/MF **A02**

Effects of Kraft Mill Effluent on the Sexuality of Fishes: An Environmental Early Warning.
PB93-168847/REB 93-01 PC **A03**/MF **A01**

Effects of Chemical Contaminants on Blood Chemistry of Teleost Fish: A Bibliography and Synopsis of Selected Effects.
PB93-168961/REB 93-01 PC **A03**/MF **A01**

Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02**/MF **A01**

Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC **A03**/MF **A01**

Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC **A02**/MF **A01**

Aquatic Toxicity Information Retrieval Data Base: A Technical Support Document. (Revised July 1992).
PB93-192631/REB 93-04 PC **A03**/MF **A01**

Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03**/MF **A01**

Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11**/MF **A03**

Field and Laboratory Studies of Chemical Contamination and Environmentally Related Diseases in Fish and Molluscs of New England.
PB93-199438/REB 93-01 PC **A02**/MF **A01**

Observations on the State of Marine Disease Studies (Chapter 18).
PB93-204170/REB 93-01 PC **A03**/MF **A01**

Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02**/MF **A01**

Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204980/REB 93-01 PC **A03**/MF **A01**

Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows ('Cyprinodon variegatus').
PB93-204998/REB 93-04 PC **A03**/MF **A01**

Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

Chemically Induced Histopathology in Aquatic Invertebrates (Chapter 14).
PB93-222263/REB 93-04 PC **A03**/MF **A01**

Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.
PB93-222404/REB 93-04 PC **A02**/MF **A01**

Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03**/MF **A01**

Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02**/MF **A01**

Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02**/MF **A01**

Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

Aquatic Toxicity Information Retrieval Data Base (AQUIRE).
PB93-505725/REB 93-04 CP **T02**

Aquatic Toxicity Information on VAX VMS Backup (AQUIRE for VMS).
PB93-505733/REB 93-01 CP **T02**

**WATER POLLUTION EFFECTS (HUMANS)**

Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC **A05**/MF **A01**

Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Human Health (February 1993 Draft).
PB93-154680/REB 93-01 PC **A09**/MF **A03**

Great Lakes Water Quality Initiative Technical Support Document for Human Health Criteria and Values (January 1993 Draft).
PB93-154698/REB 93-01 PC **A05**/MF **A01**

**WATER POLLUTION EFFECTS (MATERIALS)**

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Contaminated Sediments Critical Issue Forum. Held in Annapolis, Maryland on December 10, 1992.
PB93-194017/REB 93-01 PC **A03**/MF **A01**

**WATER POLLUTION EFFECTS (PLANTS)**

Periphyton Photosynthesis as an Indicator of Effluent Toxicity: Relationship to Effects on Animal Test Species.
PB93-131829/REB 93-01 PC **A02**/MF **A01**

Application of the 'Tradescantia micronucleus' Assay for the Genetic Evaluation of Chemical Mixtures in Soil and Aqueous Media.
PB93-141380/REB 93-01 PC **A02**/MF **A01**

Aquatic Toxicity Information Retrieval Data Base: A Technical Support Document. (Revised July 1992).
PB93-192631/REB 93-04 PC **A03**/MF **A01**

Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC **A03**/MF **A01**

Aquatic Toxicity Information Retrieval Data Base (AQUIRE).
PB93-505725/REB 93-04 CP **T02**

Aquatic Toxicity Information on VAX VMS Backup (AQUIRE for VMS).
PB93-505733/REB 93-01 CP **T02**

**WATER POLLUTION MONITORING**

Program to Analyze Aquifer Test Data and Check for Validity with the Jacob Method.
PB93-181154/REB 93-01 PC **A02**/MF **A01**

Total Coliform Rule: Implementation Manual (Including Appendix D).
PB93-186658/REB 93-01 PC **A05**/MF **A02**

Compendium of Current Monitoring Programs in Tampa Bay and Its Watershed.
PB93-191666/REB 93-01 PC **A05**/MF **A01**

Medium Systems That Failed to Conduct Required Initial Lead Tap Monitoring and Reporting.
PB93-196632/REB 93-01 PC **A03**/MF **A01**

Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC **A03**/MF **A01**

Proceeding of the Workshop on the Sea-Surface Microlayer in Relation to Ocean Disposal. Held in Airlie, Virginia on December 18-19, 1985.
PB93-206993/REB 93-04 PC **A06**/MF **A02**

Proceedings of the National Citizens' Volunteer Water Monitoring Conference (3rd). Held in Annapolis, Maryland on March 29-April 2, 1992. Building Partnerships in the Year of Clean Water.
PB93-207106/REB 93-04 PC **A09**/MF **A02**

Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

Monitoring, Research, and Surveillance Plan for the 106-Mile Deepwater Municipal Sludge Dump Site and Environs.
PB93-207744/REB 93-04 PC **A07**/MF **A02**

Proceedings of the Ocean Dumping Workshop 106-Mile Site. Held in Ocean City, NJ., on March 28-30, 1989.
PB93-208072/REB 93-04 PC **A07**/MF **A02**

Guidance on Evaluation, Resolution, and Documentation of Analytical Problems Associated with Compliance Monitoring.
PB93-229847/REB 93-04 PC **A03**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 6. Southwestern Illinois Region.
PB93-234128/REB 93-04 PC **A03**/MF **A01**

**WATER POLLUTION SAMPLING**

Lead and Copper Rule Guidance Manual. Volume 2. Corrosion Control Treatment.
PB93-101533/REB 93-01 PC **A10**/MF **A03**

STREAM: An Exposure Assessment Methodology for Agricultural Pesticide Runoff.
PB93-106888/REB 93-01 PC **A03**/MF **A01**

Volunteer Lake Monitoring Program, 1991. Volume 3. Northeastern Illinois Region.
PB93-113538/REB 93-01 PC **A07**/MF **A02**

Environmental Monitoring and Assessment Program: Gulf Coast Salt Marsh Pilot Study.
PB93-122398/REB 93-01 PC **A03**/MF **A01**

Use of the Black Creek Database to Analyze Techniques for Estimating Nonpoint Source Loadings from Small Watersheds (May 1988).
PB93-126072/REB 93-01 PC **A03**/MF **A01**

Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC **A07**/MF **A02**

Sampling, Characterizing and Mapping Contaminated Sediments in River Harbors.
PB93-135705/REB 93-01 PC **A02**/MF **A01**

Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC **A03**/MF **A01**

RCRA Ground-Water Monitoring: Draft Technical Guidance.
PB93-139350/REB 93-01 PC **A10**/MF **A03**

Role of Nitrate in the Acidification of Streams in the Catskill Mountains of New York.
PB93-150167/REB 93-01 PC **A03**/MF **A01**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC **A10**/MF **A03**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC **A08**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC **A08**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC **A99**/MF **E11**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC **A21**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC **A07**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC **A20**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC **A24**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC **A05**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 50,001 to 100,000 Persons.
PB93-174514/REB 93-01 PC **A04**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 101 to 500 Persons.
PB93-174522/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 501 to 3,300 Persons.
PB93-174530/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 3,301 to 10,000 Persons.
PB93-174548/REB 93-01 PC **A03**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 10,001 to 50,000 Persons.
PB93-174555/REB 93-01 PC **A04**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving > 100,000 Persons.
PB93-174563/REB 93-01 PC **A04**/MF **A01**

Consensus Method for Determining Groundwaters under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA).
PB93-180818/REB 93-01 PC **A04**/MF **A01**

Passive Sampling of Groundwater Monitoring Wells without Purging: Multilevel Well Chemistry and Tracer Disappearance.
PB93-181170/REB 93-01 PC **A03**/MF **A01**

Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03**/MF **A01**

Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC **A02**/MF **A01**

Compendium of Methods for Marine and Estuarine Environmental Studies.
PB93-202570/REB 93-01 PC **A10**/MF **A03**

Volunteer Water Monitoring: A Guide for State Managers.
PB93-202596/REB 93-01 PC **A05**/MF **A01**

Preliminary Data Summary for the Pulp, Paper and Paperboard Point Source Category.
PB93-202935/REB 93-01 PC **A04**/MF **A01**

Fate of Priority Pollutants in Publicly Owned Treatment Works. Pilot Study.
PB93-203974/REB 93-04 PC **A03**/MF **A01**

Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC **A08**/MF **A02**

Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16**/MF **A03**

Chesapeake Bay Coordinated Split Sample Program Annual Report, 1990-1991: Analytical Methods and Quality Assurance Workgroup of the Chesapeake Bay Program Monitoring Subcommittee.
PB93-208270/REB 93-04 PC **A06**/MF **A02**

Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants (Revised).
PB93-212025/REB 93-04 PC **A05**/MF **A01**

Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC **A09**/MF **A02**

Lake Water Quality Assessment Program: Southern Illinois Lakes.
PB93-215929/REB 93-04 PC **A03**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 1: Statewide Summary.
PB93-216927/REB 93-04 PC **A06**/MF **A02**

Volunteer Lake Monitoring Program, 1992. Volume 4. West Central Illinois Region.
PB93-219111/REB 93-04 PC **A04**/MF **A01**

Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
PB93-228518/REB 93-04 PC **A02**/MF **A01**

Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03**/MF **A01**

Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.
PB93-236438/REB 93-04 PC **A03**/MF **A01**

Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.
PB93-236446/REB 93-04 PC **A03**/MF **A01**

Inter-Regional Comparison of Patterns and Trends in Surface Water Acidification Across the United States.
PB93-236453/REB 93-04 PC **A03**/MF **A01**

Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

**WATER POLLUTION SOURCES**

Illinois Water Quality Management Plan.
PB93-138451/REB 93-01 PC **A07**/MF **A02**

**WATER POLLUTION STANDARDS**

Proceedings of the National Conference (3rd): Water Quality Standards for the 21st Century. Held in Las Vegas, Nevada on August 31-September 3, 1992.
PB93-144210/REB 93-01 PC **A16**/MF **A03**

Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Guidance.
PB93-154730/REB 93-01 PC **A10**/MF **A03**

Economic Analysis of Pretreatment Standards: The Secondary Copper and Aluminum Subcategories of the Nonferrous Metals Manufacturing Point Source Category.
PB93-167757/REB 93-01 PC **A07**/MF **A02**

Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Plastics Molding and Forming Industry.
PB93-167773/REB 93-01 PC **A05**/MF **A01**

Economic Impact Analysis of Effluent Limitations and Standards for the Nonferrous Metals Smelting and Refining Industry. Phase 2.
PB93-167781/REB 93-01 PC **A09**/MF **A03**

Restructuring Manual: A Training Manual for State Drinking Water Personnel as They Meet the Challenges of the 1986 Safe Drinking Water Act Amendments.
PB93-180842/REB 93-01 PC **A04**/MF **A01**

PRELIM Version 4.0 Users Guide. Documentation for the EPA Computer Program for Development of Local Discharge Limitations under the Pretreatment Program. Data Tape Documentation.
PB93-192748/REB 93-04 PC **A05**/MF **A01**

Volunteer Water Monitoring: A Guide for State Managers.
PB93-202596/REB 93-01 PC **A05**/MF **A01**

Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.
PB93-205508/REB 93-04 PC **A99**/MF **A06**

Supplemental Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation.
PB93-209872/REB 93-04 PC **A06**/MF **A02**

State Clean Water Strategies: Meeting the Challenges of the Future.
PB93-217628/REB 93-04 PC **A03**/MF **A01**

National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges (40CFR Parts 122, 123, and 124 Final Rule).
PB93-226728/REB 93-04 PC **A06**/MF **A02**

Office of Wastewater Enforcement and Compliance (OWEC): Primer.
PB93-226736/REB 93-04 PC **A05**/MF **A01**

Federal Register Volume 57 No. 175 Wednesday, September 9, 1992 Notices. Part 2. Final NPDES General Permits for Storm Water Discharges from Construction Sites; Fact Sheet.
PB93-227635/REB 93-04 PC **A03**/MF **A01**

Drinking Water State Revolving Fund: Ensuring Safe Drinking Water for America.
PB93-227858/REB 93-04 PC **A02**/MF **A01**

Guidelines for Deriving Ambient-Aquatic Life Advisory Concentrations.
PB93-236057/REB 93-04 PC **A03**/MF **A01**

Regulatory Impact Analysis (RIA) for the Proposed Great Lakes Water Quality Guidance (for Microcomputers).
PB93-505386/REB 93-04 CP **D02**

Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Initiative Guidance (for Microcomputers).
PB93-505394/REB 93-04 CP **D02**

Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study Technical Background Document (for Microcomputers).
PB93-505402/REB 93-04 CP **D04**

PRELIM, Version 4.0 (for Microcomputers).
PB93-505980/REB 93-04 CP **D03**

EPA Model Pretreatment Ordinance (for Microcomputers).
PB93-506079/REB 93-04 CP **D02**

**WATER PURIFICATION**

Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC **A03**/MF **A01**

**WATER QUALITY**

Freshwater environmental monitoring in Sweden. Proposals from a working group.
DE93778474/REB 93-01 PC **A08**/MF **A02**

Citizen's Guide to Ground-Water Protection.
PB93-115814/REB 93-01 PC **A03**/MF **A01**

Florida Small Systems Compliance Project.
PB93-115855/REB 93-01 PC **A04**/MF **A01**

Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC **A08**/MF **A02**

Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC **A07**/MF **A02**

Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC **A03**/MF **A01**

Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC **A11**/MF **A03**

Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

Development of Index of Biotic Integrity Expectations for the Ecoregions of Indiana. I. Central Corn Belt Plain.
PB93-149383/REB 93-01 PC **A06**/MF **A02**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Human Health (February 1993 Draft).
PB93-154680/REB 93-01 PC **A09**/MF **A03**

Great Lakes Water Quality Initiative Technical Support Document for Human Health Criteria and Values (January 1993 Draft).
PB93-154698/REB 93-01 PC **A05**/MF **A01**

Proposed Water Quality Guidance for the Great Lakes System.
PB93-164515/REB 93-01 PC **A14**/MF **A03**

Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 50,001 to 100,000 Persons.
PB93-174514/REB 93-01 PC **A04**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 101 to 500 Persons.
PB93-174522/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 501 to 3,300 Persons.
PB93-174530/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 3,301 to 10,000 Persons.
PB93-174548/REB 93-01 PC **A03**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 10,001 to 50,000 Persons.
PB93-174555/REB 93-01 PC **A04**/MF **A01**

Monitoring Requirements for Lead and Copper Rules: Water Systems Serving > 100,000 Persons.
PB93-174563/REB 93-01 PC **A04**/MF **A01**

National Public Water System Supervision Program. FY 1992 Compliance Report.
PB93-180867/REB 93-01 PC **A04**/MF **A01**

Passive Sampling of Groundwater Monitoring Wells without Purging: Multilevel Well Chemistry and Tracer Disappearance.
PB93-181170/REB 93-01 PC **A03**/MF **A01**

Learning Guide for State/Local Drinking Water Agreements.
PB93-185601/REB 93-01 PC **A07**/MF **A02**

Irrigated Wetlands of the Colorado Plateau: Information Synthesis and Habitat Evaluation Method.
PB93-186260/REB 93-01 PC **A05**/MF **A02**

Oligohaline Areas in Tampa Bay Tributaries: Spatial Extent and Species Lists.
PB93-191179/REB 93-01 PC **A03**/MF **A01**

Framework for Characterization. (Revised Final Report March 1992).
PB93-191237/REB 93-01 PC **A04**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Di-2-Ethylhexyl Phthalate.
PB93-202752/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Antimony (III).
PB93-202778/REB 93-01 PC **A03**/MF **A01**

News-Notes Number 23: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-204006/REB 93-01 PC **A03**/MF **A01**

Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03**/MF **A01**

Ambient Water and Sediment Quality of Galveston Bay: Present Status and Historical Trends. Volume 1.
PB93-205789/REB 93-04 PC **A09**/MF **A03**

Guide to Using Chesapeake Bay Program Water Quality Monitoring Data.
PB93-205888/REB 93-04 PC **A07**/MF **A02**

Quality of Our Nation's Water: 1990.
PB93-205904/REB 93-04 PC **A03**/MF **A01**

Proceedings of the National Citizens' Volunteer Water Monitoring Conference (3rd). Held in Annapolis, Maryland on March 29-April 2, 1992. Building Partnerships in the Year of Clean Water.
PB93-207108/REB 93-04 PC **A09**/MF **A02**

Portraits of Our Coastal Waters. Supplement to the National Water Quality Inventory. Report from the EPA Regions.
PB93-207546/REB 93-04 PC **A03**/MF **A01**

Water Quality in Illinois, 1990-1991.
PB93-210193/REB 93-04 PC **A03**/MF **A01**

Water Employees Together with America's Youth (WET WAY). Celebration of the 20th Anniversary of the Clean Water Act and Promotion of National Geography Awareness Week.
PB93-222941/REB 93-04 PC **A07**/MF **A02**

EPANET Water Quality Model.
PB93-236552/REB 93-04 PC **A03**/MF **A01**

Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC **A06**/MF **A02**

**WATER QUALITY ACT OF 1987**

State Clean Water Strategies: Meeting the Challenges of the Future.
PB93-217628/REB 93-04 PC **A03**/MF **A01**

**WATER QUALITY CONTROL**

Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-126049/REB 93-01 PC **A05**/MF **A01**

Northeast Indiana Conservation Tillage Demonstration Project. Final Report (1981-1985).
PB93-128056/REB 93-01 PC **A03**/MF **A01**

**WATER QUALITY CRITERIA**

Proceedings of the National Conference (3rd): Water Quality Standards for the 21st Century. Held in Las Vegas, Nevada on August 31-September 3, 1992.
PB93-144210/REB 93-01 PC **A16**/MF **A03**

Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Guidance.
PB93-154730/REB 93-01 PC **A10**/MF **A03**

Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC **A09**/MF **A02**

Ambient Aquatic Life Water Quality Criteria for Silver.
PB93-202604/REB 93-01 PC **A06**/MF **A02**

Ambient Aquatic Life Water Quality Criteria for Di-2-Ethylhexyl Phthalate.
PB93-202752/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Antimony (III).
PB93-202778/REB 93-01 PC **A03**/MF **A01**

Wildlife Criteria Portions of the Proposed Water Quality Guidance for the Great Lakes System.
PB93-227866/REB 93-04 PC **A05**/MF **A01**

**WATER QUALITY DATA**

Volunteer Lake Monitoring Program, 1991. Volume 5. East-Central Illinois Region.
PB93-102234/REB 93-01 PC **A04**/MF **A01**

Volunteer Lake Monitoring Program, 1991. Volume 3. Northeastern Illinois Region.
PB93-113538/REB 93-01 PC **A07**/MF **A02**

Dynamic River Basin Water Quality Model.
PB93-190890/REB 93-01 PC **A05**/MF **A01**

Comparison of Mid-Bay and Lateral Station Water Quality Data in the Chesapeake Bay Mainstem: Chesapeake Bay Program.
PB93-208288/REB 93-04 PC **A05**/MF **A01**

Lake Water Quality Assessment Program: Southern Illinois Lakes.
PB93-215929/REB 93-04 PC **A03**/MF **A01**

Biological and Water Quality Survey of Sugar Creek and Tributaries Crawford County, Illinois, August and September 1992.
PB93-217180/REB 93-04 PC **A04**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 5. East-Central Illinois Region.
PB93-223162/REB 93-04 PC **A05**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 6. Southwestern Illinois Region.
PB93-234128/REB 93-04 PC **A03**/MF **A01**

Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03**/MF **A01**

Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.
PB93-236446/REB 93-04 PC **A03**/MF **A01**

**WATER QUALITY MANAGEMENT**

Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC **A07**/MF **A02**

Wellhead Protection Programs: Tools for Local Governments.
PB93-101111/REB 93-01 PC **A04**/MF **A01**

Protecting the Nation's Wetlands, Oceans, and Watersheds: An Overview of Programs and Activities.
PB93-105609/REB 93-01 PC **A03**/MF **A01**

Nutrients and Phytoplankton in Puget Sound.
PB93-119576/REB 93-01 PC **A08**/MF **A02**

Quality Assurance Plan for 1991 Pilot Study of the Ecological Condition of Municipal Wastewater Constructed Wetland Treatment Systems.
PB93-134674/REB 93-01 PC **A05**/MF **A01**

Restoration of the Anacostia River.
PB93-136364/REB 93-01 PC **A05**/MF **A01**

EPA's Ground Water and Drinking Water Program: Making a Difference.
PB93-136612/REB 93-01 PC **A03**/MF **A01**

Illinois Water Quality Management Plan.
PB93-138451/REB 93-01 PC **A07**/MF **A02**

Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC **A14**/MF **A03**

Effect of the Distribution System on Drinking-Water Quality.
PB93-173722/REB 93-01 PC **A03**/MF **A01**

U.S. EPA NPDES: Basic Permit Writers' Course. Workbook.
PB93-185619/REB 93-01 PC **A17**/MF **A03**

Guide to Federal Water Quality Programs and Information: A Guide with Computer Software Developed by the Interagency Work Group on Water Quality.
PB93-186245/REB 93-01 PC **A09**/MF **A02**

Estuary Program Primer. National Estuary Program.
PB93-193753/REB 93-01 PC **A06**/MF **A02**

Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC **A08**/MF **A02**

Modeling Contaminant Propagation in Drinking-Water Distribution Systems.
PB93-205136/REB 93-04 PC **A03**/MF **A01**

Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.
PB93-205508/REB 93-04 PC **A99**/MF **A06**

Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC **A06**/MF **A02**

Case Studies in Wellhead Protection: Ten Examples of Innovative Wellhead Protection Programs.
PB93-207363/REB 93-04 PC **A03**/MF **A01**

Lake and Reservoir Restoration Guidance Manual: Second Edition.
PB93-207926/REB 93-04 PC **A15**/MF **A03**

Clark-Fork-Pend Oreille Basin Water Quality Study: A Summary of Findings and a Management Plan.
PB93-208148/REB 93-04 PC **A08**/MF **A02**

Incorporating Uncertainty Associated with Censored Water Quality Data in Parametric Trend Analysis.
PB93-208262/REB 93-04 PC **A03**/MF **A01**

Fish and Fisheries Management in Lakes and Reservoirs. Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-210375/REB 93-04 PC **A15**/MF **A03**

Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.
PB93-212033/REB 93-04 PC **A01**/MF **A01**

Revision of Methodology for Deriving National Ambient Water Quality Criteria for the Protection of Human Health: Report of Workshop and EPA's Preliminary Recommendations for Revision.
PB93-213494/REB 93-04 PC **A06**/MF **A02**

National Estuary Program Guidance. Comprehensive Conservation and Management Plans: Content and Approval Requirements.
PB93-217172/REB 93-04 PC **A03**/MF **A01**

Role and Design of Water Quality Monitoring on Forested Watersheds.
PB93-222248/REB 93-04 PC **A02**/MF **A01**

Wildlife Criteria Portions of the Proposed Water Quality Guidance for the Great Lakes System.
PB93-227866/REB 93-04 PC **A05**/MF **A01**

**WATER QUALITY PROGRAMS**

Guide to Federal Water Quality Programs and Information: A Guide with Computer Software Developed by the Interagency Work Group on Water Quality.
PB93-186245/REB 93-01 PC **A09**/MF **A02**

**WATER QUALITY SAMPLING**

Volunteer Lake Monitoring Program, 1992. Volume 2: Northwestern Illinois Region.
PB93-217214/REB 93-04 PC **A04**/MF **A01**

**WATER QUALITY STANDARDS**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

Proceedings of the National Conference (3rd): Water Quality Standards for the 21st Century. Held in Las Vegas, Nevada on August 31-September 3, 1992.
PB93-144210/REB 93-01 PC **A16**/MF **A03**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03**/MF **A01**

Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC **A09**/MF **A02**

Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.
PB93-184620/REB 93-01 PC **A03**/MF **A01**

**WATER RECLAMATION**

Guidelines for Water Use.
PB93-222180/REB 93-04 PC **A12**/MF **A03**

**WATER RESOURCES**

Publications Office of Science and Technology: Catalog.
PB93-152577/REB 93-01 PC **A06**/MF **A02**

Office of Water Environmental and Program Information Systems Compendium, FY 1992.
PB93-186203/REB 93-01 PC **A08**/MF **A02**

**WATER SERVICES**

Use of Expert System in a Water Utility.
PB93-123081/REB 93-01 PC **A04**/MF **A01**

**WATER SUPPLY**

Guide for Conducting Contaminant Source Inventories for Public Drinking Water Supplies. Technical Assistance Document.
PB93-126407/REB 93-01 PC **A06**/MF **A02**

Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

General Public Notification for Public Water Systems.
PB93-167096/REB 93-01 PC **A05**/MF **A01**

National Public Water System Supervision Program. FY 1992 Compliance Report.
PB93-180867/REB 93-01 PC **A04**/MF **A01**

Video Teleconference on Emergency Planning for Potable Water Suppliers. Held on October 30-31, 1985.
PB93-184455/REB 93-01 PC **A10**/MF **A03**

Guidance on Enforcement of the Requirements of the Surface Water Treatment Rule.
PB93-186633/REB 93-01 PC **A03**/MF **A01**

Surface Water Treatment Rule. Implementation Manual (Including Appendix D).
PB93-186641/REB 93-01 PC **A07**/MF **A02**

Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194181/REB 93-01 PC **A03**/MF **A01**

Clean Water and the American Economy. Proceedings: Surface Water. Volume 1. Held on October 19-21, 1992.
PB93-202612/REB 93-01 PC **A14**/MF **A03**

Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
PB93-202620/REB 93-01 PC **A07**/MF **A02**

Drinking Water Handbook for Public Officials.
PB93-226595/REB 93-04 PC **A04**/MF **A01**

**WATER TEMPERATURE**

Water Temperature Characteristics of Lakes Subjected to Climate Change.
PB93-135648/REB 93-01 PC **A09**/MF **A02**

**WATER TREATMENT**

Lead and Copper Rule Guidance Manual. Volume 2. Corrosion Control Treatment.
PB93-101533/REB 93-01 PC **A10**/MF **A03**

Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC **A02**/MF **A01**

Drinking Water and Health: Disinfectants and Disinfectant By-Products. Volume 7.
PB93-112290/REB 93-01 PC **A06**/MF **A02**

Economic Assessment of Reducing Fluoride in Drinking Water.
PB93-115830/REB 93-01 PC **A05**/MF **A01**

Florida Small Systems Compliance Project.
PB93-115855/REB 93-01 PC **A04**/MF **A01**

Sanitary Survey Training: Instructor's Guide for Inspectors of Small Water Systems.
PB93-115871/REB 93-01 PC **A05**/MF **A01**

Sanitary Survey Training: Instructor's Guide for Sanitarians of Micronesia.
PB93-115889/REB 93-01 PC **A09**/MF **A02**

Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC **A03**/MF **A01**

Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC **A03**/MF **A01**

Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC **A07**/MF **A02**

Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC **A05**/MF **A01**

Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

Simulation of Microbial Occurrence, Exposure and Health Risks after Drinking Water Treatment Processes.
PB93-134393/REB 93-01 PC **A05**/MF **A02**

Simulation of Raw Water and Treatment Parameters in Support of the Disinfection By-Products Regulatory Impact Analysis.
PB93-134401/REB 93-01 PC **A03**/MF **A01**

Status Report on Analytical Methods to Support the Disinfectant/Disinfection By-Products Regulation.
PB93-134898/REB 93-01 PC **A03**/MF **A01**

Status Report on Development of Regulations for Disinfectants and Disinfection By-Products.
PB93-134914/REB 93-01 PC **A03**/MF **A01**

Water Treatment Plant Simulation Program, Version 1.21, User's Manual.
PB93-134948/REB 93-01 PC **A06**/MF **A02**

Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC **A02**/MF **A01**

Removal of Beryllium from Drinking Water by Chemical Coagulation and Lime Softening.
PB93-150134/REB 93-01 PC **A03**/MF **A01**

Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

National Public Water System Supervision Program. FY 1992 Compliance Report.
PB93-180867/REB 93-01 PC **A04**/MF **A01**

Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
PB93-185759/REB 93-01 PC **A03**/MF **A01**

Guidance Manual for POTW Pretreatment Program Development.
PB93-186112/REB 93-01 PC **A14**/MF **A03**

Guidance on Enforcement of the Requirements of the Surface Water Treatment Rule.
PB93-186633/REB 93-01 PC **A03**/MF **A01**

Surface Water Treatment Rule. Implementation Manual (Including Appendix D).
PB93-186641/REB 93-01 PC **A07**/MF **A02**

Total Coliform Rule: Implementation Manual (Including Appendix D).
PB93-186658/REB 93-01 PC **A05**/MF **A02**

Tribal Water Utility Management.
PB93-190908/REB 93-01 PC **A09**/MF **A02**

Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03**/MF **A01**

Corrosion Control Principles and Strategies for Reducing Lead and Copper in Drinking Water Systems.
PB93-199420/REB 93-01 PC **A03**/MF **A01**

Determination of Nine Haloacetic Acids in Finished Drinking Water.
PB93-204121/REB 93-01 PC **A03**/MF **A01**

Modeling Contaminant Propagation in Drinking-Water Distribution Systems.
PB93-205136/REB 93-04 PC **A03**/MF **A01**

Small Community Water and Wastewater Treatment.
PB93-215606/REB 93-04 PC **A05**/MF **A01**

Comparative Health Effects Assessment of Drinking Water Treatment Technologies: Report to Congress.
PB93-216950/REB 93-04 PC **A03**/MF **A01**

Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.
PB93-222214/REB 93-04 PC **A10**/MF **A03**

Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC **A01**/MF **A01**

Emergency Disinfection of Drinking Water.
PB93-223188/REB 93-04 PC **A01**/MF **A01**

**WATER TREATMENT PLANTS**

Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC **A10**/MF **A03**

Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC **A03**/MF **A01**

Overview of Existing State Alternative Financing Programs: Financing Drinking Water System Capital Needs in the 1990's.
PB93-132637/REB 93-01 PC **A05**/MF **A01**

Technologies and Costs for Control of Disinfection By-Products: Executive Summary.
PB93-134922/REB 93-01 PC **A03**/MF **A01**

Water Treatment Plant Simulation Program, Version 1.21, User's Manual.
PB93-134948/REB 93-01 PC **A06**/MF **A02**

**WATER UTILITIES**

Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources. March 1991 Edition.
PB93-222933/REB 93-04 PC **A24**/MF **A04**

**WATER WELLS**

Wellhead Protection Programs: Tools for Local Governments.
PB93-101111/REB 93-01 PC **A04**/MF **A01**

Delineation of Wellhead Protection Areas in Fractured Rocks.
PB93-115822/REB 93-01 PC **A08**/MF **A02**

Managing Ground Water Contamination Sources in Wellhead Protection Areas: A Priority Setting Approach.
PB93-115863/REB 93-01 PC **A12**/MF **A03**

Wellhead Protection Strategies for Confined-Aquifer Settings.
PB93-115913/REB 93-01 PC **A05**/MF **A01**

Why do Wellhead Protection. Issues and Answers in Protecting Public Drinking Water Supply Systems.
PB93-115921/REB 93-01 PC **A03**/MF **A01**

Guide for Conducting Contaminant Source Inventories for Public Drinking Water Supplies. Technical Assistance Document.
PB93-126407/REB 93-01 PC **A06**/MF **A02**

Private Wells: Guidance for What to Do After the Flood.
PB93-226710/REB 93-04 PC **A02**/MF **A01**

**WATERFOWL**

Waterfowl Workgroup Living Resources Subcommittee: Annual Progress Report.
PB93-112704/REB 93-01 PC **A03**/MF **A01**

**WATERSHED MANAGEMENT**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
PB93-128015/REB 93-01 PC **A04**/MF **A01**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC **A04**/MF **A01**

Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC **A03**/MF **A01**

Application of the Ecotone Concept in Defining Nutrient Management Requirements for the Upper Potomac River Basin.
PB93-199560/REB 93-01 PC **A03**/MF **A01**

**WATERSHED MANIPULATION PROJECT**

Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC **A02**/MF **A01**

Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC **A08**/MF **A02**

**WATERSHEDS**

Protecting Coastal and Wetlands Resources: A Guide for Local Governments.
PB93-105567/REB 93-01 PC **A09**/MF **A03**

Protecting the Nation's Wetlands, Oceans, and Watersheds: An Overview of Programs and Activities.
PB93-105609/REB 93-01 PC **A03**/MF **A01**

MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC **A02**/MF **A01**

Use of the Black Creek Database to Analyze Techniques for Estimating Nonpoint Source Loadings from Small Watersheds (May 1988).
PB93-128072/REB 93-01 PC **A03**/MF **A01**

Maumee River Basin Pilot Watershed Study. Volume 5. Continued Watershed Monitoring (1981-1985) and Rainulator Study - Detailed Data (1986).
PB93-128098/REB 93-01 PC **A10**/MF **A03**

Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC A02/MF A01

Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC A03/MF A01

Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC A02/MF A01

Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC A04/MF A01

Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC A02/MF A01

Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC A08/MF A02

**WAXES**

Modeling of the Fast Organic Emissions from a Wood-Finishing Product: Floor Wax.
PB93-107027/REB 93-01 PC A02/MF A01

**WEATHERING**

Kinetics of Chemical Weathering in B Horizon Spodosol Fraction.
PB93-141539/REB 93-01 PC A02/MF A01

Role of Soil Organic Acids in Mineral Weathering Processes (Chapter 6).
PB93-149268/REB 93-01 PC A04/MF A01

Weatherability of Enhanced-Degradable Plastics.
PB93-229789/REB 93-04 PC A14/MF A03

**WELDERS**

Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC A02/MF A01

**WELL HEADS**

Guidelines for Delineation of Wellhead Protection Areas, 1993.
PB93-215861/REB 93-04 PC A10/MF A03

Protecting Local Ground-Water Supplies through Wellhead Protection.
PB93-216109/REB 93-04 PC A03/MF A01

**WELLHEAD PROTECTION PROGRAM**

Wellhead Protection Programs: Tools for Local Governments.
PB93-101111/REB 93-01 PC A04/MF A01

Wellhead Protection Strategies for Confined-Aquifer Settings.
PB93-115913/REB 93-01 PC A05/MF A01

Why do Wellhead Protection. Issues and Answers in Protecting Public Drinking Water Supply Systems.
PB93-115921/REB 93-01 PC A03/MF A01

**WELLHEADS**

Case Studies in Wellhead Protection: Ten Examples of Innovative Wellhead Protection Programs.
PB93-207363/REB 93-04 PC A03/MF A01

Wellhead Protection: A Guide for Small Communities.
PB93-215580/REB 93-04 PC A08/MF A02

3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
PB93-217669/REB 93-04 PC A12/MF A03

**WEST CENTRAL REGION (ILLINOIS)**

Volunteer Lake Monitoring Program, 1992. Volume 4. West Central Illinois Region.
PB93-219111/REB 93-04 PC A04/MF A01

**WEST VIRGINIA**

National Priorities List Sites: West Virginia, 1992.
PB93-963247/REB 93-01 PC A04/MF A01

**WESTERN REGION (UNITED STATES)**

Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC A03/MF A01

Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).
PB93-505543/REB 93-04 CP D03

**WETLAND TREATMENT SYSTEMS**

Constructed Wetland Design: the First Generation.
PB93-131753/REB 93-01 PC A02/MF A01

Habitat Quality Assessment of Two Wetland Treatment Systems in Mississippi: A Pilot Study.
PB93-135614/REB 93-01 PC A06/MF A02

**WETLANDS**

Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC A03/MF A01

Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC A07/MF A02

Protecting Coastal and Wetlands Resources: A Guide for Local Governments.
PB93-105567/REB 93-01 PC A09/MF A03

Protecting the Nation's Wetlands, Oceans, and Watersheds: An Overview of Programs and Activities.
PB93-105609/REB 93-01 PC A03/MF A01

Introduction to Nonpoint Source Pollution and Wetland Mitigation.
PB93-106953/REB 93-01 PC A03/MF A01

Potential Intertidal Habitat Restoration Sites in the Duwamish River Estuary.
PB93-122190/REB 93-01 PC A05/MF A02

Quality Assurance Plan for 1991 Pilot Study of the Ecological Condition of Municipal Wastewater Constructed Wetland Treatment Systems.
PB93-134674/REB 93-01 PC A05/MF A01

Quality Assurance Field Operations Report for the Pilot Study Evaluating the Habitat Value of Wetland Treatment Systems.
PB93-134682/REB 93-01 PC A04/MF A01

Habitat Quality Assessment of Two Wetland Treatment Systems in Mississippi: A Pilot Study.
PB93-135614/REB 93-01 PC A06/MF A02

Chesapeake Bay Program Annual Progress Report, Wetlands Workgroup, December 1991.
PB93-136893/REB 93-01 PC A03/MF A01

Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC A11/MF A03

Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
PB93-143709/REB 93-01 PC A08/MF A02

Restoration Potential of Diked Estuarine Wetlands in Washington and Oregon. Phase 2: Identification of Candidate Sites in Puget Sound.
PB93-145597/REB 93-01 PC A04/MF A01

Process for Regional Assessment of Wetland Risk.
PB93-146793/REB 93-01 PC A09/MF A02

Research and Information Needs Related to Nonpoint Source Pollution and Wetlands in the Watershed: An EPA Perspective.
PB93-168862/REB 93-01 PC A02/MF A01

Irrigated Wetlands of the Colorado Plateau: Information Synthesis and Habitat Evaluation Method.
PB93-186260/REB 93-01 PC A05/MF A02

Methane Emissions from Wetland Rice Areas of Asia.
PB93-191468/REB 93-01 PC A03/MF A01

Statistical Evaluation of the EMAP-Wetlands Classification.
PB93-199446/REB 93-01 PC A03/MF A01

Design and Construction of Demonstration/Research Wetlands for Treatment of Dairy Farm Wastewater.
PB93-202836/REB 93-01 PC A03/MF A01

Information Management Guidelines for the Wetlands Research Program.
PB93-202844/REB 93-01 PC A04/MF A01

Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
PB93-202851/REB 93-04 PC A06/MF A02

Wetland Plant Communities, Galveston Bay System.
PB93-205730/REB 93-04 PC A07/MF A02

America's Wetlands: Our Vital Link between Land and Water.
PB93-206399/REB 93-04 PC A02/MF A01

Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
PB93-212462/REB 93-04 PC A03/MF A01

Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).
PB93-212470/REB 93-04 PC A03/MF A01

Impacts of Section 404 Permits Requiring Compensatory Mitigation on Wetlands in California (USA).
PB93-212512/REB 93-04 PC A03/MF A01

Habitat Quality Assessment of Two Wetland Treatment Systems in the Arid West: A Pilot Study.
PB93-222305/REB 93-04 PC A06/MF A02

Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
PB93-233914/REB 93-04 PC A12/MF A03

Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC A01/MF A01

Establishing Quantitative Performance Criteria for Wetland Restoration.
PB93-236610/REB 93-04 PC A01/MF A01

**WHEAT**

Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
PB93-141463/REB 93-01 PC A02/MF A01

**WHITE OAK RUN**

Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC A02/MF A01

**WILDERNESS AREAS**

Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC A06/MF A02

**WILDLIFE**

Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC A06/MF A02

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC A04/MF A01

Wildlife Criteria Portions of the Proposed Water Quality Guidance for the Great Lakes System.
PB93-227866/REB 93-04 PC A05/MF A01

**WILDLIFE CONSERVATION**

Glossary for Avian Conservation Biology.
PB93-106656/REB 93-01 PC A03/MF A01

Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC A03/MF A01

**WILDLIFE MANAGEMENT**

Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC A10/MF A03

**WIND LOADS**

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-229185/REB 93-04 PC A02/MF A01

**WIND (METEOROLOGY)**

Statistical Analyses of COADS Wind Data in Coastal Regions of the United States.
PB93-212777/REB 93-04 PC A03/MF A01

Stochastic Methodology for Regional Wind-Field Modeling.
PB93-229391/REB 93-04 PC A03/MF A01

**WIND SHEAR**

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119873/REB 93-01 PC A02/MF A01

Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119881/REB 93-01 PC A03/MF A01

**WIND TUNNELS**

Wind-Tunnel Measurements of Flow Fields in the Vicinity of Buildings.
PB93-236594/REB 93-04 PC A03/MF A01

**WINDSOR (ONTARIO)**

Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC A03/MF A01

**WIRE PROCESSING**

Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
PB93-123214/REB 93-01 PC A02/MF A01

**WIRE PRODUCTS**

Waste Reduction Activities and Options for a Manufacturer of Wire Stock Used for Production of Metal Items.
PB93-123180/REB 93-01 PC A02/MF A01

**WISCONSIN**

Nonpoint Source Pollution: Land Use and Water Quality.
PB93-223014/REB 93-04 PC A03

National Priorities List Sites: Wisconsin, 1992.
PB93-963248/REB 93-01 PC A07/MF A02

**WOOD**

Characterization of Organic Emission from a Wood Finishing Product-Wood Stain.
PB93-150100/REB 93-01 PC A02/MF A01

**WOOD BURNING APPLIANCES**

Development of Residential Wood Consumption Estimation Models.
PB93-199248/REB 93-01 PC A04/MF A01

**WOOD BURNING FURNACES**

Development of Residential Wood Consumption Estimation Models.
PB93-199248/REB 93-01 PC A04/MF A01

**WOOD FUELS**

Development of Residential Wood Consumption Estimation Models.
PB93-199248/REB 93-01 PC A04/MF A01

**WOOD INDUSTRY**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Wood Preserving Operations.
PB93-206084/REB 93-04 PC A03/MF A01

**WOOD PRESERVATIVES**

Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC A02/MF A01

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Wood Preserving Operations.
PB93-206084/REB 93-04 PC A03/MF A01

Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.
PB93-212801/REB 93-04 PC A03/MF A01

Technology Selection Guide for Wood Treater Sites.
PB93-963329/REB 93-04 PC A02/MF A01

**WOOD PRODUCTS**

Economic Analysis of Interim Final Effluent Guidelines for the Gum and Wood Chemicals Industry. Group 2.
PB93-167740/REB 93-01 PC A04/MF A01

Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 1.
PB93-198950/REB 93-01 PC A17/MF A04

Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 2, Appendices.
PB93-198968/REB 93-01 PC **A07**/MF **A02**

Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Presswood and Laminated Wood Products Manufacturing.
PB93-206043/REB 93-04 PC **A02**/MF **A01**

**WOOD WASTES**

Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 1.
PB93-198950/REB 93-01 PC **A17**/MF **A04**

Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 2, Appendices.
PB93-198968/REB 93-01 PC **A07**/MF **A02**

**WRITING**

Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
PB93-123131/REB 93-01 PC **A02**/MF **A01**

**WYOMING**

National Priorities List Sites: Wyoming, 1992.
PB93-963249/REB 93-01 PC **A03**/MF **A01**

**X-RAY FLUORESCENCE ANALYSIS**

X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.
PB93-203156/REB 93-04 PC **A03**/MF **A01**

**X-RAY IRRADIATION**

Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC **A03**/MF **A01**

**X RAY SPECTROSCOPY**

Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC **A03**/MF **A01**

**XANTHOMONAS MALTOPHILIA**

Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
PB93-205011/REB 93-04 PC **A02**/MF **A01**

**XENOBIOTICS**

National Study of Chemical Residues in Fish. Volume 1.
PB93-114981/REB 93-01 PC **E09**/MF **A01**

**XENOPUS LAEVIS**

Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC **A02**/MF **A01**

**XERISCAPE**

Xeriscape Landscaping: Preventing Pollution and Using Resources Efficiently.
PB93-210219/REB 93-04 PC **A03**/MF **A01**

**XYLENES**

Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03**/MF **A01**

**YORK RIVER**

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown, Virginia. Ecological Impacts of the Yorktown Refinery on the York River Estuarine Environment.
PB92-228634/REB 93-01 PC **A05**/MF **A01**

**YORKTOWN (VIRGINIA)**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Executive Summary (Revised May 1992).
PB92-228519/REB 93-01 PC **A03**/MF **A01**

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Project Summary.
PB92-228527/REB 93-01 PC **A08**/MF **A02**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC **A08**/MF **A02**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Pollution Prevention Workshop.
PB92-228543/REB 93-01 PC **A12**/MF **A03**

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown Refinery. Refinery Release Inventory.
PB92-228550/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Solid Waste Data.
PB92-228568/REB 93-01 PC **A05**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Groundwater and Soil Data.
PB92-228576/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Surface Water Data.
PB92-228584/REB 93-01 PC **A08**/MF **A02**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Measurements of Hydrocarbon Emissions and Ambient Air Concentrations at the Amoco Yorktown Refinery. Air Quality Data. Volume 1.
PB92-228592/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Public Perceptions. Report of Observations, Thoughtleader Interviews and Focus Groups Yorktown Refinery Public Perception Study.
PB92-228642/REB 93-01 PC **A99**/MF **A06**

**ZINC CHLORIDES**

Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

**ZINC COMPOUNDS**

RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC **A02**/MF **A01**

Reregistration Eligibility Document (RED) Zinc Salts.
PB93-101657/REB 93-01 PC **A11**/MF **A03**

Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

**ZYGOTE**

Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence In situ Hybridization.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03**/MF **A01**

# SPONSORING EPA OFFICE INDEX

Publications are sorted alphabetically by title under the sponsoring EPA office. The EPA office is listed with the major EPA headquarters office. Laboratories and Divisions are listed alphabetically within the appropriate office.

## SAMPLE ENTRY

| | |
|---|---|
| **Sponsoring EPA Office** | **ENVIRONMENTAL RESEARCH LAB, Corvallis, OR** |
| EPA Report Number | EPA/600/3-89/073 |
| Title | Sensitivity of Ecological Landscapes and Regions to Global Climatic Change |
| NTIS Order Number/Media Code Price Codes | PB90-120072/HSU PC A09/MF A01 |

# SPONSORING EPA OFFICE INDEX


**OFFICE OF EXTERNAL AFFAIRS**

*EPA/SW/DK-93/012*
ADL Migration Estimation Model (for Microcomputers) (Release Number 1).
PB93-500684/REB 93-01 CP **D02**

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown, Virginia. Ecological Impacts of the Yorktown Refinery on the York River Estuarine Environment.
PB92-228634/REB 93-01 PC **A05**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Executive Summary (Revised May 1992).
PB92-228519/REB 93-01 PC **A03**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Groundwater and Soil Data.
PB92-228576/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Measurements of Hydrocarbon Emissions and Ambient Air Concentrations at the Amoco Yorktown Refinery. Air Quality Data. Volume 1.
PB92-228592/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Pollution Prevention Workshop.
PB92-228543/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Project Peer Review. Report of the Peer Review Committee of the Amoco/EPA Pollution Prevention Project at the Yorktown, Virginia Refinery.
PB92-228618/REB 93-01 PC **A10**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Public Perceptions. Report of Observations, Thoughtleader Interviews and Focus Groups Yorktown Refinery Public Perception Study.
PB92-228642/REB 93-01 PC **A99**/MF **A06**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Solid Waste Data.
PB92-228568/REB 93-01 PC **A05**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Surface Water Data.
PB92-228584/REB 93-01 PC **A08**/MF **A02**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC **A08**/MF **A02**

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Project Summary.
PB92-228527/REB 93-01 PC **A08**/MF **A02**

Analytical Methods for the National Sewage Sludge Survey.
PB93-236024/REB 93-04 PC **A12**/MF **A03**

Assessment and Control of Bioconcentratable Contaminants in Surface Waters.
PB93-229813/REB 93-04 PC **A13**/MF **A03**

*EPA/DF/DK-93/064*
Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Initiative Guidance (for Microcomputers).
PB93-505394/REB 93-04 CP **D02**

Biologic Markers in Reproductive Toxicology.
PB93-100980/REB 93-01 PC **A18**/MF **A04**

Biologic Markers of Air-Pollution Stress and Damage in Forests.
PB93-110187/REB 93-01 PC **A17**/MF **A03**

*EPA/SW/DK-93/007*
CALINE: California Line Source Model (for Microcomputers).
PB93-500254/REB 93-01 CP **D02**

*EPA/841/R-93/001*
Commitment to Watershed Protection: A Review of the Clean Lakes Program.
PB93-210300/REB 93-04 PC **A04**/MF **A01**

Comparative Health Effects Assessment of Drinking Water Treatment Technologies: Report to Congress.
PB93-216950/REB 93-04 PC **A03**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Diethylene Glycol Dinitrate (DEGDN).
PB93-117000/REB 93-01 PC **A03**/MF **A01**

*EPA/744/R-93/001*
Determination of Rates of Reaction in the Gas-Phase in the Troposphere. Theory and Practice. 5. Rate of Indirect Photoreaction.
PB93-149334/REB 93-01 PC **A08**/MF **A02**

Drinking Water and Health: Disinfectants and Disinfectant By-Products. Volume 7.
PB93-112290/REB 93-01 PC **A06**/MF **A02**

*EPA/810/B-92/016*
Drinking Water Handbook for Public Officials.
PB93-226595/REB 93-04 PC **A04**/MF **A01**

Drinking Water State Revolving Fund: Ensuring Safe Drinking Water for America.
PB93-227858/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/258*
Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.
PB93-212645/REB 93-04 PC **A02**/MF **A01**

Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

*EPA/402/R-93/011*
Environmental Characteristics of EPA, NRC, and DOE Sites Contaminated with Radioactive Substances.
PB93-185551/REB 93-01 PC **A05**/MF **A01**

*EPA/DF/MT-93/087*
Environmental Fate Data Base (EFDB) Complete: XREF, CASLST, DATALOG, BIOLOG, CHEMFATE, and BIODEG. (Date of Coverage 1993).
PB93-506426/REB 93-04 CP **T05**

*EPA/821/B-92/001*
Environmental Monitoring Methods Index. Version 1.0 Software. User's Manual.
PB92-169648/REB 93-01 PC **A06**/MF **A02**

*EPA/741/R-92/003*
Evaluation of Environmental Marketing Terms in the United States.
PB93-175784/REB 93-01 PC **A10**/MF **A03**

Federal Certification Test Results for 1992 Model Year. Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines.
PB93-111219/REB 93-01 PC **A13**/MF **A03**

Federal Policies and Technological Problem-Solving.
PB93-142107/REB 93-01 PC **A03**/MF **A01**

Federal Register Volume 57 No. 175 Wednesday, September 9, 1992 Notices. Part 2. Final NPDES General Permits for Storm Water Discharges from Construction Sites; Fact Sheet.
PB93-227635/REB 93-04 PC **A03**/MF **A01**

*EPA/202/B-92/006*
Financing Models for Environmental Protection: Helping Communities Meet Their Environmental Goals.
PB93-124998/REB 93-01 PC **A05**/MF **A01**

*EPA/841/R-93/002*
Fish and Fisheries Management in Lakes and Reservoirs. Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-210375/REB 93-04 PC **A15**/MF **A03**

*EPA/630/R-92/001*
Framework for Ecological Risk Assessment.
PB93-102192/REB 93-01 PC **A04**/MF **A01**

*EPA/600/J-93/336*
Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC **A02**/MF **A01**

Fuel Economy Guide, 1992. 3-Number.
PB93-111193/REB 93-01 PC **A04**/MF **A01**

Fuel Economy Guide, 1992. 6-Number.
PB93-111201/REB 93-01 PC **A04**/MF **A01**

Fuel Economy Guide, 1993. 3-Number.
PB93-169340/REB 93-01 PC **A04**/MF **A01**

Fuel Economy Guide, 1993. 6 Number.
PB93-169357/REB 93-01 PC **A04**/MF **A01**

*EPA/DF/DK-93/065*
Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study Technical Background Document (for Microcomputers).
PB93-505402/REB 93-04 CP **D04**

*EPA/823/R-93/002*
Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1. Fish Sampling and Analysis.
PB93-237899/REB 93-04 PC **A16**/MF **A03**

*EPA/821/B-93/001*
Guidance on Evaluation, Resolution, and Documentation of Analytical Problems Associated with Compliance Monitoring.
PB93-229847/REB 93-04 PC **A03**/MF **A01**

*EPA/840/B-92/002*
Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters.
PB93-234672/REB 93-04 PC **A99**/MF **E08**

Guide to Nonpoint Source Pollution Control. Controlling Nonpoint Source Pollution: A Guide.
PB93-234292/REB 93-04 PC **A07**/MF **A02**

*EPA/700/B-92/001*
Guide to Performing Reinspections under the Asbestos Hazard Emergency Response Act (AHERA).
PB93-128007/REB 93-01 PC **A06**/MF **A02**

Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances.
PB93-206449/REB 93-04 PC **A06**/MF **A02**

Health Effects Assessment Summary Tables.
PB93-921100/REB 93-01 Standing Order

Human Health Risk Assessment for the Use and Disposal of Sewage Sludge: Benefits of Regulation.
PB93-111540/REB 93-04 PC **A14**/MF **A03**

*EPA/SW/DK-93/005*
Industrial Source Complex LongTerm (ISCLT) (for Microcomputers).
PB93-500239/REB 93-01 CP **D03**

*EPA/SW/DK-93/004*
Industrial Source Complex Short Term (ISCST) (for Microcomputers).
PB93-500221/REB 93-01 CP **D03**

*EPA/542/R-92/011*
Innovative Treatment Technologies: Semi-Annual Status Report (Fourth Edition).
PB93-133387/REB 93-01 PC **A05**/MF **A01**

*EPA/SW/DK-93/003*
Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 2) (for Microcomputers).
PB93-500288/REB 93-01 CP **D02**

*EPA/SW/DK-93/047*
Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 3) (for Microcomputers).
PB93-505352/REB 93-04 CP **D02**

*EPA/747/R-92/003*
Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
PB93-105534/REB 93-01 PC **A04**/MF **A01**

Learning Guide for State/Local Drinking Water Agreements.
PB93-185601/REB 93-01 PC **A07**/MF **A02**

Manual of Federal Geographic Data Products.
PB93-236503/REB 93-04 PC **A17**/MF **A03**

*EPA/800/K-93/002*
Marine Debris Action Agenda for the Gulf of Mexico: Framework for Action.
PB93-223469/REB 93-04 PC **A08**/MF **A02**

*EPA/560/5-85/015*
Methods for Assessing Exposure to Chemical Substances. Volume 11. Methodology for Estimating the Migration of Additives and Impurities from Polymeric Materials.
PB93-134096/REB 93-01 PC **A09**/MF **A02**

Multiple Chemical Sensitivities. Addendum to Biologic Markers in Immunotoxicology.
PB93-222990/REB 93-04 PC **A09**/MF **A03**

*EPA/832/R-93/001*
Municipal Water Pollution Prevention Program, National MWPP Conference. Held in Washington, DC. on April 27-28, 1993.
PB93-231140/REB 93-04 PC **A03**/MF **A01**

*EPA/842/B-92/002*
National Estuary Program Guidance. Comprehensive Conservation and Management Plans: Content and Approval Requirements.
PB93-217172/REB 93-04 PC **A03**/MF **A01**

*EPA/833/Z-90/100*
National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges (40CFR Parts 122, 123, and 124 Final Rule).
PB93-226728/REB 93-04 PC **A06**/MF **A02**

National Public Water System Supervision Program. FY 1992 Compliance Report.
PB93-180867/REB 93-01 PC **A04**/MF **A01**

Nonpoint Source Pollution: Land Use and Water Quality.
PB93-223014/REB 93-04 PC **A03**

*EPA/811/R-92/003*
Occurrence Assessment for Disinfectants and Disinfection By-Products (Phase 6a) in Public Drinking Water.
PB93-134377/REB 93-01 PC **A04**/MF **A01**

*EPA/830/K-93/001*
Office of Wastewater Enforcement and Compliance (OWEC): Primer.
PB93-226736/REB 93-04 PC **A05**/MF **A01**

*EPA/SW/DK-93/002*
Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 3) (for Microcomputers).
PB93-500270/REB 93-01 CP **D02**

*EPA/SW/DK-93/046*
Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 4) (for Microcomputers).
PB93-505345/REB 93-04 CP **D02**

*EPA/SW/DK-93/073*
Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 5) (for Microcomputers).
PB93-506053/REB 93-04 CP **D02**

*EPA/SW/DK-93/009*
PA-Score (Preliminary Assessment Score), Version 2.1, 3 1/2 inch (for Microcomputers).
PB93-500353/REB 93-01 CP **D02**

*EPA/SW/DK-93/008*
PA-Score (Preliminary Assessment Score), Version 2.1, 5 1/4 inch (for Microcomputers).
PB93-500346/REB 93-01 CP **D02**

*EPA/832/F-93/004*
Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.
PB93-212033/REB 93-04 PC **A01**/MF **A01**

*EPA/737/F-93/005*
Pesticide Fact Sheet: Polyhedral Occlusion Bodies of the Nuclear Polyhedrosis Virus of 'Spodoptera exigua'.
PB93-206779/REB 93-01 PC **A02**/MF **A01**

# SPONSORING EPA OFFICE INDEX

*EPA/738/R-93/001*
Pesticide Reregistration Progress Report.
PB93-178994/REB 93-01 PC **A03**/MF **A01**

*EPA-22T-1001*
Pesticide Reregistration Progress Report, October 1991.
PB93-206605/REB 93-04 PC **A03**/MF **A01**

*EPA/DF/DK-93/011*
Preamble and Final Sludge Rule (for Microcomputers).
PB93-500478/REB 93-01 CP **D01**

*EPA/SW/DK-93/072*
PRELIM, Version 4.0 (for Microcomputers).
PB93-505980/REB 93-04 CP **D03**

*EPA/SW/DK-93/072A*
PRELIM Version 4.0 Users Guide. Documentation for the EPA Computer Program for Development of Local Discharge Limitations under the Pretreatment Program. Data Tape Documentation.
PB93-192748/REB 93-04 PC **A05**/MF **A01**

*EPA/SW/DK-93/066*
Preliminary Ranking Evaluation Score (PREscore) Version 2.0 (for Microcomputers).
PB93-505915/REB 93-04 CP **D02**

*EPA/821/R-93/009*
Preliminary Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease.
PB93-214344/REB 93-04 PC **A05**/MF **A02**

Proceedings: Galveston Bay Characterization Workshop. Held on February 21-23, 1991.
PB93-205672/REB 93-04 PC **A11**/MF **A03**

*EPA/540/09-93/233*
Proceedings of National Integrated Pest Management Forum. Held in Arlington, VA., on June 17-19, 1992.
PB93-124675/REB 93-01 PC **A07**/MF **A02**

*EPA/821/R-92/007*
Proceedings of the Annual EPA Conference on Analysis of Pollutants in the Environment (15th). Held in Norfolk, Virginia on May 6-7, 1992.
PB93-152601/REB 93-01 PC **A99**/MF **A06**

*EPA/823/R-92/009*
Proceedings of the National Conference (3rd): Water Quality Standards for the 21st Century. Held in Las Vegas, Nevada on August 31-September 3, 1992.
PB93-144210/REB 93-01 PC **A16**/MF **A03**

*EPA/570/09-91/007*
Protecting Local Ground-Water Supplies through Wellhead Protection.
PB93-216109/REB 93-04 PC **A03**/MF **A01**

Protecting Visibility in National Parks and Wilderness Areas.
PB93-186393/REB 93-01 PC **A20**/MF **A04**

*EPA/800/K-93/001*
Public Health Action Agenda for the Gulf of Mexico: Frame Work for Action.
PB93-223428/REB 93-04 PC **A06**/MF **A02**

*EPA/402/R-92/014*
Radon Measurement in Schools: Revised Edition.
PB93-237493/REB 93-04 PC **A04**/MF **A01**

*EPA/440/1-91/009B*
Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry Using Revised Compliance Costs. (Revised January 1992).
PB93-186104/REB 93-01 PC **A03**/MF **A01**

*EPA/821/R-93/006*
Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry.
PB93-214328/REB 93-04 PC **A03**/MF **A01**

*EPA/700/R-92/006*
Reactions of Potential Organic Water Contaminants with Aqueous Chlorine and Monochloramine.
PB93-175040/REB 93-01 PC **A04**/MF **A01**

*EPA/738/F-93/005*
RED Facts: Silver.
PB93-232924/REB 93-04 PC **A02**/MF **A01**

Regulatory Effectiveness Study for the Armand Bayou Coastal Preserve.
PB93-205680/REB 93-04 PC **A06**/MF **A02**

Regulatory Effectiveness Study for the Christmas Bay Coastal Preserve.
PB93-205696/REB 93-04 PC **A09**/MF **A03**

*EPA/630/R-92/003*
Report of the Neurotoxicity Risk Assessment Guidelines Peer Review Workshop. Held in Washington, DC. on June 2-3, 1992.
PB93-146918/REB 93-01 PC **A06**/MF **A02**

*EPA/630/R-92/002*
Report on the Ecological Risk Assessment Guidelines Strategic Planning Workshop. Held in Miami, Florida on April 30-May 2, 1991.
PB93-102200/REB 93-01 PC **A05**/MF **A01**

Report to the United States Congress on Radionuclides in Drinking Water: Multimedia Risk and Cost Assessment of Radon in Drinking Water.
PB93-209427/REB 93-04 PC **A06**/MF **A02**

*EPA/738/R-93/002*
Reregistration Eligibility Document (RED) Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-234763/REB 93-04 PC **A07**/MF **A02**

*EPA/738/R-93/005*
Reregistration Eligibility Document (RED): Silver.
PB93-232973/REB 93-04 PC **A05**/MF **A02**

*EPA/738/R-93/007*
Reregistration Eligibility Document (RED) 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-234755/REB 93-04 PC **A07**/MF **A02**

*EPA/600/9-90/038*
Research to Improve Health Risk Assessments (RIHRA) Program.
PB93-116226/REB 93-01 PC **A06**/MF **A02**

Review of EPA's Environmental Monitoring and Assessment Program (EMAP). Interim Report.
PB93-146348/REB 93-01 PC **A03**/MF **A01**

*EPA/823/B-93/001*
Selecting Remediation Techniques for Contaminated Sediment.
PB93-216273/REB 93-04 PC **A10**/MF **A03**

*EPA/DF/DK-93/076*
Site Assessment Information Directory (SAID) Region 1 (for Microcomputers). Date of Coverage: October 1991.
PB93-506111/REB 93-04 CP **D03**

*EPA/DF/DK-93/077*
Site Assessment Information Directory (SAID) Region 2 (for Microcomputers). Date of Coverage: October 1991.
PB93-506129/REB 93-04 CP **D03**

*EPA/DF/DK-93/078*
Site Assessment Information Directory (SAID) Region 3 (for Microcomputers). Date of Coverage: October 1991.
PB93-506137/REB 93-04 CP **D03**

*EPA/DF/DK-93/079*
Site Assessment Information Directory (SAID) Region 4 (for Microcomputers). Date of Coverage: October 1991.
PB93-506145/REB 93-04 CP **D03**

*EPA/DF/DK-93/080*
Site Assessment Information Directory (SAID) Region 5 (for Microcomputers). Date of Coverage: 1991.
PB93-506152/REB 93-04 CP **D03**

*EPA/DF/DK-93/081*
Site Assessment Information Directory (SAID) Region 6 (for Microcomputers). Date of Coverage: October 1991.
PB93-506160/REB 93-04 CP **D03**

*EPA/DF/DK-93/082*
Site Assessment Information Directory (SAID) Region 7 (for Microcomputers). Date of Coverage: October 1991.
PB93-506178/REB 93-04 CP **D03**

*EPA/DF/DK-93/083*
Site Assessment Information Directory (SAID) Region 8 (for Microcomputers). Date of Coverage: 1991.
PB93-506186/REB 93-04 CP **D03**

*EPA/DF/DK-93/084*
Site Assessment Information Directory (SAID) Region 9 (for Microcomputers). Date of Coverage: October 1991.
PB93-506194/REB 93-04 CP **D03**

*EPA/DF/DK-93/085*
Site Assessment Information Directory (SAID) Region 10 (for Microcomputers). Date of Coverage: October 1991.
PB93-506202/REB 93-04 CP **D03**

*EPA/841/R-93/003*
State and Local Funding of Nonpoint Source Control Programs.
PB93-228146/REB 93-04 PC **A09**/MF **A02**

*EPA/340/1-80/020*
Summary of Factors Affecting Compliance by Ferrous Foundaries. Volume 1. Text.
PB93-199347/REB 93-01 PC **A05**/MF **A02**

*EPA/821/R-93/007*
Supplement to the Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics and Synthetic Fibers Point Source Category.
PB93-214336/REB 93-04 PC **A06**/MF **A02**

*EPA/440/1-91/009A*
Supplement to the OCPSF Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category.
PB93-186096/REB 93-04 PC **A11**/MF **A03**

*EPA/440/1-76/081C*
Supplemental for Pretreatment to the Interim Final Development Document for the Secondary Aluminum Segment of the Nonferrous Metals Manufacturing. Point Source Category.
PB93-232122/REB 93-04 PC **A07**/MF **A02**

*EPA/21W-4002*
Supplemental Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation.
PB93-209872/REB 93-04 PC **A06**/MF **A02**

Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC **A03**/MF **A01**

*EPA/542/B-92/003*
Synopses of Federal Demonstrations of Innovative Site Remediation Technologies.
PB93-144111/REB 93-01 PC **A11**/MF **A03**

*EPA/822/R-93/002*
Technical Support Document for the Surface Disposal of Sewage Sludge.
PB93-110591/REB 93-01 PC **A15**/MF **A03**

*EPA/822/R-93/003*
Technical Support for the Incineration of Sewage Sludge.
PB93-110617/REB 93-01 PC **A11**/MF **A03**

Test Car List, 1992. Passenger Cars.
PB93-111185/REB 93-01 PC **A05**/MF **A01**

Test Car List, 1993. Passenger Cars.
PB93-164531/REB 93-01 PC **A05**/MF **A02**

Town of Edinburg Landfill Reclamation Demonstration Project.
PB93-198976/REB 93-01 PC **A12**/MF **A03**

Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16**/MF **A03**

*EPA/DF/CD-93/020*
Toxic Release Inventory (TRI), 1987-1990 (on CD-ROM).
PB93-500742/REB 93-01 CD-ROM$45.00

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, January 1993, Documentation.
PB93-155166/REB 93-01 PC **A03**/MF **A01**

*EPA/DF/MT-93/001*
Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, June 1992.
PB93-500197/REB 93-01 CP **T05**

*EPA/DF/MT-93/037*
Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, January 1993.
PB93-504595/REB 93-01 CP **T05**

*EPA/DF/MT-93/001A*
Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, June 1992. Record and Data Element Description.
PB93-100261/REB 93-01 PC **A03**/MF **A01**

*EPA/745/F-93/002*
Toxics Release Inventory. Public Data Release. State Fact Sheets, 1991.
PB93-208668/REB 93-04 PC **A06**/MF **A02**

*EPA/745/R-93/003*
Toxics Release Inventory: Public Release Data, 1991.
PB93-219968/REB 93-04 PC **A16**/MF **A03**

*EPA/842/B-92/003*
Turning the Tide on Trash: A Learning Guide on Marine Debris.
PB93-216992/REB 93-04 PC **A05**/MF **A01**

Video Teleconference on Emergency Planning for Potable Water Suppliers. Held on October 30-31, 1985.
PB93-184455/REB 93-01 PC **A10**/MF **A03**

*EPA/620/R-93/006*
Virginian Province Demonstration Report. EMAP-Estuaries, 1990.
PB93-229854/REB 93-04 PC **A11**/MF **A03**

Water Employees Together with America's Youth (WET WAY). Celebration of the 20th Anniversary of the Clean Water Act and Promotion of National Geography Awareness Week.
PB93-222941/REB 93-04 PC **A07**/MF **A02**

*EPA/822/R-93/006*
Wildlife Criteria Portions of the Proposed Water Quality Guidance for the Great Lakes System.
PB93-227866/REB 93-04 PC **A05**/MF **A01**

*EPA/840/B-93/001*
Xeriscape Landscaping: Preventing Pollution and Using Resources Efficiently.
PB93-210219/REB 93-04 PC **A03**/MF **A01**

OFFICE OF GENERAL COUNSEL

*EPA/340/1-88/004*
Guideline for Graphic Arts Calculations.
PB93-199370/REB 93-01 PC **A05**/MF **A01**

Recommended Quality Assurance Procedures for Opacity Continuous Emission Monitoring Systems.
PB93-199263/REB 93-01 PC **A05**/MF **A01**

OFFICE OF INTERNATIONAL ACTIVITIES

*EPA/600/M-91/031*
Hazardous Waste Management.
PB93-116135/REB 93-01 PC **A03**/MF **A01**

**OFFICE OF AIR AND RADIATION**

Sustainable Agriculture and the Environment in the Humid Tropics.
PB93-173920/REB 93-01 PC **A99**/MF **A06**

SOLID WASTE MANAGEMENT

*EPA/540/F-93/013*
Amendment to Historical Definitions of NPL Deletion Start and Completion Dates.
PB93-963278/REB 93-01 PC **A01**/MF **A01**

ARARs Fact Sheet: Compliance with the Clean Air Act and Associated Air Quality Requirements.
PB92-963282/REB 93-01 PC **A03**/MF **A01**

ATSDR Health Consultations under CERCLA.
PB93-963334/REB 93-01 PC **A01**/MF **A01**

*EPA/DF/MT-93/089*
Biennial Reporting System (BRS) 1989 (Date of Coverage: 1989).
PB93-507044/REB 93-04 CP **T04**

*EPA/540/N-92/001*
Bioremediation: An Information Update on Applying Bioremediation to Site Cleanup.
PB93-126175/REB 93-01 PC **A03**/MF **A01**

*EPA/540/2-90/004*
Bioremediation in the Field: Number 1, November 1990.
PB93-206340/REB 93-04 PC **A03**/MF **A01**

*EPA/550/K-93/001*
Chemical Emergency Preparedness and Prevention Advisory: Hydrogen Fluoride, Series 8, No. 3.
PB93-234797/REB 93-04 PC **A02**/MF **A01**

*EPA/540/F-93/011*
Clarification of Delegation to Approve Consistency Exemptions at NPL Sites.
PB93-963281/REB 93-01 PC **A01**/MF **A01**

Community Right-to-Know and Small Business: Understanding Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act of 1986.
PB93-207538/REB 93-04 PC **A03**/MF **A01**

*EPA/540/R-93/059*
Compendium of ROD Language for FY 1993 Focus Areas.
PB93-963328/REB 93-01 PC **A04**/MF **A01**

Cost of Remedial Action Model.
PB93-963304/REB 93-04 PC **A01**/MF **A01**

Cost of Remedial Actions (CORA) Model: Overview and Applications.
PB93-963318/REB 93-04 PC **A03**/MF **A01**

*EPA/540/F-93/039*
Determination of Imminent and Substantial Endangerment for Removal Actions.
PB93-963416/REB 93-04 PC **A01**/MF **A01**

Discussions with the Public Concerning NPL Listings.
PB93-963338/REB 93-01 PC **A03**/MF **A01**

*EPA/811/P-92/001*
Draft Ground-Water Disinfection Rule.
PB93-134351/REB 93-01 PC **A05**/MF **A01**

Economic Impacts of RCRA Regulations on the Plating and Polishing Industry.
PB93-158988/REB 93-01 PC **A07**/MF **A02**

Effect of OSHA's Bloodborne Pathogens Standard on Hazardous Waste Cleanup Activities.
PB93-963419/REB 93-04 PC **A02**/MF **A01**

Ensuring the Adequacy of Cost Share Provisions in Superfund State Contracts.
PB93-963336/REB 93-01 PC **A03**/MF **A01**

*EPA/540/F-93/033*
Expedited Response Actions.
PB93-963410/REB 93-01 PC **A02**/MF **A01**

*EPA/540/F-93-005*
Extending the Tracking of Analytical Services to Potentially Responsible Party-Lead Superfund Sites (Supplemental Guidance on OSWER Directive 9240.0-2A).
PB93-963502/REB 93-01 PC **A03**/MF **A01**

*EPA/540/F-93/029*
Facility Response Plans.
PB93-963408/REB 93-01 PC **A01**/MF **A01**

*EPA/SW/DK-93/088*
Field Certification Tracking System (FCTS), Version 2.1 (for Microcomputers).
PB93-506582/REB 93-04 CP **D02**

Further Direction on Implementing the Superfund Accelerated Cleanup Model (SACM).
PB93-963291/REB 93-01 PC **A02**/MF **A01**

*EPA/530/R-93/002*
Geotechnical Systems for Structures on Contaminated Sites: A Technical Guidance Document.
PB93-209419/REB 93-04 PC **A08**/MF **A02**

*EPA/500/B-92/006*
Ground-Water Modeling Compendium. Model Fact Sheets, Descriptions, Applications and Assessment Framework.
PB93-207504/REB 93-04 PC **A08**/MF **A02**

*EPA/530/R-93/014*
Guidance for Capacity Assurance Planning. Capacity Planning Pursuant to CERCLA Section 104(c)(9).
PB93-209898/REB 93-04 PC **A09**/MF **A02**

*EPA/9360.7-06*
Guidance for Federal Facilities on Release Notification Requirements under CERCLA and SARA Title III.
PB93-963412/REB 93-01 PC **A03**/MF **A01**

*EPA/540/R-93/057*
Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA.
PB93-963402/REB 93-04 PC **A04**/MF **A01**

Guidance on Implementation of the 'Contribute to Remedial Performance' Provision.
PB93-963413/REB 93-04 PC **A02**/MF **A01**

*EPA/540/F-93/012*
Guidance on Program Management Activities under ARCS.
PB93-963280/REB 93-01 PC **A03**/MF **A01**

*EPA/540/F-93/030*
Guidance on Setting Priorities for NPL Candidate Sites.
PB93-963333/REB 93-01 PC **A02**/MF **A01**

Guide to Community Involvement for Site Assessment Managers.
PB93-963348/REB 93-04 PC **A02**/MF **A01**

Guiding Principles for Chemical Accident Prevention, Preparedness and Response.
PB93-217560/REB 93-04 PC **A07**/MF **A02**

*EPA/530/R-93/010*
Hazardous Waste Management Planning Needs and Practices: A Review of Several State Agency Approaches.
PB93-193225/REB 93-04 PC **A04**/MF **A01**

Hazardous Waste Report, 1991: Instructions and Forms.
PB93-233757/REB 93-04 PC **A08**/MF **A02**

HSED SACM Report. Volume 1, Number 1, January 1993.
PB93-963289/REB 93-01 PC **A01**/MF **A01**

*EPA/540/F-93/014*
Identification of a Senior Superfund Official for Addressing Special NPL Site-Related Issues.
PB93-963279/REB 93-01 PC **A01**/MF **A01**

*EPA/530/SW-91/094*
Index to the Monthly Hotline Report Questions (June 1982 to December 1991).
PB92-131374/REB 93-01 PC **A07**/MF **A02**

*EPA/540/F-93/016*
Initiatives to Streamline the Alternative Remedial Contracting Strategy (ARCS) Contracts' Award Fee Process.
PB93-963275/REB 93-01 PC **A03**/MF **A01**

*EPA/530/R-92/014M*
Inside the Hotline: A Compilation of 1992 Monthly Hotline Reports.
PB93-159572/REB 93-01 PC **A05**/MF **A01**

Instruction Manual for the Biennial Reporting System (BRS) NTIS Data Tape.
PB93-233740/REB 93-04 PC **A05**/MF **A01**

Instruction Manual for the Resource Conservation and Recovery Information System (RCRIS) Extract Data Tapes.
PB93-183499/REB 93-04 PC **A03**/MF **A01**

*EPA/542/B-92/004*
Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC **A03**/MF **A01**

*EPA/530/SW-90/072A*
Markets for Recovered Aluminum.
PB93-170132/REB 93-01 PC **A03**/MF **A01**

*EPA/530/SW-90/071A*
Markets for Recovered Glass.
PB93-169845/REB 93-01 PC **A03**/MF **A01**

National Priorities List Sites (1992).
PB93-963250/REB 93-01 PC**$700.00**

*EPA/540/F-93/019*
NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC **A01**/MF **A01**

Obligation of Funds under Superfund State Contracts.
PB93-963326/REB 93-04 PC **A01**/MF **A01**

*EPA/542/B-93/001*
Online Guided Tour of the Cleanup Information Bulletin Board System. (CLU-IN: Cleanup Information Bulletin Board).
PB93-193704/REB 93-01 PC **A03**/MF **A01**

*EPA/550/B-93/002*
Opportunities and Challenges for Local Emergency Planning Committees: Bestseller in EPCRA.
PB93-234789/REB 93-04 PC **A02**/MF **A01**

*EPA/540/F-93-007*
OSWER Integrated Health and Safety Standard Operating Practices.
PB93-963401/REB 93-01 PC **A01**/MF **A01**

*EPA/542/B-92/005A*
OSWER Source Book. Volume 1. Training and Technology Transfer Resources, 1992-1993.
PB93-143980/REB 93-01 PC **A10**/MF **A03**

*EPA/542/B-92/005B*
OSWER Source Book. Volume 2. Training and Technology Transfer Resources, 1992-1993.
PB93-144129/REB 93-01 PC **A11**/MF **A03**

Overview of the Outyear Liability Model (OLM).
PB93-963259/REB 93-01 PC **A02**/MF **A01**

PA Review Checklist.
PB93-963342/REB 93-04 PC **A03**/MF **A01**

*EPA/540/F-93/015*
Performance Tracking under ARCS Contracts.
PB93-963276/REB 93-01 PC **A01**/MF **A01**

*EPA/540/F-93/009*
Permits and Permit 'Equivalency' Processes for CERCLA On-Site Response Actions.
PB93-963325/REB 93-01 PC **A02**/MF **A01**

Personal Air Sampling and Air Monitoring Requirements under 29 CFR 1910.120.
PB93-963420/REB 93-04 PC **A03**/MF **A01**

*EPA/530/R-93/007*
Petitions to Delist Hazardous Wastes: A Guidance Manual. Second Edition.
PB93-169365/REB 93-01 PC **A08**/MF **A02**

*EPA/540/F-93/047*
Presumptive Remedies: Policy and Procedures.
PB93-963345/REB 93-04 PC **A02**/MF **A01**

*EPA/540/F-93/048*
Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites with Volatile Organic Compounds in Soils.
PB93-963346/REB 93-04 PC **A03**/MF **A01**

*EPA/540/F-93/035*
Presumptive Remedy for CERCLA Municipal Landfill Sites.
PB93-963339/REB 93-04 PC **A03**/MF **A01**

*EPA/530/R-93/008*
Proceedings of the National United States Environmental Protection Agency Conference on Household Hazardous Waste Management (7th). Held in Minneapolis, Minnesota on December 8-12, 1992.
PB93-170116/REB 93-01 PC **A99**/MF **A06**

*EPA/540/F-93/032*
Questions and Answers on Release Notification Requirements and Reportable Quantity Adjustments.
PB93-963411/REB 93-01 PC **A03**/MF **A01**

*EPA/530/R-93/001*
RCRA Ground-Water Monitoring: Draft Technical Guidance.
PB93-139350/REB 93-01 PC **A10**/MF **A03**

*EPA/530/R-92/017*
RCRA Implementation Plan, FY 1993.
PB93-176956/REB 93-01 PC **A05**/MF **A02**

*EPA/530/R-93/006*
RCRA Public Involvement Manual.
PB93-231066/REB 93-04 PC **A11**/MF **A03**

*EPA/540/F-93/006*
Reassignment of CLP Transportation Functions.
PB93-963501/REB 93-01 PC **A01**/MF **A01**

*EPA/540/F-93/004*
Required Contracts Management Training for Regional Superfund Personnel.
PB93-963258/REB 93-01 PC **A01**/MF **A01**

Resource Conservation and Recovery Information System (RCRIS) Data Element Dictionary.
PB93-192656/REB 93-04 PC **A24**/MF **A04**

Resource Conservation and Recovery Information System (RCRIS) Extract Tapes.
PB93-592570/REB
93-04 SubscriptionPC**$2540.00**

Response Action Contractor Final Indemnification Guidelines. Volume 2, Number 1, March 1993.
PB93-963290/REB 93-01 PC **A01**/MF **A01**

*EPA/540/F-93/008*
SARA '200' Remedial Action Starts Requirement.
PB93-963324/REB 93-01 PC **A01**/MF **A01**

Site Assessment: Evaluating Risks at Superfund Sites.
PB93-963347/REB 93-04 PC **A02**/MF **A01**

Site Enforcement Tracking System (SETS): PRP Listing by Site for Region 4.
PB93-177178/REB 93-01 PC **A99**

Smart Moves in Superfund - Regional Pilots and Initiatives. Volume 1, Number 2, September 1992.
PB93-963283/REB 93-01 PC **A01**/MF **A01**

Smart Moves in Superfund - Revitalization One Year Later. Volume 1, Number 3, January 1993.
PB93-963284/REB 93-01 PC **A01**/MF **A01**

Standard Document for Remedial Site Assessment Decisions.
PB93-963268/REB 93-01 PC **A01**/MF **A01**

Successful Practices in Title III Implementation. Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Cameron County, Texas; Bucks County, Pennsylvania; Harford County, Maryland; Dallas County, Texas. Series 6, Number 7.
PB93-130086/REB 93-01 PC **A03**/MF **A01**

Successful Practices in Title 3 Implementation Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Series 6, Number 8.
PB93-126126/REB 93-01 PC **A03**/MF **A01**

*EPA/600/X-93/062*
Summary of GIS Support to Superfund.
PB93-963506/REB 93-04 PC **A04**/MF **A01**

Superfund Accelerated Cleanup Model (SACM) Coordination Strategy.
PB94-963201/REB 93-04 PC **A01**/MF **A01**

*EPA/540/F-93/024*
Superfund Accelerated Cleanup Model (SACM): Questions and Answers.
PB93-963286/REB 93-04 PC **A01**/MF **A01**

*EPA/540/R-93/067*
Superfund Administrative Improvements. Executive Summary.
PB93-963294/REB 93-04 PC **A03**/MF **A01**

*EPA/540/R-93/068*
Superfund Administrative Improvements. Final Report.
PB93-963295/REB 93-04 PC **A04**/MF **A01**

*EPA/520/F-92/009*
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (American Thermostat Corporation, New York).
PB92-963627/REB 93-01 PC **A02**/MF **A01**

*EPA/520/F-92/017*
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Ciba-Geigy Corporation, McIntosh, Alabama).
PB92-963630/REB 93-01 PC **A02**/MF **A01**

*EPA/520/F-92/011*
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Krysowaty Farm, Hillsborough, New Jersey).
PB92-963629/REB 93-01 PC **A02**/MF **A01**

*EPA/520/F-92/006*
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Valley of the Drums, Bullitt County, Kentucky).
PB92-963618/REB 93-01 PC **A02**/MF **A01**

*EPA/520/F-92/010*
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Wide Beach Section of Brant, New York).
PB92-963628/REB 93-01 PC **A02**/MF **A01**

*EPA/520/F-93/008*
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Fulton Terminals Site Profile, Oswego County, NY).
PB93-963616/REB 93-04 PC **A02**/MF **A01**

*EPA/520/F-93/007*
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Harvey and Knott Drum Site, New Castle County, Delaware).
PB93-963614/REB 93-04 PC **A01**/MF **A01**

*EPA/540/R-93/055*
Superfund: EPA/ICMA Superfund Revitalization Conference. Held in Chicago, Illinois on November 12-13, 1992.
PB93-963274/REB 93-01 PC **A04**/MF **A01**

Superfund: Qualified Disadvantaged Business Utilization in State Response.
PB92-963283/REB 93-01 PC **A01**/MF **A01**

*EPA/540/R-93/072*
Superfund Reauthorization: NACEPT Subcommittee Handbook.
PB93-963298/REB 93-04 PC **A05**/MF **A02**

Superfund Response Action Contracts.
PB93-963292/REB 93-01 PC **A01**/MF **A01**

*EPA/540/F-93/020*
Technology Selection Guide for Wood Treater Sites.
PB93-963329/REB 93-04 PC **A02**/MF **A01**

*EPA/540/2-91/002*
Understanding Bioremediation: A Guidebook for Citizens.
PB93-205670/REB 93-04 PC **A03**/MF **A01**

*EPA/540/F-93/010*
Use of Time and Materials and Cost Reimbursement Subcontracts for Remedial Actions under the Alternative Remedial Contracting Strategy Contracts.
PB93-963282/REB 93-01 PC **A02**/MF **A01**

RADIATION

*EPA/450/2-76/005-9*
Aeros Manual Series. Volume 5. Aeros Manual of Codes. Update Number 9.
PB93-200798/REB 93-01 PC **A10**/MF **A03**

*EPA/520/1-91/013*
Background Information Document to Support NESHAPS Rulemaking on Nuclear Power Reactors.
PB93-199321/REB 93-01 PC **A14**/MF **A03**

*EPA/SW/DK-93/049*
Emissions and Fuel Economy Results 1993 Car Models (for Microcomputers).
PB93-504553/REB 93-01 CP **D02**

*EPA/420/R-93/007*
Federal Test Procedure Review Project: Preliminary Technical Report.
PB93-207975/REB 93-04 PC **A11**/MF **A03**

*EPA/420/R-93/006*
Federal Test Procedure Review Project: Status Report.
PB93-197903/REB 93-01 PC **A03**/MF **A01**

*EPA/AA/CA/CPSB-90/01*
Formation and Control of Combustion Pollutants from Gasoline-Fueled Spark-Ignition Motor Vehicle Engines. (Revised November 1992).
PB93-141042/REB 93-01 PC **A04**/MF **A01**

*EPA/340/1-90/015*
Guide to the Asbestos NESHAP as Revised November 1990.
PB93-199362/REB 93-01 PC **A04**/MF **A01**

*EPA/520/1-84/026*
Identification of Cost Factors for the Ocean Disposal Alternative for Low-Level Radioactive Waste.
PB93-203917/REB 93-04 PC **A03**/MF **A01**

*EPA/400/R-92/010*
Laboratory Testing of Commercially Available Power Frequency Magnetic Field Survey Meters.
PB93-131506/REB 93-01 PC **A15**/MF **A03**

*EPA/520/1-87/012-1*
Low-Level and NARM Radioactive Wastes. Draft Environmental Impact Statement for Proposed Rules. Volume 1. Background Information Document.
PB93-200673/REB 93-01 PC **A99**/MF **A06**

*EPA/420/R-93/008*
Marine Industry Characterization Report.
PB93-216174/REB 93-04 PC **A10**/MF **A03**

Methodology to Estimate Nonroad Equipment Populations by Nonattainment Areas.
PB93-174332/REB 93-01 PC **A05**/MF **A01**

*EPA/402/R-93/079*
National Radon Measurement Proficiency Program: Individual Proficiency Report.
PB93-209989/REB 93-04 PC **A16**/MF **A03**

On-Board Corrosion Analysis of a Recovered Nuclear Waste Container.
PB93-202927/REB 93-01 PC **A03**/MF **A01**

*EPA/520/1-87/015*
Radon/Radon Progeny Measurement Proficiency Program: Cumulative Proficiency Report (Revised September 1987).
PB93-203909/REB 93-04 PC **A03**/MF **A01**

*EPA/340/1-90/016*
Reporting and Recordkeeping Requirements for Waste Disposal: A Field Guide.
PB93-199115/REB 93-01 PC **A03**/MF **A01**

AIR QUALITY PLANNING AND STANDARDS

*EPA/600/J-93/263*
Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

*EPA/451/R-92/001*
Air/Superfund National Technical Guidance Study Series: Applicability of Open Path Monitors for Superfund.
PB93-138154/REB 93-01 PC **A07**/MF **A02**

*EPA/451/R-93/004*
Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.
PB93-215648/REB 93-04 PC **A03**/MF **A01**

*EPA/450/1-89/001A*
Air/Superfund National Technical Guidance Study Series. Volume 1. Overview of Air Pathway Assessments for Superfund Sites (Revised).
PB93-173987/REB 93-01 PC **A05**/MF **A01**

*EPA/451/R-93/007*
Air/Superfund National Technical Guidance Study Series. Volume 4. Guidance for Ambient Air Monitoring at Superfund Sites (Revised).
PB93-199214/REB 93-01 PC **A08**/MF **A02**

*EPA/453/R-93/015*
Alternative Control Techniques Document-NOx Emissions from Process Heaters.
PB93-186211/REB 93-01 PC **A10**/MF **A03**

*EPA/453/R-93/007*
Alternative Control Techniques Document. NOx Emissions from Stationary Gas Turbines.
PB93-156586/REB 93-01 PC **A11**/MF **A03**

*EPA/453/R-92/019*
Alternative Control Technology Document: Carbon Reactivation Processes.
PB93-180626/REB 93-01 PC **A06**/MF **A02**

*EPA/453/R-92/011*
Alternative Control Technology Document: Control of VOC Emissions from the Application of Agricultural Pesticides.
PB93-199131/REB 93-01 PC **A12**/MF **A03**

*EPA/451/R-92/002*
Assessing Potential Indoor Air Impacts for Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-122257/REB 93-01 PC **A09**/MF **A03**

*EPA/600/A-93/137*
Association of Personal and Workplace Characteristics with Reported Health Symptoms of 6771 Government Employees in Washington, DC.
PB93-212264/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/424*
Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02**/MF **A01**

*EPA/340/1-90/001*
Benzene Equipment Leak Inspection Manual.
PB93-199123/REB 93-01 PC **A06**/MF **A02**

*EPA/450/3-85/025B*
Calciners and Dryers in Mineral Industries: Background Information for Promulgated Standards.
PB93-122448/REB 93-01 PC **A04**/MF **A01**

*EPA/450/3-91/023*
Carbon Disulfide Emission Control Options.
PB93-124667/REB 93-01 PC **A03**/MF **A01**

Characterization of the Organic Emissions from the Thermal Destruction of CFCs.
PB93-205557/REB 93-04 PC **A10**/MF **A03**

*EPA/454/R-92/014*
Comparison of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model and Wind Tunnel Data.
PB93-226751/REB 93-04 PC **A06**/MF **A02**

*EPA/600/A-93/199*
Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
PB93-229151/REB 93-04 PC **A03**/MF **A01**

Compilation of Air Pollutant Emission Factors. Volume 1. Stationary Point and Area Sources. Supplement E.
PB93-157105/REB 93-01 PC **A10**/MF **A03**

*EPA/SW/DK-89/176*
COMPLEX1 (for Microcomputers).
PB93-504538/REB 93-01 CP **D05**

*EPA/340/1-84/011*
Compliance Data System Quality Assurance Manual, June 1984.
PB93-199339/REB 93-01 PC **A10**/MF **A03**

*EPA/453/R-92/018*
Control Techniques for Volatile Organic Compound Emissions from Stationary Sources, December 1992.
PB93-150258/REB 93-01 PC **A20**/MF **A04**

*EPA/SW/DK-92/038*
Crosswalk/Air Toxic Emission Factor Data Base Management System (XATEF) Version 2.0 (for Microcomputers).
PB93-504793/REB 93-01 CP **D02**

*EPA/454/R-93/007*
Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.
PB93-210383/REB 93-04 PC **A07**/MF **A02**

*EPA/454/R-92/016*
Development and Evaluation of a Revised Area Source Algorithm for the Industrial Source Complex Long Term Model.
PB93-226777/REB 93-04 PC **A06**/MF **A02**

*EPA/454/R-92/017*
Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC **A08**/MF **A02**

*EPA/452/B-93/006*
Directory of OAQPS Information Services, May 1993.
PB93-196624/REB 93-01 PC **A03**/MF **A01**

*EPA/SW/DK-93/055*
Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).
PB93-505493/REB 93-04 CP **D03**

*EPA/SW/DK-93/060*
Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).
PB93-505543/REB 93-04 CP **D03**

*EPA/SW/DK-93/056*
Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).
PB93-505501/REB 93-04 CP **D03**

*EPA/SW/DK-93/057*
Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).
PB93-505519/REB 93-04 CP **D03**

*EPA/SW/DK-93/058*
Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).
PB93-505527/REB 93-04 CP **D03**

*EPA/SW/DK-93/054*
Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
PB93-505485/REB 93-04 CP **D03**

*EPA/SW/DK-93/059*
Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP **D03**

*EPA/600/J-93/369*
Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02**/MF **A01**

*EPA/450/3-85/028*
Enabling Document for New Source Performance Standards for Calciners and Dryers in Mineral Industries.
PB93-122455/REB 93-01 PC **A04**/MF **A01**

*EPA/450/3-91/013*
Enabling Document for Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants.
PB93-147007/REB 93-01 PC **A07**/MF **A02**

*EPA/453/D-93/016*
Ethylene Oxide Emissions from Commercial Sterilization/Fumigation Operations: Background Information for Proposed Standards.
PB93-226744/REB 93-04 PC **A13**/MF **A03**

*EPA/453/R-92/010*
Evaluation and Costing of NOx Controls for Existing Utility Boilers in the NESCAUM Region.
PB93-142016/REB 93-01 PC **A18**/MF **A04**

*EPA/454/R-92/004*
Evaluation of CO Intersection Modeling Techniques Using a New York City Database.
PB93-105559/REB 93-01 PC **A10**/MF **A03**

*EPA/450/4-92/013*
Evaluation of Two Methods for the Measurement of Mercury Emissions in Exhaust Gases from a Municipal Waste Combustor.
PB93-105542/REB 93-01 PC **A05**/MF **A01**

*EPA/450/4-91/005B*
Feasibility of Including Fugitive PM-10 Emissions Estimates in the EPA Emissions Trends Report.
PB93-169084/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/234*
Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC **A02**/MF **A01**

*EPA/450/2-92/004*
Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures.
PB93-122273/REB 93-01 PC **A09**/MF **A03**

*EPA/450/3-91/019*
General Provisions for 40 CFR Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories. Background Information for Proposed Regulation.
PB93-226090/REB 93-04 PC **A06**/MF **A02**

*EPA/452/R-93/002*
Guidance for Growth Factors, Projections, and Control Strategies for the 15 Percent Rate-of-Progress Plans.
PB93-186476/REB 93-01 PC **A09**/MF **A03**

*EPA/452/R-92/005*
Guidance on the Adjusted Base Year Emissions Inventory and the 1996 Target for the 15 Percent Rate of Progress Plans.
PB93-122356/REB 93-01 PC **A04**/MF **A01**

*EPA/454/R-93/002*
Guidance on the Application of Refined Dispersion Models for Hazardous/Toxic Air Releases.
PB93-210359/REB 93-04 PC **A20**/MF **A04**

*EPA/452/R-93/007*
Guidance on the Relationship between the 15 Percent Rate-of-Progress Plans and Other Provisions of the Clean Air Act.
PB93-200525/REB 93-01 PC **A04**/MF **A01**

*EPA/340/1-85/019*
Guide to Effective Inspection Reports for Air Pollution Violations. Stationary Source Compliance Training Series.
PB93-199107/REB 93-01 PC **A04**/MF **A01**

*EPA/454/R-92/005*
Guideline for Modeling Carbon Monoxide from Roadway Intersections.
PB93-210391/REB 93-04 PC **A04**/MF **A01**

Guideline on Air Quality Models (Revised): Appendix W of 40 CFR Part 51 (Supplement B).
PB93-213213/REB 93-04 PC **A03**/MF **A01**

*EPA/452/R-92/010*
Guidelines for Estimating and Applying Rule Effectiveness for Ozone CO State Implementation Plan Base Year Inventories.
PB93-131498/REB 93-01 PC **A05**/MF **A01**

*EPA/450/3-92/007A*
Guidelines for MACT Determinations under Section 112(j) (Proposal).
PB93-183283/REB 93-04 PC **A08**/MF **A02**

*EPA/600/R-92/234*
Guidelines for Mercury Measurements from Stationary Sources: Quality Assurance Handbook. Section 3.19. Volume 3.
PB93-131209/REB 93-01 PC **A08**/MF **A02**

*EPA/453/D-92/016A*
Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1A. National Impacts Assessment.
PB93-156552/REB 93-01 PC **A08**/MF **A02**

*EPA/453/D-92/016B*
Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1B. Control Technologies.
PB93-156560/REB 93-01 PC **A13**/MF **A03**

*EPA/453/D-92/016C*
Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1C. Model Emission Sources.
PB93-156578/REB 93-01 PC **A11**/MF **A03**

*EPA/452/S-92/001*
Highlights of the EPA Innovative Regulatory Strategies Workshop: Market-Based Incentives and other Innovations for Air Pollution Control. Summary of Workshop Discussion Sessions. Held in Washington, DC. on January 15-17, 1992.
PB93-150290/REB 93-01 PC **A05**/MF **A01**

*EPA/208/R-92/001*
Information Technology Architecture.
PB93-122430/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/161*
Initial Assessment of Emissions from Heat Setting Carpet Yarn.
PB93-229862/REB 93-04 PC **A04**/MF **A01**

*EPA/454/R-93/015*
Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC **A06**/MF **A02**

*EPA/452/R-93/003*
Issues and Approaches to Improving Transportation Modeling for Air Quality Analysis.
PB93-194066/REB 93-01 PC **A05**/MF **A02**

*EPA/454/R-93/006*
Locating and Estimating Air Emissions from Sources of Methylene Chloride.
PB93-207579/REB 93-04 PC **A10**/MF **A03**

*EPA/454/R-93/011*
Locating and Estimating Air Emissions from Sources of Styrene.
PB93-207520/REB 93-04 PC **A06**/MF **A02**

*EPA/453/B-93/018*
Medical Waste Incinerator Operator Training Program: Course Handbook.
PB93-781979/REB 93-04 PC**$56.00**/MF**$22.00**

*EPA/SW/DK-93/006*
MESOPUFF (for Microcomputers).
PB93-500247/REB 93-01 CP **D02**

*EPA/454/R-92/021*
Modeling Protocol for Applying MESOPUFF II to Long Range Transport Problems.
PB93-226106/REB 93-04 PC **A04**/MF **A01**

*EPA/450/R-92/001*
National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC **A07**/MF **A02**

*EPA/453/B-92/007*
National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Index, 1992.
PB93-206571/REB 93-04 PC **A99**/MF **A06**

*EPA/453/B-92/006*
National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Volume 6. Citations, 1992.
PB93-207652/REB 93-04 PC **A10**/MF **A03**

*EPA/453/R-92/008*
National Air Toxics Information Clearinghouse: NATICH Data Base Report of Federal, State, Local and EPA Air Toxics Activities.
PB93-206589/REB 93-04 PC **A99**/MF **E08**

*EPA/453/R-92/005*
National Air Toxics Information Clearinghouse: Ongoing Research and Regulatory Development Projects, July 1992.
PB93-206563/REB 93-04 PC **A14**/MF **A03**

*EPA/450/3-92/006B*
National Emission Standards for Hazardous Air Pollutants Compliance Extensions for Early Reductions: Background Information for Promulgated Standards.
PB93-149425/REB 93-01 PC **A08**/MF **A02**

*EPA/600/R-92/131*
Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC **A02**/MF **A01**

*EPA/450/3-90/006B*
OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC **A04**/MF **A01**

*EPA/625/R-92/003*
Organic Air Emissions from Waste Management Facilities.
PB93-215598/REB 93-04 PC **A07**/MF **A02**

*EPA/600/J-92/427*
Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02**/MF **A01**

*EPA-450/2-92/003*
Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC **A15**/MF **A03**

*EPA/450/4-84/010*
Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or Inhalable Particulate Data (Draft).
PB93-200640/REB 93-01 PC **A04**/MF **A01**

*EPA/452/R-93/001*
Procedures for Identifying Reasonably Available Control Technology for Stationary Sources of PM-10.
PB93-175776/REB 93-01 PC **A08**/MF **A02**

*EPA/454/R-92/026*
Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone. Volume 2. Emission Inventory Requirements for Photochemical Air Quality Simulation Models (Revised).
PB93-234375/REB 93-04 PC **A11**/MF **A03**

*EPA/454/R-92/025*
Protocol for Determining the Best Performing Model.
PB93-226082/REB 93-04 PC **A03**/MF **A01**

*EPA/453/R-93/026*
Protocol for Equipment Leak Emission Estimates.
PB93-229219/REB 93-04 PC **A12**/MF **A03**

*EPA/454/B-93/012*
Reactive Plume Model IV (RPM-IV) User's Guide.
PB93-217412/REB 93-04 PC **A23**/MF **A04**

*EPA/454/R-93/021A*
Regional Interim Emission Inventories (1987-1991). Volume 1. Development Methodologies.
PB93-236107/REB 93-04 PC **A07**/MF **A02**

*EPA/454/R-93/021B*
Regional Interim Emission Inventories (1987-1991). Volume 2. Emission Summaries.
PB93-236115/REB 93-04 PC **A06**/MF **A02**

*EPA/450/3-92/009*
Regulatory Impact Analysis for the National Emissions Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Seven Other Processes.
PB93-143972/REB 93-01 PC **A09**/MF **A02**

*EPA/453/R-93/024*
Report to Congress on Implementation of Section 112 of the Clean Air Act Amendments of 1990.
PB93-236008/REB 93-04 PC **A05**/MF **A01**

*EPA/454/R-93/024*
Role of Ozone Precursors in Tropospheric Ozone Formation and Control: A Report to Congress.
PB93-226694/REB 93-04 PC **A04**/MF **A01**

*EPA/450/4-92/006*
SCREEN2 Model User's Guide.
PB93-216885/REB 93-04 PC **A04**/MF **A01**

*EPA/454/R-92/019*
Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised.
PB93-219095/REB 93-04 PC **A05**/MF **A01**

*EPA/454/R-92/015*
Sensitivity Analysis of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model.
PB93-226769/REB 93-04 PC **A05**/MF **A01**

*EPA/452/R-93/013*
Simultaneous Control of PM-10 and Hazardous Air Pollutants: Rationale for Selection of Hazardous Air Pollutants as Potential Particulate Matter or Associated with Particulate Matter at Source Conditions.
PB93-216380/REB 93-04 PC **A05**/MF **A01**

*EPA/340/1-86/005A*
Standards of Performance for New Stationary Sources. Volume 1. Introduction, Summary and Standards: A Compilation as of December 31, 1985.
PB93-199297/REB 93-01 PC **A08**/MF **A02**

*EPA/452/R-92/006*
State Air Pollution Control Programs: A Profile Report.
PB93-122364/REB 93-01 PC **A03**/MF **A01**

*EPA/452/R-93/011*
Study of Highway Vehicle Emission Inventory Procedures for Selected Urban Areas.
PB93-185577/REB 93-01 PC **A04**/MF **A01**

*EPA/600/J-92/425*
Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03**/MF **A01**

*EPA/450/3-87/020*
Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC **A07**/MF **A02**

*EPA/454/R-93/025*
Summary of Public Comments and EPA Responses on the Draft Report: The Role of Ozone Precursors in Tropospheric Ozone Formation and Control.
PB93-226702/REB 93-04 PC **A03**/MF **A01**

*EPA/450/2-92/002*
Technical Information Document for Residential Wood Combustion Best Available Control Measures.
PB93-122224/REB 93-01 PC **A05**/MF **A01**

*EPA/450/4-90/007D*
User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC **A99**/MF **A06**

*EPA/454/R-92/006*
User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections.
PB93-210250/REB 93-04 PC **A05**/MF **A02**

*EPA/453/B-92/012*
User's Manual for the BLIS BBS.
PB93-122422/REB 93-01 PC **A07**/MF **A02**

*EPA/450/3-92/001A*
VOC/HAP Emissions from Marine Vessel Loading Operations. Technical Support Document for Proposed Standards.
PB93-193910/REB 93-01 PC **A13**/MF **A03**

*EPA/SW/DK-92/043*
Volatile Organic Compound/Particulate Matter Speciation Data Base Management System (SPECIATE), Version 1.5 (for Microcomputers).
PB93-505238/REB 93-01 CP **D02**

*EPA/454/R-92/023*
Workbook for Plume Visual Impact Screening and Analysis (Revised).
PB93-223592/REB 93-04 PC **A08**/MF **A02**

*EPA/454/R-92/024*
Workbook of Screening Techniques for Assessing Impacts of Toxic Air Pollutants (Revised).
PB93-210367/REB 93-04 PC **A14**/MF **A03**

MOBILE SOURCE POLLUTION CONTROL

*EPA/460/3-89/002*
Analysis of Original Equipment and Aftermarket Manufacturer Oxygen Sensor Constructional, Functional, and Price Differences.
PB93-208007/REB 93-04 PC **A18**/MF **A04**

*EPA/AA/TDG-93/02A*
Cold Starting an Alcohol-Fueled Engine with Ultrasonic Fuel Atomization.
PB93-206597/REB 93-04 PC **A03**/MF **A01**

Commercial Marine Vessel Contributions to Emission Inventories.
PB93-173961/REB 93-01 PC **A07**/MF **A02**

Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines. Federal Certification Test Results for 1993 Model Year.
PB93-164523/REB 93-01 PC **A15**/MF **A03**

*EPA/AA/TDG-93/04*
Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel - Final Report.
PB93-197929/REB 93-01 PC **A03**/MF **A01**

*EPA/AA/TDG-92/06*
Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC **A03**/MF **A01**

*EPA/AA/EVRB-92/01*
Development of Conversion Factors for Heavy-Duty Bus Engines G/BHP-HR to G/Mile.
PB93-232932/REB 93-04 PC **A03**/MF **A01**

*EPA/AA/TEB-92/01*
Emissions and Fuel Economy Effects of the Fuelon Power Gasoline Fuel Additive.
PB93-236701/REB 93-04 PC **A03**/MF **A01**

*EPA/SW/DK-93/048*
Emissions and Fuel Economy Results 1992 Car Models (for Microcomputers).
PB93-504546/REB 93-01 CP **D02**

*EPA/AA/TEB-511/92/01*
EPA Evaluation of the Fuelon Power Gasoline Fuel Additive under Section 511 of the Motor Vehicle Information and Cost Savings Act.
PB93-236693/REB 93-04 PC **A03**/MF **A01**

# SPONSORING EPA OFFICE INDEX


*EPA/AA/CTAB-92/04*
Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03**/MF **A01**

*EPA/420/R-93/003*
Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
PB93-180875/REB 93-01 PC **A06**/MF **A02**

*EPA/AA/CTAB-92/02*
Evaluation of Resistively Heated Fuel Injection Technology to Reduce Cold Start Emissions and Assist Starting/Driveaway of a Methanol-Fueled Vehicle.
PB93-144350/REB 93-01 PC **A03**/MF **A01**

*EPA/AA/TDG-93/03*
Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.
PB93-216869/REB 93-04 PC **A03**/MF **A01**

Final Regulatory Impact Analysis and Summary and Analysis of Comments: Control of Vehicular Evaporative Emissions.
PB93-228138/REB 93-04 PC **A07**/MF **A02**

*EPA/AA/TETSB-93/02*
Heavy-Duty Engine Testing Report Cummins/EPA/Taiwan Correlation Test Results, 1993.
PB93-236172/REB 93-04 PC **A03**/MF **A01**

*EPA/AA/TDG-93/01*
Light-Duty Automotive Technology and Fuel Economy Trends through 1993.
PB93-199255/REB 93-01 PC **A06**/MF **A02**

Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC **A24**/MF **A04**

*EPA/420/R-93/004*
Nonroad Mobile Source Sales and Attrition Study: Identification and Evaluation of Available Data Sources.
PB93-190098/REB 93-01 PC **A11**/MF **A03**

Regulatory Impact Analysis: Control of Sulfur and Aromatics Contents of on-Highway Diesel Fuel.
PB93-207660/REB 93-04 PC **A12**/MF **A03**

*EPA/AA/EPSD-I/M-92-01*
Report on the EPA/Manufacturer Cooperative I/M Testing Program.
PB93-208015/REB 93-04 PC **A10**/MF **A03**

*EPA/AA/TDG-93/05*
Spray Characteristics of Two Types of Fuel Injectors.
PB93-180859/REB 93-01 PC **A03**/MF **A01**

**OFFICE OF ENFORCEMENT**

*EPA/OE/LE-133*
Enforcement Four-Year Strategic Plan: Enhanced Environmental Enforcement for the 1990's.
PB93-129724/REB 93-01 PC **A05**/MF **A01**

Environmental Protection Agency Civil Enforcement Docket.
PB93-921700/REB 93-01 Subscription

*EPA/400/R-92/006*
National List of Asbestos Landfills.
PB93-200517/REB 93-01 PC **A10**/MF **A03**

WATER ENFORCEMENT

Guidance Manual for Control of Slug Loadings to POTWs.
PB93-202745/REB 93-01 PC **A08**/MF **A02**

*EPA/440/4-87/005*
Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.
PB93-184620/REB 93-01 PC **A03**/MF **A01**

Private Wells: Guidance for What to Do After the Flood.
PB93-226710/REB 93-04 PC **A02**/MF **A01**

**OFFICE OF PLANNING AND MANAGEMENT**

ADMINISTRATION

*EPA-21M-1013*
U.S. Environmental Protection Agency Advisory Committees Charters, Rosters and Accomplishments.
PB93-130094/REB 93-01 PC **A05**/MF **A01**

OFFICE OF POLICY AND EVALUATION

Assessing the Environmental Consumer Market.
PB93-116026/REB 93-01 PC **A03**/MF **A01**

Benefits and Feasibility of Effluent Trading between Point Sources: An Analysis in Support of Clean Water Act Reauthorization.
PB93-217636/REB 93-04 PC **A04**/MF **A01**

*EPA/230/1-73/026*
Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC **A07**/MF **A02**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 1.
PB93-209013/REB 93-04 PC **A03**/MF **A01**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 2.
PB93-209021/REB 93-04 PC **A15**/MF **A03**

*EPA/230/B-93/001*
Guide to Federal Water Quality Programs and Information: A Guide with Computer Software Developed by the Interagency Work Group on Water Quality.
PB93-186245/REB 93-01 PC **A09**/MF **A02**

Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC **A06**/MF **A02**

*EPA/230/R-93/006*
International Trade in Environmental Protection Equipment: An Assessment of Existing Data.
PB93-236206/REB 93-04 PC **A04**/MF **A01**

*EPA/230/R-92/004*
Overview of Strategic Planning at the Environmental Protection Agency.
PB93-128064/REB 93-01 PC **A03**/MF **A01**

*EPA/230/09-89/067*
Risk Communication About Chemicals in Your Community. Facilitator's Manual and Guide.
PB93-200541/REB 93-01 PC **A05**/MF **A02**

RESOURCES MANAGEMENT

*EPA/220/B-92/021*
Public Access: A How To Guide.
PB93-111029/REB 93-01 PC **A09**/MF **A03**

**OFFICE OF TOXIC SUBSTANCES**

Course 1. Model Curriculum for Training Asbestos Abatement Contractors and Supervisors (Training Manual).
PB93-780773/REB 93-01 PC**$182.00**

Course 2. Model Curriculum for School Building Inspectors (Training Manual).
PB93-780823/REB 93-01 PC**$136.00**

Course 3. Model Curriculum for School Asbestos Management Planners (Training Manual).
PB93-780872/REB 93-01 PC**$81.00**

Course 4. Model Curriculum for Asbestos Abatement Workers (English Version) (Training Manual).
PB93-780922/REB 93-01 PC**$235.00**

Course 5. Presentation to Accompany 'Guidance for Controlling Asbestos-Containing Materials in Buildings' (Training Manual).
PB93-780971/REB 93-01 PC**$41.00**

*EPA/560/4-92/002*
Emergency Planning and Community Right-to-Know Act: Section 313 Release Reporting Requirements (August 1991).
PB93-205847/REB 93-04 PC **A03**/MF **A01**

EPA Model Asbestos Worker Training Course. Instructor's Manual. Course 4 (English Version) (Training Manual).
PB93-780948/REB 93-01 PC **A15**

EPA Model Asbestos Worker Training Instructor's Resources. Course 4 (English Version) (Training Manual).
PB93-780955/REB 93-01 PC **A09**

EPA Model Asbestos Worker Training Manual. Course 4 (English Version).
PB93-780930/REB 93-01 PC **A14**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Instructor's Course Syllabus. Course 1 (Training Manual).
PB93-780799/REB 93-01 PC **A09**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Student Notebook. Course 1 (Training Manual).
PB93-780781/REB 93-01 PC **A21**

Model EPA Curriculum for Training Building Inspectors. Instructor's Course Syllabus. Course 2 (Training Manual).
PB93-780849/REB 93-01 PC **A07**

Model EPA Curriculum for Training Building Inspectors. Student Notebook. Course 2 (Training Manual).
PB93-780831/REB 93-01 PC **A17**

Model EPA Curriculum for Training Management Planners. Instructor's Course Syllabus. Course 3 (Training Manual).
PB93-780898/REB 93-01 PC **A04**

Model EPA Curriculum for Training Management Planners. Student Notebook. Course 3 (Training Manual).
PB93-780880/REB 93-01 PC **A07**

National Pesticide Survey: Glossary.
PB93-115970/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Project Summary.
PB93-115988/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Summary Results of EPA's National Survey of Pesticides in Drinking Water Wells.
PB93-115996/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Survey Analytes.
PB93-116010/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Survey Design.
PB93-116002/REB 93-01 PC **A02**/MF **A01**

*EPA/737/F-93/006*
Pesticide Fact Sheet: 'Metarhizium anisopliae' Strain ESF1.
PB93-206787/REB 93-01 PC **A01**/MF **A01**

*EPA-21T-1004*
Pesticide Reregistration, March 1991.
PB93-205896/REB 93-04 PC **A03**/MF **A01**

*EPA/730/R-93/001*
Pesticide Reregistration Progress Report, April 1993.
PB93-226199/REB 93-04 PC **A03**/MF **A01**

*EPA/560/4-91/006*
Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (1991).
PB93-205854/REB 93-04 PC **A03**/MF **A01**

*EPA/560/4-88/004C*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electrodeposition of Organic Coatings.
PB93-205987/REB 93-04 PC **A02**/MF **A01**

*EPA/560/4-88/004G*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electroplating Operations.
PB93-206027/REB 93-04 PC **A02**/MF **A01**

*EPA/560/4-88/004F*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Formulation of Aqueous Solutions.
PB93-206019/REB 93-04 PC **A02**/MF **A01**

*EPA/560/4-88/004L*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Leather Tanning and Finishing.
PB93-206076/REB 93-04 PC **A03**/MF **A01**

*EPA/560/4-88/004A*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Monofilament Fiber Manufacturing.
PB93-205961/REB 93-04 PC **A02**/MF **A01**

*EPA/560/4-88/004K*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Paper and Paperboard Production.
PB93-206068/REB 93-04 PC **A03**/MF **A01**

*EPA/560/4-88/004I*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Presswood and Laminated Wood Products Manufacturing.
PB93-206043/REB 93-04 PC **A02**/MF **A01**

*EPA/560/4-88/004B*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Printing Operations.
PB93-205979/REB 93-04 PC **A02**/MF **A01**

*EPA/560/4-88/004J*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Roller, Knife, and Gravure Coating Operations.
PB93-206050/REB 93-04 PC **A03**/MF **A01**

*EPA/560/4-88/004Q*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Rubber Production and Compounding.
PB93-206092/REB 93-04 PC **A03**/MF **A01**

*EPA/560/4-88/004E*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Semiconductor Manufacturing.
PB93-206001/REB 93-04 PC **A02**/MF **A01**

*EPA/560/4-88/004D*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Spray Application of Organic Coatings.
PB93-205995/REB 93-04 PC **A02**/MF **A01**

*EPA/560/4-88/004H*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Textile Dyeing.
PB93-206035/REB 93-04 PC **A02**/MF **A01**

*EPA/560/4-88/004P*
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Wood Preserving Operations.
PB93-206084/REB 93-04 PC **A03**/MF **A01**

*EPA/560/1-89/002*
Toxic and Hazardous Chemicals, Title III and Communities: An Outreach Manual for Community Groups.
PB93-200806/REB 93-01 PC **A08**/MF **A02**

*EPA/560/4-91/008*
Toxic Chemical Release Inventory Magnetic Media Submission Instructions. Section 313 of the Emergency Planning and Community Right-to-Know Act (Revised 1990 Version).
PB93-116127/REB 93-01 PC **A03**/MF **A01**

*EPA/DF/MT-93/068*
Toxic Release Inventory (TRI), 1987.
PB93-506004/REB 93-04 CP **T16**

*EPA/DF/MT-93/069*
Toxic Release Inventory (TRI), 1988.
PB93-506012/REB 93-04 CP **T14**

*EPA/DF/MT-93/070*
Toxic Release Inventory (TRI), 1989.
PB93-506020/REB 93-04 CP **T14**

*EPA/DF/MT-93/071*
Toxic Release Inventory (TRI), 1990.
PB93-506038/REB 93-04 CP **T14**

PESTICIDE PROGRAMS

*EPA/540/FS-92/216*
EPA Pesticide RED FACTS Sheets: Indole-3-Butyric Acid.
PB93-107282/REB 93-01 PC **A02**/MF **A01**

*EPA/540/09-89/012*
Federal Insecticide, Fungicide, and Rodenticide Act as Amended.
PB93-116085/REB 93-01 PC **A05**/MF **A01**

General Information on Applying for Registration of Pesticides in the United States.
PB93-115939/REB 93-01 PC **A08**/MF **A02**

Methylbromide and Its Alternatives as Fumigants, 1979-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149912/REB 93-01 PC **A09**/MF **A03**

*EPA/DF/DK-93/010A*
Oil and Hazardous Materials Technical Assistance Data System, (OHM-TADS) Fields and Their Definitions. Users' Guide.
PB93-111706/REB 93-01 PC **A03**/MF **A01**

*EPA/DF/DK-93/010*
Oil and Hazardous Materials, Technical Assistance Data System (OHM-TADS) (for Microcomputers).
PB93-500577/REB 93-01 CP **D06**

*EPA/738/F-93/003*
Pesticide Fact Sheet: Arsenic Acid (H3AsO4).
PB93-198711/REB 93-01 PC **A02**/MF **A01**

*EPA/737/F-93/010*
Pesticide Fact Sheet: Glufosinate Ammonium.
PB93-219830/REB 93-04 PC **A03**/MF **A01**

*EPA/737/F-90/009*
Pesticide Fact Sheet: GY-81/Enzone.
PB93-219848/REB 93-04 PC **A03**/MF **A01**

*EPA/540-FS-93/238*
Pesticide Fact Sheet Number 20.1: Amitrole.
PB93-149680/REB 93-01 PC **A02**/MF **A01**

*EPA/540/FS-93/239*
Pesticide Fact Sheet Number 20.2: Amitrole.
PB93-144368/REB 93-01 PC **A02**/MF **A01**

*EPA/540/FS-93/236*
Pesticide Fact Sheet Number 236: Pyridate.
PB93-130441/REB 93-01 PC **A03**/MF **A01**

*EPA/737/F-92/003*
Pesticide Fact Sheet Number 239: Cimectacarb.
PB93-206753/REB 93-04 PC **A02**/MF **A01**

*EPA/737/F-93/001*
Pesticide Fact Sheet Number 240: Dimethenamid. SAN 582H/Frontier (Trade Name) Herbicide.
PB93-198695/REB 93-01 PC **A03**/MF **A01**

*EPA/737/F-93/002*
Pesticide Fact Sheet: 'Pseudomonas cepacia' Type Wisconsin.
PB93-206746/REB 93-04 PC **A02**/MF **A01**

*EPA/737/F-93/004*
Pesticide Fact Sheet: Streptomyces sp. Strain K61.
PB93-206761/REB 93-04 PC **A02**/MF **A01**

*EPA/737/F-93/007*
Pesticide Fact Sheet: 1-Indole-3-Butanethioic Acid, S-Phenyl Ester.
PB93-219822/REB 93-04 PC **A02**/MF **A01**

*EPA/738/B-93/001*
Pesticide Reregistration Rejection Rate Analysis Residue Chemistry/Environmental Fate Follow Up Guidance for Conducting Rotational Crop Studies.
PB93-194041/REB 93-01 PC **A03**/MF **A01**

*EPA/737/R-93/001*
Pesticide Reregistration Rejection Rate Analysis Residue Chemistry. Follow-up Guidance for Generating Storage Stability Data; Submission of Raw Data; Maximum Theoretical Concentration Factors; Flowchart Diagrams.
PB93-193696/REB 93-01 PC **A04**/MF **A01**

Pesticide Safety and Training Materials Catalog (Catalogo de Materiales Educativos y Proteccion Sobre Pesticidas).
PB93-200814/REB 93-01 PC **A07**/MF **A02**

*EPA/734/R-92/001*
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC **A10**/MF **A03**

*EPA/734/R-92/002*
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC **A08**/MF **A02**

*EPA/734/R-92/003*
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC **A08**/MF **A02**

*EPA/734/R-92/004*
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC **A06**/MF **A02**

*EPA/734/R-92/005*
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC **A99**/MF **E11**

*EPA/734/R-92/006*
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC **A21**/MF **A04**

*EPA/734/R-92/007*
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC **A07**/MF **A02**

*EPA/734/R-92/008*
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC **A20**/MF **A04**

*EPA/734/R-92/009*
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC **A06**/MF **A02**

*EPA/734/R-92/010*
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC **A24**/MF **A04**

*EPA/734/12-92/011*
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC **A05**/MF **A01**

*EPA/733/K-92/001*
Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC **A03**/MF **A01**

*EPA/540/09-93/244*
PR Notice 86-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144012/REB 93-01 PC **A01**/MF **A01**

*EPA/540/09-93/243*
PR Notice 86-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144020/REB 93-01 PC **A01**/MF **A01**

*EPA/540/09-93/242*
PR Notice 86-3. Notice to Producers, Registrants, and Formulators.
PB93-144038/REB 93-01 PC **A01**/MF **A01**

*EPA/540/09-93/241*
PR Notice 86-4. Notice to Registrants of Pesticides, and Applicants for Pesticide Registration.
PB93-144046/REB 93-01 PC **A02**/MF **A01**

*EPA/540/09-93/240*
PR Notice 86-5. Notice to Producers, Formulators, Distributors and Registrants.
PB93-144053/REB 93-01 PC **A03**/MF **A01**

*EPA/540/09-93/246*
PR Notice 87-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-141687/REB 93-01 PC **A03**/MF **A01**

*EPA/540/09-93/247*
PR Notice 87-2. Notice to Procedures, Registrants, and Formulators.
PB93-144061/REB 93-01 PC **A01**/MF **A01**

*EPA/540/09-93/248*
PR Notice 87-3. Notice to Manufacturers, Formulators, Distributors and Registrants of Pesticide Products.
PB93-144079/REB 93-01 PC **A01**/MF **A01**

*EPA/540/09-93/249*
PR Notice 87-4. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-141695/REB 93-01 PC **A03**/MF **A01**

*EPA/540/09-93/250*
PR Notice 87-5. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-144087/REB 93-01 PC **A03**/MF **A01**

*EPA/540/09-93/251*
PR Notice 87-6. Notice to Manufacturers, Formulators, Procedures, and Registrants of Pesticide Products.
PB93-144095/REB 93-01 PC **A02**/MF **A01**

*EPA/540/09-93/252*
PR Notice 87-7. Notice to Producers, Formulators and Registrants of Pesticides.
PB93-146108/REB 93-01 PC **A02**/MF **A01**

*EPA/540/09-93/253*
PR Notice 87-8. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-147015/REB 93-01 PC **A02**/MF **A01**

*EPA/540/09-93/254*
PR Notice 87-9. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149151/REB 93-01 PC **A01**/MF **A01**

*EPA/540/09-93/255*
PR Notice 87-10. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149169/REB 93-01 PC **A01**/MF **A01**

*EPA/540/09-93/256*
PR Notice 87-11. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-149664/REB 93-01 PC **A01**/MF **A01**

*EPA/731/N-92/001*
PR Notice 92-1. Notice to Manufacturers, Formulators, Producers, and Registrants of Pesticide Products.
PB93-219467/REB 93-04 PC **A02**/MF **A01**

*EPA/731/N-92/002*
PR Notice 92-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219475/REB 93-04 PC **A01**/MF **A01**

*EPA/731/N-92/003*
PR Notice 92-3. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticide Products.
PB93-219483/REB 93-04 PC **A03**/MF **A01**

*EPA/731/N-92/004*
PR Notice 92-4. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219491/REB 93-04 PC **A01**/MF **A01**

*EPA/731/N-92/005*
PR Notice 92-5. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219509/REB 93-04 PC **A01**/MF **A01**

*EPA/737/N-92/006*
PR Notice 92-6. Notice to Manufacturers, Producers, Formulators and Registrants of Pesticides.
PB93-219517/REB 93-04 PC **A01**/MF **A01**

*EPA/540/FS-92/219*
RED Facts: Capsaicin.
PB93-100311/REB 93-01 PC **A02**/MF **A01**

*EPA/540/FS-92/224*
RED Facts: Ethylene.
PB93-100345/REB 93-01 PC **A02**/MF **A01**

*EPA/738/F-93/001*
RED Facts: Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-232916/REB 93-04 PC **A02**/MF **A01**

*EPA/738/F-93/002*
RED Facts: Iron Salts.
PB93-198703/REB 93-01 PC **A02**/MF **A01**

*EPA/540/FS-93/225*
RED Facts: 'Nosema locustae'.
PB93-100352/REB 93-01 PC **A02**/MF **A01**

*EPA/738/F-92/014*
RED Facts: Oxalic Acid.
PB93-173953/REB 93-01 PC **A02**/MF **A01**

*EPA/540/FS-93/232*
RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02**/MF **A01**

*EPA/738/F-92/008*
RED Facts: Sodium Hydroxide.
PB93-124683/REB 93-01 PC **A02**/MF **A01**

*EPA/540/FS-93/227*
RED Facts: Streptomycin and Streptomycin Sulfate.
PB93-100378/REB 93-01 PC **A02**/MF **A01**

*EPA/540/FS-93/230*
RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC **A02**/MF **A01**

*EPA/738/F-93/003*
RED Facts: 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-232908/REB 93-04 PC **A02**/MF **A01**

*EPA/540/RS-92/222*
Reregistration Eligibility Document (RED): Capsaicin. (List D, Case 4018).
PB93-101434/REB 93-01 PC **A08**/MF **A02**

*EPA/738/S-93/001*
Reregistration Eligibility Document (RED): Iron Salts.
PB93-200780/REB 93-01 PC **A05**/MF **A02**

*EPA/540/RS-93/226*
Reregistration Eligibility Document (RED) 'Nosema locustae'.
PB93-100360/REB 93-01 PC **A07**/MF **A02**

*EPA/738/R-92/004*
Reregistration Eligibility Document (RED): Oxalic Acid.
PB93-169100/REB 93-01 PC **A06**/MF **A02**

*EPA/540/RS-93/231*
Reregistration Eligibility Document (RED) Soap Salts.
PB93-101673/REB 93-01 PC **A13**/MF **A03**

*EPA/540/RS-93/235*
Reregistration Eligibility Document (RED): Sodium Hydroxide.
PB93-124691/REB 93-01 PC **A07**/MF **A02**

*EPA/540/RS-93/228*
Reregistration Eligibility Document (RED): Streptomycin and Streptomycin Sulfate.
PB93-100386/REB 93-01 PC **A09**/MF **A02**

*EPA/540/RS-93/229*
Reregistration Eligibility Document (RED) Zinc Salts.
PB93-101657/REB 93-01 PC **A11**/MF **A03**

*EPA/738/R-93/009*
Status of Pesticides in Reregistration and Special Review (Rainbow Report), June 1993.
PB93-230829/REB 93-04 PC **A17**/MF **A03**

**OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE**
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE

*EPA/540/M-91/003*
Abstract Proceedings: Superfund Technical Support Project General Meeting. Held in Athens, Georgia on December 3-6, 1990.
PB93-205862/REB 93-04 PC **A03**/MF **A01**

*EPA/451/R-93/009*
Air/Superfund National Technical Guidance Study Series: Evaluation of Short-Term Air Action Levels for Superfund Sites.
PB93-200913/REB 93-01 PC **A14**/MF **A03**

*EPA/451/R-93/001*
Air/Superfund National Technical Guidance Study Series. Models for Estimating Air Emission Rates from Superfund Remedial Actions.
PB93-186807/REB 93-01 PC **A08**/MF **A02**

Consideration of ARARs during Removal Actions.
PB92-963410/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/007*
Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC **A03**/MF **A01**

*EPA/540/S-92/010*
Engineering Bulletin: Pyrolysis Treatment.
PB93-105583/REB 93-01 PC **A02**/MF **A01**

# SPONSORING EPA OFFICE INDEX

*EPA/540/S-92/008*
Engineering Bulletin: Slurry Walls.
PB93-105575/REB 93-01 PC **A02**/MF **A01**

*EPA/540/S-92/009*
Engineering Bulletin: Technology Preselection Data Requirements.
PB93-105591/REB 93-01 PC **A02**/MF **A01**

*EPA/451/R-93/003*
Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215655/REB 93-04 PC **A04**/MF **A01**

*EPA/451/R-93/006*
Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215622/REB 93-04 PC **A04**/MF **A01**

*EPA/451/R-93/005*
Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215630/REB 93-04 PC **A04**/MF **A01**

Exercising Flexibility through the Superfund Accelerated Cleanup Model (SACM).
PB93-963253/REB 93-01 PC **A01**/MF **A01**

*EPA/540/C-93/003*
Field Certification Tracking System (FCTS). User's Guide. Version 2.1.
PB93-963415/REB 93-04 PC **A04**/MF **A01**

*EPA/540/R-92/021*
Guidance for Performing Site Inspections under CERCLA.
PB92-963375/REB 93-01 PC **A11**/MF **A03**

Guidance on CERCLA Settlements with De Micromis Waste Contributors.
PB93-963619/REB 93-04 PC **A03**/MF **A01**

Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP.
PB93-963252/REB 93-01 PC **A03**/MF **A01**

*EPA/540/R-92/071A*
Guide for Conducting Treatability Studies under CERCLA.
PB93-126787/REB 93-01 PC **A05**/MF **A01**

*EPA/540/R-92/026*
Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC **A22**/MF **A04**

Highlights: Superfund Program Management. Fiscal Year 1993.
PB93-963261/REB 93-01 PC **A03**/MF **A01**

*EPA/540/2-90/012*
International Evaluation of In-situ Biorestoration of Contaminated Soil and Groundwater (September 1990)--Translation.
PB93-207553/REB 93-04 PC **A03**/MF **A01**

*EPA/540/R-92/029*
Mentor-Protege Program.
PB93-963251/REB 93-01 PC **A02**/MF **A01**

*EPA/540/R-92/027*
OSWER Superfund Telephone Directory.
PB92-963289/REB 93-01 PC **A03**/MF **A01**

*EPA/540/F-93/042*
Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis.
PB93-963297/REB 93-04 PC **A03**/MF **A01**

Superfund Accelerated Cleanup Model (SACM). Volume 1, Number 4, November 1992.
PB92-963267/REB 93-01 PC **A01**/MF **A01**

*EPA/540/R-92/020*
Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC **A09**/MF **A02**

*EPA/540/8-90/101*
Superfund: Environmental Progress.
PB93-206209/REB 93-04 PC **A03**/MF **A01**

Superfund: Environmental Response and Health and Safety (Training Materials).
PB93-963100/REB 93-01 Standing Order

*EPA/540/8-91/005*
Superfund Innovative Technology Evaluation (SITE) Program.
PB93-116093/REB 93-01 PC **A03**/MF **A01**

Superfund Progress. Aficionado's Version. Progress as of September 30, 1992.
PB93-963255/REB 93-01 PC **A03**/MF **A01**

Superfund Progress: Fall/Winter 1992.
PB93-963254/REB 93-01 PC **A03**/MF **A01**

*EPA/ROD/R01-92/066*
Superfund Record of Decision (EPA Region 1): Brunswick Naval Air Station, Operable Unit 2, ME. (Second Remedial Action), June 1992.
PB93-963706/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R01-92/064*
Superfund Record of Decision (EPA Region 1): Darling Hill Dump, Lyndon, VT. (First Remedial Action), June 1992.
PB93-963702/REB 93-01 PC **A03**/MF **A01**

*EPA/ROD/R01-92/072*
Superfund Record of Decision (EPA Region 1): Newport Naval Education/Training Center, Newport, RI. (First Remedial Action), September 1992.
PB93-963707/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R01-92/071*
Superfund Record of Decision (EPA Region 1): Otis Air National Guard/Camp Edwards, MA. (First Remedial Action), May 1992.
PB93-963704/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R01-92/069*
Superfund Record of Decision (EPA Region 1): PSC Resources Site, Palmer, MA. (First Remedial Action), September 1992.
PB93-963708/REB 93-04 PC **A09**/MF **A02**

*EPA/ROD/R01-92/067*
Superfund Record of Decision (EPA Region 1): Revere Textile Prints, Sterling, CT. (First Remedial Action), September 1992.
PB93-963703/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R01-92/068*
Superfund Record of Decision (EPA Region 1): Tibbetts Road, Barrington, NH. (First Remedial Action), September 1992.
PB93-963709/REB 93-04 PC **A07**/MF **A02**

*EPA/ROD/R01-92/070*
Superfund Record of Decision (EPA Region 1): Town Garage Radio Beacon, Londonderry, NH. (First Remedial Action), September 1992.
PB93-963705/REB 93-04 PC **A06**/MF **A02**

*EPA/ROD/R02-92/182*
Superfund Record of Decision (EPA Region 2): Bioclinical Laboratories, Town of Islip, Suffolk County, NY. (First Remedial Action), September 1992.
PB93-963807/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R02-92/187*
Superfund Record of Decision (EPA Region 2): Cosden Chemical Coatings, City of Beverly, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963818/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R02-92/194*
Superfund Record of Decision (EPA Region 2): Dover Municipal Well 4, Morris County, Dover, NJ. (First Remedial Action), September 1992.
PB93-963819/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R02-92/176*
Superfund Record of Decision (EPA Region 2): Ellis Property, Sharp Road, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963820/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R02-92/184*
Superfund Record of Decision (EPA Region 2): Endicott Village Well Field, Broome County, NY. (Third Remedial Action), September 1992.
PB93-963821/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R02-92/188*
Superfund Record of Decision (EPA Region 2): Evor Phillips Leasing Company, Old Bridge Township, Middlesex County, NJ. (First Remedial Action), September 1992.
PB93-963814/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R02-92/178*
Superfund Record of Decision (EPA Region 2): FAA Technical Center, Atlantic County, Atlantic City International Airport, NJ. (Third Remedial Action), September 1992.
PB93-963808/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R02-92/173*
Superfund Record of Decision (EPA Region 2): Facet Enterprises, Village of Elmira Heights, Chemung County, NY. (First Remedial Action), September 1992.
PB93-963822/REB 93-04 PC **A07**/MF **A02**

*EPA/ROD/R02-92/180*
Superfund Record of Decision (EPA Region 2): Higgins Farm, Franklin Township, Somerset County, NJ. (Second Remedial Action), September 1992.
PB93-963813/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R02-92/186*
Superfund Record of Decision (EPA Region 2): Imperial Oil/Champion Chemicals, Monmouth County, NJ. (Second Remedial Action), September 1992.
PB93-963823/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R02-92/185*
Superfund Record of Decision (EPA Region 2): Industrial Latex, Bergen County, Wallington, NJ. (First Remedial Action), September 1992.
PB93-963824/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R02-92/183*
Superfund Record of Decision (EPA Region 2): Islip Municipal Sanitary Landfill, Town of Islip, NY. (First Remedial Action), September 1992.
PB93-963825/REB 93-04 PC **A05**/MF **A02**

*EPA/ROD/R02-92/191*
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 5), Lakehurst, NJ. (Sixth Remedial Action), January 1992.
PB93-963809/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R02-92/192*
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 6), Lakehurst, NJ. (Fifth Remedial Action), December 1991.
PB93-963810/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R02-92/193*
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 7), Ocean County, NJ. (Seventh Remedial Action), March 1992.
PB93-963826/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R02-92/175*
Superfund Record of Decision (EPA Region 2): North Sea Municipal Landfill, Suffolk County, Southampton, NY. (Second Remedial Action), September 1992.
PB93-963811/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R02-92/171*
Superfund Record of Decision (EPA Region 2): Pasley Solvents and Chemicals, Town of Hempstead, Nassau County, NY. (First Remedial Action), April 1992.
PB93-963805/REB 93-01 PC **A06**/MF **A02**

*EPA/ROD/R02-92/189*
Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 1), Clinton County, NY. (First Remedial Action), September 1992.
PB93-963815/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R02-92/190*
Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 3), Clinton County, NY. (Second Remedial Action), September 1992.
PB93-963816/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R02-92/181*
Superfund Record of Decision (EPA Region 2): Preferred Plating, Suffolk County, Farmingdale, NY. (Second Remedial Action), September 1992.
PB93-963817/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R02-92/169*
Superfund Record of Decision (EPA Region 2): Ramapo Landfill Site, Rockland County, NY. (First Remedial Action), March 1992.
PB93-963801/REB 93-01 PC **A04**/MF **A01**

*EPA/ROD/R02-92/179*
Superfund Record of Decision (EPA Region 2): Rowe Industries Groundwater Contamination, Sag Harbor, NY. (First Remedial Action), September 1992.
PB93-963827/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R02-92/177*
Superfund Record of Decision (EPA Region 2): Witco Chemical (Oakland Plant), Bergen County, Oakland, NJ. (First Remedial Action), September 1992.
PB93-963812/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R03-92/159*
Superfund Record of Decision (EPA Region 3): Abex Corporation, Portsmouth, VA. (First Remedial Action), September 1992.
PB93-963917/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R03-92/150*
Superfund Record of Decision (EPA Region 3): Brown's Battery Breaking, Tilden Township, Berks County, PA. (Second Remedial Action), July 1992.
PB93-963918/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R03-92/149*
Superfund Record of Decision (EPA Region 3): Butz Landfill, Pocono and Jackson Townships, Monroe County, PA. (Second Remedial Action), June 1992.
PB93-963919/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R03-92/155*
Superfund Record of Decision (EPA Region 3): Commodore Semiconductor Group, Lower Providence Township, PA. (First Remedial Action), September 1992.
PB93-963920/REB 93-04 PC **A06**/MF **A02**

*EPA/ROD/R03-92/161*
Superfund Record of Decision (EPA Region 3): Dixie Caverns Landfill Site, Operable Unit 2, Roanoke County, VA. (Second Remedial Action), September 1992.
PB93-963907/REB 93-01 PC **A03**/MF **A01**

*EPA/ROD/R03-92/145*
Superfund Record of Decision (EPA Region 3): Dublin Water Supply, Bucks County, PA. (First Remedial Action), December 1991.
PB93-963903/REB 93-01 PC **A06**/MF **A02**

*EPA/ROD/R03-92/152*
Superfund Record of Decision (EPA Region 3): Eastern Diversified Metals Site, Schuylkill County, Hometown, PA. (Second Remedial Action), July 1992.
PB93-963914/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R03-92/153*
Superfund Record of Decision (EPA Region 3): MW Manufacturing Site, Montour County, PA. (Subsequent Remedial Action), June 1992.
PB93-963904/REB 93-01 PC **A05**/MF **A01**

*EPA/ROD/R03-92/144*
Superfund Record of Decision (EPA Region 3): Raymark Site, Operable Unit 1, Montgomery County, PA. (First Remedial Action), December 1991.
PB93-963902/REB 93-01 PC **A07**/MF **A02**

*EPA/ROD/R03-92/160*
Superfund Record of Decision (EPA Region 3): Rhinehart Tire Fire Dump, Operable Unit 2, Winchester, VA. (Second Remedial Action), September 1992.
PB93-963921/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R03-92/157*
Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.
PB93-963912/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R03-92/143*
Superfund Record of Decision (EPA Region 3): Strasburg Landfill, Newlin Township, Chester County, PA. (Third Remedial Action), March 1992.
PB93-963916/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R03-92/158*
Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.
PB93-963913/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R03-92/156*
Superfund Record of Decision (EPA Region 3): Tonolli Corporation, Nesquehoning Borough, Carbon County, PA. (First Remedial Action), September 1992.
PB93-963922/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R03-92/141*
Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, Operable Unit 1, Richmond, VA. (First Remedial Action), May 1992.
PB93-963923/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R03-92/142*
Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, (Operable Unit 5), Richmond, VA. (First Remedial Action), March 1992.
PB93-963901/REB 93-01 PC **A04**/MF **A01**

*EPA/ROD/R03-92/162*
Superfund Record of Decision (EPA Region 3): USA Aberdeen, Operable Unit One, Michaelsville, MD. (Second Remedial Action), June 1992.
PB93-963915/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R04-92/123*
Superfund Record of Decision (EPA Region 4): Agrico Chemical, Escambia County, Pensacola, FL. (First Remedial Action), September 1992.
PB93-964017/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R04-92/104*
Superfund Record of Decision (EPA Region 4): Benfield Industries, Haywood County, Hazelwood, NC. (First Remedial Action), July 1992.
PB93-964018/REB 93-04 PC **A09**/MF **A02**

*EPA/ROD/R04-92/112*
Superfund Record of Decision (EPA Region 4): Carrier Air Conditioning, Collierville, TN. (First Remedial Action), September 1992.
PB93-964019/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R04-92/125*
Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964009/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R04-92/122*
Superfund Record of Decision (EPA Region 4): Florida Steel Corporation, Martin County, Indiantown, FL. (First Remedial Action), June 1992.
PB93-964020/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R04-92/115*
Superfund Record of Decision (EPA Region 4): Madison County Sanitary Landfill, Madison, FL. (First Remedial Action), September 1992.
PB93-964021/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R04-92/126*
Superfund Record of Decision (EPA Region 4): Milan Army Ammunition Plant, TN. (First Remedial Action), September 1992.
PB93-964022/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R04-92/127*
Superfund Record of Decision (EPA Region 4): National Electric Coil/Cooper Industries, KY. (First Remedial Action), September 1992.
PB93-964016/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R04-92/110*
Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), A/M Area Groundwater Operable Unit 3, Aiken County, SC. (Third Remedial Action), June 1992.
PB93-964013/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R04-92/108*
Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 1, SC. (First Remedial Action), June 1992.
PB93-964023/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R04-92/109*
Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 2, SC. (Second Remedial Action), June 1992.
PB93-964024/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R04-92/116*
Superfund Record of Decision (EPA Region 4): Standard Auto Bumper Site, Dade County, Hialeah, FL. (First Remedial Action), September 1992.
PB93-964014/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R04-92/118*
Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation, Operable Unit 6, Roane County, TN. (Fourth Remedial Action), September 1992.
PB93-964025/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R04-92/119*
Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.
PB93-964010/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R04-92/120*
Superfund Record of Decision (EPA Region 4): USMC Camp Lejeune Military Reservation, NC. (First Remedial Action), September 1992.
PB93-964026/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R04-92/124*
Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964011/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R04-92/121*
Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.
PB93-964012/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R04-92/103*
Superfund Record of Decision (EPA Region 4): Yellow Water Road Dump, Duval County, Baldwin, FL. (Second Remedial Action), June 1992.
PB93-964015/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R05-92/214*
Superfund Record of Decision (EPA Region 5): Alsco Anaconda Site, Gnadenhutten, OH. (Second Remedial Action), September 1992.
PB93-964121/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R05-92/217*
Superfund Record of Decision (EPA Region 5): American Chemical Services, Griffith, IN. (First Remedial Action), September 1992.
PB93-964125/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R05-92/221*
Superfund Record of Decision (EPA Region 5): Butterworth No. 2 Landfill Site, Grand Rapids, MI. (First Remedial Action), September 1992.
PB93-964122/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R05-92/220*
Superfund Record of Decision (EPA Region 5): Cannelton Industries Site, Sault Sainte Marie, MI. (First Remedial Action), September 1992.
PB93-964126/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R05-92/219*
Superfund Record of Decision (EPA Region 5): Central Illinois Public Service, Taylorville Manufactured Gas Plant Site, Christian County, IL. (First Remedial Action), September 1992.
PB93-964127/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R05-92/222*
Superfund Record of Decision (EPA Region 5): City Disposal Sanitary Landfill, Dane County, WI. (First Remedial Action), September 1992.
PB93-964128/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R05-92/209*
Superfund Record of Decision (EPA Region 5): Clare Water Supply Site, Clare County, Clare, MI. (Second Remedial Action), September 1992.
PB93-964106/REB 93-01 PC **A04**/MF **A01**

*EPA/ROD/R05-92/194*
Superfund Record of Decision (EPA Region 5): Columbus Old Municipal Landfill, Columbus, IN. (First Remedial Action), March 1992.
PB93-964104/REB 93-01 PC **A03**/MF **A01**

*EPA/ROD/R05-92/195*
Superfund Record of Decision (EPA Region 5): Grand Traverse Overall Supply Site, Greilickville, MI. (First Remedial Action), February 1992.
PB93-964101/REB 93-01 PC **A03**/MF **A01**

*EPA/ROD/R05-92/223*
Superfund Record of Decision (EPA Region 5): H. Brown Company, Walker, MI. (First Remedial Action), September 1992.
PB93-964129/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R05-92/206*
Superfund Record of Decision (EPA Region 5): Kohler Landfill, Kohler, WI. (First Remedial Action), March 1992.
PB93-964111/REB 93-01 PC **A05**/MF **A02**

*EPA/ROD/R05-92/199*
Superfund Record of Decision (EPA Region 5): Metal Working Shop, Benzie County, Lake Ann, MI. (First Remedial Action), June 1992.
PB93-964113/REB 93-01 PC **A03**/MF **A01**

*EPA/ROD/R05-92/196*
Superfund Record of Decision (EPA Region 5): MIDCO I, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964130/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R05-92/193*
Superfund Record of Decision (EPA Region 5): Midco II, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964102/REB 93-01 PC **A05**/MF **A01**

*EPA/ROD/R05-92/210*
Superfund Record of Decision (EPA Region 5): New Brighton/Arden Hills, Ramsey County, MN. (Eighth Remedial Action), September 1992.
PB93-964131/REB 93-04 PC **A07**/MF **A02**

*EPA/ROD/R05-92/213*
Superfund Record of Decision (EPA Region 5): Reilly Tar and Chemical, St. Louis Park, MN. (Fourth Remedial Action), September 1992.
PB93-964124/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R05-92/200*
Superfund Record of Decision (EPA Region 5): Savanna Army Depot, Savanna, IL. (First Remedial Action), March 1992.
PB93-964116/REB 93-01 PC **A04**/MF **A01**

*EPA/ROD/R05-92/203*
Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 1, Anoka County, Andover, MN. (Second Remedial Action), (Amendment), June 1992.
PB93-964123/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R05-92/202*
Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 2, Anoka County, Andover, MN. (Second Remedial Action), December 1992.
PB93-964132/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R05-92/215*
Superfund Record of Decision (EPA Region 5): Torch Lake Site, Operable Units 1 and 3, Houghton County, MI. (First Remedial Action), September 1992.
PB93-964120/REB 93-01 PC **A04**/MF **A01**

*EPA/ROD/R05-92/218*
Superfund Record of Decision (EPA Region 5): Tri County/Elgin Landfill Site, Elgin, IL. (First Remedial Action), September 1992.
PB93-964133/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R05-92/192*
Superfund Record of Decision (EPA Region 5): Twin Cities AF Reserve (SAR Landfill), MN. (First Remedial Action), March 1992.
PB93-964103/REB 93-01 PC **A04**/MF **A01**

*EPA/ROD/R06-92/073*
Superfund Record of Decision (EPA Region 6): Double Eagle Refinery, Oklahoma City, OK. (First Remedial Action), September 1992.
PB93-964210/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R06-92/076*
Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 1), Vermilion Parish, LA. (Second Remedial Action), September 1992.
PB93-964207/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R06-92/075*
Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 2), Vermilion Parish, LA. (First Remedial Action), September 1992.
PB93-964206/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R06-92/068*
Superfund Record of Decision (EPA Region 6): Koppers (Texarkana Plant), TX. (First Remedial Action), (Amendment), March 1992.
PB93-964208/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R06-92/074*
Superfund Record of Decision (EPA Region 6): Prewitt Abandoned Refinery, Prewitt, NM. (First Remedial Action), September 1992.
PB93-964209/REB 93-04 PC **A09**/MF **A02**

*EPA/ROD/R07-92/061*
Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.
PB93-964304/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R07-92/060*
Superfund Record of Decision (EPA Region 7): Pester Refinery, Butler County, El Dorado, KS. (First Remedial Action), September 1992.
PB93-964305/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R08-92/062*
Superfund Record of Decision (EPA Region 8): Denver Radium, Operable Unit 9, Denver, CO. (Eighth Remedial Action), December 1991.
PB93-964402/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R08-92/063*
Superfund Record of Decision (EPA Region 8): Denver Radium Site, Operable Unit 8, Denver, CO. (Ninth Remedial Action), January 1992.
PB93-964405/REB 93-04 PC **A06**/MF **A02**

*EPA/ROD/R08-92/066*
Superfund Record of Decision (EPA Region 8): Hill Air Force Base, UT. (Second Remedial Action), September 1992.
PB93-964403/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R08-92/058*
Superfund Record of Decision (EPA Region 8): Idaho Pole National Priorities List Site, Bozeman, MT. (First Remedial Action), September 1992.
PB93-964406/REB 93-04 PC **A07**/MF **A02**

*EPA/ROD/R08-92/060*
Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 1, Weber County, UT. (Second Remedial Action), June 1992.
PB93-964407/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R08-92/067*
Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 3, Weber County, UT. (Fourth Remedial Action), September 1992.
PB93-964408/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R08-92/061*
Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 4, UT. (Third Remedial Action), September 1992.
PB93-964409/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R08-92/056*
Superfund Record of Decision (EPA Region 8): Portland Cement Co. (Kiln Dust No. 2 and No. 3), Operable Unit 2, Salt Lake City, UT. (Second Remedial Action), March 1992.
PB93-964410/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R08-92/065*
Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), Operable Unit 2, Golden, CO. (Fourth Remedial Action), September 1992.
PB93-964411/REB 93-04 PC **A19**/MF **A04**

*EPA/ROD/R08-92/064*
Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), (Operable Unit 4), Golden, CO. (Third Remedial Action), April 1992.
PB93-964404/REB 93-04 PC **A06**/MF **A02**

# SPONSORING EPA OFFICE INDEX


*EPA/ROD/R08-92/059*
Superfund Record of Decision (EPA Region 8): Silver Bow Creek/Butte Area, MT. (Second Remedial Action), June 1992.
PB93-964412/REB 93-04 PC **A07**/MF **A02**

*EPA/ROD/R09-92/082*
Superfund Record of Decision (EPA Region 9): Hassayampa Landfill, AZ. (First Remedial Action), August 1992.
PB93-964505/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R09-92/083*
Superfund Record of Decision (EPA Region 9): Iron Mountain Mine, Shasta County, CA. (Second Remedial Action), September 1992.
PB93-964506/REB 93-04 PC **A06**/MF **A02**

*EPA/ROD/R09-92/085*
Superfund Record of Decision (EPA Region 9): Jasco Chemical Company, Mountain View, CA. (First Remedial Action), September 1992.
PB93-964507/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R09-92/086*
Superfund Record of Decision (EPA Region 9): Purity Oil Sales, Fresno County, CA. (Second Remedial Action), September 1992.
PB93-964508/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R09-92/077*
Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 3, Sacramento, CA. (Second Remedial Action), December 1991.
PB93-964509/REB 93-04 PC **A09**/MF **A03**

*EPA/ROD/R09-92/084*
Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 4, Sacramento, CA. (Third Remedial Action), September 1992.
PB93-964510/REB 93-04 PC **A05**/MF **A01**

*EPA/ROD/R09-92/079*
Superfund Record of Decision (EPA Region 9): Westinghouse Electric (Sunnyvale Plant), Sunnyvale, CA. (First Remedial Action), October 1991.
PB93-964501/REB 93-01 PC **A05**/MF **A01**

*EPA/ROD/R10-92/039*
Superfund Record of Decision (EPA Region 10): Arrcom (Drexler Enterprise), Rathdrum, ID. (First Remedial Action), June 1992.
PB93-964606/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R10-92/041*
Superfund Record of Decision (EPA Region 10): Bunker Hill Mining and Metallurgical Complex, Shoshone County, ID. (Second Remedial Action), September 1992.
PB93-964611/REB 93-04 PC **A08**/MF **A02**

*EPA/ROD/R10-92/050*
Superfund Record of Decision (EPA Region 10): Eielson Air Force Base, AK. (First Remedial Action), September 1992.
PB93-964612/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R10-92/044*
Superfund Record of Decision (EPA Region 10): Elmendorf Air Force Base, Operable Unit 2, Source Area ST41, Anchorage, AK. (First Remedial Action), September 1992.
PB93-964604/REB 93-01 PC **A03**/MF **A01**

*EPA/ROD/R10-92/049*
Superfund Record of Decision (EPA Region 10): Fort Lewis Military Reservation, Landfill No. 5, Pierce County, WA. (First Remedial Action), July 1992.
PB93-964607/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R10-92/043*
Superfund Record of Decision (EPA Region 10): Joseph Forest Products, Wallowa County, OR. (First Remedial Action), September 1992.
PB93-964613/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R10-92/048*
Superfund Record of Decision (EPA Region 10): McChord AFB, Washrack Treatment Area, WA. (First Remedial Action), September 1992.
PB93-964614/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R10-92/034*
Superfund Record of Decision (EPA Region 10): Naval Air Station Whidbey Island - Ault Field, (Operable Unit 1, Area 6), Oak Harbor, WA. (First Remedial Action), April 1992.
PB93-964609/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R10-92/042*
Superfund Record of Decision (EPA Region 10): Pesticide Laboratory, Yakima, WA. (First Remedial Action), September 1992.
PB93-964608/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R10-92/051*
Superfund Record of Decision (EPA Region 10): Umatilla Army Depot (Lagoons), Soils Operable Unit 2, Hermiston, OR. (First Remedial Action), September 1992.
PB93-964610/REB 93-04 PC **A04**/MF **A01**

*EPA/ROD/R10-92/045*
Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 2, ID. (Third Remedial Action), September 1992.
PB93-964615/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R10-92/046*
Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 22, ID. (Fourth Remedial Action), September 1992.
PB93-964616/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R10-92/040*
Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 23, ID. (Second Remedial Action), June 1992.
PB93-964617/REB 93-04 PC **A03**/MF **A01**

*EPA/ROD/R10-92/047*
Superfund Record of Decision (EPA Region 10): Wyckoff/Eagle Harbor, WA. (First Remedial Action), September 1992.
PB93-964618/REB 93-04 PC **A07**/MF **A02**

Superfund Records of Decision Update. Volume 7, Number 2, November 1992.
PB93-963256/REB 93-01 PC **A02**/MF **A01**

Superfund: Report of the EPA Superfund Revitalization Public Meeting Held on June 24, 1992. Volumes 1 and 2.
PB92-963288/REB 93-01 PC **A06**/MF **A02**

*EPA/540/R-92/073*
Technical Guidance Document: Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems.
PB93-105625/REB 93-01 PC **A05**/MF **A02**

**OFFICE OF RESEARCH AND DEVELOPMENT**

*EPA/600/9-90/041*
Bioremediation of Hazardous Wastes.
PB93-116143/REB 93-01 PC **A04**/MF **A01**

*EPA/600/R-93/067A*
Economic Growth Analysis System: Reference Manual.
PB93-183408/REB 93-04 PC **A12**/MF **A03**

*EPA/600/R-93/067B*
Economic Growth Analysis System: User's Guide.
PB93-183416/REB 93-04 PC **A04**/MF **A01**

*EPA/600/9-90/026*
Environmental Monitoring and Assessment Program: 1990 Project Descriptors.
PB93-116150/REB 93-01 PC **A04**/MF **A01**

*EPA/600/A-92/247*
Geographical Distribution and Source Type Analysis of Toxic Metal Emissions.
PB93-121036/REB 93-01 PC **A02**/MF **A01**

*EPA/625/6-91/028*
Handbook: Remediation of Contaminated Sediments.
PB93-116275/REB 93-01 PC **A04**/MF **A01**

*EPA/600/4-90/033*
Near Coastal Program Plan for 1991: Estuaries.
PB93-116176/REB 93-01 PC **A12**/MF **A03**

*EPA/600/J-93/127*
Program to Analyze Aquifer Test Data and Check for Validity with the Jacob Method.
PB93-181154/REB 93-01 PC **A02**/MF **A01**

Protecting the Environment: A Research Strategy for the 1990s.
PB93-115954/REB 93-01 PC **A04**/MF **A01**

*EPA/625/4-91/030*
Seminar Publication. Medical and Institutional Waste Incineration: Regulations, Management, Technology, Emissions, and Operations.
PB93-116283/REB 93-01 PC **A03**/MF **A01**

*EPA/600/9-90/053*
Strategy for Environmental Health Research at EPA.
PB93-116168/REB 93-01 PC **A06**/MF **A02**

*EPA/DF/MT-93/061A*
Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-183440/REB 93-04 PC **A05**/MF **A01**

*EPA/DF/MT-93/061*
Toxic Release Inventory, (TRI), 1991.
PB93-505873/REB 93-04 CP **T14**

*EPA/600/A-92/282*
Trace Organic Contaminants in Anthropogenically Acidified Surface Waters.
PB93-135689/REB 93-01 PC **A03**/MF **A01**

*EPA/625/11-91/004*
User's Guide: Strategic Waste Minimization Initiative (SWAMI) Version 2.0: A Software Tool to Aid in Process Analysis for Pollution Prevention.
PB93-116291/REB 93-01 PC **A05**/MF **A01**

ENVIRONMENTAL RESEARCH LAB - Athens, GA

*EPA/600/R-92/223*
3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
PB93-217669/REB 93-04 PC **A12**/MF **A03**

*EPA/600/R-93/131*
Anaerobic Dehalogenation and Its Environmental Implications. Abstracts of 1992 American Society for Microbiology Conference. Held in Athens, Georgia on August 30-September 4, 1992.
PB93-217792/REB 93-04 PC **A04**/MF **A01**

*EPA/600/R-93/132*
Environmental Fate Constants for Organic Chemicals under Consideration for EPA's Hazardous Waste Identification Projects.
PB93-221646/REB 93-04 PC **A09**/MF **A02**

Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC **A04**/MF **A01**

*EPA/600/J-93/228*
FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/227*
Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.
PB93-205102/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/280*
Global Flux of Methane from Shallow Submarine Sediments.
PB93-222388/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/267*
Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-93/125*
Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
PB93-217784/REB 93-04 PC **A07**/MF **A02**

*EPA/600/J-93/281*
Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/217*
Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/081*
MULTIMED: The Multimedia Exposure Assessment Model for Evaluating the Land Disposal of Wastes-Model Theory.
PB93-186252/REB 93-01 PC **A07**/MF **A02**

*EPA/600/J-93/283*
Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/042*
Photochemical Conversion of Solar Energy in the Environment.
PB93-167187/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/229*
Possible Influence of Hydrogen Concentration on Microbial Methane Stable Hydrogen Isotopic Composition.
PB93-205128/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-93/046*
PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
PB93-174027/REB 93-01 PC **A17**/MF **A04**

*EPA/600/J-93/265*
Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/192*
Role and Design of Water Quality Monitoring on Forested Watersheds.
PB93-222248/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/296*
Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
PB93-222776/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/218*
Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC **A03**/MF **A01**

*EPA/600/S3-88/001*
Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/219*
STREAM: An Exposure Assessment Methodology for Agricultural Pesticide Runoff.
PB93-106888/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/284*
Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/282*
Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.
PB93-222404/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-93/082*
Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
PB93-185536/REB 93-01 PC **A11**/MF **A03**

*EPA/823/R-92/005*
Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

ENVIRONMENTAL RESEARCH LAB - Corvallis, OR

*EPA/600/J-93/411*
Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/219*
Adding a Landscape Ecology Perspective to Conservation and Management Planning.
PB93-234516/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/456*
Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
PB93-141554/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/158*
Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.
PB93-212785/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-92/210*
Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08**/MF **A02**

*EPA/600/J-93/259*
Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
PB93-212652/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/206*
Bacillus thuringiensis var. kurstaki Affects a Beneficial Insect, the Cinnabar Moth (Lepidoptera: Arctidae).
PB93-199651/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/256*
Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. aeschynomene' Transformants with Benomyl Resistance.
PB93-212629/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/344*
Biodiversity and Management of Natural Resources: The Issues.
PB93-106912/REB 93-01 PC **A01**/MF **A01**

*EPA/600/A-92/292*
Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/186*
Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.
PB93-234540/REB 93-04 PC **A04**/MF **A01**

*EPA/600/A-92/288*
Characterization of Eastern U.S. Spruce-Fir Soils.
PB93-141133/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/458*
Characterizing the Distribution of Observed Precipitation and Runoff over the Continental United States.
PB93-141570/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/453*
Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/195*
Climate Change Impacts on Net Primary Production in China.
PB93-222271/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/009*
Collection and Chemical Analysis of Lichens for Biomonitoring.
PB93-149862/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/398*
Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/196*
Comparing Sampling Designs for Monitoring Ecological Status and Trends: Impact of Temporal Patterns (Chapter 3).
PB93-222289/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/240*
Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).
PB93-212470/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/418*
Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/074*
Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC **A07**/MF **A02**

*EPA/600/J-93/147*
Comparison of Systematic and Random Sampling for Estimating the Accuracy of Maps Generated from Remotely Sensed Data.
PB93-191443/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/347*
Conservation and Sequestration of Carbon: The Potential of Forest and Agroforest Management Practices.
PB93-229656/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/153*
Conservation Tillage Impacts on National Soil and Atmospheric Carbon Levels.
PB93-191500/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/350*
Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.
PB93-229680/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-93/105*
Design and Construction of Demonstration/Research Wetlands for Treatment of Dairy Farm Wastewater.
PB93-202836/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/047*
Developing Improved Strategies to Determine Male Reproductive Risk from Environmental Toxins.
PB93-167286/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/008*
Development of Genetically Enhanced Baculovirus Pesticides (Chapter 5).
PB93-149235/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/195*
Digital Topographic Approach to Modeling: The Distribution of Precipitation in Mountainous Terrain.
PB93-106649/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/345*
Dissolved Organic Carbon and Sulfate Sorption by Spodosol Mineral Horizons.
PB93-229631/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/150*
Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/010*
Ecologically Acceptable Strategy for the Use of Genetically Engineered Baculovirus Pesticides.
PB93-149243/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/159*
Ecotoxicological Principles for Avian Field Studies Using Radiotelemetry or Remote Sensing.
PB93-212793/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/343*
Effect of Aerosolization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/401*
Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/146*
Effects of CO2 and Climate Change on Forest Trees.
PB93-222339/REB 93-04 PC **A07**/MF **A02**

*EPA/600/A-92/290*
Effects of CO2 and Temperature on Five Rice Cultivars.
PB93-141158/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/148*
Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/281*
Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
PB93-135671/REB 93-01 PC **A01**/MF **A01**

*EPA/600/R-92/241*
Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC **A05**/MF **A01**

*EPA/600/R-93/128*
Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC **A07**/MF **A02**

*EPA/600/A-92/205*
EMAP and Other Tools for Measuring Biodiversity, Habitat Conditions, and Environmental Trends.
PB93-106748/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/217*
Engineered Plants in the Environment.
PB93-234532/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/417*
Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-92/216*
Environmental Monitoring and Assessment Program: Gulf Coast Salt Marsh Pilot Study.
PB93-122398/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/023*
Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC **A04**/MF **A01**

*EPA/600/J-93/151*
Equilibrium Analysis of Carbon Pools and Fluxes of Forest Biomes in the Former Soviet Union.
PB93-191484/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/232*
Establishing Quantitative Performance Criteria for Wetland Restoration.
PB93-236610/REB 93-04 PC **A01**/MF **A01**

*EPA/620/R-93/008*
Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
PB93-202851/REB 93-04 PC **A06**/MF **A02**

Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC **A12**/MF **A03**

*EPA/600/J-93/254*
Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/348*
Forest Fires in Russia: Carbon Dioxide Emissions to the Atmosphere.
PB93-229664/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/257*
Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.
PB93-212637/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/349*
Forest Management in Russia: Challenges and Opportunities in the Era of Perestroika.
PB93-106961/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/093*
Forest Sector Carbon Budget of the United States: Carbon Pools and Flux under Alternative Policy Options.
PB93-196996/REB 93-01 PC **A10**/MF **A03**

*EPA/600/A-92/255*
Formaldehyde-Contaminated Fog Effects on Plant Growth.
PB93-121101/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/154*
Future Context of Sustainable Agriculture: Planning for Uncertainty.
PB93-191518/REB 93-01 PC **A03**/MF **A01**

Genetically Engineered Baculoviruses as Agents for Pest Control.
PB93-150175/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/126*
Global Climates: Past, Present, and Future. Activities for Integrated Science Education.
PB93-222313/REB 93-04 PC **A06**/MF **A02**

*EPA/600/R-92/194A*
Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. User's Guide. Volume 1. NGDC Key to Geophysical Records Documentation No. 26.
PB93-146082/REB 93-01 PC **A07**/MF **A02**

*EPA/600/R-92/194B*
Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. Documentation Manual, DISC-A. Volume 1. NGDC Key to Geophysical Records Documentation No. 27.
PB93-146090/REB 93-01 PC **A11**/MF **A03**

*EPA/600/A-92/196*
Glossary for Avian Conservation Biology.
PB93-106656/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/205*
Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-92/229*
Habitat Quality Assessment of Two Wetland Treatment Systems in Mississippi: A Pilot Study.
PB93-135614/REB 93-01 PC **A06**/MF **A02**

*EPA/600/J-93/155*
Impacts of Climate Change on Rice Yield: A Comparison of Four Model Performances.
PB93-191526/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/239*
Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
PB93-212462/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/244*
Impacts of Section 404 Permits Requiring Compensatory Mitigation on Wetlands in California (USA).
PB93-212512/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/346*
Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.
PB93-229649/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-92/289*
Influence of Elevated CO2 and Temperature on Wetland Rice Root Dynamics.
PB93-141141/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/106*
Information Management Guidelines for the Wetlands Research Program.
PB93-202844/REB 93-01 PC **A04**/MF **A01**

*EPA/600/J-93/152*
Integrating Sustainable Agriculture, Ecology, and Environmental Policy. Conference Proceedings.
PB93-191492/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/408*
Inter-Regional Comparison of Patterns and Trends in Surface Water Acidification Across the United States.
PB93-236453/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-92/215*
Interim Protocol for Testing the Effects of Microbial Pathogens on Subterranean Termites ('Isoptera: rhinotermitidae').
PB93-124634/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/348*
Introduction to Nonpoint Source Pollution and Wetland Mitigation.
PB93-106953/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/071*
Irrigated Wetlands of the Colorado Plateau: Information Synthesis and Habitat Evaluation Method.
PB93-186260/REB 93-01 PC **A05**/MF **A02**

*EPA/600/A-93/013*
Isolation and Purification of Bacterial DNA from Soil.
PB93-149276/REB 93-01 PC **A04**/MF **A01**

*EPA/600/J-92/454*
Kinetics of Chemical Weathering in B Horizon Spodosol Fraction.
PB93-141539/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/233*
Landscape-Scale Effects of Toxic Events for Ecological Risk Assessment.
PB93-236628/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/207*
Longterm Response of Lakes to Acidic Deposition.
PB93-229722/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/400*
MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/346*
Mathematical Model of Plant Uptake and Translocation of Organic Chemicals: Development of the Model.
PB93-106938/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/347*
Mathematical Model of Plant Uptake and Translocations of Organic Chemicals: Application to Experiments.
PB93-106946/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/410*
Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/399*
Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/149*
Methane Emissions from Wetland Rice Areas of Asia.
PB93-191468/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/289*
Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/293*
Mineral Dissolution Rates: A Comparison of Laboratory and Field Studies.
PB93-141182/REB 93-01 PC **A01**/MF **A01**

*EPA/600/J-93/204*
Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/345*
Modelling Epicodic Acidification of Surface Waters: The State of Science.
PB93-106920/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/018*
Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/241*
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/242*
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/243*
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/260*
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/291*
Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/416*
Pathogenicity of 'Salmonella pullorum' in Northern Bobwhite Quail and Mallard Ducks.
PB93-135739/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/409*
Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/156*
Potential Bias from Non-Continuous Monitoring of Ambient Ozone Concentrations for Characterizing Hourly and Daily 7- and 12-Hour Average Concentrations.
PB93-191534/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/053*
Precollege Education: A Vital Component if Sustainable Agriculture is to Take Root.
PB93-168870/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/084*
Proceedings of the International Workshop on Carbon Cycling in Boreal Forest and Sub-Arctic Ecosystems: Biospheric Responses and Feedbacks to Global Climate Change.
PB93-205540/REB 93-04 PC **A13**/MF **A03**

*EPA/600/R-92/249*
Process for Regional Assessment of Wetland Risk.
PB93-146793/REB 93-01 PC **A09**/MF **A02**

*EPA/600/R-92/230*
Quality Assurance Field Operations Report for the Pilot Study Evaluating the Habitat Value of Wetland Treatment Systems.
PB93-134682/REB 93-01 PC **A04**/MF **A01**

*EPA/600/R-92/231*
Quality Assurance Plan for 1991 Pilot Study of the Ecological Condition of Municipal Wastewater Constructed Wetland Treatment Systems.
PB93-134674/REB 93-01 PC **A05**/MF **A01**

*EPA/620/R-92/002*
Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC **A11**/MF **A03**

*EPA/600/J-93/349*
Reactions That Modify Chemistry in Lakes of the National Surface Water Survey.
PB93-229672/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/415*
Recent Sulfur Enrichment in the Sediments of Little Rock Lake, Wisconsin.
PB93-135721/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/292*
Recovery of DNA from Soils and Sediments.
PB93-222634/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/455*
Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/291*
Relationship of Total Viable and Culturable Cells in Epiphytic Populations of 'Pseudomonas syringae'.
PB93-222826/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/052*
Research and Information Needs Related to Nonpoint Source Pollution and Wetlands in the Watershed: An EPA Perspective.
PB93-166862/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/072*
Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC **A09**/MF **A02**

*EPA/600/A-92/283*
Rice Field Inventory Using AVHRR Data.
PB93-135697/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/218*
Role of Ecological Sample Surveys in the Implementation of Biocriteria.
PB93-234524/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/008*
Role of Nitrate in the Acidification of Streams in the Catskill Mountains of New York.
PB93-150167/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/012*
Role of Soil Organic Acids in Mineral Weathering Processes (Chapter 6).
PB93-149268/REB 93-01 PC **A04**/MF **A01**

*EPA/620/R-93/005*
Sampling and Assessment Issues in Using Fish as Indicators of Ecological Condition in Lakes: A Workshop Report. (3rd Draft Report).
PB93-186278/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/412*
Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/288*
Simple Mini-Method to Extract DNA Directly from Soil for Use with Polymerase Chain Reaction Amplification.
PB93-222792/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/122*
Soil Biology and Ecology.
PB93-199453/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/287*
Soil-Mediated Effects of Atmospheric Deposition on Eastern U.S. Spruce-Fir Forests.
PB93-141125/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/290*
Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/256*
Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/457*
Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/121*
Statistical Evaluation of the EMAP-Wetlands Classification.
PB93-199446/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/231*
Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC **A01**/MF **A01**

*EPA/600/R-93/138*
Stream Indicator and Design Workshop.
PB93-222321/REB 93-04 PC **A05**/MF **A01**

*EPA/600/J-92/397*
Surface Waters Component of the Environmental Monitoring and Assessment Program (EMAP): An Overview.
PB93-121267/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/255*
Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/257*
Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-92/167*
Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC **A07**/MF **A02**

*EPA/600/J-93/261*
Synthesis of Ectomycorrhizae on Northern Red Oak Seedlings in a Michigan Nursery.
PB93-212678/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/405*
Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/406*
Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.
PB93-236438/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/011*
Uncertainties in Countrywide Forest Biomass Estimates.
PB93-149250/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/204*
Use of Ecoregions in Biological Monitoring.
PB93-106730/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/407*
Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.
PB93-236446/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-93/024*
Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC **A04**/MF **A01**

*EPA/600/R-93/178*
Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC **A08**/MF **A02**

*EPA/600/J-92/419*
Who Will Speak for Biodiversity.
PB93-135762/REB 93-01 PC **A01**/MF **A01**

*ENVIRONMENTAL RESEARCH LAB - Duluth, MN*

*EPA/440/5-88/093*
Ambient Aquatic Life Water Quality Criteria for Antimony (III).
PB93-202778/REB 93-01 PC **A03**/MF **A01**

*EPA/440/5-87/013*
Ambient Aquatic Life Water Quality Criteria for Di-2-Ethylhexyl Phthalate.
PB93-202752/REB 93-01 PC **A03**/MF **A01**

*EPA/440/5-88/092*
Ambient Aquatic Life Water Quality Criteria for Hexachlorobenzene.
PB93-202760/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/277*
Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.
PB93-222354/REB 93-04 PC **A03**/MF **A01**

*EPA/DF/MT-93/051*
Aquatic Toxicity Information on VAX VMS Backup (AQUIRE for VMS).
PB93-505733/REB 93-01 CP **T02**

*EPA/DF/MT-93/050A*
Aquatic Toxicity Information Retrieval Data Base: A Technical Support Document. (Revised July 1992).
PB93-192631/REB 93-04 PC **A03**/MF **A01**

*EPA/DF/MT-93/050*
Aquatic Toxicity Information Retrieval Data Base (AQUIRE).
PB93-505725/REB 93-04 CP **T02**

Expanding Global Forest Management: An 'Easy First' Proposal.
PB93-199669/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/055*
Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202828/REB 93-01 PC **A08**/MF **A02**

*EPA/600/J-93/202*
Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-92/243*
Relationship between Water Temperatures and Air Temperatures for Central U.S. Streams.
PB93-135655/REB 93-01 PC **A07**/MF **A02**

*EPA/600/J-92/413*
Sampling, Characterizing and Mapping Contaminated Sediments in River Harbors.
PB93-135705/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/278*
Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.
PB93-222362/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/182*
Technological Considerations for Planning the Global Carbon Future.
PB93-222008/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/003*
Vertical Diffusion in Small Stratified Lake: Data and Error Analysis.
PB93-149185/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-92/244*
Water Temperature Characteristics of Lakes Subjected to Climate Change.
PB93-135648/REB 93-01 PC **A09**/MF **A02**

ENVIRONMENTAL RESEARCH LAB - Gulf Breeze, FL

*EPA/600/J-92/387*
Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/061*
Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/388*
Application of DNA Probes to Analysis of Bacteriophage Distribution Patterns in the Environment.
PB93-121200/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/221*
Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.
PB93-234490/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/059*
Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

*EPA/600/J-93/225*
Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC **A01**/MF **A01**

*EPA/600/J-92/390*
Bioremediation as a Technology: Experiences with the Exxon Valdez Oil Spill.
PB93-121226/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/220*
Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
PB93-205037/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/222*
Characterization of Catalase Activities in a Root-Colonizing Isolate of 'Pseudomonas putida' (Revised).
PB93-205052/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/381*
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/389*
Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/408*
Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/072*
Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/386*
Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
PB93-121176/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/386*
Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
PB93-121184/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/384*
Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/063*
Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/406*
Effects of 'Beauveria bassiana' on Embryos of the Inland Silverside Fish ('Menidia beryllina').
PB93-131811/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/062*
Effects of Chemical Contaminants on Blood Chemistry of Teleost Fish: A Bibliography and Synopsis of Selected Effects.
PB93-168961/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/056*
Effects of Kraft Mill Effluent on the Sexuality of Fishes: An Environmental Early Warning.
PB93-168847/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/071*
Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/067*
Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/382*
Fate of 'Bacillus sphaericus' and 'Bacillus thuringiensis' Serovar 'Israelensis' in the Aquatic Environment.
PB93-121143/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/065*
Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/219*
Genetic Analysis of the aggA Locus Involved in Agglutination and Adherence of 'Pseudomonas putida', a Beneficial Fluorescent Pseudomonad.
PB93-205029/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/064*
Genus- and Group-Specific Hybridization Probes for Determinative and Environmental Studies of Sulfate-Reducing Bacteria.
PB93-168987/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/215*
Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204980/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/130*
Importance of Fish Diseases: An Overview.
PB93-204113/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/057*
Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/218*
Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
PB93-205011/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/216*
Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows ('Cyprinodon variegatus').
PB93-204998/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/223*
Isolation and Diversity of Actinomycetes in the Chesapeake Bay.
PB93-205060/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/384*
Long-Term Survival and Plasmid Maintenance of 'Escherichia coli' in Marine Microcosms.
PB93-236230/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/226*
Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/385*
Microbial Trophic Interactions in Aquatic Microcosms Designed for Testing Genetically Engineered Microorganisms: A Field Comparison.
PB93-236248/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/136*
Observations on the State of Marine Disease Studies (Chapter 18).
PB93-204170/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/070*
Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/073*
Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium 'Nitrosomonas europaea'.
PB93-169076/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-92/232*
Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC **A23**/MF **A04**

*EPA/600/J-92/405*
Performance of an Aquatic Multispecies System in Evaluating the Effects of a Model Microbial Pest Control Agent on Nontarget Organisms.
PB93-131803/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/407*
Periphyton Photosynthesis as an Indicator of Effluent Toxicity: Relationship to Effects on Animal Test Species.
PB93-131829/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/222*
Physiological and Nonspecific Biomarkers.
PB93-119832/REB 93-01 PC **A05**/MF **A01**

*EPA/600/J-93/390*
Recent Developments in Cleanup Technologies.
PB93-236289/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/382*
Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/068*
Selection of a 'Pseudomonas cepacia' Strain Constitutive for the Degradation of Trichloroethylene.
PB93-169027/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/060*
Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
PB93-168946/REB 93-01 PC **A02**

*EPA/600/J-93/391*
Spawning Periodicity of the Inland Silverside, 'Menidia beryllina' (Pisces: Atherinidae) in the Laboratory: Relationship to Lunar Cycles.
PB93-236297/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/217*
Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/069*
Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/388*
Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/058*
Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/389*
UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/066*
Use of a Novel Plasmid to Monitor the Fate of a Genetically Engineered 'Pseudomonas putida' Strain.
PB93-169001/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/224*
Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
PB93-205078/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/383*
Use of Inoculation in Bioremediation.
PB93-121150/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/287*
Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02**/MF **A01**

ENVIRONMENTAL RESEARCH LAB - Narragansett, RI

*EPA/600/J-93/082*
Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/272*
Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

*EPA/440/5-87/011*
Ambient Aquatic Life Water Quality Criteria for Silver.
PB93-202604/REB 93-01 PC **A06**/MF **A02**

*EPA/600/J-93/197*
Application of the Ecotone Concept in Defining Nutrient Management Requirements for the Upper Potomac River Basin.
PB93-199560/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/108*
Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/163*
Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/183*
Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/137*
Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/253*
Characterization of Reference Artemia III for Marine Toxicological Studies.
PB93-212595/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/310*
Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/194*
Chemically Induced Histopathology in Aquatic Invertebrates (Chapter 14).
PB93-222263/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/195*
Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/196*
Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/205*
Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
PB93-229706/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/128*
Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/200*
Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/313*
Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/212*
Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
PB93-228518/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/164*
DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/211*
Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/252*
Effects of Food Density on Growth and on Patterns of Prey Depletion by Larval Silverside Fish, 'Menidia beryllina' (Cope): A Laboratory Investigation with Image Analysis.
PB93-212587/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/238*
Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean..
PB93-212454/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/136*
Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/120*
Field and Laboratory Studies of Chemical Contamination and Environmentally Related Diseases in Fish and Molluscs of New England.
PB93-199436/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/312*
Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/193*
Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04**/MF **A01**

*EPA/600/J-93/184*
Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/314*
Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/308*
Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/140*
Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/210*
Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/273*
Measurement of Sediment Resuspension Rates in Long Island Sound.
PB93-222115/REB 93-04 PC **A01**/MF **A01**

*EPA/600/A-93/156*
Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.
PB93-212769/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/212*
Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/213*
Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/139*
Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
PB93-185866/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/141*
Physical and Chemical Parameters of Sediment Extraction and Fractionation That Influence Toxicity, as Evaluated by Microtox (Trade Name).
PB93-185882/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/209*
Physiological Limitations on Phytoplankton Productivity in the Ocean.
PB93-204923/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/166*
Plume Definition in Regions of Strong Bending.
PB93-221844/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/315*
Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/309*
Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-93/097*
Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-196988/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/165*
Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).
PB93-221836/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/157*
Statistical Analyses of COADS Wind Data in Coastal Regions of the United States.
PB93-212777/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/135*
Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/198*
Stress Proteins in Aquatic Organisms: An Environmental Perspective.
PB93-199578/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/204*
Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/138*
Taxonomic Level Sufficient for Assessing a Moderate Impact on Macrobenthic Communities in Puget Sound, Washington, USA.
PB93-185858/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/084*
Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/189*
Transport of Low-Level Radioactive Soil at Deep-Ocean Disposal Site.
PB93-199487/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/206*
Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
PB93-229714/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/083*
Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/311*
Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/199*
Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/120*
What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.
PB93-211985/REB 93-04 PC **A21**/MF **A04**

ENVIRONMENTAL MONITORING & SUPPORT LAB - Cinn, OH

*EPA/600/J-92/368*
Macromolecular Adduction by Trichloroacetonitrile in the Fischer 344 Rat Following Oral Gavage.
PB93-107134/REB 93-01 PC **A03**/MF **A01**

Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-92/121*
Methods for the Determination of Chemical Substances in Marine and Estuarine Environmental Samples.
PB93-182913/REB 93-01 PC **A05**/MF **A01**

ENVIRONMENTAL MONITORING SYSTEMS LAB - Las Vegas, NV

*EPA/600/4-91/018*
Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13**/MF **A03**

*EPA/SW/DK-93/041*
ASESS 1.01A (3 1/2 Inch Diskette) (for Microcomputers).
PB93-505154/REB 93-01 CP **D02**

*EPA/SW/DK-93/044A*
ASSESS User's Guide.
PB93-163251/REB 93-01 PC **A03**/MF **A01**

*EPA/SW/DK-93/044*
ASSESS 1.01A (5 1/4 Inch Diskette) (for Microcomputers).
PB93-505295/REB 93-01 CP **D02**

*EPA/600/A-92/207*
Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/353*
Decision Model for Biomarkers of Exposure.
PB93-106995/REB 93-01 PC **A03**/MF **A01**

*EPA/600/S4-88/025*
Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).
PB93-222586/REB 93-04 PC **A01**/MF **A01**

*EPA/600/J-93/201*
Empirical Model of Vehicle Emissions.
PB93-199602/REB 93-01 PC **A02**/MF **A01**

*EPA/600/4-91/013*
Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC **A12**/MF **A03**

*EPA/620/R-93/001*
Environmental Monitoring and Assessment Program: EMAP-Arid Colorado Plateau Pilot Study, 1992. Implementation Plan.
PB93-181618/REB 93-01 PC **A08**/MF **A02**

*EPA/600/R-92/166*
Exploring the Effects of Vector to Raster and Raster to Vector Conversion.
PB93-122166/REB 93-01 PC **A04**/MF **A01**

*EPA/SW/DK-93/040*
Geo-EAS: Software for Geostatistics 1.2.1 (3 1/2 inch Version) (for Microcomputers).
PB93-504967/REB 93-01 CP **D02**

*EPA/SW/DK-93/039*
Geo-EAS: Software for Geostatistics 1.2.1 (5 1/4 Inch Version) (for Microcomputers).
PB93-504959/REB 93-01 CP **D02**

*EPA/SW/DK-93/042A*
Geophysics Advisor Expert System, Version 2.0.
PB93-163285/REB 93-01 PC **A03**/MF **A01**

*EPA/SW/DK-93/042*
Geophysics Advisor Expert System (Version 2.0) (for Microcomputers).
PB93-505162/REB 93-01 CP **D02**

*EPA/600/8-91/008A*
Geostatistical Environmental Assessment Software: User's Guide. GEO-EAS 1.2.1.
PB93-163236/REB 93-01 PC **A07**/MF **A02**

*EPA/600/A-93/074*
Immunoassay for p-Nitrophenol in Urine (Chapter XX).
PB93-175552/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-92/128*
Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies.
PB92-220532/REB 93-04 PC **A08**/MF **A02**

*EPA/SW/DK-93/045*
SCOUT: A Data Analysis Program (Version 1.40) (for Microcomputers).
PB93-505303/REB 93-01 CP **D02**

*EPA/600/S4-88/012*
Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.
PB93-228492/REB 93-04 PC **A02**/MF **A01**

*EPA/600/S4-88/009*
Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-228500/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-93/073*
X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.
PB93-203156/REB 93-04 PC **A03**/MF **A01**

ENVIRONMENTAL MONITORING SYSTEMS LAB - RTP, NC

*EPA/600/A-92/244*
Atmopheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/250*
Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
PB93-121069/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S4-88/028*
Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC **A02**/MF **A01**

ENVIRONMENTAL SCIENCES RESEARCH LAB - RTP, NC

*EPA/600/A-93/170*
Acid Aerosol Measurement Methods: A Summary of U.S. EPA Intercomparisons.
PB93-221885/REB 93-04 PC **A02**/MF **A01**

*EPA/600/4-89/005*
Acid Precipitation in North America: 1986 Annual and Seasonal Data Summaries from Acid Deposition System Data Base.
PB93-223154/REB 93-04 PC **A04**/MF **A01**

*EPA/600/A-92/275*
Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/002*
Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/162*
Aerosol Measurement: Principles, Techniques, and Applications.
PB93-212827/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/065*
Agricultural Pesticide Emissions Associated with Common Crops in the United States.
PB93-173136/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/081*
Air Emissions Testing.
PB93-180933/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/268*
Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-93/006*
Analysis of Acid Precipitation Samples Collected by State Agencies. Sampling Period: January-December 1990.
PB93-144152/REB 93-01 PC **A12**/MF **A03**

*EPA/600/R-92/225*
Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/168*
Analysis of Protocol Gases: An On-Going Quality Assurance Audit (May 1993).
PB93-221869/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-92/221*
Application of a Data-Assimilating Prognostic Meteorological Model to Two Urban Areas.
PB93-126571/REB 93-01 PC **A05**/MF **A01**

*EPA/600/A-93/058*
Assessing Potential Exposures from Routine Use of VOC-Contaminated Groundwater.
PB93-173060/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-92/222*
Atmospheric Chemistry and Physical Fate of HCFCs and HFCs and Their Degradation Products.
PB93-131449/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/239*
Atmospheric Deposition of Toxic Metals to Lake Michigan: Preliminary Annual Model Calculations.
PB93-120954/REB 93-01 PC **E02**/MF **A01**

*EPA/600/A-92/221*
Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/215*
Chemical Contaminants in House Dust: Occurrences and Sources.
PB93-228542/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/278*
Comparison of Aerosol Acidity in Urban and Semi-Rural Environments.
PB93-131712/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/214*
Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
PB93-228534/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/236*
Comparison of Modeled Concentration Profiles Using Site-Specific and Constant-Condition Meteorological Data for the ISCLT and PAL Models.
PB93-120921/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/265*
Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/363*
CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 1. Technical Formulations.
PB93-107076/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/363*
CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 2. Performance Characteristics.
PB93-107084/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/238*
Design of the Clean Air Act Deposition Monitoring Network.
PB93-120947/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/037*
Determination of the Strong Acidity of Atmospheric Fine-Particles (< 2.5 mum) Using Annular Denuder Technology. Standard Method, Enhanced Method.
PB93-178234/REB 93-01 PC **A07**/MF **A02**

*EPA/600/A-93/213*
Development and Evaluation of a Transportable Fast Gas Chromatograph for the Monitoring of Organic Vapors in Air.
PB93-228526/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/124*
Development and Validation of a Source Test Method for 2,4-Toluene Diisocyanate.
PB93-204055/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/230*
Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/191*
Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/252*
Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/103*
Discussion: Response to Internal Reviews of My Paper, 1993 Census Bureau Annual Research Conference.
PB93-191385/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/161*
Downwash of Plumes in the Vicinity of Buildings: A Wind-Tunnel Study.
PB93-212819/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-93/065*
Dry Deposition Flux Calculations for the National Dry Deposition Network.
PB93-178242/REB 93-01 PC **A05**/MF **A02**

*EPA/600/A-93/197*
Dynamometer Testing of On-Road Vehicles from the Los Angeles in-Use Emissions Study.
PB93-222297/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-92/241*
Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
PB93-120970/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/110*
EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/203*
Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.
PB93-229193/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/251*
Evaluation of a Sorbent-Based Preconcentrated for Analysis of VOCs in Air Using Gas Chromatography-Atomic Emission Detection.
PB93-121077/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/249*
Evaluation of Commercially-Available Portable Gas Chromatographs.
PB93-121051/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/004*
Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC **A04**/MF **A01**

*EPA/600/A-93/053*
Evaluation of Portable Gas Chromatographs.
PB93-168813/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/053*
Evaluation of Portable Multisorbent Air Samplers for Use with an Automated Multitube Analyzer.
PB93-172930/REB 93-01 PC **A05**/MF **A01**

*EPA/600/A-92/245*
Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/076*
Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/216*
Exposure Modeling of Acid Aerosols.
PB93-228559/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/085*
Field-Deployable Monitors for Volatile Organic Compounds in Air. (Essential Capabilities of a Portable Gas Chromatograph).
PB93-185700/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/101*
Field Test of a Generic Method for Halogenated Hydrocarbons.
PB93-212181/REB 93-04 PC **A13**/MF **A03**

*EPA/600/J-93/266*
Final Results of the Condors Convective Diffusion Experiment.
PB93-212728/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-92/217*
General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC **A04**/MF **A01**

*EPA/600/A-92/259*
Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/126*
Indoor Concentration Modeling of Aerosol Strong Acidity.
PB93-204071/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/144*
Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/277*
Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
PB93-131704/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/264*
Interpretive Analysis of Observed and Modeled Mesoscale Ozone Photochemistry in Areas with Numerous Point Sources.
PB93-212702/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-93/085*
Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.
PB93-221653/REB 93-04 PC **A07**/MF **A02**

*EPA/600/A-92/31*
Laboratory Simulation of Turbulent Convection Over an Urban Heat Island.
PB93-120871/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/123A*
Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
PB93-227163/REB 93-04 PC **A11**/MF **A03**

*EPA/600/R-93/123B*
Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
PB93-227171/REB 93-04 PC **A12**/MF **A03**

*EPA/600/A-92/246*
Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/140*
Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/075*
Measurement of Biogenic Emissions from Corn.
PB93-180883/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/054*
Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/222*
Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-93/116*
Method for the Determination of Asbestos in Bulk Building Materials. (Test Method).
PB93-218576/REB 93-04 PC **A05**/MF **A02**

*EPA/600/A-93/129*
Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/104*
Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/014*
Methods for Analyzing Extreme Events Under Climate Change.
PB93-146827/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/082*
Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/089*
Multiple Metals Stack Emission Measurement Methodology for Stationary Sources, Current Status.
PB93-185734/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/235*
Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC **A02/MF A01**

*EPA/600/A-93/143*
National Performance Audit Program (NPAP).
PB93-212322/REB 93-04 PC **A02/MF A01**

*EPA/600/A-93/145*
NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC **A02/MF A01**

*EPA/600/A-93/125*
Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
PB93-204063/REB 93-01 PC **A02/MF A01**

*EPA/600/A-93/223*
New Mathematical Model of Pollutant Dispersion Near a Building.
PB93-236529/REB 93-04 PC **A03/MF A01**

*EPA/600/J-93/262*
Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.
PB93-212686/REB 93-04 PC **A03/MF A01**

*EPA/600/A-92/227*
Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119873/REB 93-01 PC **A02/MF A01**

*EPA/600/A-93/202*
Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-229185/REB 93-04 PC **A02/MF A01**

*EPA/600/J-93/319*
Optical Remote Measurement of Toxic Gases.
PB93-229409/REB 93-04 PC **A03/MF A01**

*EPA/600/R-93/119*
Outreach to Manufacturers of Lead Test Kits.
PB93-216570/REB 93-04 PC **A03/MF A01**

*EPA/600/A-92/242*
Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02/MF A01**

*EPA/600/J-93/322*
Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.
PB93-229425/REB 93-04 PC **A03/MF A01**

*EPA/600/A-92/240*
Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC **A02/MF A01**

*EPA/600/A-93/141*
Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.
PB93-212306/REB 93-04 PC **A02/MF A01**

*EPA/600/A-92/229*
Pilot Study to Evaluate Methods for the Assessment of Exposure of Small Children to Pesticides in the Residential Environment.
PB93-119899/REB 93-01 PC **A03/MF A01**

*EPA/600/A-93/123*
Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02/MF A01**

*EPA/600/A-92/253*
Proceedings of the EPA/A and WMA International Symposium (1992), Measurement of Toxic and Related Air Pollutants. Held in Durham, North Carolina on May 4-9, 1992.
PB93-121093/REB 93-01 PC **A01/MF A01**

*EPA/600/R-92/206A*
Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 1.
PB93-122331/REB 93-01 PC **A99/MF A06**

*EPA/600/R-92/206B*
Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 2.
PB93-122349/REB 93-01 PC **A99/MF A06**

*EPA/600/A-93/063*
Protecting Confidentiality in Establishment Surveys.
PB93-180958/REB 93-01 PC **A03/MF A01**

*EPA/600/J-93/317*
Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.
PB93-229383/REB 93-04 PC **A03/MF A01**

*EPA/600/A-93/142*
Recent Advances in Measuring Exhaled Breath and Estimating Exposure and Body Burden for Volatile Organic Compounds (VOCS).
PB93-212314/REB 93-04 PC **A03/MF A01**

*EPA/600/A-93/127*
Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03/MF A01**

*EPA/600/A-93/080*
Regional Modeling Analysis of the Dependencies of Atmospheric Oxidants to Perturbations in NOx and Hydrocarbon Emissions.
PB93-180925/REB 93-01 PC **A02/MF A01**

*EPA/600/R-93/075*
Relationships between Ozone Precursor Levels and Response to Emissions Reductions: Analysis of Regional Oxidant Model Results for the Northeastern United States.
PB93-186294/REB 93-01 PC **A07/MF A02**

*EPA/600/A-92/243*
Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC **A02/MF A01**

*EPA/600/A-93/171*
Replacement of Charcoal Sorbent in the VOST.
PB93-221893/REB 93-04 PC **A03/MF A01**

*EPA/600/A-93/229*
Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.
PB93-236586/REB 93-04 PC **A03/MF A01**

*EPA/600/A-93/201*
Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.
PB93-229177/REB 93-04 PC **A03/MF A01**

*EPA/600/A-93/128*
Setting an Agenda for Research in the Federal Statistical System: Needs for Statistical Disclosure Limitation Procedures.
PB93-204097/REB 93-04 PC **A03/MF A01**

*EPA/600/J-92/360*
Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC **A03/MF A01**

*EPA/600/A-92/228*
Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119881/REB 93-01 PC **A03/MF A01**

*EPA/600/A-93/088*
Source Apportionment of Air Pollution in China: Extending the Usefulness of Receptor Modeling by Combining Multivariate and Chemical Mass Balance Models.
PB93-185726/REB 93-01 PC **A03/MF A01**

*EPA/600/A-93/105*
Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC **A03/MF A01**

*EPA/600/A-93/167*
Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC **A02/MF A01**

*EPA/600/A-93/079*
Spatiotemporal Variability of Non-Urban Ozone Concentrations Over the Eastern United States and Its Potential Replication by Satellite Data.
PB93-191326/REB 93-01 PC **A03/MF A01**

*EPA/600/A-92/233*
Stagnation Diffusion Observed in a Deeply Pooling Valley during STAGMAP.
PB93-120897/REB 93-01 PC **A02/MF A01**

*EPA/600/A-93/067*
Statistical Problems Arising from Environmental Issues.
PB93-185718/REB 93-01 PC **A01/MF A01**

*EPA/600/J-93/318*
Stochastic Methodology for Regional Wind-Field Modeling.
PB93-229391/REB 93-04 PC **A03/MF A01**

*EPA/600/A-92/237*
Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC **A02/MF A01**

*EPA/600/3-89/005*
Summary of the 1987 EPA National Performance Audit Program on Source Measurements.
PB93-223444/REB 93-04 PC **A03/MF A01**

*EPA/600/R-92/202*
Survey of Data from the Continuous Sites of the 1990 Atlanta Ozone Precursor Study.
PB93-124616/REB 93-01 PC **A04/MF A01**

*EPA/600/R-92/219*
Survey of Portable Analyzers for the Measurement of Gaseous Fugitive Emissions.
PB93-126589/REB 93-01 PC **A05/MF A01**

*EPA/600/A-92/226*
Survey of Protocols for Conducting Indoor Air Quality Investigations in Large Buildings.
PB93-119865/REB 93-01 PC **A03/MF A01**

*EPA/600/J-93/321*
Tagged Species Engineering Model (TSEM).
PB93-229417/REB 93-04 PC **A03/MF A01**

*EPA/600/A-92/248*
Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC **A02/MF A01**

*EPA/600/A-93/208*
Total Volatile Organic Concentrations in 2700 Personal, Indoor, and Outdoor Air Samples Collected in the US EPA Team Studies.
PB93-229730/REB 93-04 PC **A03/MF A01**

*EPA/600/A-93/220*
Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
PB93-234508/REB 93-04 PC **A03/MF A01**

*EPA/600/A-93/107*
Two New Gas Standards Programs at the National Institute of Standards and Technology.
PB93-191427/REB 93-01 PC **A02/MF A01**

*EPA/600/A-93/106*
Using Method 301 to Validate Sampling and Analytical Methods for Selected CAAA Compounds.
PB93-191419/REB 93-01 PC **A03/MF A01**

*EPA/600/A-93/138*
UV Monitoring Program at US EPA.
PB93-212272/REB 93-04 PC **A03/MF A01**

*EPA/600/J-93/267*
Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03/MF A01**

*EPA/600/A-93/169*
VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC **A02/MF A01**

*EPA/600/A-93/230*
Wind-Tunnel Measurements of Flow Fields in the Vicinity of Buildings.
PB93-236594/REB 93-04 PC **A03/MF A01**

*EPA/600/R-93/130*
Workshop Report: Identification of Performance Parameters for Portable X-ray Fluorescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.
PB93-216612/REB 93-04 PC **A05/MF A02**

*EPA/600/R-93/129*
Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.
PB93-216604/REB 93-04 PC **A06/MF A02**

HEALTH EFFECTS RESEARCH LAB - Cinn, OH

*EPA/600/A-92/176*
32P-Postlabeling in Studies of PAH Activation.
PB93-106631/REB 93-01 PC **A03/MF A01**

*EPA/600/J-93/392*
Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.
PB93-236305/REB 93-04 PC **A03/MF A01**

*EPA/600/J-93/371*
Acute and Delayed Effects of Diisopropyl Fluorophosphate on Body Temperature, Heart Rate and Motor Activity in the Awake, Unrestrained Rat.
PB93-228971/REB 93-04 PC **A03/MF A01**

*EPA/600/J-93/101*
Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC **A03/MF A01**

*EPA/600/J-93/089*
Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC **A03/MF A01**

*EPA/600/J-92/374*
Age-Related Changes in Disposition and Metabolism of Benzene in Male C57BL/6N Mice.
PB93-107191/REB 93-01 PC **A02/MF A01**

*EPA/600/J-93/333*
Ammonia Abatement System for Whole-Body Small Animal Inhalation Exposures to Acid Aerosols.
PB93-229516/REB 93-04 PC **A03/MF A01**

*EPA/600/J-93/108*
Analysis of DNA Strand Breaks Induced in Rodent Liver in vivo, Hepatocytes in Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC **A03/MF A01**

*EPA/600/J-92/437*
Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC **A03/MF A01**

*EPA/600/J-92/378*
Animal Models for Assessing the Neurobehavioral Impact of Airborne Pollutants.
PB93-107233/REB 93-01 PC **A03/MF A01**

*EPA/600/J-93/104*
Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC **A02/MF A01**

*EPA/600/J-92/447*
Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
PB93-141463/REB 93-01 PC **A02/MF A01**

*EPA/600/J-92/439*
Application of the 'Tradescantia micronucleus' Assay for the Genetic Evaluation of Chemical Mixtures in Soil and Aqueous Media.
PB93-141380/REB 93-01 PC **A02/MF A01**

*EPA/600/J-93/368*
Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.
PB93-228948/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/441*
Behavioral Development Following Daily Episodes of Mother-Infant Separation in the Rat.
PB93-141406/REB 93-01 PC **A01**/MF **A01**

*EPA/600/J-93/400*
Bitertanol, a Triazole Fungicide, Increases Operant Responding but Not Motor Activity.
PB93-236370/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/118*
Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/091*
Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/379*
Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.
PB93-231835/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/339*
Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/122*
Comments on Recent Data for Particle Deposition in Human Nasal Passages.
PB93-181105/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/099*
Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/357*
Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-228831/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/375*
Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Industion of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/126*
Competition Potentials of Environmentally Applied Bacteria with Human Fecal Microbiota.
PB93-181147/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/444*
Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomegalovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/403*
Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/111*
Cytokine (Tumor Necrosis Factor, IL-6, and IL-8) Production by Respiratory Syncytial Virus-Infected Human Alveolar Macrophages.
PB93-181006/REB 93-01 PC **A02**/MF **A01**

Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/401*
Deposition of Sulfate Acid Aerosols in the Developing Human Lung.
PB93-236388/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/436*
Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
PB93-141356/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/369*
Dermal Penetration of ((14)C)Captan in Young and Adult Rats.
PB93-107142/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/359*
Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/370*
Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/338*
Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
PB93-229565/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/361*
Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.
PB93-228872/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/373*
Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/350*
Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/102*
Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/429*
Direct Effects of Ethane Dimethanesulphonate on Epididymal Function in Adult Rats. An In vitro Demonstration.
PB93-141281/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/362*
Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-228880/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/109*
Distribution of Cardiac Output during Diurnal Changes of Activity in Rats.
PB93-180982/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/372*
Dithicarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.
PB93-228989/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/438*
DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/394*
DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/115*
DNA Isolation from Small Tissue Samples Using Salt and Spermine.
PB93-181048/REB 93-01 PC **A01**/MF **A01**

*EPA/600/J-92/433*
Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/342*
Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
PB93-229607/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/114*
Effect of Methoxychlor on Ovarian Steroidogenesis: Role in Early Pregnancy Loss.
PB93-181030/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/396*
Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/374*
Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/404*
Effects of Dopaminergic Drugs on Working and Reference Memory in Rats.
PB93-236412/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/395*
Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
PB93-236321/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/106*
Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Bensidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/375*
Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC **A01**/MF **A01**

*EPA/600/J-93/112*
Electrophoresis Gel Buffer Recirculator for under Twenty Dollars.
PB93-181014/REB 93-01 PC **A01**/MF **A01**

*EPA/600/J-93/107*
Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/123*
EPA Priorities for Biologic Markers Research in Environmental Health.
PB93-181113/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/366*
EPA's Reassessment of Dioxin Risk: Directed Health Research.
PB93-228922/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/377*
Evaluation of the Effects of Methanol during Early Pregnancy in the Rat.
PB93-231850/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/334*
Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/121*
Extrapolation Modeling of Aerosol Deposition in Human and Laboratory Rat Lungs.
PB93-181097/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/398*
Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/421*
Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/094*
Genetic Toxicology of Putative Nongenotoxic Carcinogens.
PB93-175636/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/372*
Genotoxicity of 2,4,5-Trichlorophenoxyacetic Acid Biodegradation Products in the 'Salmonella' Reversion and Lambda Prophage-Induction Bioassays.
PB93-107175/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/024*
Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/119*
Gonadal Effects of Fetal Exposure to the Azo Dye Congo Red in Mice: Infertility in Female but Not Male Offspring.
PB93-181071/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/434*
Health Effects of Arsenic in Drinking Water: Research Needs.
PB93-141331/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/443*
Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/378*
Human Health Effects of Air Pollution.
PB93-231843/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/120*
Human Upper Respiratory Tract Responses to Inhaled Pollutants with Emphasis on Nasal Lavage.
PB93-181089/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/093*
Importance of Experimenter-Blind Procedure in Neurotoxicology (Mini-Review).
PB93-175628/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/430*
Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC **A01**/MF **A01**

*EPA/600/J-92/371*
In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with In vivo Data.
PB93-107167/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/448*
In vitro Mammalian Mutagenesis as a Model for Genetic Lesions in Human Cancer.
PB93-141471/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/340*
In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/367*
Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/098*
Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
PB93-175677/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/090*
International Validation of a Neurobehavioral Screening Battery: The IPCS/WHO Collaborative Study.
PB93-175594/REB 93-01 PC **A02**

*EPA/600/J-93/124*
Interspecies Modeling of Inhaled Particle Deposition Patterns.
PB93-181121/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/423*
Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/353*
Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/364*
Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-228906/REB 93-04 PC **A01**/MF **A01**

*EPA/600/J-93/331*
Maturational Changes in Dermal Absorption of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Fischer 344 Rats.
PB93-229490/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/442*
Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/377*
Mechanisms Underlying Somatosensory Cortical Dynamics: 1. In vivo Studies.
PB93-107217/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/376*
Mechanisms Underlying Somatosensory Cortical Dynamics: 2. In vitro Studies.
PB93-107225/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/373*
Metabolism and Disposition of Inorganic Arsenic in Laboratory Animals and Humans.
PB93-107183/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/399*
Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.
PB93-236362/REB 93-04 PC **A04**/MF **A01**

*EPA/600/J-92/445*
Micronuclei and Other Nuclear Anomalies in Buccal Smears: A Field Test in Snuff Users.
PB93-141448/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/446*
Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/358*
Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/402*
Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/449*
Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/100*
Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/366*
Ninety-Day Toxicity Study of Chloral Hydrate in the Sprague-Dawley Rat.
PB93-107118/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/365*
Ninety-Day Toxicity Study of Sodium Monochloroacetate in Sprague-Dawley Rats.
PB93-107100/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/432*
Olfactory Evoked Responses to Odorous Stimuli of Different Intensities.
PB93-141315/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/097*
Olfactory Toxicity of Beta,Beta'-Iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/376*
Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/440*
PCR Primers Specific for Detection of a Rat Repetitive Sequence.
PB93-141398/REB 93-01 PC **A01**/MF **A01**

*EPA/600/J-92/428*
Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/110*
Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-180990/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/414*
Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/358*
Predictors of Individual Differences in Acute Response to Ozone Exposure.
PB93-226849/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/360*
Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-228864/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/355*
Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-228815/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/420*
Quantification of Nitro- and Hydroxylated Nitro-Aromatic/Polycyclic Aromatic Hydrocarbons in Selected Ambient Air Daytime Winter Samples.
PB93-141190/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/363*
Rapid Efficient Production of Baculovirus Expression Vectors.
PB93-228898/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/337*
Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/095*
Relationship between Serum Cholinesterase Activity and the Change in Body Temperature and Motor Activity in the Rat: A Dose-Response Study of Diisopropyl Fluorophosphate.
PB93-175644/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/125*
Repeated Maternal Seperation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/397*
Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.
PB93-236347/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/431*
Review of the Literature on Potential Reproductive and Developmental Toxicity of Electric and Magnetic Fields.
PB93-141307/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/343*
Short Communication: Improved Thin-Layer Chromatographic Separation of 32P-Postlabeled DNA Adducts.
PB93-229615/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/113*
Steroidogenic Assessment Using Ovary Culture in Cycling Rats: Effects of Bis(2-Diethylhexyl) Phthalate on Ovarian Steroid Production.
PB93-181022/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/354*
Strain Comparisons of DFP Neurotoxicity in Rats.
PB93-228609/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/096*
Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175651/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/335*
Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/426*
Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
PB93-141257/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/370*
Thermal Influences on Nervous System Function.
PB93-107159/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/117*
Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/103*
Twenty-Four Hour Rhythms of Selected Ambient Temperature in Rat and Hamster.
PB93-175727/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/105*
Use of Analytically Defined Estimates of Aerosol Respirable Fraction to Predict Lung Deposition Patterns.
PB93-175743/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/332*
Using Neuroblastoma Cell Lines to Examine Organophosphate Neurotoxicity.
PB93-229508/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/341*
Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
PB93-229599/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/396*
Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/422*
V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

HEALTH EFFECTS RESEARCH LAB - RTP, NC

*EPA/600/J-93/092*
Summary of Workshop III: Evoked Potentials.
PB93-175610/REB 93-01 PC **A01**/MF **A01**

INDUSTRIAL ENVIRONMENTAL RESEARCH LAB - Cinn, OH

*EPA/600/J-93/328*
Oxidation of Biphenyl by a Multicomponent Enzyme System from 'Pseudomonas' sp. Strain LB400.
PB93-229466/REB 93-04 PC **A02**/MF **A01**

INDUSTRIAL ENVIRONMENTAL RESEARCH LAB - RTP, NC

*EPA/600/A-92/286*
Advacate-Low-Cost Process for SO2 Control.
PB93-141117/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/009*
Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC **A03**/MF **A01**

*EPA/600/S8-88/071*
Advanced Utility Simulation Model. Project Summary.
PB93-222636/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/077*
Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/197*
Air Toxics: The Research Challenge of the 1990 Clean Air Act Amendments.
PB93-106664/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/355*
Airborne Particle Sizes and Sources Found in Indoor Air.
PB93-107019/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/071*
Alternate Performance Standard Project: Interpreting the Post-Construction Test.
PB93-175529/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-92/201*
Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
PB93-122307/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/057*
Analysis of Atmospheric Deposition Samples from Easton, Pennsylvania.
PB93-181600/REB 93-01 PC **A04**/MF **A01**

*EPA/600/A-92/270*
Analysis of IAQ Control Options and the Effects of Sources and Sinks.
PB93-131647/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/269*
Applications of Pulse Combustion in Industrial and Incineration Processes.
PB93-131639/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/210*
ASHRAE Standard 62: Ventilation for Acceptable Indoor Air Quality.
PB93-106797/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/184*
Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
PB93-222024/REB 93-04 PC **A02**/MF **A01**

*EPA/600/S8-88/102*
Baseline Emissions Forecasts for Industrial Non-Boiler Sources. Project Summary.
PB93-222560/REB 93-04 PC **A01**/MF **A01**

*EPA/600/S7-89/005*
Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-226450/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/090*
Biomass Combustion in Gas-Turbine-Based Systems.
PB93-185742/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/185*
Bioresponse Testing of Sources of Indoor Air Contaminants.
PB93-222032/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-93/108A*
Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC **A13**/MF **A03**

*EPA/600/R-93/044*
Characterization of Emissions from the Simulated Open-Burning of Non-Metallic Automobile Shredder Residue.
PB93-172914/REB 93-01 PC **A05**/MF **A01**

*EPA/600/A-92/265*
Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/001*
Characterization of Organic Emission from a Wood Finishing Product-Wood Stain.
PB93-150100/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/019*
Characterization of PM-10 Emissions from Antiskid Materials Applied to Ice- and Snow-Covered Roadways.
PB93-150209/REB 93-01 PC **A05**/MF **A01**

*EPA/600/J-93/087*
Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/081*
Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC **A03**/MF **A01**

*EPA/600/S7-88/005*
Clinton, New Jersey, Radon Mitigation Follow-Up and Long-Term Monitoring. Project Summary.
PB93-222594/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-92/197*
Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC **A05**/MF **A01**

*EPA/600/J-93/250*
Comparison of Methods for Estimating Global Methane Emissions from Landfills.
PB93-212561/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-92/177*
Contribution to Indoor Ozone Levels of an Ozone Generator.
PB93-234557/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-93/090*
Control Technology Center FY92: A Summary of Program Accomplishments.
PB93-199230/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/109*
Coprocessing of Fossil Fuels and Biomass for CO2 Emission Reduction in the Transportation Sector.
PB93-194165/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/080*
Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/272*
Design of New Schools and Other Large Buildings Which Are Radon Resistant and Easy to Mitigate.
PB93-131662/REB 93-01 PC **A03**/MF **A01**

*EPA/600/S7-88/011*
Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.
PB93-222628/REB 93-04 PC **A01**/MF **A01**

*EPA/600/A-92/267*
Development of Good Combustion Practice for Municipal Waste Combustors.
PB93-131613/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/096*
Development of Residential Wood Consumption Estimation Models.
PB93-199248/REB 93-01 PC **A04**/MF **A01**

*EPA/600/R-93/088*
Development of Sampling and Analytical Methods for the Measurement of Nitrous Oxide from Fossil Fuel Combustion Sources.
PB93-194330/REB 93-01 PC **A07**/MF **A02**

*EPA/600/R-92/214*
Development of Size-Specific Data from Particulate Control Technology Research Reports.
PB93-131456/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/076*
Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/266*
Dry Flue Gas Cleaning Processes for Achieving Air Pollutant Emissions Requirements.
PB93-131605/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/410*
Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-92/196*
Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

*EPA/600/A-92/271*
Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-92/192*
Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
PB93-105518/REB 93-01 PC **A08**/MF **A02**

*EPA/600/A-93/188*
EPA's Indoor Air/Pollution Prevention Workshop.
PB93-222065/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/149*
EPA's Information Management System for Tracking Reasonable Further Progress.
PB93-212389/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/152*
EPA's Photovoltaic Demand-Side Management Cost-Shared Demonstrations.
PB93-212413/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/180*
Establishing Priorities in the U.S. EPA's Indoor Air Engineering Research Program.
PB93-221984/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/249*
Estimate of Global Methane Emissions from Coal Mines.
PB93-212553/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/248*
Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-92/268*
Evaluating Materials for Healthy Buildings.
PB93-131621/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/187*
Evaluation of Carbon Black Slurries as Clean Burning Fuels.
PB93-222057/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/059*
Evaluation of Emissions from Masonry Heaters and Masonry Fireplaces in Homes.
PB93-173078/REB 93-01 PC **A03**/MF **A01**

*EPA/600/S7-89/006A*
Evaluation of FGD Dry Injection Sorbents and Additives. Volume 1. Development of High Reactivity Sorbents. Project Summary.
PB93-228484/REB 93-04 PC **A02**/MF **A01**

*EPA/600/S7-88/019*
Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.
PB93-228468/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-92/242*
Evaluation of Nitrogen Oxide Emissions Data from TVA Coal-Fired Boilers.
PB93-138865/REB 93-01 PC **A06**/MF **A02**

*EPA/600/J-92/357*
Evaluation of Para-Dichlorobenzene Emissions from Solid Moth Repellant as a Source of Indoor Air Pollution.
PB93-107035/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/155*
Evaluation of Ventilation Performance for Indoor Space.
PB93-212751/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-93/078*
Experimental Investigation of PIC Formation in CFC-12 Incineration.
PB93-191294/REB 93-01 PC **A07**/MF **A02**

*EPA/600/A-92/211*
Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/212*
Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/181*
Fundamental Mass Transfer Models for Indoor Air Pollution Sources.
PB93-221992/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/174*
Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/354*
Global Inventory of Volatile Organic Compound Emissions from Anthropogenic Sources.
PB93-107001/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/251*
Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.
PB93-212579/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-92/191A*
Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
PB93-100907/REB 93-01 PC **A07**/MF **A02**

*EPA/600/R-92/191B*
Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

*EPA/600/S8-88/085*
Guidelines for Stack Testing at Municipal Waste Combustion Facilities. Project Summary.
PB93-222610/REB 93-04 PC **A02**/MF **A01**

*EPA/625/6-91/029*
Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04**/MF **A01**

*EPA/600/J-93/246*
Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212538/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/150*
IAQPC: An Indoor Air Quality Simulator.
PB93-212397/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/078*
Indoor Radon Reduction in Crawl-Space Houses: A Review of Alternative Approaches.
PB93-173177/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/396*
Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
PB93-121259/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S8-88/065*
Industrial Boiler Furnace Sorbent Injection Algorithm Development.
PB93-222436/REB 93-04 PC **A01**/MF **A01**

*EPA/600/S8-88/091*
Industrial Boiler Low NOx Combustion Retrofit Cost Algorithm Development. Project Summary.
PB93-222578/REB 93-04 PC **A01**/MF **A01**

*EPA/600/A-93/189*
International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.
PB93-222073/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/279*
Inventory of Methane Losses from the Natural Gas Industry.
PB93-131720/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/158*
Investigation of Possible Uses of Surplus CFC/Halon Chemicals.
PB93-229771/REB 93-04 PC **A07**/MF **A02**

*EPA/600/R-93/080A*
Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 1. Technical Report and Appendices A-F.
PB93-191302/REB 93-01 PC **A13**/MF **A03**

*EPA/600/R-93/080B*
Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 2. Appendices G-N.
PB93-191310/REB 93-01 PC **A15**/MF **A03**

*EPA/600/J-92/364*
Measurement and Distribution of Radon and Radon Progeny: An Overview of Indoor Radon Risk Reduction in the United States.
PB93-107092/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/169*
Measurement of the Surface Permeability of Basement Concretes.
PB93-232114/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/153*
Methane Emissions from the Natural Gas Industry.
PB93-212421/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-93/063*
Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC **A06**/MF **A02**

*EPA/600/A-92/937*
Modeling Individual Exposure from Indoor Sources.
PB93-119840/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/088*
Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/208*
Modeling of Indoor Air Quality for a Personal Computer.
PB93-106771/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/356*
Modeling of the Fast Organic Emissions from a Wood-Finishing Product: Floor Wax.
PB93-107027/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/380*
Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
PB93-121127/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/215*
On-Line Measurement of Nitrous Oxide from Combustion Sources by Automated Gas Chromatography.
PB93-106847/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/274*
Organic Combustion Fingerprints of Three Common Home Heating Fuels.
PB93-222123/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/179*
Particle-Size-Dependent Efficiency of Air Cleaners.
PB93-221976/REB 93-04 PC **A01**/MF **A01**

*EPA/600/A-93/062*
Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
PB93-173102/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/086*
Pollution Prevention for Cleaner Air: EPA's Air and Energy Engineering Research Laboratory.
PB93-173730/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/077*
Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S8-88/084*
Preliminary Diagnostic Procedures for Radon Control. Project Summary.
PB93-222545/REB 93-04 PC **A01**/MF **A01**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Held in Tampa, Florida on April 16-19, 1991.
PB93-124162/REB 93-01 PC **E99**/MF **E99**

*EPA/600/R-92/209A*
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 1. Sessions P, 0, 1A, 2A, 3A, 4A, 6A, 6B, 9C and 10B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124170/REB 93-01 PC **A20**/MF **A04**

*EPA/600/R-92/209B*
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 2. Sessions 1B, 2B, 3B, 4B, 7A, 7B, 8A, 8B and 9B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124188/REB 93-01 PC **A21**/MF **A04**

*EPA/600/R-92/209C*
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 3. Sessions 1C, 2C,

3C, 4C, 6C, 7C, 8C, 9A, and 10A/C. Held in Tampa, Florida on April 16-19, 1991.
PB93-124196/REB 93-01 PC **A21**/MF **A04**

*EPA/600/R-93/052*
Proceedings of the Indoor Radon Modeling Workshop, Florida Radon Research Program. Held in Tampa, Florida on April 16-17, 1991.
PB93-172922/REB 93-01 PC **A09**/MF **A02**

*EPA/600/R-93/083A*
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

*EPA/600/R-93/083B*
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

*EPA/600/R-93/083C*
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

*EPA/600/R-92/093A*
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 1. Sessions 1-3.
PB93-212843/REB 93-04 PC **A15**/MF **A03**

*EPA/600/R-92/093B*
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 2. Sessions 4 and 5.
PB93-212850/REB 93-04 PC **A20**/MF **A04**

*EPA/600/R-92/093C*
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 3. Sessions 6-8.
PB93-212868/REB 93-04 PC **A19**/MF **A04**

*EPA/600/R-93/064A*
Proceedings: 1991 SO2 Control Symposium. Volume 1. Opening Session and Sessions 1-3.
PB93-196095/REB 93-01 PC **A19**/MF **A04**

*EPA/600/R-93/064B*
Proceedings: 1991 SO2 Control Symposium. Volume 2. Sessions 4 and 5A.
PB93-196103/REB 93-01 PC **A22**/MF **A04**

*EPA/600/R-93/064C*
Proceedings: 1991 SO2 Control Symposium. Volume 3. Sessions 5B and 6.
PB93-196111/REB 93-01 PC **A20**/MF **A04**

*EPA/600/R-93/064D*
Proceedings: 1991 SO2 Control Symposium. Volume 4. Session 7.
PB93-196129/REB 93-01 PC **A15**/MF **A03**

*EPA/600/R-93/064E*
Proceedings: 1991 SO2 Control Symposium. Volume 5. Session 8.
PB93-196137/REB 93-01 PC **A13**/MF **A03**

*EPA/600/S8-88/104*
Projections of Regional Fuel Oil and Natural Gas Prices. Project Summary.
PB93-222552/REB 93-04 PC **A01**/MF **A01**

*EPA/600/J-93/075*
R-245ca: A Potential Far-Term Alternative for R-11.
PB93-173144/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-92/207*
Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

*EPA/600/J-92/411*
Reaction Kinetics of Ca-Based Sorbents with HCl.
PB93-131860/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/091*
Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
PB93-199388/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-92/196*
Recommended Performance Standard of the Florida Radon Research Program.
PB93-122281/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/196*
Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.
PB93-229144/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/151*
Relating Air Cleaner Efficiency to Indoor Air Quality.
PB93-212405/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/183*
Removal Efficiencies in Terms of Particle Size and Concentration in a Suburban Home of Console Air Cleaners.
PB93-222016/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-92/224*
Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127801/REB 93-01 PC **A06**/MF **A02**

*EPA/600/R-92/239*
Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
PB93-135663/REB 93-01 PC **A07**/MF **A02**

*EPA/600/J-93/079*
Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
PB93-173664/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/274*
Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131688/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/070*
Simulation of Performance of Chlorine-Free Fluorinated Ethers and Fluorinated Hydrocarbons to Replace CFC-11 and CFC-114 in Chillers.
PB93-175511/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/058A*
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 1.
PB93-174761/REB 93-01 PC **A24**/MF **A04**

*EPA/600/R-93/058B*
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 2.
PB93-174779/REB 93-01 PC **A25**/MF **A06**

*EPA/600/R-93/058C*
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
PB93-174787/REB 93-01 PC **A99**/MF **A06**

*EPA/600/R-93/058D*
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 2.
PB93-174795/REB 93-01 PC **A99**/MF **A06**

*EPA/600/R-93/058E*
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 1.
PB93-174803/REB 93-01 PC **A99**/MF **A06**

*EPA/600/R-93/058E*
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 2.
PB93-174811/REB 93-01 PC **A99**/MF **A06**

*EPA/600/R-93/058G*
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 4.
PB93-174829/REB 93-01 PC **A13**/MF **A03**

*EPA/600/A-93/078*
Sorption and Reemission of Formaldehyde by Gypsum Wallboard.
PB93-180917/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/186*
Status of ASHRAE Standard 62. Ventilation for Acceptable Indoor Air Quality.
PB93-222040/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/358*
Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107042/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-92/159*
Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
PB93-101160/REB 93-01 PC **A06**/MF **A02**

*EPA/600/A-93/061*
Technological Options for Acid Rain Control.
PB93-173094/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/216*
Technologies Options for Acid Rain Control.
PB93-106854/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/351*
Technology for Reduction of CO2 Emissions from the Transportation Sector.
PB93-106987/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/213*
Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
PB93-106821/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/235*
Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/245*
Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-92/214*
Use of Surface-Coating-Free Materials for Reduction of Volatile Organic Compound Emissions from Coating Operations.
PB93-106839/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/063*
Using a Neural Network to Estimate Solvent Consumption.
PB93-173110/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/209*
Validation of Source and Sink Models: Problems and Possible Solutions.
PB93-106789/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/276*
Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

*EPA/600/S8-88.088*
Volatile Organic Compound Model Quality Assurance and Sensitivity Testing (Version 1.8).
PB93-223022/REB 93-04 PC **A01**/MF **A01**

MUNICIPAL ENVIRONMENTAL RESEARCH LAB - Cinn, OH

*EPA/600/R-93/159*
Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
PB93-227551/REB 93-04 PC **A06**/MF **A02**

*EPA/600/R-93/152*
Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.
PB93-218501/REB 93-04 PC **A07**/MF **A02**

*EPA/600/J-93/231*
Alternating Current Electrocoagulation for Superfund Site Remediation.
PB93-205144/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/261*
Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC **A03**/MF **A01**

*EPA/540/AR-92/010*
Applications Analysis Report: Silicate Technology Corporation's Solidification/Stabilization Technology for Organic and Inorganic Contaminants in Soils.
PB93-172948/REB 93-01 PC **A07**/MF **A02**

*EPA/600/J-93/325*
Aromatic Hydrocarbon Degradation: A Molecular Approach.
PB93-229433/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/194*
Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/069*
Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
PB93-175503/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-92/145*
AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
PB93-100113/REB 93-01 PC **A10**/MF **A03**

*EPA/SW/DK-92/053*
AutoMOUSE (Modular Oriented Uncertainty SystEm) - An Improvement to the MOUSE Computerized Uncertainty Analysis Program (for Microcomputers).
PB93-500007/REB 93-01 CP **D03**

*EPA/540/AR-92/017*
Babcock and Wilcox Cyclone Furnace Vitrification Technology: Applications Analysis Report.
PB93-122315/REB 93-01 PC **A03**/MF **A01**

*EPA/540/SR-92/017*
Babcock and Wilcox Cyclone Furnace Vitrification. Technology Demonstration Summary.
PB93-145621/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/137A*
Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC **A10**/MF **A03**

*EPA/600/R-93/137B*
Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC **A15**/MF **A03**

*EPA/600/A-93/133*
Biodegradation of Chlorinated Organic Compounds by 'Phanerochaete chrysosporium', a Wood-Rotting Fungus.
PB93-204147/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/163*
Biodegradation of Crystal Violet by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191609/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/164*
Biodegradation of DDT (1,1,1-Trichloro-2,2-Bis(4-Chlorophenyl)Ethane) by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191617/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/099*
Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191351/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/161*
Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium': Involvement of the Lignin Degrading System.
PB93-191583/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/158*
Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191559/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/162*
Biodegradation of Polycyclic Aromatic Hydrocarbons by 'Phanerochaete chrysosporium'.
PB93-191591/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/157*
Biodegradation of 2,4,5-Trichlorophenoxyacetic Acid in Liquid Culture and in Soil by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191542/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/211*
Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/100*
Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/098*
Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/190*
Broad-Based Environmental Life Cycle Assessment.
PB93-199495/REB 93-01 PC **A02**/MF **A01**

*EPA/540/AR-92/002*
Carver-Greenfield Process (Trade Name) Dehydro-Tech Corporation. Applications Analysis Report.
PB93-101152/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/094*
Characteristics of Non-Petroleum Underground Storage Tanks.
PB93-185775/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/304*
Characterization of the Alkane-Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis': Identification of a New P450 Gene Family.
PB93-229268/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-93/113A*
Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203693/REB 93-04 PC **A07**/MF **A02**

*EPA/600/R-93/113B*
Chemical Shoreline Cleaning Agents for Oil Spills: Update State-of-the-Art on Mechanisms of Action and Factors Influencing Performance.
PB93-203701/REB 93-04 PC **A04**/MF **A01**

*EPA/600/J-92/403*
Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/214*
Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
PB93-204972/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/300*
Cloning and Expression in 'Escherichia coli' of Pseudomonas Strain LB400 Genes Encoding Polychlorinated Biphenyl Degradation.
PB93-229227/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/254*
Column Vapor Extraction Experiments on Gasoline Contaminated Soil.
PB93-131514/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/092*
Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
PB93-185759/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J093/003*
Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/260*
Comparing the Accuracy of Equation Formats for Modeling Microbial Population Decay Rates.
PB93-131548/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/168*
Comparison of the Efficiency of Polycarbonate and Mixed Cellulose Ester Filters for Use in the Filtration of Water Samples.
PB93-194363/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/394*
Constructed Wetland Design: the First Generation.
PB93-131753/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/024*
Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/068*
Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/119*
Corrosion Control Principles and Strategies for Reducing Lead and Copper in Drinking Water Systems.
PB93-199420/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/236*
Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC **A02**/MF **A01**

*EPA/540/AR-92/015*
Demonstration of a Trial Excavation at the McColl Superfund Site.
PB93-100121/REB 93-01 PC **A04**/MF **A01**

*EPA/600/R-93/012A*
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC **A07**/MF **A02**

*EPA/600/R-93/012B*
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 1: Pages 1 through 662.
PB93-218246/REB 93-04 PC **A99**/MF **A06**

*EPA/600/R-93/012C*
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 2: Pages 663 through 1389.
PB93-218253/REB 93-04 PC **A99**/MF **A06**

*EPA/600/A-92/262*
Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/131*
Determination of Nine Haloacetic Acids in Finished Drinking Water.
PB93-204121/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/145*
Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/225*
Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-93/136*
Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.
PB93-222214/REB 93-04 PC **A10**/MF **A03**

*EPA/600/J-93/305*
Disruption of the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.
PB93-229276/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/342*
Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/085*
Effect of the Distribution System on Drinking-Water Quality.
PB93-173722/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/159*
Effects of Culture Parameters on DDT (1,1,1-Trichloro-2,2-BIS(4-Chlorophenyl)Ethane) Biodegradation by 'Phanerochaete chrysosporium'.
PB93-191567/REB 93-01 PC **A03**/MF **A01**

*EPA/540/R-93/516*
Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.
PB93-205383/REB 93-04 PC **A03**/MF **A01**

*EPA/540/R-93/515*
Emerging Technology Report: Metals Treatment at Superfund Sites by Absorptive Filtration.
PB93-231165/REB 93-04 PC **A04**/MF **A01**

*EPA/600/A-93/067*
Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/224*
Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/056*
EPA Bibliography on Surface Contamination.
PB93-168904/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/112*
EPA's Life Cycle Methodology: Guidelines for Use in Development of Packaging.
PB93-194199/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/154*
EPA's Research in LCA Methodology.
PB93-212439/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/226*
EPANET Water Quality Model.
PB93-236552/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/052*
Estimation of the Cost of Using Chemical Protective Clothing.
PB93-168805/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/114*
Evaluation of Laboratory Tests to Determine the Effectiveness of Chemical Surface Washing Agents.
PB93-194215/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/167*
Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.
PB93-229870/REB 93-04 PC **A25**/MF **A06**

*EPA/600/J-93/166*
Evaluation of the Bioremediation of a Contaminated Soil with Phytotoxicity Tests.
PB93-191625/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/155*
Evaluation of Three Cleaning Methods for Removing Asbestos from Carpet: Determination of Airborne Asbestos Concentrations Associated with Each Method.
PB93-218568/REB 93-04 PC **A05**/MF **A01**

*EPA/600/A-93/102*
Evaluation of Three Oil Spill Laboratory Dispersant Effectiveness Tests.
PB93-191377/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/144*
Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
PB93-221638/REB 93-04 PC **A04**/MF **A01**

*EPA/600/J-92/280*
Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/006*
Extraction and Recovery of Lead Species from Soil.
PB93-150142/REB 93-01 PC **A02**/MF **A01**

Field Applications of Robotic Systems in Hazardous Environments, p1-29 1993. See also PB86-176344 and PB92-166743.
PB93-229755/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-92/263*
Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/201*
FLEX: An Expert System for Reviewing the Chemical Resistance of Flexible Membrane Liners for Waste Management.
PB93-106706/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/154*
Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC **A04**/MF **A01**

*EPA/600/A-93/227*
Foam Scrubbing (Chapter 9).
PB93-236560/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/307*
Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/209*
Genetic and Cell-Free Studies of PCB Biodegradation in 'Pseudomonas putida' LB400.
PB93-229748/REB 93-04 PC **A03**/MF **A01**

*EPA/540/R-92/074B*
Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Quick Reference Fact Sheet.
PB93-121325/REB 93-01 PC **A02**/MF **A01**

*EPA/540/R-92/074A*
Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Remedy Selection. Interim Guidance.
PB93-126597/REB 93-01 PC **A03**/MF **A01**

*EPA/625/R-92/009*
Guides to Pollution Prevention: Metal Casting and Heat Treating Industry.
PB93-127793/REB 93-01 PC **A05**/MF **A01**

*EPA/625/R-92/008*
Guides to Pollution Prevention: The Mechanical Equipment Repair Industry.
PB93-121317/REB 93-01 PC **A03**/MF **A01**

*EPA/625/R-92/011*
Guides to Pollution Prevention: The Metal Finishing Industry.
PB93-100105/REB 93-04 PC **A04**/MF **A01**

*EPA/540/R-93/523*
Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
PB93-233914/REB 93-04 PC **A12**/MF **A03**

*EPA/540/S5-91/005*
Horsehead Resource Development Company, Inc., Flame Reactor Technology. Technology Demonstration Summary.
PB93-145639/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/392*
Hydraulic Conductivity of Three Geosynthetic Clay Liners.
PB93-131746/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/146*
Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC **A01**/MF **A01**

*EPA/600/A-93/116*
In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/297*
Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC **A01**/MF **A01**

*EPA/600/J-93/144*
Incineration of Hazardous Waste: A Critical Review Update.
PB93-185916/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/086*
Ink and Cleaner Waste Reduction Evaluation for Flexographic Printers.
PB93-191286/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/298*
Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-92/238*
Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC **A05**/MF **A02**

*EPA/600/J-93/327*
Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
PB93-229458/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/330*
Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
PB93-229482/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/306*
Isolation of the Alkane Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis'.
PB93-229284/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/303*
Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-92/200*
Landfill Containment and Cover Systems.
PB93-106698/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-92/203*
Landfill Containment Systems Regulations.
PB93-106722/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/070*
LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC **A05**/MF **A01**

*EPA/600/A-93.113*
Life Cycle Analysis (Video Conference Paper).
PB93-194207/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-92/245*
Life-Cycle Assessment: Inventory Guidelines and Principles.
PB93-139681/REB 93-01 PC **A07**/MF **A02**

*EPA/600/R-92/226*
Life Cycle Design Guidance Manual. Environmental Requirements and the Product System.
PB93-164507/REB 93-04 PC **A09**/MF **A03**

*EPA/600/J-93/193*
Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/095*
Location of Leaks in Pressurized Petroleum Pipelines by Means of Passive-Acoustic Sensing Methods.
PB93-185783/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/160*
Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.
PB93-212801/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/111*
Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194181/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/167*
Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/132*
Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/134*
Mineralization of Recalcitrant Environmental Pollutants by a White Rot Fungus. Proceedings of the National Conference on Hazardous Wastes and Hazardous Materials. Held in Washington, DC. on March 16-18, 1987.
PB93-204154/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/114*
Mobile On-Site Recycling of Metalworking Fluids.
PB93-216562/REB 93-04 PC **A04**/MF **A01**

*EPA/600/J-93/230*
Modeling Contaminant Propagation in Drinking-Water Distribution Systems.
PB93-205136/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/234*
Molecular Basis of Biodegradation of Chloroaromatic Compounds.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/143*
New Approaches to Estimation of Solid-Waste Quantity and Composition.
PB93-185908/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/299*
Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
PB93-222909/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/101*
Nutrient Movement through Beach Media: Problems and Field Results Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191344/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/226*
Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.
PB93-236578/REB 93-04 PC **A04**/MF **A01**

*EPA/600/R-93/066*
On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC **A09**/MF **A02**

*EPA/600/R-92/251*
On-Site Waste Ink Recycling: Technology Evaluation Report.
PB93-141026/REB 93-01 PC **A04**/MF **A01**

*EPA/600/R-92/175*
Opportunities for Pollution Prevention Research to Support the 33/50 Program.
PB93-107266/REB 93-01 PC **A06**/MF **A02**

*EPA/600/A-92/273*
Opportunities for the Use of Geosynthetics in Waste Management Facilities.
PB93-131670/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/160*
Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
PB93-191575/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/329*
Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
PB93-229474/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-93/099*
Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC **A05**/MF **A01**

*EPA/600/J-93/002*
Pilot-Scale Evlauation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-92/240*
Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

*EPA/600/A-93/093*
Planning and Progress of EPA's Pollution Prevention Research Program.
PB93-185767/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/015B*
Pollution Prevention Opportunity Assessment: Geochemistry Laboratory, Sandia National Laboratories.
PB93-146900/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/015A*
Pollution Prevention Opportunity Assessment: Manufacturing and Fabrication Repair Laboratory at Sandia National Laboratories.
PB93-146868/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/008*
Pollution Prevention Opportunity Assessment: USDA Beltsville Agricultural Research Center.
PB93-146843/REB 93-01 PC **A04**/MF **A01**

*EPA/600/J-93/237*
Pollution Prevention Research Ongoing: EPA's Risk Reduction Engineering Laboratory.
PB93-212447/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/007*
Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/326*
Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
PB93-229441/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/302*
Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
PB93-229243/REB 93-04 PC **A03**/MF **A01**

*EPA/600/R-92/174*
Proceedings of the Symposium on Soil Venting. Held in Houston, Texas on April 29-May 1, 1991.
PB93-122323/REB 93-01 PC **A15**/MF **A03**

*EPA/600/A-93/097*
Program for Providing Engineering Technical Assistance to Site Remediation Managers.
PB93-185809/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/301*
Proteins from Eight Eukaryotic Cytochrome P-450 Families Share a Segmented Region of Sequence Similarity.
PB93-229235/REB 93-04 PC **A02**/MF **A01**

*EPA/SW/DK-93/074*
Protocol-A Computerized Solid Waste Quantity and Composition Estimation System (Version 1.02) (for Microcomputers).
PB93-506061/REB 93-04 CP **D03**

*EPA/600/J-92/402*
Rapid Measurement of Aqueous Hydroxyl Radical Concentrations in Steady-State HO Flux Systems.
PB93-131779/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/096*
Reclamation of Urban Stormwater.
PB93-185791/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/135*
Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/160*
Recycling Nickel Electroplating Rinse Waters by Low Temperature Evaporation and Reverse Osmosis.
PB93-218865/REB 93-04 PC **A04**/MF **A01**

*EPA/600/J-93/004*
Removal of Beryllium from Drinking Water by Chemical Coagulation and Lime Softening.
PB93-150134/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/296*
Removal of Radionuclides by Electrokinetic Soil Processing.
PB93-222875/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/235*
Repeated Sequences Including RS1100 'Pseudomonas cepacia' AC1100 Function as IS Elements.
PB93-205177/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-93/149*
Replacement of Hazardous Material in Wide Web Flexographic Printing Process.
PB93-229128/REB 93-04 PC **A05**/MF **A01**

*EPA/600/A-92/202*
Resistance of Membranes in Cover Systems to Root Penetration by Grass and Trees.
PB93-106714/REB 93-01 PC **A02**/MF **A01**

Results of U.S. EPA Research Waste Combustion Residues.
PB93-106672/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/191*
Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/133*
Risk Reduction Engineering Laboratory Site Remediation Technical Support Program: FY92 Annual Report.
PB93-217651/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/115*
Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
PB93-194223/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/117*
Screening Methodology for Assessing Leaking UST Sites and Clean Up Technologies.
PB93-199404/REB 93-01 PC **A03**/MF **A01**

*EPA/540/S-92/011*
Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
PB93-121333/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/275*
Sequence Similarities in the Genes Encoding Polychlorinated Biphenyl Degradation by 'Pseudomonas' Strain LB400 and 'Alcaligenes eutrophus' H850.
PB93-229201/REB 93-04 PC **A01**/MF **A01**

*EPA/540/R-93/521*
Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.
PB93-227205/REB 93-04 PC **A04**/MF **A01**

*EPA/540/R-92/080*
SITE-Emerging Technologies: Laser Induced Photochemical Oxidative Destruction of Toxic Organics in Leachates and Groundwaters.
PB93-131431/REB 93-01 PC **A04**/MF **A01**

*EPA/600/J-93/187*
Slowing the Waste Behemoth: Source Reduction is Overshadowed by Recycling's Success.
PB93-194546/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-92/285*
Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/404*
Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/011*
Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/118*
Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/091*
Storm and Combined Sewer Overflow: An Overview of EPA's Research Program.
PB93-185957/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/092*
Stress Cracking Behavior of HDPE Geomembranes and Its Prevention.
PB93-196616/REB 93-01 PC **A06**/MF **A02**

## OFFICE OF RESEARCH AND DEVELOPMENT

*EPA/540/S-92/014*
Superfund Engineering Issue: Considerations for Evaluating the Impact of Metals Partitioning during the Incineration of Contaminated Soils from Superfund Sites.
PB93-121341/REB 93-01 PC **A03**/MF **A01**

*EPA/540/R-92/076*
Superfund Innovative Technology Evaluation Program: Progress and Accomplishments Fiscal Year 1991. A 5th Report to Congress.
PB93-126613/REB 93-01 PC **A05**/MF **A01**

Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

*EPA/600/A-92/199*
Technical Issues on Long-Term Performance of Solidified/Stabilized Waste Forms.
PB93-106680/REB 93-01 PC **A03**/MF **A01**

*EPA/530/R-93/012*
Technical Resource Document: Solidification/Stabilization and Its Application to Waste Materials.
PB93-237535/REB 93-04 PC **A16**/MF **A03**

*EPA/600/J-92/412*
Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-92/173*
Technology Assessment of Soil Vapor Extraction and Air Sparging.
PB93-100154/REB 93-01 PC **A04**/MF **A01**

*EPA/540/5-91/007A*
Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 1.
PB93-115160/REB 93-01 PC **A09**/MF **A02**

*EPA/540/5-91/007B*
Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 2.
PB93-115178/REB 93-01 PC **A15**/MF **A03**

*EPA/540/5-91/009*
Technology Evaluation Report: Pilot-Scale Demonstration of a Slurry-Phase Biological Reactor for Creosote-Contaminated Soil. Volume 1.
PB93-205532/REB 93-04 PC **A09**/MF **A02**

*EPA/540/R-92/079A*
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 1.
PB93-227122/REB 93-04 PC **A08**/MF **A02**

*EPA/540/R-92/079B*
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 1.
PB93-227130/REB 93-04 PC **A24**/MF **A04**

*EPA/540/R-92/079C*
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grant Calumet River, Gary, Indiana. Volume 2. Part 2.
PB93-227148/REB 93-04 PC **A99**/MF **A06**

*EPA/540/R-92/079D*
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 3.
PB93-227155/REB 93-04 PC **A11**/MF **A03**

*EPA/540/R-93/509*
Technology Evaluation Report: Site Program Demonstration Test. Accutech Pneumatic Fracturing Extraction and Hot Gas Injection, Phase 1. Volume 1.
PB93-216596/REB 93-04 PC **A08**/MF **A02**

*EPA/540/R-93/517*
Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
PB93-216067/REB 93-04 PC **A07**/MF **A02**

*EPA/600/R-93/102*
Thermal Degradation Characteristics of Environmentally Sensitive Pesticide Products.
PB93-201127/REB 93-01 PC **A04**/MF **A01**

*EPA/600/J-92/395*
Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
PB93-131761/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/006*
U.S. EPA's QA/QC Program for Waste Management Facilities. Proceedings of the GRI Seminar (6th), MQC/MQA and CQC/CQA of Geosynthetics. Held in Philadelphia, Pennsylvania on December 10-11, 1992.
PB93-149219/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/172*
Use of Alternative Materials for Daily Cover at Municipal Solid Waste Landfills.
PB93-227197/REB 93-04 PC **A08**/MF **A02**

*EPA/600/R-92/218*
Use of Expert System in a Water Utility.
PB93-123081/REB 93-01 PC **A04**/MF **A01**

*EPA/600/C-92/006*
User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/379*
Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/084*
Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC **A03**/MF **A01**

*EPA/600/S-92/034*
Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
PB93-123024/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/029*
Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/030*
Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/028*
Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/032*
Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/031*
Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/037*
Waste Minimization Assessment for a Manufacturer of Penny Blanks and Zinc Products.
PB93-123107/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/035*
Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
PB93-123016/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/036*
Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/044*
Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
PB93-123164/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/061*
Waste Reduction Activities and Options for a Fossil Fuel Fired Electrical Generating Station.
PB93-126233/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/056*
Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
PB93-126290/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/045*
Waste Reduction Activities and Options for a Manufacturer of Artists Supply Paints.
PB93-123172/REB 93-01 PC **A01**/MF **A01**

*EPA/600/S-92/062*
Waste Reduction Activities and Options for a Manufacturer of Commercial Dry Cleaning Equipment.
PB93-126225/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/047*
Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
PB93-123198/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/049*
Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
PB93-123214/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/055*
Waste Reduction Activities and Options for a Manufacturer of Fine Chemicals Using Batch Processes.
PB93-126308/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/039*
Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
PB93-123115/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/052*
Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
PB93-123248/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/054*
Waste Reduction Activities and Options for a Manufacturer of General Purpose Paints and Painting Supplies.
PB93-126316/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/057*
Waste Reduction Activities and Options for a Manufacturer of Hardened Steel Gears.
PB93-126282/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/064*
Waste Reduction Activities and Options for a Manufacturer of Orthopedic Implants.
PB93-126217/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/040*
Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
PB93-123123/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/060*
Waste Reduction Activities and Options for a Manufacturer of Plastic Containers by Injection Molding.
PB93-126241/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/042*
Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
PB93-123149/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/050*
Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
PB93-123222/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/046*
Waste Reduction Activities and Options for a Manufacturer of Wire Stock Used for Production of Metal Items.
PB93-123180/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/041*
Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
PB93-123131/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/053*
Waste Reduction Activities and Options for a Printing Plate Preparation Section of a Newspaper.
PB93-126563/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/051*
Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
PB93-123230/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/058*
Waste Reduction Activities and Options for a Scrap Metal Recovery Facility.
PB93-126266/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/048*
Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
PB93-123206/REB 93-01 PC **A02**/MF **A01**

*EPA/600/S-92/043*
Waste Reduction Activities and Options for an Autobody Repair Facility.
PB93-123156/REB 93-01 PC **A01**/MF **A01**

*EPA/600/S-92/063*
Waste Reduction Activities and Options for an Electrical Utility Transmission System Monitoring and Maintenance Facility.
PB93-126639/REB 93-01 PC **A02**/MF **A01**

*EPA/600/R-93/150*
Watts Nickel and Rinse Water Recovery via an Advanced Reverse Osmosis System.
PB93-229011/REB 93-04 PC **A05**/MF **A01**

*EPA/600/R-93/162*
Weatherability of Enhanced-Degradable Plastics.
PB93-229789/REB 93-04 PC **A14**/MF **A03**

*EPA/600/A-93/066*
What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC **A03**/MF **A01**

ROBERT S. KERR ENVIRONMENTAL RESEARCH LAB - Ada, OK

*EPA/600/J-93/131*
Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-92/450*
Applied Geologic, Microbiological, and Engineering Constraints of In-situ BTEX Bioremediation.
PB93-141513/REB 93-01 PC **A03**/MF **A01**

*EPA/540/S-92/016*
Basic Concepts of Contaminant Sorption.
PB93-146835/REB 93-01 PC **A01**/MF **A01**

*EPA/540/S-92/018*
Behavior of Metals in Soils.
PB93-131480/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/004*
Bioremediation.
PB93-149193/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/175*
Bioremediation of Chlorinated Solvents in the Vadose Zone.
PB93-221935/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/452*
Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport.
PB93-141497/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/344*
Biotransformation and Mineralization of Alkylbenzenes under Denitrifying Conditions.
PB93-229623/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/177*
Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.
PB93-221950/REB 93-04 PC **A01**/MF **A01**

*EPA/600/A-92/220*
Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/451*
Cell Density and Non-Equilibrium Sorption Effects on Bacterial Dispersal in Groundwater Microcosms.
PB93-141505/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/172*
Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/178*
Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.
PB93-221968/REB 93-04 PC **A02**/MF **A01**

*EPA/600/A-93/005*
Comparison of Ground-Water Sampling Devices Based on Equilibration of Water Quality Indicator Parameters.
PB93-149201/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/118*
Compilation of Ground-Water Models.
PB93-209401/REB 93-04 PC **A13**/MF **A03**

*EPA/600/A-92/224*
Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/133*
Determination of Carboxylic Acids by Ion-Exclusion Chromatography with Non-Suppressed Conductivity and Optical Detectors.
PB93-181212/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/134*
Development and Application of Borehole Flowmeters for Environmental Assessment.
PB93-185817/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/022*
DNAPL Site Evaluation.
PB93-150217/REB 93-01 PC **A16**/MF **A03**

*EPA/600/A-93/148*
Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-92/409*
Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
PB93-131845/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/147*
Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.
PB93-212363/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/132*
Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03**/MF **A01**

*EPA/540/S-93/501*
In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC **A03**/MF **A01**

*EPA/540/S-92/017*
In-situ Bioremediation of Ground Water.
PB93-146850/REB 93-01 PC **A01**/MF **A01**

*EPA/600/R-93/124*
In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC **A12**/MF **A03**

*EPA/600/J-92/393*
Inhibition of Alkylbenzene Biodegradation under Denitrifying Conditions by Using Acetylene Block Technique.
PB93-121242/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/072*
Laboratory Studies on the Stability and Transport of Inorganic Colloids Through Natural Aquifer Material (Chapter 49).
PB93-175537/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/359*
Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3, Hydraulic Conductivity Variability and Calculated Macrodispersivities.
PB93-107050/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-92/247*
LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

*EPA/600/J-93/294*
Mechanical Integrity Testing and Training Facility, Ada, Oklahoma.
PB93-222859/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/295*
Microcosm and In situ Field Studies of Enhanced Biotransformation of Trichloroethylene by Phenol-Utilizing Microorganisms.
PB93-222867/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/352*
Molecular Size Exclusion by Soil Organic Materials Estimated from Their Swelling in Organic Solvents.
PB93-228583/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/129*
Passive Sampling of Groundwater Monitoring Wells without Purging: Multilevel Well Chemistry and Tracer Disappearance.
PB93-181170/REB 93-01 PC **A03**/MF **A01**

*EPA/600/A-93/073*
Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC **A02**/MF **A01**

*EPA/600/A-93/176*
Performance of Pilot Scale Bioventing at an Aviation Gasoline Spill Site.
PB93-221943/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-92/391*
Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/271*
Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/279*
Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.
PB93-222370/REB 93-04 PC **A02**/MF **A01**

*EPA/600/R-93/011*
Quality Assurance and Quality Control in the Development and Application of Ground-Water Models.
PB93-178226/REB 93-01 PC **A08**/MF **A02**

*EPA/600/A-93/146*
Rapid Phase Indentification of Mixed Crystalline Solids.
PB93-212355/REB 93-04 PC **A03**/MF **A01**

*EPA/600/A-93/173*
Retrospective Performance Evaluation on In situ Bioremediation: Site Characterization.
PB93-221919/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/130*
Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/351*
Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-228575/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-93/005*
Surfactants and Subsurface Remediation.
PB93-149854/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-92/414*
Transformation of Carbon Tetrachloride in the Presence of Sulfide, Biotite, and Vermiculite.
PB93-135713/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/142*
VIRTUS, a Model of Virus Transport in Unsaturated Soils.
PB93-185890/REB 93-01 PC **A02**/MF **A01**

OFFICE OF ENVIRONMENTAL PROCESSES AND EFFECTS RESEARCH (OEPER)

*EPA/600/R-93/033*
Environmental Monitoring Issues: Results of Workshops Held in July 1992 as Part of EPA's Eighth Annual Waste Testing and Quality Assurance Symposium.
PB93-216075/REB 93-04 PC **A12**/MF **A03**

OFFICE OF MONITORING SYSTEMS AND QUALITY ASSURANCE (OMSQA)

Always a River: Supplemental Environmental Education Curriculum on the Ohio River and Water Grades K-12.
PB93-200905/REB 93-01 PC **A14**/MF **A03**

*EPA/600/3-89/061D*
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC **A14**/MF **A03**

*EPA/600/3-89/061C*
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC **A14**/MF **A03**

*EPA/600/3-89/061B*
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC **A18**/MF **A04**

*EPA/600/3-89/061A*
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC **A14**/MF **A03**

*EPA/625/R-92/004*
Guidelines for Water Use.
PB93-222180/REB 93-04 PC **A12**/MF **A03**

*EPA/625/6-91/027*
Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC **A10**/MF **A03**

Proceedings: Interagency Symposium (2nd) on Stabilization of Soils and Other Materials. Held in Metairie, Louisiana on November 2-5, 1992.
PB93-131977/REB 93-01 PC **A17**/MF **A04**

*EPA/745/K-93/001*
Toxic Chemical Release Inventory Reporting Form R and Instructions. Revised 1992 Version. Section 313 of the Emergency Planning and Community Right-to-Know Act.
PB93-194140/REB 93-01 PC **A06**/MF **A02**

OFFICE OF HEALTH AND ENVIRONMENTAL ASSESSMENT (OHEA)

*EPA/600/8-90/045F*
Air Quality Criteria for Carbon Monoxide.
PB93-167492/REB 93-01 PC **A99**/MF **A06**

*EPA/600/J-93/293*
Armitage-Doll Two-Stage Model: Implications and Extension.
PB93-222842/REB 93-04 PC **A02**/MF **A01**

*EPA/600/J-93/180*
Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/203*
Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC **A02**/MF **A01**

*EPA/600/J-93/174*
Cytoplasmic Microtubular Dynamics and Chromatin Organization during Mammalian Oogenesis and Oocyte Maturation.
PB93-194413/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/182*
Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/169*
Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC **A01**/MF **A01**

*EPA/600/J-93/186*
Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/178*
ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC **A02**/MF **A01**

*EPA/600/8-91/057*
Evaluation of the Potential Carcinogenicity of Acetamide, N-Fluoren-2-yl (53-96-3).
PB93-181626/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/058*
Evaluation of the Potential Carcinogenicity of Acrylonitrile (107-13-1).
PB93-181634/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/059*
Evaluation of the Potential Carcinogenicity of Aldrin (309-00-2).
PB93-181642/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/079*
Evaluation of the Potential Carcinogenicity of Alpha-Hexachlorocyclohexane (319-84-6).
PB93-185049/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/060*
Evaluation of the Potential Carcinogenicity of Amitrole (61-82-5).
PB93-181659/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/061*
Evaluation of the Potential Carcinogenicity of Arsenic and Inorganic Arsenic Compounds.
PB93-181667/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/065*
Evaluation of the Potential Carcinogenicity of Asbestos (1332-21-4).
PB93-184885/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/066*
Evaluation of the Potential Carcinogenicity of Auramine (492-80-8).
PB93-184893/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/067*
Evaluation of the Potential Carcinogenicity of Azaserine (115-02-6).
PB93-184901/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/068*
Evaluation of the Potential Carcinogenicity of Aziridine (151-56-4).
PB93-184919/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/070*
Evaluation of the Potential Carcinogenicity of Benz(a)anthracene (00056-55-3).
PB93-184935/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/069*
Evaluation of the Potential Carcinogenicity of Benz(c)acridine (225-51-4).
PB93-184927/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/071*
Evaluation of the Potential Carcinogenicity of Benzene (71-43-2).
PB93-184943/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/072*
Evaluation of the Potential Carcinogenicity of Benzidine and Its Salt (92-87-5).
PB93-184976/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/075*
Evaluation of the Potential Carcinogenicity of Benzo(a)Pyrene (50-32-8).
PB93-185007/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/073*
Evaluation of the Potential Carcinogenicity of Benzo(b)fluoranthene (00205-99-2).
PB93-184984/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/074*
Evaluation of the Potential Carcinogenicity of Benzo(k)fluoranthene (207-08-9).
PB93-184992/REB 93-01 PC **A03**/MF **A01**

## OFFICE OF RESEARCH AND DEVELOPMENT

*EPA/600/8-91/076*
Evaluation of the Potential Carcinogenicity of Benzotrichloride (97-07-7).
PB93-185015/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/077*
Evaluation of the Potential Carcinogenicity of Benzyl Chloride (100-44-7).
PB93-185023/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/078*
Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
PB93-185031/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/080*
Evaluation of the Potential Carcinogenicity of Beta-Hexachlorocyclohexane (319-85-7).
PB93-185056/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/083*
Evaluation of the Potential Carcinogenicity of Bis(Chloromethyl)Ether (542-88-1).
PB93-185080/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/082*
Evaluation of the Potential Carcinogenicity of Bis(2-Chloroethyl)Ether (111-44-4).
PB93-185072/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/062*
Evaluation of the Potential Carcinogenicity of Cacodylic Acid (75-60-5).
PB93-184851/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/085*
Evaluation of the Potential Carcinogenicity of Cadmium (7740-43-9), Cadium Acetate (543-90-8), Cadmium Bromide (7789-42-6), Cadmium Chloride (10108-64-2).
PB93-185106/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/086*
Evaluation of the Potential Carcinogenicity of Carbon Tetrachloride (56-23-5).
PB93-185114/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/087*
Evaluation of the Potential Carcinogenicity of Chlorambucil (305-03-3).
PB93-185213/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/088*
Evaluation of the Potential Carcinogenicity of Chlordane (57-74-9).
PB93-185221/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/089*
Evaluation of the Potential Carcinogenicity of Chlornaphazine (494-03-1).
PB93-185239/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/090*
Evaluation of the Potential Carcinogenicity of Chloroform (67-66-3).
PB93-194249/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/091*
Evaluation of the Potential Carcinogenicity of Chloromethyl Methyl Ether (Technical Grade) (107-30-2).
PB93-185122/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/093*
Evaluation of the Potential Carcinogenicity of Chromium and Hexavalent Chromium Compounds.
PB93-185148/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/094*
Evaluation of the Potential Carcinogenicity of Chrysene (218-01-9).
PB93-185155/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/095*
Evaluation of the Potential Carcinogenicity of Coke Oven Emissions.
PB93-185163/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/096*
Evaluation of the Potential Carcinogenicity of Creosote (8001-58-9).
PB93-185171/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/097*
Evaluation of the Potential Carcinogenicity of Cyclophosphamide (50-18-0).
PB93-185189/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/098*
Evaluation of the Potential Carcinogenicity of Daunomycin (20830-81-3).
PB93-185197/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/099*
Evaluation of the Potential Carcinogenicity of DDD (72-54-8).
PB93-185205/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/100*
Evaluation of the Potential Carcinogenicity of DDE (72-55-9).
PB93-185247/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/101*
Evaluation of the Potential Carcinogenicity of DDT (50-29-3).
PB93-185254/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/102*
Evaluation of the Potential Carcinogenicity of Diallate (2303-16-4).
PB93-185262/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/103*
Evaluation of the Potential Carcinogenicity of Diaminotoluene (Mixed) (95-80-7).
PB93-185270/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/104*
Evaluation of the Potential Carcinogenicity of Dibenz(a,h)Anthracene (53-70-3).
PB93-185288/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/063*
Evaluation of the Potential Carcinogenicity of Dichlorophenylarsine (696-28-6).
PB93-184869/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/109*
Evaluation of the Potential Carcinogenicity of Dieldrin (60-57-1).
PB93-194272/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/064*
Evaluation of the Potential Carcinogenicity of Diethylarsine (692-42-2).
PB93-184877/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/112*
Evaluation of the Potential Carcinogenicity of Diethylstilbestrol (56-53-1).
PB93-194306/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/113*
Evaluation of the Potential Carcinogenicity of Dihydrosafrole (94-58-6).
PB93-185312/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/115*
Evaluation of the Potential Carcinogenicity of Dimethyl Sulfate (77-78-1).
PB93-194322/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/116*
Evaluation of the Potential Carcinogenicity of Dimethylaminoazobenzene (60-11-7).
PB93-185338/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/119*
Evaluation of the Potential Carcinogenicity of Dimethylcarbamoyl Chlo.
PB93-185361/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/122*
Evaluation of the Potential Carcinogenicity of Dinitrotoluene (Mixture) (25321-14-6).
PB93-185395/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/127*
Evaluation of the Potential Carcinogenicity of Epichlorohydrin (106-89-8).
PB93-192334/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/128*
Evaluation of the Potential Carcinogenicity of Ethyl Carbamate (Urethane) (51-79-6).
PB93-192342/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/133*
Evaluation of the Potential Carcinogenicity of Ethyl Methanesulfonate (62-50-0).
PB93-193597/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/129*
Evaluation of the Potential Carcinogenicity of Ethyl 4,4'-Dichlorobenzilate (510-15-6).
PB93-192359/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/130*
Evaluation of the Potential Carcinogenicity of Ethylene Dibromide (106-93-4).
PB93-192367/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/131*
Evaluation of the Potential Carcinogenicity of Ethylene Oxide (75-21-8).
PB93-192375/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/132*
Evaluation of the Potential Carcinogenicity of Ethylenethiourea (96-45-7).
PB93-193589/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/134*
Evaluation of the Potential Carcinogenicity of Formaldehyde (50-00-0).
PB93-193605/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/081*
Evaluation of the Potential Carcinogenicity of Gamma-Hexachlorocyclohexane (Lindane) (58-89-9).
PB93-185064/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/135*
Evaluation of the Potential Carcinogenicity of Glycidylaldehyde (765-34-4).
PB93-193613/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/137*
Evaluation of the Potential Carcinogenicity of Heptachlor Epoxide (1024-57-3).
PB93-190486/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/136*
Evaluation of the Potential Carcinogenicity of Heptachlor (76-44-8).
PB93-190478/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/138*
Evaluation of the Potential Carcinogenicity of Hexachlorobenzene (118-74-1).
PB93-190494/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/139*
Evaluation of the Potential Carcinogenicity of Hexachlorobutadiene (87-68-3).
PB93-190502/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/140*
Evaluation of the Potential Carcinogenicity of Hexachloroethane (67-72-1).
PB93-190510/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/141*
Evaluation of the Potential Carcinogenicity of Hydrazine (302-01-2).
PB93-190528/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/142*
Evaluation of the Potential Carcinogenicity of Indeno(1,2,3-CD)Pyrene (193-39-5).
PB93-190536/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/143*
Evaluation of the Potential Carcinogenicity of Isosafrole (120-58-1).
PB93-190544/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/144*
Evaluation of the Potential Carcinogenicity of Kepone Chlordecone (143-50-0).
PB93-190569/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/145*
Evaluation of the Potential Carcinogenicity of Lasiocarpine (303-34-4).
PB93-190577/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/146*
Evaluation of the Potential Carcinogenicity of Melphalan (148-82-3).
PB93-196301/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/147*
Evaluation of the Potential Carcinogenicity of Methyl Chloride (74-87-3).
PB93-196319/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/150*
Evaluation of the Potential Carcinogenicity of Methyl Iodide (74-88-4).
PB93-196343/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/152*
Evaluation of the Potential Carcinogenicity of Methylthiouracil (56-04-2).
PB93-196368/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/153*
Evaluation of the Potential Carcinogenicity of Mitomycin C (50-07-7).
PB93-196376/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/151*
Evaluation of the Potential Carcinogenicity of N-Methyl-N'-Nitro-N-Nitrosoguanidine (70-25-7).
PB93-196350/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/163*
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Ethylurea (759-73-9).
PB93-196475/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/164*
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurea (684-93-5).
PB93-196483/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/165*
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurethane (165-53-2).
PB93-196491/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/158*
Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Butylamine (924-16-3).
PB93-196426/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/162*
Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Propylamine (621-64-7).
PB93-196467/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/159*
Evaluation of the Potential Carcinogenicity of N-Nitrosodiethanolamine (1116-54-7).
PB93-196434/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/160*
Evaluation of the Potential Carcinogenicity of N-Nitrosodiethylamine (55-18-5).
PB93-196442/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/161*
Evaluation of the Potential Carcinogenicity of N-Nitrosodimethylamine (62-75-9).
PB93-196459/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/166*
Evaluation of the Potential Carcinogenicity of N-Nitrosomethylvinylamine (4549-40-0).
PB93-196509/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/167*
Evaluation of the Potential Carcinogenicity of N-Nitrosopiperidine (100-75-4).
PB93-196517/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/168*
Evaluation of the Potential Carcinogenicity of N-Nitrosopyrrolidine.
PB93-196525/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/156*
Evaluation of the Potential Carcinogenicity of Nickel (7740-02-0).
PB93-196400/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/189*
Evaluation of the Potential Carcinogenicity of o-Toluidine Hydrochloride (636-21-5).
PB93-202349/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/187*
Evaluation of the Potential Carcinogenicity of o-Toluidine (95-53-4).
PB93-201200/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/188*
Evaluation of the Potential Carcinogenicity of p-Toluidine (106-49-0).
PB93-201192/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/170*
Evaluation of the Potential Carcinogenicity of Pentachloroethane (76-01-7).
PB93-185320/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/171*
Evaluation of the Potential Carcinogenicity of Pentachloronitrobenzene (82-68-8).
PB93-196541/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/172*
Evaluation of the Potential Carcinogenicity of Pentachlorophenol (87-86-5).
PB93-196558/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/173*
Evaluation of the Potential Carcinogenicity of Phenacetin (62-44-2).
PB93-196566/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/174*
Evaluation of the Potential Carcinogenicity of Polychlorinated Biphenyls (1336-36-3) Including Specific Aroclors.
PB93-196574/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/178*
Evaluation of the Potential Carcinogenicity of Safrole (94-59-7).
PB93-201291/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/179*
Evaluation of the Potential Carcinogenicity of Selenium Sulfide (Selenium Disulfide) (7488-56-4).
PB93-201283/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/180*
Evaluation of the Potential Carcinogenicity of Streptozotocin (18883-66-4).
PB93-201275/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/184*
Evaluation of the Potential Carcinogenicity of Tetrachloroethylene (127-18-4).
PB93-201234/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/185*
Evaluation of the Potential Carcinogenicity of Thioacetamide (62-55-5).
PB93-201226/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/186*
Evaluation of the Potential Carcinogenicity of Thiourea (62-56-6).
PB93-201218/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/190*
Evaluation of the Potential Carcinogenicity of Toxaphene (8001-35-2).
PB93-202331/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/192*
Evaluation of the Potential Carcinogenicity of Trichloroethylene (79-01-6).
PB93-202323/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/193*
Evaluation of the Potential Carcinogenicity of Trichlorophenol (Mixed) (2516-78-22).
PB93-202315/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/196*
Evaluation of the Potential Carcinogenicity of Tris(2,3-Dibromopropyl) Phosphate (126-72-7).
PB93-202281/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/197*
Evaluation of the Potential Carcinogenicity of Trypan Blue (72-57-1).
PB93-202273/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/198*
Evaluation of the Potential Carcinogenicity of Uracil Mustard (66-75-1).
PB93-202265/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/199*
Evaluation of the Potential Carcinogenicity of Vinyl Chloride (75-01-4).
PB93-202257/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/182*
Evaluation of the Potential Carcinogenicity of 1,1,1,2-Tetrachloroethane (630-20-6).
PB93-201259/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/183*
Evaluation of the Potential Carcinogenicity of 1,1,2,2-Tetrachloroethane (79-34-5).
PB93-201242/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/191*
Evaluation of the Potential Carcinogenicity of 1,1,2-Trichloroethane (79-00-5).
PB93-204584/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/120*
Evaluation of the Potential Carcinogenicity of 1,1 Dimethylhydrazine (57-14-7).
PB93-185379/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/110*
Evaluation of the Potential Carcinogenicity of 1,2:3,4-Diepoxybutane (1464-53-5).
PB93-194280/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/105*
Evaluation of the Potential Carcinogenicity of 1,2:7,8-Dibenzopyrene (189-55-9).
PB93-185296/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/106*
Evaluation of the Potential Carcinogenicity of 1,2-Dibromo-3-Chloropropane (96-12-8).
PB93-185304/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/108*
Evaluation of the Potential Carcinogenicity of 1,2-Dichloroethane (107-06-2).
PB93-194264/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/111*
Evaluation of the Potential Carcinogenicity of 1,2-Diethylhydrazine (1615-80-1).
PB93-194298/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/121*
Evaluation of the Potential Carcinogenicity of 1,2-Dimethylhydrazine (540-73-8).
PB93-185387/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/126*
Evaluation of the Potential Carcinogenicity of 1,2-Diphenylhydrazine (122-66-7).
PB93-192326/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/176*
Evaluation of the Potential Carcinogenicity of 1,2-Propylenimine (75-55-8).
PB93-196590/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/175*
Evaluation of the Potential Carcinogenicity of 1,3-Propane Sultone (1120-71-4).
PB93-196582/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/125*
Evaluation of the Potential Carcinogenicity of 1,4-Dioxane (123-91-1).
PB93-185429/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/154*
Evaluation of the Potential Carcinogenicity of 1-Naphthylamine (134-32-7).
PB93-196384/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/181*
Evaluation of the Potential Carcinogenicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (1746-01-6).
PB93-201267/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/194*
Evaluation of the Potential Carcinogenicity of 2,4,5-Trichlorophenol (95-95-4).
PB93-202307/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/195*
Evaluation of the Potential Carcinogenicity of 2,4,6-Trichlorophenol (88-06-2).
PB93-202299/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/123*
Evaluation of the Potential Carcinogenicity of 2,4-Dinitrotoluene (121-14-2).
PB93-185403/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/124*
Evaluation of the Potential Carcinogenicity of 2,6-Dinitrotoluene (606-20-2).
PB93-185411/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/155*
Evaluation of the Potential Carcinogenicity of 2-Naphthylamine (91-59-8).
PB93-196392/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/157*
Evaluation of the Potential Carcinogenicity of 2-Nitropropane (79-46-9).
PB93-196418/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/107*
Evaluation of the Potential Carcinogenicity of 3,3'-Dichlorobenzidine (91-94-1).
PB93-194256/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/114*
Evaluation of the Potential Carcinogenicity of 3,3'-Dimethoxybenzidine (119-90-4).
PB93-194314/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/118*
Evaluation of the Potential Carcinogenicity of 3,3'-Dimethylbenzidine (119-93-7).
PB93-185353/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/148*
Evaluation of the Potential Carcinogenicity of 3-Methylcholanthrene (59-49-5).
PB93-196327/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/149*
Evaluation of the Potential Carcinogenicity of 4,4'-Methylenebis (1-Chloroaniline) (101-14-4).
PB93-196335/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/092*
Evaluation of the Potential Carcinogenicity of 4-Chloro-o-Toluidine Hydrochloride (3165-93-3).
PB93-185130/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/169*
Evaluation of the Potential Carcinogenicity of 5-Nitro-O-Toluidine (99-55-8).
PB93-196533/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/117*
Evaluation of the Potential Carcinogenicity of 7,12-Dimethylbenz(a)anthracene (57-97-6).
PB93-185346/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-91/177*
Evaluation of the Potential Carcinogenicity Saccharin (81-07-2).
PB93-196608/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/177*
Frequency and Nature of Specific-Locus Mutations Induced in Female Mice by Radiations and Chemicals: A Review.
PB93-194447/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/170*
Gene Expression during Oogenesis in Mice.
PB93-194389/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/171*
Gene Expression in Pre-Implantation Mammalian Embryos.
PB93-194397/REB 93-01 PC **A03**/MF **A01**

*EPA/600/R-93/145*
Genetic Damage In vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04**/MF **A01**

*EPA/600/AP-92/001A*
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 1. Disposition and Pharmacokinetics.
PB93-222651/REB 93-04 PC **A07**/MF **A02**

*EPA/600/AP-92/001B*
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 2. Mechanisms of Toxic Actions.
PB93-222669/REB 93-04 PC **A03**/MF **A01**

*EPA/600/AP-92/001C*
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 3. Acute, Subchronic, and Chronic Toxicity.
PB93-222677/REB 93-04 PC **A04**/MF **A01**

*EPA/600/AP-92/001D*
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 4. Immunotoxic Effects.
PB93-222685/REB 93-04 PC **A04**/MF **A01**

*EPA/600/AP-92/001E*
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.
PB93-222693/REB 93-04 PC **A06**/MF **A02**

*EPA/600/AP-92/001F*
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 6. Carcinogenicity of TCDD in Animals.
PB93-222701/REB 93-04 PC **A04**/MF **A01**

*EPA/600/AP-92/001G*
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 7. Epidemiology/Human Data.
PB93-222719/REB 93-04 PC **A07**/MF **A02**

*EPA/600/AP-92/001H*
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 8. Dose-Response Relationships.
PB93-222727/REB 93-04 PC **A11**/MF **A03**

*EPA/600/J-93/175*
Maternal Age Effect: The Enigma of Down Syndrome and Other Trisomic Conditions.
PB93-194421/REB 93-01 PC **A03**/MF **A01**

*EPA/600/8-89/053*
Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04**/MF **A01**

*EPA/600/J-93/181*
Mutational Risks in Females: Genomic Imprinting and Maternal Molecules.
PB93-194488/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/176*
Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/208*
Quantification of Germ-Cell Risk Associated with the Induction of Heritable Translocations.
PB93-199677/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/188*
Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.
PB93-222081/REB 93-04 PC **A03**/MF **A01**

*EPA/600/J-90/119*
Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/179*
Radiation- and Chemically-Induced Chromosome Aberrations in Mouse Oocytes: A Comparison with Effects in Males.
PB93-194462/REB 93-01 PC **A02**/MF **A01**

*EPA/600/6-90/006F*
Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders.
PB93-134419/REB 93-01 PC**$29.00**/MF **A04**

*EPA/600/J-93/185*
Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03**/MF **A01**

*EPA/600/J-93/172*
Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence in situ Hybridization.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

**OFFICE OF WATER AND HAZARDOUS MATERIALS**

*EPA/440/6-90/004*
Citizen's Guide to Ground-Water Protection.
PB93-115814/REB 93-01 PC **A03**/MF **A01**

*EPA/440/6-90/008*
Compendium of Federal Financial Assistance Programs: Targeting Programs for State and Local Ground-Water Protection.
PB93-116069/REB 93-01 PC **A06**/MF **A02**

*EPA/570/9-91/009*
Delineation of Wellhead Protection Areas in Fractured Rocks.
PB93-115822/REB 93-01 PC **A08**/MF **A02**

*EPA/440/1-80/073A*
Development Document for Effluent Limitations Guidelines and Standards for the Aluminum Forming Point Source Category.
PB93-208213/REB 93-04 PC **A99**/MF **A06**

*EPA/440/1-82/074B*
Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category (Proposed).
PB93-206522/REB 93-04 PC **A23**/MF **A04**

*EPA/440/1-83/084B*
Development Document for Effluent Limitations Guidelines and Standards for the Pharmaceuticals Manufacturing. Point Source Category.
PB93-206969/REB 93-04 PC **A04**/MF **A01**

*EPA/440/1-82/072*
Development Document for Effluent Limitations Guidelines and Standards for the Porcelain Enameling. Point Source Category.
PB93-206514/REB 93-04 PC **A21**/MF **A04**

*EPA/440/1-83/007B*
Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Inorganic Chemicals Manufacturing Point Source Category, Phase 2 (Proposed).
PB93-206530/REB 93-04 PC **A24**/MF **A04**

*EPA/440/1-82/070B-VOL-1*
Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 1.
PB93-206498/REB 93-04 PC **A24**/MF **A04**

*EPA/440/1-82/070B-VOL-2*
Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 2.
PB93-206506/REB 93-04 PC **A22**/MF **A04**

*EPA/440/1-79/049B*
Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards, and Pretreatment Standards for the Paint Formulating Point Source Category.
PB93-206472/REB 93-04 PC **A21**/MF **A04**

*EPA/440/1-82/084B*
Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Pharmaceutical Manufacturing Point Source Category.
PB93-208221/REB 93-04 PC **A22**/MF **A04**

*EPA/570/F-91/047*
Fact Sheet: National Primary Drinking Water Regulations for Lead and Copper.
PB93-193746/REB 93-01 PC **A03**/MF **A01**

*EPA/440/1-79/300*
Fate of Priority Pollutants in Publicly Owned Treatment Works. Pilot Study.
PB93-203974/REB 93-04 PC **A03**/MF **A01**

Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources. March 1991 Edition.
PB93-222933/REB 93-04 PC **A24**/MF **A04**

*EPA/440/5-93/001*
Guidelines for Delineation of Wellhead Protection Areas, 1993.
PB93-215861/REB 93-04 PC **A10**/MF **A03**

*EPA/440/4-90/006*
Lake and Reservoir Restoration Guidance Manual: Second Edition.
PB93-207926/REB 93-04 PC **A15**/MF **A03**

Methodology for Analysis of Detention Basins for Control of Urban Runoff Quality.
PB93-223576/REB 93-04 PC **A04**/MF **A01**

*EPA/440/1-84/040*
Proceedings of Annual Analytical Symposium (7th). Held in Norfolk, Virginia on March 28-29, 1984.
PB93-237519/REB 93-04 PC **A99**/MF **A06**

*EPA/570/9-91/040*
Status Report on Development of Regulations for Disinfectants and Disinfection By-Products.
PB93-134914/REB 93-01 PC **A03**/MF **A01**

*EPA/811/S-92/002*
Technologies and Costs for Control of Disinfection By-Products: Executive Summary.
PB93-134922/REB 93-01 PC **A03**/MF **A01**

*EPA/440/1-80/103*
Treatability Studies for the Inorganic Chemicals Manufacturing Point Source Category.
PB93-206480/REB 93-04 PC **A11**/MF **A03**

*EPA/625/R-93/002*
Wellhead Protection: A Guide for Small Communities.
PB93-215580/REB 93-04 PC **A08**/MF **A02**

*EPA/440/6-89/002*
Wellhead Protection Programs: Tools for Local Governments.
PB93-101111/REB 93-01 PC **A04**/MF **A01**

*EPA/570/9-91/008*
Wellhead Protection Strategies for Confined-Aquifer Settings.
PB93-115913/REB 93-01 PC **A05**/MF **A01**

*EPA/570/9-91/014*
Why do Wellhead Protection. Issues and Answers in Protecting Public Drinking Water Supply Systems.
PB93-115921/REB 93-01 PC **A03**/MF **A01**

WATER PLANNING AND STANDARDS
Cost Effectiveness Analysis of Effluent Guidelines and Standards for the Aluminum Forming Category.
PB93-156107/REB 93-01 PC **A03**/MF **A01**

*EPA/230/2-74/059A*
Economic Analysis of Effluent Guidelines: Mineral Mining and Processing Industry.
PB93-167765/REB 93-01 PC **A14**/MF **A03**

*EPA/230/1-76/065E*
Economic Analysis of Interim Final Effluent Guidelines for the Gum and Wood Chemicals Industry. Group 2.
PB93-167740/REB 93-01 PC **A04**/MF **A01**

*EPA/230/1-76/041A*
Economic Analysis of Pretreatment Standards: The Secondary Copper and Aluminum Subcategories of the Nonferrous Metals Manufacturing Point Source Category.
PB93-167757/REB 93-01 PC **A07**/MF **A02**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants.
PB93-156495/REB 93-01 PC **A04**/MF **A01**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants, July 1986.
PB93-156503/REB 93-01 PC **A05**/MF **A01**

*EPA/440/2-85/030*
Economic Impact Analysis of Effluent Limitations and Standards for the Nonferrous Metals Smelting and Refining Industry. Phase 2.
PB93-167781/REB 93-01 PC **A09**/MF **A03**

*EPA/440/2-85/026*
Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Gold Placer Mining Industry.
PB93-203990/REB 93-04 PC **A07**/MF **A02**

*EPA/440/2-84/001*
Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Plastics Molding and Forming Industry.
PB93-167773/REB 93-01 PC **A05**/MF **A01**

*EPA/600/A-93/019*
Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC **A03**/MF **A01**

Guidelines for Deriving Ambient Aquatic Life Advisory Concentrations.
PB93-236057/REB 93-04 PC **A03**/MF **A01**

Proceedings of Annual Analytical Symposium (10th). U.S. Environmental Protection Agency, Office of Water, Industrial Technology Division. Held in Norfolk, Virginia on May 13-14, 1987.
PB93-234771/REB 93-04 PC **A99**/MF **E08**

Regulatory Applications of Sediment Criteria.
PB93-174472/REB 93-01 PC **A03**/MF **A01**

*EPA/841/B-87/110*
Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC **A04**/MF **A01**

WATER PROGRAM OPERATIONS
America's Wetlands: Our Vital Link between Land and Water.
PB93-206399/REB 93-04 PC **A02**/MF **A01**

*EPA/811/R-92/008*
Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC **A07**/MF **A02**

*EPA/570/9-87/003*
Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
PB93-115806/REB 93-01 PC **A05**/MF **A01**

*EPA/813/R-92/002*
Case Studies in Wellhead Protection: Ten Examples of Innovative Wellhead Protection Programs.
PB93-207363/REB 93-04 PC **A03**/MF **A01**

*EPA/800/R-93/001B*
Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
PB93-202620/REB 93-01 PC **A07**/MF **A02**

*EPA/800/R-93/001A*
Clean Water and the American Economy. Proceedings: Surface Water. Volume 1. Held on October 19-21, 1992.
PB93-202612/REB 93-01 PC **A14**/MF **A03**

*EPA/841/B-93/003*
Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance.
PB93-193795/REB 93-01 PC **A05**/MF **A01**

*EPA/503/2-89/001*
Compendium of Methods for Marine and Estuarine Environmental Studies.
PB93-202570/REB 93-01 PC **A10**/MF **A03**

*EPA/823/N-92/001*
Contaminated Sediments News: Number 5, April, 1992.
PB93-207413/REB 93-04 PC **A02**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Tetranitromethane (TNM).
PB93-116994/REB 93-01 PC **A03**/MF **A01**

*EPA/842/B-92/006*
Dredged Material Ocean Dumping Reference Document.
PB93-223568/REB 93-04 PC **A04**/MF **A01**

Drinking Water Information Guide.
PB93-222958/REB 93-04 PC **A06**/MF **A02**

Drinking Water Toxicity Profiles.
PB93-122406/REB 93-01 PC **A09**/MF **A02**

Drinking Water Training Resources Directory: A National Training Coalition Directory of Current Training Materials. First Edition.
PB93-202802/REB 93-01 PC **A07**/MF **A02**

*EPA/570/9-86/001*
Economic Assessment of Reducing Fluoride in Drinking Water.
PB93-115830/REB 93-01 PC **A05**/MF **A01**

*EPA/821/R-93/001*
Economic Benefits of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-168797/REB 93-01 PC **A08**/MF **A02**

*EPA/821/R-93/004*
Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
PB93-173979/REB 93-01 PC **A22**/MF **A04**

*EPA/810/R-92/001*
EPA's Ground Water and Drinking Water Program: Making a Difference.
PB93-136612/REB 93-01 PC **A03**/MF **A01**

*EPA/503/8-88/003*
Estuary Program Primer. National Estuary Program.
PB93-193753/REB 93-01 PC **A06**/MF **A02**

Federal Register, Volume 58, No. 72. Part 2. Environmental Protection Agency, 40 CFR Parts 122 et al. Water Quality Guidance for the Great Lakes System and Correction; Proposed Rules.
PB93-183002/REB 93-01 PC **A11**/MF **A03**

*EPA/570/9-91/006*
Florida Small Systems Compliance Project.
PB93-115855/REB 93-01 PC **A04**/MF **A01**

*EPA/811/R-92/005*
Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC **A05**/MF **A01**

*EPA/570/9-89/002*
General Public Notification for Public Water Systems.
PB93-167096/REB 93-01 PC **A05**/MF **A01**

*EPA/842/B-92/001*
Global Oceans Directory. A Compendium of Organizations Dedicated to Marine Conservation.
PB93-206555/REB 93-04 PC **A08**/MF **A02**

Great Lakes Water Quality Guidance Docket Index.
PB93-207769/REB 93-04 PC **A05**/MF **A01**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Human Health (February 1993 Draft).
PB93-154680/REB 93-01 PC **A09**/MF **A03**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC **A04**/MF **A01**

Great Lakes Water Quality Initiative Technical Support Document for Human Health Criteria and Values (January 1993 Draft).
PB93-154698/REB 93-01 PC **A05**/MF **A01**

Guidance for Writing Permits for the Use or Disposal of Sewage Sludge.
PB93-217537/REB 93-04 PC **A18**/MF **A04**

Guidance Manual for POTW Pretreatment Program Development.
PB93-186112/REB 93-01 PC **A14**/MF **A03**

*EPA/812/R-92/003*
Guidance on Enforcement of the Requirements of the Surface Water Treatment Rule.
PB93-186633/REB 93-01 PC **A03**/MF **A01**

*EPA/570/9-91/033*
Guide for Conducting Contaminant Source Inventories for Public Drinking Water Supplies. Technical Assistance Document.
PB93-126407/REB 93-01 PC **A06**/MF **A02**

*EPA/813/R-93/001*
Guide for Cost-Effectiveness and Cost-Benefit Analysis of State and Local Ground Water Protection Programs.
PB93-207397/REB 93-04 PC **A06**/MF **A02**

Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC **A05**/MF **A01**

Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

*EPA/812/B-93/004*
Indian Primacy Procedures Handbook for the Public Water System Supervision (PWSS) Program and the Underground Injection Control (UIC) Program.
PB93-185585/REB 93-01 PC **A09**/MF **A02**

*EPA/556/1-87/001*
INSEA User's Manual Environmental Performance Model of Incineration at Sea Operations.
PB93-206977/REB 93-04 PC **A07**/MF **A02**

*EPA/812/R-93/002*
Institutional Solutions to Drinking Water Problems: Maine Case Studies.
PB93-180834/REB 93-01 PC **A03**/MF **A01**

*EPA/831/S-92/002*
Introduction to Water Quality-Based Toxics Control for the NPDES Program.
PB93-207967/REB 93-04 PC **A03**/MF **A01**

*EPA/812/B-92/006*
Lead and Copper Monitoring Guidance for Water Systems Serving 3,301 to 10,000 Persons.
PB93-174548/REB 93-01 PC **A03**/MF **A01**

*EPA/812/B-92/004*
Lead and Copper Monitoring Guidance for Water Systems Serving 101 to 500 Persons.
PB93-174522/REB 93-01 PC **A03**/MF **A01**

*EPA/812/B-92/005*
Lead and Copper Monitoring Guidance for Water Systems Serving 501 to 3,300 Persons.
PB93-174530/REB 93-01 PC **A03**/MF **A01**

*EPA/503/3-88/001*
Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
PB93-207561/REB 93-04 PC **A03**/MF **A01**

*EPA/570/9-91/023*
Managing Ground Water Contamination Sources in Wellhead Protection Areas: A Priority Setting Approach.
PB93-115863/REB 93-01 PC **A12**/MF **A03**

Managing Nonpoint Source Pollution. Final Report to Congress on Section 319 of the Clean Water Act (1989).
PB93-200897/REB 93-01 PC **A10**/MF **A03**

*EPA/625/1-91/024*
Manual: Alternative Wastewater Collection Systems.
PB93-116259/REB 93-01 PC **A10**/MF **A03**

*EPA/503/9-89/002*
Marine and Estuarine Protection: Programs and Activities.
PB93-179000/REB 93-01 PC **A03**/MF **A01**

*EPA/812/R-93/003*
Medium Systems That Failed to Conduct Required Initial Lead Tap Monitoring and Reporting.
PB93-196632/REB 93-01 PC **A03**/MF **A01**

*EPA/440/4-90/007*
Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC **A06**/MF **A02**

*EPA/812/B-92/007*
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 10,001 to 50,000 Persons.
PB93-174555/REB 93-01 PC **A04**/MF **A01**

*EPA/812/B-92/008*
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 50,001 to 100,000 Persons.
PB93-174514/REB 93-01 PC **A04**/MF **A01**

*EPA/812/B-92/009*
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving > 100,000 Persons.
PB93-174563/REB 93-01 PC **A04**/MF **A01**

*EPA/503/4-91/001*
Monitoring, Research, and Surveillance Plan for the 106-Mile Deepwater Municipal Sludge Dump Site and Environs.
PB93-207744/REB 93-04 PC **A07**/MF **A02**

*EPA/832/B-92/001*
Municipal Water Pollution Prevention Bibliography: 1992, the Year of Clean Water. Celebration and Commitment.
PB93-141083/REB 93-01 PC **A03**/MF **A01**

*EPA/503/9-90/004*
National Directory of Citizen Volunteer Environmental Monitoring Programs (Third Edition).
PB93-207496/REB 93-04 PC **A03**/MF **A01**

*EPA/823/R-92/008A*
National Study of Chemical Residues in Fish. Volume 1.
PB93-114981/REB 93-01 PC **E09**/MF **A01**

*EPA/823/R-92/008B*
National Study of Chemical Residues in Fish. Volume 2.
PB93-114999/REB 93-01 PC **E11**/MF **A04**

News-Notes Number 21: The Condition of the Environment and the Nonpoint Sources of Water Pollution.
PB93-204030/REB 93-01 PC **A03**/MF **A01**

*EPA/841/N-92/003*
News Notes, Number 22: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-126183/REB 93-01 PC **A03**/MF **A01**

*EPA/841/N-92/005*
News-Notes Number 23: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-204006/REB 93-01 PC **A03**/MF **A01**

*EPA/833/F-93/002*
NPDES Storm Water Program. Question and Answer Document. Volume 1.
PB93-223410/REB 93-04 PC **A03**/MF **A01**

*EPA/830/R-93/001*
Office of Wastewater Enforcement and Compliance Strategic Plan.
PB93-223204/REB 93-04 PC **A03**/MF **A01**

*EPA/800/B-92/001*
Office of Water Environmental and Program Information Systems Compendium, FY 1992.
PB93-186203/REB 93-01 PC **A08**/MF **A02**

*EPA/812/R-92/001*
Overview of Existing State Alternative Financing Programs: Financing Drinking Water System Capital Needs in the 1990's.
PB93-132637/REB 93-01 PC **A05**/MF **A01**

*EPA/503/2-91/004*
Portraits of Our Coastal Waters. Supplement to the National Water Quality Inventory. Report from the EPA Regions.
PB93-207546/REB 93-04 PC **A03**/MF **A01**

*EPA/440/1-89/025*
Preliminary Data Summary for the Pulp, Paper and Paperboard Point Source Category.
PB93-202935/REB 93-01 PC **A04**/MF **A01**

*EPA/556/1-87/005*
Proceeding of the Workshop on the Sea-Surface Microlayer in Relation to Ocean Disposal. Held in Airlie, Virginia on December 18-19, 1985.
PB93-206993/REB 93-04 PC **A06**/MF **A02**

Proceedings and Summary of the Workshop on Finfish as Indicators of Toxic Contamination. Held in Airlie, Virginia on July 27-28, 1986.
PB93-208320/REB 93-04 PC **A06**/MF **A02**

*EPA/823/R-92/007*
Proceedings of the EPA's Contaminated Sediment Management Strategy Forums.
PB93-126399/REB 93-01 PC **A10**/MF **A03**

*EPA/841/R-92/004*
Proceedings of the National Citizens' Volunteer Water Monitoring Conference (3rd). Held in Annapolis, Maryland on March 29-April 2, 1992. Building Partnerships in the Year of Clean Water.
PB93-207108/REB 93-04 PC **A09**/MF **A02**

*EPA/503/9-89/009*
Proceedings of the Ocean Dumping Workshop 106-Mile Site. Held in Ocean City, NJ., on March 28-30, 1989.
PB93-208072/REB 93-04 PC **A07**/MF **A02**

*EPA/823/R-93/001*
Proceedings: Tiered Testing Issues for Freshwater and Marine Sediments. Held in Washington, DC. on September 16-18, 1992.
PB93-152619/REB 93-01 PC **A22**/MF **A04**

Proposed Water Quality Guidance for the Great Lakes System.
PB93-164515/REB 93-01 PC **A14**/MF **A03**

*EPA/842/R-92/002*
Protecting Coastal and Wetlands Resources: A Guide for Local Governments.
PB93-105567/REB 93-01 PC **A09**/MF **A03**

*EPA/840/S-92/001*
Protecting the Nation's Wetlands, Oceans, and Watersheds: An Overview of Programs and Activities.
PB93-105609/REB 93-01 PC **A03**/MF **A01**

*EPA/820/B-92/002*
Publications Office of Science and Technology: Catalog.
PB93-152577/REB 93-01 PC **A06**/MF **A02**

*EPA/841/K-92/001*
Quality of Our Nation's Water: 1990.
PB93-205904/REB 93-04 PC **A03**/MF **A01**

*EPA/570/9-91/700*
Radionuclides in Drinking Water. National Primary Drinking Water Regulations for Radionuclides. Proposed Rules.
PB93-194058/REB 93-01 PC **A03**/MF **A01**

*EPA/812/B-92/004*
Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

*EPA/821/R-93/002*
Regulatory Impact Analysis of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-174613/REB 93-01 PC **A06**/MF **A02**

Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC **A09**/MF **A02**

*EPA/503/6-90/001*
Report to Congress on Implementation of Section 403(c) of the Federal Water Pollution Control Act.
PB93-207488/REB 93-04 PC **A07**/MF **A02**

*EPA/570/9-91/035*
Restructuring Manual: A Training Manual for State Drinking Water Personnel as They Meet the Challenges of the 1986 Safe Drinking Water Act Amendments.
PB93-180842/REB 93-01 PC **A04**/MF **A01**

Revision of Methodology for Deriving National Ambient Water Quality Criteria for the Protection of Human Health: Report of Workshop and EPA's Preliminary Recommendations for Revision.
PB93-213494/REB 93-04 PC **A06**/MF **A02**

*EPA/570/9-88/003*
Sanitary Survey Training: Instructor's Guide for Inspectors of Small Water Systems.
PB93-115871/REB 93-01 PC **A05**/MF **A01**

*EPA/570/9-88/004*
Sanitary Survey Training: Instructor's Guide for Sanitarians of Micronesia.
PB93-115889/REB 93-01 PC **A09**/MF **A02**

*EPA/503/8-90/005*
Saving Bays and Estuaries: A Primer for Establishing and Managing Estuary Programs. Appendices G, H, and I.
PB93-116077/REB 93-01 PC **A05**/MF **A02**

*EPA/823/R-92/006*
Sediment Classification Methods Compendium.
PB93-115186/REB 93-01 PC **A11**/MF **A03**

*EPA/811/R-92/002*
Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

*EPA/811/R-92/007*
Simulation of Microbial Occurrence, Exposure and Health Risks after Drinking Water Treatment Processes.
PB93-134393/REB 93-01 PC **A05**/MF **A02**

State Clean Water Strategies: Meeting the Challenges of the Future.
PB93-217628/REB 93-04 PC **A03**/MF **A01**

State Sludge Management Program Guidance Manual.
PB93-128122/REB 93-01 PC **A06**/MF **A02**

*EPA/811/R-92/004*
Status Report on Analytical Methods to Support the Disinfectant/Disinfection By-Products Regulation.
PB93-134898/REB 93-01 PC **A03**/MF **A01**

*EPA/811/R-92/006*
Status Report on the Development of Draft MCLGs for Disinfectants and By-Products.
PB93-134906/REB 93-01 PC **A05**/MF **A01**

*EPA/833/R-92/001*
Storm Water Management for Construction Activities. Developing Pollution Prevention Plans and Best Management Practices. Summary Guidance.
PB93-223550/REB 93-04 PC **A03**/MF **A01**

*EPA/842/B-92/009*
Summary of Implementation and Demonstration Projects in Bays and Estuaries.
PB93-194637/REB 93-01 PC **A07**/MF **A02**

*EPA/430/9-87/010*
Summary of the 1987 Carver-Greenfield Sludge Drying Technology Workshop: Problems and Solutions. Held in Los Angeles, California on March 10-11, 1987.
PB93-174506/REB 93-01 PC **A04**/MF **A01**

*EPA/440/1-86/016S*
Supplementary Development Document for Effluent Limitations Guidelines for the Leather Tanning and Finishing Point Source Category.
PB93-207934/REB 93-04 PC **A06**/MF **A02**

Surface Water Treatment Rule. Implementation Manual (Including Appendix D).
PB93-186641/REB 93-01 PC **A07**/MF **A02**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.
PB93-205508/REB 93-04 PC **A99**/MF **A06**

*EPA/823/R-92/004*
Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03**/MF **A01**

*EPA/822/R-93/002*
Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

*EPA/822/R-93/001B*
Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

Total Coliform Rule: Implementation Manual (Including Appendix D).
PB93-186658/REB 93-01 PC **A05**/MF **A02**

*EPA/833/B-93/003*
Training Manual for NPDES Permit Writers.
PB93-217644/REB 93-04 PC **A09**/MF **A02**

*EPA/812/B-93/005*
Tribal Water Utility Management.
PB93-190908/REB 93-01 PC **A09**/MF **A02**

*EPA/833/B-92/004*
U.S. EPA NPDES: Basic Permit Writers' Course. Workbook.
PB93-185619/REB 93-01 PC **A17**/MF **A03**

*EPA/833/K-93/001*
Urban Runoff Management Information/Education Products. Version 1.
PB93-190932/REB 93-01 PC **A09**/MF **A03**

*EPA/811/S-92/001*
Use of Microbial Risk Assessment in Setting U.S. Drinking Water Standards.
PB93-134930/REB 93-01 PC **A03**/MF **A01**

*EPA/440/4-90/010*
Volunteer Water Monitoring: A Guide for State Managers.
PB93-202596/REB 93-01 PC **A05**/MF **A01**

*EPA/811/B-92/001*
Water Treatment Plant Simulation Program, Version 1.21, User's Manual.
PB93-134948/REB 93-01 PC **A06**/MF **A02**

OFFICE OF DRINKING WATER

*EPA/570/F-90/017*
Drinking Water Regulations under the Safe Drinking Water Act.
PB93-194033/REB 93-01 PC **A03**/MF **A01**

*EPA/812/B-92/002*
Lead in Drinking Water Regulation: Public Education Guidance (Guidance for Conducting a Community-Based Public Education Program on Lead in Drinking Water).
PB93-101079/REB 93-01 PC **A04**/MF **A01**

*EPA/814/B-92/002*
Manual for the Certification of Laboratories Analyzing Drinking Water. Criteria and Procedures Quality Assurance (Third Edition).
PB93-145688/REB 93-01 PC **A03**/MF **A01**

*EPA/570/F-91/044*
Phase II Fact Sheet: National Primary Drinking Water Regulations for 38 Inorganic and Synthetic Organic Chemicals.
PB93-193787/REB 93-01 PC **A03**/MF **A01**

*EPA/811/R-92/001*
Simulation of Raw Water and Treatment Parameters in Support of the Disinfection By-Products Regulatory Impact Analysis.
PB93-134401/REB 93-01 PC **A03**/MF **A01**

*EPA/570/9-87/002*
Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells.
PB93-115897/REB 93-01 PC **A04**/MF **A01**

*EPA/570/9-89/003*
Underground Injection Control Program.
PB93-115905/REB 93-01 PC **A03**/MF **A01**

**REGION III - PHILADELPHIA, PA**

Baseline Point Source Load Inventory, 1985. 1991 Re-evaluation Report No. 2.
PB93-193761/REB 93-01 PC **A03**/MF **A01**

Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans.
PB93-122182/REB 93-01 PC **A03**/MF **A01**

Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans, December 1992.
PB93-226058/REB 93-04 PC **A04**/MF **A01**

Chesapeake Bay American Eel Fishery Management Plan. Agreement Commitment Report 1991.
PB93-226017/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Atlantic Croaker and Spot Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226629/REB 93-04 PC **A03**/MF **A01**

Chesapeake Bay Coordinated Split Sample Program Annual Report, 1990-1991: Analytical Methods and Quality Assurance Workgroup of the Chesapeake Bay Program Monitoring Subcommittee.
PB93-208270/REB 93-04 PC **A06**/MF **A02**

Chesapeake Bay Program Annual Progress Report, Wetlands Workgroup, December 1991.
PB93-136893/REB 93-01 PC **A03**/MF **A01**

Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC **A12**/MF **A03**

Chesapeake Bay Summer Flounder Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226637/REB 93-04 PC **A03**/MF **A01**

Comparison of Mid-Bay and Lateral Station Water Quality Data in the Chesapeake Bay Mainstem: Chesapeake Bay Program.
PB93-208288/REB 93-04 PC **A05**/MF **A01**

Cost of Providing Government Services to Alternative Residential Patterns.
PB93-207728/REB 93-04 PC **A09**/MF **A02**

Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11**/MF **A03**

Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and Chincoteague Bay, 1991.
PB93-191120/REB 93-01 PC **A13**/MF **A03**

Guide to Using Chesapeake Bay Program Water Quality Monitoring Data.
PB93-205888/REB 93-04 PC **A07**/MF **A02**

Incorporating Uncertainty Associated with Censored Water Quality Data in Parametric Trend Analysis.
PB93-208262/REB 93-04 PC **A03**/MF **A01**

Living Resources Subcommittee: Annual Summary.
PB93-112506/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Atmospheric Deposition of Critical Issue Forum. Held in Annapolis, Maryland on November 5, 1992.
PB93-193738/REB 93-01 PC **A03**/MF **A01**

Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Contaminated Sediments Critical Issue Forum. Held in Annapolis, Maryland on December 10, 1992.
PB93-194017/REB 93-01 PC **A03**/MF **A01**

Role and Function of Forest Buffers in the Chesapeake Bay Basin for Nonpoint Source Management.
PB93-207405/REB 93-04 PC **A03**/MF **A01**

Trends in Nitrogen in the Chesapeake Bay, 1984-1990.
PB93-122174/REB 93-01 PC **A04**/MF **A01**

Waterfowl Workgroup Living Resources Subcommittee: Annual Progress Report.
PB93-112704/REB 93-01 PC **A03**/MF **A01**

**REGION IV - ATLANTA, GA**

EVAP3.0 CRC Evaporative Emission Model: User's Manual.
PB93-213916/REB 93-04 PC **A03**/MF **A01**

*EPA/SW/DK-93/086*
Evaporative Emission Model (EVAP 3.0) (for Microcomputers).
PB93-506301/REB 93-04 CP **D02**

**REGION V - CHICAGO, ILL.**

*EPA/905/9-91/006A*
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
PB93-128015/REB 93-01 PC **A04**/MF **A01**

*EPA/905/9-91/006B*
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC **A04**/MF **A01**

*EPA/905/9-91/006C*
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
PB93-128031/REB 93-01 PC **A06**/MF **A02**

*EPA/905/9-91/010*
Cost Effective Corn and Soybean Production Without Tillage: Fact or Fiction (May 1988).
PB93-157568/REB 93-01 PC **A03**/MF **A01**

*EPA/905/9-91/025*
Development of Index of Biotic Integrity Expectations for the Ecoregions of Indiana. I. Central Corn Belt Plain.
PB93-149383/REB 93-01 PC **A06**/MF **A02**

*EPA/905/9-91/013*
Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

*EPA/905/9-91/008*
Maumee River Basin Pilot Watershed Study. Volume 5. Continued Watershed Monitoring (1981-1985) and Rainulator Study - Detailed Data (1986).
PB93-128098/REB 93-01 PC **A10**/MF **A03**

*EPA/905/9-91/001*
Northeast Indiana Conservation Tillage Demonstration Project. Final Report (1981-1985).
PB93-128056/REB 93-01 PC **A03**/MF **A01**

*EPA/905/9-91/007*
Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
PB93-128114/REB 93-01 PC **A04**/MF **A01**

*EPA/905/3-90/003*
Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

*EPA/905/9-91/021*
Pollution Prevention: Meeting the Environmental Challenges of the 1990s. Region 5 FY 91 Accomplishments.
PB93-128106/REB 93-01 PC **A04**/MF **A01**

*EPA/905/R-92/003*
Proceedings of the Midwest Pollution Control Biologists Meeting, 1991. Environmental Indicators: Measurement and Assessment Endpoints. Held in Lincolnwood, Illinois on March 19-22, 1991.
PB93-145712/REB 93-01 PC **A06**/MF **A02**

*EPA/905/9-89/003*
Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC **A07**/MF **A02**

*EPA/905/9-89/0087*
Proceedings of the 1989 Midwest Pollution Control Biologists Meeting. Held in Chicago, Illinois on February 14-17, 1989.
PB93-143691/REB 93-01 PC **A08**/MF **A02**

*EPA/910/9-91/035*
Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC **A14**/MF **A03**

*EPA/905/9-91/011*
Use of the Black Creek Database to Analyze Techniques for Estimating Nonpoint Source Loadings from Small Watersheds (May 1988).
PB93-128072/REB 93-01 PC **A03**/MF **A01**

**REGION VI - DALLAS, TX**

*EPA/451/R-93/008*
Air/Superfund National Technical Guidance Study Series: Compilation of Information on Real-Time Air Monitoring for Use at Superfund Sites.
PB93-199222/REB 93-04 PC **A05**/MF **A02**

Ambient Water and Sediment Quality of Galveston Bay: Present Status and Historical Trends. Volume 1.
PB93-205789/REB 93-04 PC **A09**/MF **A03**

Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1. Technical Report.
PB93-205722/REB 93-04 PC **A11**/MF **A03**

Characterization of Selected Public Health Issues in Galveston Bay.
PB93-205771/REB 93-04 PC **A08**/MF **A02**

Environmental Management Inventory of Galveston Bay.
PB93-205797/REB 93-04 PC **A06**/MF **A02**

Recreational Fishery By-Catch in the Galveston Bay System.
PB93-205805/REB 93-04 PC **A06**/MF **A02**

Segmentation Development for Galveston Bay.
PB93-205748/REB 93-04 PC **A07**/MF **A02**

Shoreline Survey for Unpermitted Discharges to Galveston Bay.
PB93-205706/REB 93-04 PC **A03**/MF **A01**

Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC **A20**/MF **A04**

Wetland Plant Communities, Galveston Bay System.
PB93-205730/REB 93-04 PC **A07**/MF **A02**

**REGION X - SEATTLE, WA**

*EPA/910/R-93/006*
Clark-Fork-Pend Oreille Basin Water Quality Study: A Summary of Findings and a Management Plan.
PB93-208148/REB 93-04 PC **A08**/MF **A02**

*EPA/910/9-92/026*
Clean Water Act (Section 319): An Evaluation of Program Implementation in Region 10.
PB93-145654/REB 93-01 PC **A05**/MF **A01**

*EPA/910/9-89/031B*
Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
PB93-181238/REB 93-01 PC **A25**/MF **A06**

*EPA/910/9-92/029*
Consensus Method for Determining Groundwaters under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA).
PB93-180818/REB 93-01 PC **A04**/MF **A01**

*EPA/910/9-91/019*
Dynamic River Basin Water Quality Model.
PB93-190890/REB 93-01 PC **A05**/MF **A01**

*EPA/910/9-91/037*
Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC **A10**/MF **A03**

*EPA/910/9-91/027*
Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound.
PB93-122208/REB 93-01 PC **A09**/MF **A02**

*EPA/910/9-91/027-APP*
Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound, Appendices.
PB93-122216/REB 93-01 PC **A16**/MF **A03**

Glass Markets Information System: Application Records.
PB93-193902/REB 93-01 PC **A21**/MF **A04**

Glass Markets Information System; Application Summary Reports.
PB93-197887/REB 93-01 PC **A05**/MF **A01**

*EPA/910/9-92/019*
Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

*EPA/910/9-92/008*
Maritime Industrial Waste Project Reduction of Toxicant Pollution from the Maritime Industry in Puget Sound.
PB93-119568/REB 93-01 PC **A08**/MF **A02**

*EPA/910/9-92/030*
Model Pollution Prevention Plan for the Kraft Segment of the Pulp and Paper Industry.
PB93-145605/REB 93-01 PC **A04**/MF **A01**

*EPA/910/9-91/002*
Nutrients and Phytoplankton in Puget Sound.
PB93-119576/REB 93-01 PC **A08**/MF **A02**

*EPA/910/9-92/031*
Pollution Prevention for the Kraft Pulp and Paper Industry.
PB93-145613/REB 93-01 PC **A04**/MF **A01**

*EPA/910/9-92/027*
Pollution Prevention Opportunity Assessment and Implementation Plan. For Simpson Tacoma Kraft Company, Tacoma, Washington.
PB93-145670/REB 93-01 PC **A05**/MF **A01**

*EPA/910/9-91/050*
Potential Intertidal Habitat Restoration Sites in the Duwamish River Estuary.
PB93-122190/REB 93-01 PC **A05**/MF **A02**

*EPA/910/9-92/013*
Region 10 In-Stream Biological Monitoring Handbook: For Wadable Streams in the Pacific Northwest.
PB93-226611/REB 93-04 PC **A05**/MF **A01**

*EPA/910/9-92/012*
Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
PB93-143709/REB 93-01 PC **A08**/MF **A02**

*EPA/910/9-92/033*
Restoration Potential of Diked Estuarine Wetlands in Washington and Oregon. Phase 2: Identification of Candidate Sites in Puget Sound.
PB93-145597/REB 93-01 PC **A04**/MF **A01**

*EPA/910/9-91/023*
Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC **A06**/MF **A02**

# CORPORATE AUTHOR INDEX

Entries are sequenced by corporate name, report number, and NTIS order number. The monitor agency number is given following the report title.

## SAMPLE ENTRY

| | |
|---|---|
| **Corporate/Performing Organization** | **OREGON STATE UNIVERSITY, Corvallis, OR** |
| (Report or Series Number) | EPA/600/3-89/073 |
| Title | Sensitivity of Ecological Landscapes and Regions to Global Climatic Change |
| (Sponsor's Report or Series Number) | EPA/600/3-89/073 |
| NTIS Order Number/Media Code Price Codes | PB90-120072/HSU PC A09/MF A01 |

# CORPORATE AUTHOR INDEX


**A.S.L. AND ASSOCIATES, HELENA, MT.**

Potential Bias from Non-Continuous Monitoring of Ambient Ozone Concentrations for Characterizing Hourly and Daily 7- and 12-Hour Average Concentrations.
*(EPA/600/J-93/156)*
PB93-191534/REB 93-01 PC **A02**/MF **A01**

**ABB/COMBUSION ENGINEERING, INC., WINDSOR, CT.**

Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
*(EPA/600/J-93/235)*
PB93-236644/REB 93-04 PC **A03**/MF **A01**

**ABB ENVIRONMENTAL SERVICES, INC., CHAPEL HILL, NC.**

Cytokine (Tumor Necrosis Factor, IL-6, and IL-8) Production by Respiratory Syncytial Virus-Infected Human Alveolar Macrophages.
*(EPA/600/J-93/111)*
PB93-181006/REB 93-01 PC **A02**/MF **A01**

**ABT ASSOCIATES, INC., CAMBRIDGE, MA.**

Human Health Risk Assessment for the Use and Disposal of Sewage Sludge: Benefits of Regulation.
PB93-111540/REB 93-04 PC **A14**/MF **A03**

Economic Assessment of Reducing Fluoride in Drinking Water.
*(EPA/570/9-86/001)*
PB93-115830/REB 93-01 PC **A05**/MF **A01**

Evaluation of Environmental Marketing Terms in the United States.
*(EPA/741/R-92/003)*
PB93-175784/REB 93-01 PC **A10**/MF **A03**

**ACRES INTERNATIONAL CORP., AMHERST, NY.**

Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
*(EPA/600/R-93/091)*
PB93-199388/REB 93-01 PC **A03**/MF **A01**

**ACUREX CORP., RESEARCH TRIANGLE PARK, NC.**

Modeling of the Fast Organic Emissions from a Wood-Finishing Product: Floor Wax.
*(EPA/600/J-92/356)*
PB93-107027/REB 93-01 PC **A02**/MF **A01**

Emission Rates of Mercury from Latex Paints.
*(EPA/600/A-92/271)*
PB93-131654/REB 93-01 PC **A02**/MF **A01**

Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
*(EPA/600/J-92/410)*
PB93-131852/REB 93-01 PC **A02**/MF **A01**

Characterization of Organic Emission from a Wood Finishing Product-Wood Stain.
*(EPA/600/J-93/001)*
PB93-150100/REB 93-01 PC **A02**/MF **A01**

R-245ca: A Potential Far-Term Alternative for R-11.
*(EPA/600/J-93/075)*
PB93-173144/REB 93-01 PC **A02**/MF **A01**

Fundamental Mass Transfer Models for Indoor Air Pollution Sources.
*(EPA/600/A-93/181)*
PB93-221992/REB 93-04 PC **A02**/MF **A01**

**ACUREX ENVIRONMENTAL CORP., JEFFERSON, AR.**

Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
*(EPA/600/R-92/240)*
PB93-141034/REB 93-01 PC **A17**/MF **A03**

**ACUREX ENVIRONMENTAL CORP., MOUNTAIN VIEW, CA.**

Evaluation and Costing of NOx Controls for Existing Utility Boilers in the NESCAUM Region.
*(EPA/453/R-92/010)*
PB93-142016/REB 93-01 PC **A18**/MF **A04**

**ACUREX ENVIRONMENTAL CORP., RESEARCH TRIANGLE PARK, NC.**

REPT-8421.356
Characterization of the Organic Emissions from the Thermal Destruction of CFCs.
PB93-205557/REB 93-04 PC **A10**/MF **A03**

Validation of Source and Sink Models: Problems and Possible Solutions.
*(EPA/600/A-92/209)*
PB93-106789/REB 93-01 PC **A03**/MF **A01**

On-Line Measurement of Nitrous Oxide from Combustion Sources by Automated Gas Chromatography.
*(EPA/600/A-92/215)*
PB93-106847/REB 93-01 PC **A03**/MF **A01**

Evaluation of Para-Dichlorobenzene Emissions from Solid Moth Repellant as a Source of Indoor Air Pollution.
*(EPA/600/J-92/357)*
PB93-107035/REB 93-01 PC **A02**/MF **A01**

Reaction Kinetics of Ca-Based Sorbents with HC1.
*(EPA/600/J-92/411)*
PB93-131860/REB 93-01 PC **A03**/MF **A01**

Advacate-Low-Cost Process for SO2 Control.
*(EPA/600/A-92/286)*
PB93-141117/REB 93-01 PC **A02**/MF **A01**

Characterization of Emissions from the Simulated Open-Burning of Non-Metallic Automobile Shredder Residue.
*(EPA/600/R-93/044)*
PB93-172914/REB 93-01 PC **A05**/MF **A01**

Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
*(EPA/600/J-93/080)*
PB93-173672/REB 93-01 PC **A02**/MF **A01**

Analysis of Atmospheric Deposition Samples from Easton, Pennsylvania.
*(EPA/600/R-93/057)*
PB93-181600/REB 93-01 PC **A04**/MF **A01**

Development of Sampling and Analytical Methods for the Measurement of Nitrous Oxide from Fossil Fuel Combustion Sources.
*(EPA/600/R-93/088)*
PB93-194330/REB 93-01 PC **A07**/MF **A02**

Control Technology Center FY92: A Summary of Program Accomplishments.
*(EPA/600/R-93/090)*
PB93-199230/REB 93-01 PC **A03**/MF **A01**

Evaluation of Carbon Black Slurries as Clean Burning Fuels.
*(EPA/600/A-93/187)*
PB93-222057/REB 93-04 PC **A03**/MF **A01**

**AGRICULTURAL RESEARCH SERVICE, TIFTON, GA. SOUTHEAST WATERSHED RESEARCH LAB.**

Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.
*(EPA/600/R-93/186)*
PB93-234540/REB 93-04 PC **A04**/MF **A01**

**ALABAMA UNIV. IN BIRMINGHAM. DEPT. OF CIVIL ENGINEERING.**

Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
*(EPA/600/R-92/238)*
PB93-131472/REB 93-01 PC **A05**/MF **A02**

**ALBERTA ENVIRONMENTAL CENTRE, VEGREVILLE.**

Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
*(EPA/600/R-93/099)*
PB93-199396/REB 93-01 PC **A05**/MF **A01**

**ALICE HAMILTON OCCUPATIONAL HEALTH CENTER, WASHINGTON, DC.**

EPA Model Asbestos Worker Training Manual. Course 4 (English Version).
PB93-780930/REB 93-01 PC **A14**

EPA Model Asbestos Worker Training Course. Instructor's Manual. Course 4 (English Version) (Training Manual).
PB93-780948/REB 93-01 PC **A15**

**ALLEN COUNTY SOIL AND WATER CONSERVATION DISTRICT, FORT WAYNE, IN.**

Northeast Indiana Conservation Tillage Demonstration Project. Final Report (1981-1985).
*(EPA/905/9-91/001, GL-05/91)*
PB93-128056/REB 93-01 PC **A03**/MF **A01**

**ALLIANCE TECHNOLOGIES CORP., CHAPEL HILL, NC.**

CH-92-04
Combustion Area Sources: Data Sources.
*(EPA/600/R-92/197)*
PB93-106623/REB 93-01 PC **A05**/MF **A01**

**ALUMINUM CO. OF AMERICA, PITTSBURGH, PA.**

Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.
*(EPA/540/R-93/521)*
PB93-227205/REB 93-04 PC **A04**/MF **A01**

**AMERICAN SOCIETY OF LIMNOLOGY AND OCEANOGRAPHY, WALLA WALLA, WA.**

What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.
*(EPA/600/R-93/120)*
PB93-211985/REB 93-04 PC **A21**/MF **A04**

**AMERICAN SOLAR ENERGY SOCIETY, BOULDER, CO.**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991.
PB93-174753/REB 93-01 PC **E99**/MF **E99**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 1.
*(EPA/600/R-93/058A)*
PB93-174761/REB 93-01 PC **A24**/MF **A04**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 2.
*(EPA/600/R-93/058B)*
PB93-174779/REB 93-01 PC **A25**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
*(EPA/600/R-93/058C)*
PB93-174787/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 2.
*(EPA/600/R-93/058D)*
PB93-174795/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 1.
*(EPA/600/R-93/058E)*
PB93-174803/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 2.
*(EPA/600/R-93/058E)*
PB93-174811/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 4.
*(EPA/600/R-93/058G)*
PB93-174829/REB 93-01 PC **A13**/MF **A03**

**AMOCO CORP., CHICAGO, IL.**

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Project Summary.
PB92-228527/REB 93-01 PC **A08**/MF **A02**

**AMOCO CORP./ENVIRONMENTAL PROTECTION AGENCY, YORKTOWN, VA. POLLUTION PREVENTION PROJECT.**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Executive Summary (Revised May 1992).
PB92-228519/REB 93-01 PC **A03**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC **A08**/MF **A02**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Pollution Prevention Workshop.
PB92-228543/REB 93-01 PC **A12**/MF **A03**

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown Refinery. Refinery Release Inventory.
PB92-228550/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Solid Waste Data.
PB92-228568/REB 93-01 PC **A05**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Groundwater and Soil Data.
PB92-228576/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Air Quality Data. Volume 2.
PB92-228600/REB 93-04 PC **A16**/MF **A03**

Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown, Virginia. Ecological Impacts of the Yorktown Refinery on the York River Estuarine Environment.
PB92-228634/REB 93-01 PC **A05**/MF **A01**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Public Perceptions. Report of Observations, Thoughtleader Interviews and Focus Groups Yorktown Refinery Public Perception Study.
PB92-228642/REB 93-01 PC **A99**/MF **A06**

**AMOCO OIL CO., NAPERVILLE, IL.**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Surface Water Data.
PB92-228584/REB 93-01 PC **A08**/MF **A02**

**ANDREW W. BREIDENBACH ENVIRONMENTAL RESEARCH CENTER, CINCINNATI, OH.**

AWBERC-91-09
Always a River: Supplemental Environmental Education Curriculum on the Ohio River and Water Grades K-12.
PB93-200905/REB 93-01 PC **A14**/MF **A03**

**APOGEE RESEARCH, INC., BETHESDA, MD.**

Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC **A06**/MF **A02**

**AQUA TERRA CONSULTANTS, MOUNTAIN VIEW, CA.**

STREAM: An Exposure Assessment Methodology for Agricultural Pesticide Runoff.
*(EPA/600/A-92/219)*
PB93-106888/REB 93-01 PC **A03**/MF **A01**

Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC **A04**/MF **A01**

Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
*(EPA/600/R-93/082)*
PB93-185536/REB 93-01 PC **A11**/MF **A03**

3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
*(EPA/600/R-92/223)*
PB93-217669/REB 93-04 PC **A12**/MF **A03**

Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
*(EPA/600/R-93/125)*
PB93-217784/REB 93-04 PC **A07**/MF **A02**

**ARIZONA UNIV., TUCSON. DEPT. OF CHEMICAL ENGINEERING.**

Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
*(EPA/600/J-93/245)*
PB93-212520/REB 93-04 PC **A03**/MF **A01**

Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
*(EPA/600/J-93/246)*
PB93-212538/REB 93-04 PC **A03**/MF **A01**

**ARIZONA UNIV., TUCSON. DEPT. OF VETERINARY SCIENCES.**
Performance of an Aquatic Multispecies System in Evaluating the Effects of a Model Microbial Pest Control Agent on Nontarget Organisms.
*(EPA/600/J-92/405)*
PB93-131803/REB 93-01 PC **A03**/MF **A01**

**ASCENSION TECHNOLOGY, INC., LINCOLN CENTER, MA.**
EPA's Photovoltaic Demand-Side Management Cost-Shared Demonstrations.
*(EPA/600/A-93/152)*
PB93-212413/REB 93-04 PC **A02**/MF **A01**

**ASCI CORP., ATHENS, GA.**
PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
*(EPA/600/R-93/046)*
PB93-174027/REB 93-01 PC **A17**/MF **A04**

**ASCI CORP., NARRAGANSETT, RI.**
Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
*(EPA/600/J-93/200)*
PB93-199594/REB 93-01 PC **A03**/MF **A01**

**ASCI CORP., NEWPORT, OR.**
Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
*(EPA/600/J-93/238)*
PB93-212454/REB 93-04 PC **A03**/MF **A01**

**AUBURN UNIV., AL. DEPT. OF CIVIL ENGINEERING.**
Development and Application of Borehole Flowmeters for Environmental Assessment.
*(EPA/600/J-93/134)*
PB93-185817/REB 93-01 PC **A03**/MF **A01**

**BATTELLE COLUMBUS LABS., OH.**
Life-Cycle Assessment: Inventory Guidelines and Principles.
*(EPA/600/R-92/245)*
PB93-139681/REB 93-01 PC **A07**/MF **A02**

Evaluation of Portable Multisorbent Air Samplers for Use with an Automated Multitube Analyzer.
*(EPA/600/R-93/053)*
PB93-172930/REB 93-01 PC **A05**/MF **A01**

In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
*(EPA/600/A-93/116)*
PB93-194231/REB 93-01 PC **A03**/MF **A01**

**BATTELLE, COLUMBUS, OH.**
Guides to Pollution Prevention: The Metal Finishing Industry.
*(EPA/625/R-92/011)*
PB93-100105/REB 93-04 PC **A04**/MF **A01**

Opportunities for Pollution Prevention Research to Support the 33/50 Program.
*(EPA/600/R-92/175)*
PB93-107266/REB 93-01 PC **A06**/MF **A02**

Guides to Pollution Prevention: The Mechanical Equipment Repair Industry.
*(EPA/625/R-92/008)*
PB93-121317/REB 93-01 PC **A03**/MF **A01**

Guides to Pollution Prevention: Metal Casting and Heat Treating Industry.
*(EPA/625/R-92/009)*
PB93-127793/REB 93-01 PC **A05**/MF **A01**

Periphyton Photosynthesis as an Indicator of Effluent Toxicity: Relationship to Effects on Animal Test Species.
*(EPA/600/J-92/407)*
PB93-131829/REB 93-01 PC **A02**/MF **A01**

On-Site Waste Ink Recycling: Technology Evaluation Report.
*(EPA/600/R-92/251)*
PB93-141026/REB 93-01 PC **A04**/MF **A01**

Quantification of Nitro- and Hydroxylated Nitro-Aromatic/Polycyclic Aromatic Hydrocarbons in Selected Ambient Air Daytime Winter Samples.
*(EPA/600/J-92/420)*
PB93-141190/REB 93-01 PC **A03**/MF **A01**

Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
*(EPA/600/J-93/081)*
PB93-173680/REB 93-01 PC **A03**/MF **A01**

Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
*(EPA/812/B-92/004)*
PB93-174464/REB 93-01 PC **A03**/MF **A01**

Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
*(EPA/600/A-93/129)*
PB93-204105/REB 93-04 PC **A02**/MF **A01**

Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC **A05**/MF **A01**

Mobile On-Site Recycling of Metalworking Fluids.
*(EPA/600/R-93/114)*
PB93-216562/REB 93-04 PC **A04**/MF **A01**

Fluid Sorbent Recycling Device for Industrial Fluid Users.
*(EPA/600/R-93/154)*
PB93-218519/REB 93-04 PC **A04**/MF **A01**

Chemical Contaminants in House Dust: Occurrences and Sources.
*(EPA/600/A-93/215)*
PB93-228542/REB 93-04 PC **A02**/MF **A01**

Technical Resource Document: Solidification/Stabilization and Its Application to Waste Materials.
*(EPA/530/R-93/012)*
PB93-237535/REB 93-04 PC **A16**/MF **A03**

**BATTELLE/MARINE SCIENCES LAB., SEQUIM, WA.**
Estuarine Habitat Assessment Protocol.
*(EPA/910/9-91/037)*
PB93-121812/REB 93-01 PC **A10**/MF **A03**

**BATTELLE OCEAN SCIENCES, DUXBURY, MA.**
Regulatory Applications of Sediment Criteria.
PB93-174472/REB 93-01 PC **A03**/MF **A01**

**BATTELLE PACIFIC NORTHWEST LABS., RICHLAND, WA.**
Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
*(EPA/600/J-92/455)*
PB93-141547/REB 93-01 PC **A03**/MF **A01**

INSEA User's Manual Environmental Performance Model of Incineration at Sea Operations.
*(EPA/556/1-87/001)*
PB93-206977/REB 93-04 PC **A07**/MF **A02**

Acid Precipitation in North America: 1986 Annual and Seasonal Data Summaries from Acid Deposition System Data Base.
*(EPA/600/4-89/005)*
PB93-223154/REB 93-04 PC **A04**/MF **A01**

**BETHLEHEM STEEL CORP., PA.**
Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 1. Technical Report and Appendices A-F.
*(EPA/600/R-93/060A)*
PB93-191302/REB 93-01 PC **A13**/MF **A03**

Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 2. Appendices G-N.
*(EPA/600/R-93/060B)*
PB93-191310/REB 93-01 PC **A15**/MF **A03**

**BLACK AND VEATCH, KANSAS CITY, MO.**
Lead and Copper Rule Guidance Manual. Volume 2. Corrosion Control Treatment.
*(EPA/811/B-92/002)*
PB93-101533/REB 93-01 PC **A10**/MF **A03**

**BOOZ-ALLEN AND HAMILTON, INC., BETHESDA, MD.**
Index to the Monthly Hotline Report Questions (June 1982 to December 1991).
*(EPA/530/SW-91/094)*
PB92-131374/REB 93-01 PC **A07**/MF **A02**

Inside the Hotline: A Compilation of 1992 Monthly Hotline Reports.
*(EPA/530/R-92/014M)*
PB93-159572/REB 93-01 PC **A05**/MF **A01**

**BOOZ-ALLEN AND HAMILTON, INC., LOS ANGELES, CA. TRANSPORTATION CONSULTING DIV.**
Commercial Marine Vessel Contributions to Emission Inventories.
PB93-173961/REB 93-01 PC **A07**/MF **A02**

**BOYCE THOMPSON INST. FOR PLANT RESEARCH, ITHACA, NY.**
Development of Genetically Enhanced Baculovirus Pesticides (Chapter 5).
*(EPA/600/A-93/008)*
PB93-149235/REB 93-01 PC **A02**/MF **A01**

Ecologically Acceptable Strategy for the Use of Genetically Engineered Baculovirus Pesticides.
*(EPA/600/A-93/010)*
PB93-149243/REB 93-01 PC **A02**/MF **A01**

Genetically Engineered Baculoviruses as Agents for Pest Control.
PB93-150175/REB 93-01 PC **A03**/MF **A01**

**BROOKHAVEN NATIONAL LAB., UPTON, NY.**
Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
*(EPA/600/A-92/241)*
PB93-120970/REB 93-01 PC **A02**/MF **A01**

Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.
*(EPA/600/A-93/198)*
PB93-229144/REB 93-04 PC **A03**/MF **A01**

**BROOKHAVEN NATIONAL LAB., UPTON, NY. NUCLEAR WASTE RESEARCH GROUP.**
Identification of Cost Factors for the Ocean Disposal Alternative for Low-Level Radioactive Waste.
*(EPA/520/1-84/026)*
PB93-203917/REB 93-04 PC **A03**/MF **A01**

**BROOKHAVEN NATIONAL LAB., UPTON, NY. OCEANOGRAPHIC AND ATMOSPHERIC SCIENCES DIV.**
Physiological Limitations on Phytoplankton Productivity in the Ocean.
*(EPA/600/J-93/209, ERLN-X199)*
PB93-204923/REB 93-01 PC **A02**/MF **A01**

Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
*(EPA/600/J-93/210, ERLN-X210)*
PB93-204931/REB 93-01 PC **A03**/MF **A01**

**BURNS AND ROE INDUSTRIAL SERVICES CORP., PARAMUS, NJ.**
Fate of Priority Pollutants in Publicly Owned Treatment Works. Pilot Study.
*(EPA/440/1-79/300)*
PB93-203974/REB 93-04 PC **A03**/MF **A01**

**BUTLER UNIV., INDIANAPOLIS, IN. HOLCOMB RESEARCH INST.**
Quality Assurance and Quality Control in the Development and Application of Ground-Water Models.
*(EPA/600/R-93/011)*
PB93-178226/REB 93-01 PC **A08**/MF **A02**

Compilation of Ground-Water Models.
*(EPA/600/R-93/118)*
PB93-209401/REB 93-04 PC **A13**/MF **A03**

**CALGARY UNIV. HEALTH SCIENCES CENTRE (ALBERTA). DEPT. OF MEDICAL BIOCHEMISTRY.**
Gene Expression in Pre-Implantation Mammalian Embryos.
*(EPA/600/J-93/171, OHEA-R-474)*
PB93-194397/REB 93-01 PC **A03**/MF **A01**

**CALIFORNIA STATE UNIV., LONG BEACH.**
Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
*(EPA/600/J-93/139, ERLN-X192)*
PB93-185866/REB 93-01 PC **A02**/MF **A01**

Stress Proteins in Aquatic Organisms: An Environmental Perspective.
*(EPA/600/J-93/198, ERLN-X-193)*
PB93-199578/REB 93-01 PC **A03**/MF **A01**

Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
*(EPA/600/J-93/315, ERLN-1150)*
PB93-229375/REB 93-04 PC **A03**/MF **A01**

**CALIFORNIA UNIV., BERKELEY. DEPT. OF FORESTRY AND RESOURCES MANAGEMENT.**
Exploring the Effects of Vector to Raster and Raster to Vector Conversion.
*(EPA/600/R-92/166)*
PB93-122166/REB 93-01 PC **A04**/MF **A01**

**CALIFORNIA UNIV., BERKELEY. DEPT. OF PLANT PATHOLOGY.**
Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.
*(EPA/600/J-93/258)*
PB93-212645/REB 93-04 PC **A02**/MF **A01**

Relationship of Total Viable and Culturable Cells in Epiphytic Populations of 'Pseudomonas syringae'.
*(EPA/600/J-93/291)*
PB93-222826/REB 93-04 PC **A02**/MF **A01**

**CALIFORNIA UNIV., RIVERSIDE. DEPT. OF SOIL AND ENVIRONMENTAL SCIENCES.**
VIRTUS, a Model of Virus Transport in Unsaturated Soils.
*(EPA/600/J-93/142)*
PB93-185890/REB 93-01 PC **A02**/MF **A01**

**CALIFORNIA UNIV., RIVERSIDE. STATEWIDE AIR POLLUTION RESEARCH CENTER.**
Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
*(CRC-APRAC-ME-9)*
PB93-207447/REB 93-04 PC **A11**/MF **A03**

**CALIFORNIA UNIV., SANTA BARBARA.**
Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
*(EPA/600/J-93/410)*
PB93-236479/REB 93-04 PC **A03**/MF **A01**

**CAMBRIDGE SYSTEMATICS, INC., MA.**
Study of Highway Vehicle Emission Inventory Procedures for Selected Urban Areas.
*(EPA/452/R-93/011)*
PB93-185577/REB 93-01 PC **A04**/MF **A01**

**CAMP, DRESSER AND MCKEE, INC., CAMBRIDGE, MA.**
Technology Assessment of Soil Vapor Extraction and Air Sparging.
*(EPA/600/R-92/173)*
PB93-100154/REB 93-01 PC **A04**/MF **A01**

Proceedings of the Symposium on Soil Venting. Held in Houston, Texas on April 29-May 1, 1991.
*(EPA/600/R-92/174)*
PB93-122323/REB 93-01 PC **A15**/MF **A03**

Column Vapor Extraction Experiments on Gasoline Contaminated Soil.
*(EPA/600/A-92/254)*
PB93-131514/REB 93-01 PC **A03**/MF **A01**

**CAPONE (RONALD L.) AND ASSOCIATES, ARLINGTON, VA.**
Using a Neural Network to Estimate Solvent Consumption.
*(EPA/600/A-93/063)*
PB93-173110/REB 93-01 PC **A02**/MF **A01**

**CARLETON UNIV., OTTAWA (ONTARIO). DEPT. OF BIOLOGY.**
Landscape-Scale Effects of Toxic Events for Ecological Risk Assessment.
*(EPA/600/A-93/233)*
PB93-236628/REB 93-04 PC **A03**/MF **A01**

**CASCADIA RESEARCH COLLECTIVE, OLYMPIA, WA.**

Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
*(EPA/910/9-91/023)*
PB93-121820/REB 93-01 PC **A06**/MF **A02**

**CDM FEDERAL PROGRAMS CORP., FAIRFAX, VA.**

Characteristics of Non-Petroleum Underground Storage Tanks.
*(EPA/600/A-93/094)*
PB93-185775/REB 93-01 PC **A03**/MF **A01**

Location of Leaks in Pressurized Petroleum Pipelines by Means of Passive-Acoustic Sensing Methods.
*(EPA/600/A-93/095)*
PB93-185783/REB 93-01 PC **A03**/MF **A01**

**CENTER OF MARINE BIOTECHNOLOGY, BALTIMORE, MD.**

CONTRIB-30
Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
*(EPA/600/J-93/218)*
PB93-205011/REB 93-04 PC **A02**/MF **A01**

CONTRIB-196
Isolation and Diversity of Actinomycetes in the Chesapeake Bay.
*(EPA/600/J-93/223)*
PB93-205060/REB 93-01 PC **A02**/MF **A01**

Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
*(EPA/600/J-92/386)*
PB93-121176/REB 93-01 PC **A02**/MF **A01**

Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
*(EPA/600/J-93/225)*
PB93-205086/REB 93-04 PC **A01**/MF **A01**

**CINCINNATI UNIV. MEDICAL CENTER, OH.**

Mechanisms of Aldehyde-Induced Bronchial Reactivity: Role of Airway Epithelium.
*(HEI/RR-92/49)*
PB93-179927/REB 93-01 PC **A04**/MF **A01**

Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
*(EPA/600/J-93/307)*
PB93-229292/REB 93-04 PC **A03**/MF **A01**

**CINCINNATI UNIV. MEDICAL CENTER, OH. DEPT. OF MICROBIOLOGY AND MOLECULAR GENETICS.**

Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
*(EPA/600/J-93/303)*
PB93-229250/REB 93-04 PC **A02**/MF **A01**

Characterization of the Alkane-Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis': Identification of a New P450 Gene Family.
*(EPA/600/J-93/304)*
PB93-229268/REB 93-04 PC **A03**/MF **A01**

Isolation of the Alkane Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis'.
*(EPA/600/J-93/306)*
PB93-229284/REB 93-04 PC **A02**/MF **A01**

**CINCINNATI UNIV., OH. COLL. OF MEDICINE.**

Disruption of the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.
*(EPA/600/J-93/305)*
PB93-229276/REB 93-04 PC **A03**/MF **A01**

Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
*(EPA/600/J-93/326)*
PB93-229441/REB 93-04 PC **A03**/MF **A01**

Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
*(EPA/600/J-93/327)*
PB93-229458/REB 93-04 PC **A03**/MF **A01**

Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
*(EPA/600/J-93/330)*
PB93-229482/REB 93-04 PC **A03**/MF **A01**

**CINCINNATI UNIV., OH. DEPT. OF CIVIL AND ENVIRONMENTAL ENGINEERING.**

Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
*(EPA/600/J-92/380)*
PB93-121127/REB 93-01 PC **A03**/MF **A01**

Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
*(EPA/600/A-93/092)*
PB93-185759/REB 93-01 PC **A03**/MF **A01**

**CINCINNATI UNIV., OH. DEPT. OF MICROBIOLOGICAL AND MOLECULAR GENETICS.**

Proteins from Eight Eukaryotic Cytochrome P-450 Families Share a Segmented Region of Sequence Similarity.
*(EPA/600/J-93/301)*
PB93-229235/REB 93-04 PC **A02**/MF **A01**

Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
*(EPA/600/J-93/302)*
PB93-229243/REB 93-04 PC **A03**/MF **A01**

**CINCINNATI WATER WORKS, OH.**

Design for Total Organics Removal at Cincinnati.
*(EPA/600/A-92/262)*
PB93-131563/REB 93-01 PC **A03**/MF **A01**

**CLEAN WASHINGTON CENTER, SEATTLE.**

Glass Markets Information System: Application Records.
PB93-193902/REB 93-01 PC **A21**/MF **A04**

Glass Markets Information System; Application Summary Reports.
PB93-197887/REB 93-01 PC **A05**/MF **A01**

**CLEMSON UNIV., SC. DEPT. OF CHEMISTRY AND GEOLOGY.**

Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
*(EPA/600/A-93/062)*
PB93-173102/REB 93-01 PC **A03**/MF **A01**

**COAST GUARD, WASHINGTON, DC.**

Evaluation of Three Oil Spill Laboratory Dispersant Effectiveness Tests.
*(EPA/600/A-93/102)*
PB93-191377/REB 93-01 PC **A02**/MF **A01**

**COASTAL ENVIRONMENTAL SERVICES, INC., LINTHICUM, MD.**

Oligohaline Areas in Tampa Bay Tributaries: Spatial Extent and Species Lists.
*(TBNEP-04-92)*
PB93-191179/REB 93-01 PC **A03**/MF **A01**

Database of Benthic Sampling Locations in Tampa Bay.
*(TBNEP-06-92)*
PB93-191211/REB 93-01 PC **A05**/MF **A01**

Distribution of Selected Fish Species in Tampa Bay.
*(TBNEP-05-92)*
PB93-191229/REB 93-01 PC **A04**/MF **A01**

Data Management Strategy for the Tampa Bay National Estuary Program: Recommendations and Implementation Plan.
*(TBNEP-08-92)*
PB93-191633/REB 93-01 PC **A09**/MF **A03**

Compendium of Current Monitoring Programs in Tampa Bay and Its Watershed.
*(TBNEP-02-92)*
PB93-191666/REB 93-01 PC **A05**/MF **A01**

**COHEN (S.) AND ASSOCIATES, INC., MCLEAN, VA.**

Background Information Document to Support NESHAPS Rulemaking on Nuclear Power Reactors.
*(EPA/520/1-91/019)*
PB93-199321/REB 93-01 PC **A14**/MF **A03**

**COLORADO SCHOOL OF MINES, GOLDEN.**

Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
*(EPA/540/R-93/523)*
PB93-233914/REB 93-04 PC **A12**/MF **A03**

**COLORADO STATE UNIV., FORT COLLINS. DEPT. OF MECHANICAL ENGINEERING.**

Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
*(EPA/600/S-92/035)*
PB93-123016/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Machined Parts.
*(EPA/600/S-92/031)*
PB93-123040/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
*(EPA/600/S-92/030)*
PB93-123057/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
*(EPA/600/S-92/029)*
PB93-123065/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
*(EPA/600/S-92/036)*
PB93-123099/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer Producing Printed Circuit Boards.
*(EPA/600/S-92/033)*
PB93-126621/REB 93-01 PC **A02**/MF **A01**

**COMBUSTION ENGINEERING, INC., WINDSOR, CT.**

Reburn Technology for Boiler NOx Control.
*(EPA/600/A-92/264)*
PB93-131589/REB 93-01 PC **A03**/MF **A01**

**COMMISSION OF THE EUROPEAN COMMUNITIES, ISPRA (ITALY). ENVIRONMENTAL INST.**

International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.
*(EPA/600/A-93/189)*
PB93-222073/REB 93-04 PC **A02**/MF **A01**

**COMPUTER BASED SYSTEMS, INC., ARLINGTON, VA.**

Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
*(EPA/DF/MT-93/061A)*
PB93-183440/REB 93-04 PC **A05**/MF **A01**

Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-192755/REB 93-04 PC **A05**/MF **A01**

**COMPUTER SCIENCES CORP., CINCINNATI, OH.**

User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
*(EPA/600/C-92/006, EPA/SW/DK-93/029A)*
PB93-134872/REB 93-01 PC **A03**/MF **A01**

**COMPUTER SCIENCES CORP., RESEARCH TRIANGLE PARK, NC.**

CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 2. Performance Characteristics.
*(EPA/600/J-92/363)*
PB93-107084/REB 93-01 PC **A03**/MF **A01**

Development of an Improved Urban Airshed Modeling System.
*(EPA/600/A-92/232)*
PB93-120889/REB 93-01 PC **A03**/MF **A01**

Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
*(EPA/600/A-92/235)*
PB93-120913/REB 93-01 PC **A02**/MF **A01**

Comparison of Modeled Concentration Profiles Using Site-Specific and Constant-Condition Meteorological Data for the ISCLT and PAL Models.
*(EPA/600/A-92/236)*
PB93-120921/REB 93-01 PC **A02**/MF **A01**

Regional Modeling Analysis of the Dependencies of Atmospheric Oxidants to Perturbations in NOx and Hydrocarbon Emissions.
*(EPA/600/A-93/080)*
PB93-180925/REB 93-01 PC **A02**/MF **A01**

Stochastic Methodology for Regional Wind-Field Modeling.
*(EPA/600/J-93/318)*
PB93-229391/REB 93-04 PC **A03**/MF **A01**

Tagged Species Engineering Model (TSEM).
*(EPA/600/J-93/321)*
PB93-229417/REB 93-04 PC **A03**/MF **A01**

**CONNECTICUT COLL., NEW LONDON. DEPT. OF BOTANY.**

Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).
*(EPA/600/J-93/240)*
PB93-212470/REB 93-04 PC **A03**/MF **A01**

**CONNECTICUT UNIV., STORRS.**

Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
*(EPA/600/J-93/204)*
PB93-199636/REB 93-01 PC **A02**/MF **A01**

**CONNECTICUT UNIV., STORRS. DEPT. OF CIVIL ENGINEERING.**

Relationships between Ozone Precursor Levels and Response to Emissions Reductions: Analysis of Regional Oxidant Model Results for the Northeastern United States.
*(EPA/600/R-93/075)*
PB93-186294/REB 93-01 PC **A07**/MF **A02**

**COOK COLL., NEW BRUNSWICK, NJ. CENTER FOR AGRICULTURAL MOLECULAR BIOLOGY.**

Aromatic Hydrocarbon Degradation: A Molecular Approach.
*(EPA/600/J-93/325)*
PB93-229433/REB 93-04 PC **A03**/MF **A01**

**CORIELL INST. FOR MEDICAL RESEARCH, CAMDEN, NJ.**

Genetic Damage in vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
*(EPA/600/R-93/145, OHEA-R-523)*
PB93-221620/REB 93-04 PC **A04**/MF **A01**

**CORNELL UNIV. AGRICULTURAL EXPERIMENT STATION, ITHACA, NY. DEPT. OF AGRONOMY.**

Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
*(EPA/905/9-91/006B, GL-06B/91)*
PB93-128023/REB 93-01 PC **A04**/MF **A01**

**CORNELL UNIV., ITHACA, NY. DEFREES HYDRAULICS LAB.**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
*(EPA/823/R-92/004)*
PB93-145704/REB 93-01 PC **A03**/MF **A01**

**CORVALLIS ENVIRONMENTAL RESEARCH LAB., OR.**

EPA/600/A-92/205
EMAP and Other Tools for Measuring Biodiversity, Habitat Conditions, and Environmental Trends.
PB93-106748/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-92/255
Formaldehyde-Contaminated Fog Effects on Plant Growth.
PB93-121101/REB 93-01 PC **A02**/MF **A01**

EPA/600/A-92/257
Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-92/290
Effects of CO2 and Temperature on Five Rice Cultivars.
PB93-141158/REB 93-01 PC **A02**/MF **A01**

EPA/600/A-93/011
Uncertainties in Countrywide Forest Biomass Estimates.
PB93-149250/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/018
Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/122
Soil Biology and Ecology.
PB93-199453/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/159
Ecotoxicological Principles for Avian Field Studies Using Radiotelemetry or Remote Sensing.
PB93-212793/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-93/217
Engineered Plants in the Environment.
PB93-234532/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/218
Role of Ecological Sample Surveys in the Implementation of Biocriteria.
PB93-234524/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/219
Adding a Landscape Ecology Perspective to Conservation and Management Planning.
PB93-234516/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/232
Establishing Quantitative Performance Criteria for Wetland Restoration.
PB93-236610/REB 93-04 PC **A01**/MF **A01**

EPA/600/J-92/344
Biodiversity and Management of Natural Resources: The Issues.
PB93-106912/REB 93-01 PC **A01**/MF **A01**

EPA/600/J-92/349
Forest Management in Russia: Challenges and Opportunities in the Era of Perestroika.
PB93-106961/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-92/401
Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-92/416
Pathogenicity of 'Salmonella pullorum' in Northern Bobwhite Quail and Mallard Ducks.
PB93-135739/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/417
Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/052
Research and Information Needs Related to Nonpoint Source Pollution and Wetlands in the Watershed: An EPA Perspective.
PB93-168862/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/148
Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/150
Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/231
Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC **A01**/MF **A01**

EPA/600/J-93/241
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/242
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/243
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/244
Impacts of Section 404 Permits Requiring Compensatory Mitigation on Wetlands in California (USA).
PB93-212512/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/255
Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/256
Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. aeschynomene' Transformants with Benomyl Resistance.
PB93-212629/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/257
Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.
PB93-212637/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/261
Synthesis of Ectomycorrhizae on Northern Red Oak Seedlings in a Michigan Nursery.
PB93-212678/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/288
Simple Mini-Method to Extract DNA Directly from Soil for Use with Polymerase Chain Reaction Amplification.
PB93-222792/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/346
Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.
PB93-229649/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/347
Conservation and Sequestration of Carbon: The Potential of Forest and Agroforest Management Practices.
PB93-229656/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/348
Forest Fires in Russia: Carbon Dioxide Emissions to the Atmosphere.
PB93-229664/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/409
Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

EPA/600/R-92/167
Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC **A07**/MF **A02**

EPA/600/R-92/210
Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08**/MF **A02**

EPA/600/R-92/241
Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC **A05**/MF **A01**

EPA/600/R-93/024
Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC **A04**/MF **A01**

EPA/600/R-93/093
Forest Sector Carbon Budget of the United States: Carbon Pools and Flux under Alternative Policy Options.
PB93-196996/REB 93-01 PC **A10**/MF **A03**

EPA/600/R-93/128
Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC **A07**/MF **A02**

Environmental Monitoring and Assessment Program: Gulf Coast Salt Marsh Pilot Study.
*(EPA/600/R-92/216)*
PB93-122398/REB 93-01 PC **A03**/MF **A01**

**CORVALLIS ENVIRONMENTAL RESEARCH LAB., OR. GLOBAL PROCESSES AND EFFECTS PROGRAM.**

EPA/600/R-93/146
Effects of CO2 and Climate Change on Forest Trees.
PB93-222339/REB 93-04 PC **A07**/MF **A02**

**DAYTON UNIV., OH. RESEARCH INST.**

Thermal Degradation Characteristics of Environmentally Sensitive Pesticide Products.
*(EPA/600/R-93/102)*
PB93-201127/REB 93-01 PC **A04**/MF **A01**

**DEFIANCE SOIL AND WATER CONSERVATION DISTRICT, OH.**

Maumee River Basin Pilot Watershed Study. Volume 5. Continued Watershed Monitoring (1981-1985) and Rainulator Study - Detailed Data (1986).
*(EPA/905/9-91/008, GL-09B/91)*
PB93-128098/REB 93-01 PC **A10**/MF **A03**

**DELAWARE UNIV., NEWARK. COLL. OF MARINE STUDIES.**

Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC **A03**/MF **A01**

On-Board Corrosion Analysis of a Recovered Nuclear Waste Container.
*(ORP/TAD-79/2)*
PB93-202927/REB 93-01 PC **A03**/MF **A01**

**DEVELOPMENT PLANNING AND RESEARCH ASSOCIATES, INC., MANHATTAN, KS.**

P-536
Economic Impacts of RCRA Regulations on the Plating and Polishing Industry.
PB93-158988/REB 93-01 PC **A07**/MF **A02**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants.
PB93-156495/REB 93-01 PC **A04**/MF **A01**

Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants, July 1986.
PB93-156503/REB 93-01 PC **A05**/MF **A01**

Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Gold Placer Mining Industry.
*(EPA/440/2-85/026)*
PB93-203990/REB 93-04 PC **A07**/MF **A02**

**DREXEL UNIV., PHILADELPHIA, PA. GEOSYNTHETIC RESEARCH INST.**

Stress Cracking Behavior of HDPE Geomembranes and Its Prevention.
*(EPA/600/R-93/092)*
PB93-196616/REB 93-01 PC **A06**/MF **A02**

**DYNAMAC CORP., ADA, OK.**

In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
*(EPA/600/R-93/124)*
PB93-215564/REB 93-04 PC **A12**/MF **A03**

**DYNAMAC CORP., ROCKVILLE, MD.**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 1.
PB93-209013/REB 93-04 PC **A03**/MF **A01**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 2.
PB93-209021/REB 93-04 PC **A15**/MF **A03**

**EASTERN RESEARCH GROUP, INC., ARLINGTON, MA.**

Handbook: Ground Water. Volume 1. Ground Water and Contamination.
*(EPA/625/6-90/016A)*
PB93-129732/REB 93-01 PC **A08**/MF **A02**

Handbook: Ground Water. Volume 2. Methodology.
*(EPA/625/6-90/016B)*
PB93-129740/REB 93-01 PC **A07**/MF **A02**

**EASTERN RESEARCH GROUP, INC., LEXINGTON, MA.**

Technical Support Document for Land Application of Sewage Sludge. Volume 1.
*(EPA/822/R-93/002)*
PB93-110575/REB 93-01 PC **A99**/MF **A06**

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
*(EPA/822/R-93/001B)*
PB93-110583/REB 93-01 PC **A99**/MF **E11**

Technical Support Document for the Surface Disposal of Sewage Sludge.
*(EPA/822/R-93/002)*
PB93-110591/REB 93-01 PC **A15**/MF **A03**

Technical Support for the Incineration of Sewage Sludge.
*(EPA/822/R-93/003)*
PB93-110617/REB 93-01 PC **A11**/MF **A03**

Report of the Neurotoxicity Risk Assessment Guidelines Peer Review Workshop. Held in Washington, DC. on June 2-3, 1992.
*(EPA/630/R-92/003)*
PB93-146918/REB 93-01 PC **A08**/MF **A02**

Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
*(EPA/821/R-93/004)*
PB93-173979/REB 93-01 PC **A22**/MF **A04**

**ELECTRIC POWER RESEARCH INST., PALO ALTO, CA.**

EPRI-TR-101054-VOL-1
Proceedings: 1991 SO2 Control Symposium. Volume 1. Opening Session and Sessions 1-3.
*(EPA/600/R-93/064A)*
PB93-196095/REB 93-01 PC **A19**/MF **A04**

EPRI-TR-101054-VOL-2
Proceedings: 1991 SO2 Control Symposium. Volume 2. Sessions 4 and 5A.
*(EPA/600/R-93/064B)*
PB93-196103/REB 93-01 PC **A22**/MF **A04**

EPRI-TR-101054-VOL-3
Proceedings: 1991 SO2 Control Symposium. Volume 3. Sessions 5B and 6.
*(EPA/600/R-93/064C)*
PB93-196111/REB 93-01 PC **A20**/MF **A04**

EPRI-TR-101054-VOL-4
Proceedings: 1991 SO2 Control Symposium. Volume 4. Session 7.
*(EPA/600/R-93/064D)*
PB93-196129/REB 93-01 PC **A15**/MF **A03**

EPRI-TR-101054-VOL-5
Proceedings: 1991 SO2 Control Symposium. Volume 5. Session 8.
*(EPA/600/R-93/064E)*
PB93-196137/REB 93-01 PC **A13**/MF **A03**

Proceedings: 1991 SO2 Control Symposium. Held in Washington, DC. on December 3-6, 1991.
PB93-196087/REB 93-01 PC **E99**/MF **E99**

**ELECTRO-PURE SYSTEMS, INC., AMHERST, NY.**

Alternating Current Electrocoagulation for Superfund Site Remediation.
*(EPA/600/J-93/231)*
PB93-205144/REB 93-04 PC **A02**/MF **A01**

**ENERGY AND ENVIRONMENTAL ANALYSIS, INC., ARLINGTON, VA.**

Methodology to Estimate Nonroad Equipment Populations by Nonattainment Areas.
PB93-174332/REB 93-01 PC **A05**/MF **A01**

**ENERGY AND ENVIRONMENTAL ENGINEERING, INC., SOMERVILLE, MA. RESEARCH AND DEVELOPMENT DIV.**

SITE-Emerging Technologies: Laser Induced Photochemical Oxidative Destruction of Toxic Organics in Leachates and Groundwaters.
*(EPA/540/R-92/080)*
PB93-131431/REB 93-01 PC **A04**/MF **A01**

**ENERGY AND ENVIRONMENTAL RESEARCH CORP., DURHAM, NC.**

Development of Good Combustion Practice for Municipal Waste Combustors.
*(EPA/600/A-92/267)*
PB93-131613/REB 93-01 PC **A03**/MF **A01**

**ENERGY AND ENVIRONMENTAL RESEARCH CORP., IRVINE, CA.**

Biomass Combustion in Gas-Turbine-Based Systems.
*(EPA/600/A-93/090)*
PB93-185742/REB 93-01 PC **A02**/MF **A01**

Experimental Investigation of PIC Formation in CFC-12 Incineration.
*(EPA/600/R-93/078)*
PB93-191294/REB 93-01 PC **A07**/MF **A02**

Survey of Medical Waste Incinerators and Emissions Control.
*(ARB-R-93/462)*
PB93-210110/REB 93-04 PC **A19**/MF **A04**

**ENGINEERING-SCIENCE, FAIRFAX, VA.**

Benzene Equipment Leak Inspection Manual.
*(EPA/340/1-90/001)*
PB93-199123/REB 93-01 PC **A06**/MF **A02**

**ENTROPY ENVIRONMENTALISTS, INC., RESEARCH TRIANGLE PARK, NC.**

Reporting and Recordkeeping Requirements for Waste Disposal: A Field Guide.
*(EPA/340/1-90/016)*
PB93-199115/REB 93-01 PC **A03**/MF **A01**

Recommended Quality Assurance Procedures for Opacity Continuous Emission Monitoring Systems.
PB93-199263/REB 93-01 PC **A05**/MF **A01**

**ENVIRONMENTAL AND OCCUPATIONAL HEALTH SCIENCES INST., PISCATAWAY, NJ. EXPOSURE MEASUREMENT AND ASSESSMENT DIV.**

Indoor Concentration Modeling of Aerosol Strong Acidity.
*(EPA/600/A-93/126)*
PB93-204071/REB 93-01 PC **A02**/MF **A01**

Gasoline and Methanol Exposures from Automobiles within Residences and Attached Garages.
*(EPA/600/A-93/190)*
PB93-222222/REB 93-04 PC **A02**/MF **A01**

**ENVIRONMENTAL ENGINEERING CONSULTANTS, NORWICH, VT.**

Constructed Wetland Design: the First Generation.
*(EPA/600/J-92/394)*
PB93-131753/REB 93-01 PC **A02**/MF **A01**

**ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC., RESEARCH TRIANGLE PARK, NC.**

DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
*(EPA/600/J-92/438)*
PB93-141372/REB 93-01 PC **A02**/MF **A01**

Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
*(EPA/600/J-93/076)*
PB93-173151/REB 93-01 PC **A02**/MF **A01**

Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
*(EPA/600/J-93/369)*
PB93-228955/REB 93-04 PC **A02**/MF **A01**

**ENVIRONMENTAL MANAGEMENT SUPPORT, SILVER SPRING, MD.**

Abstract Proceedings: Superfund Technical Support Project General Meeting. Held in Athens, Georgia on December 3-6, 1990.
*(EPA/540/M-91/003)*
PB93-205862/REB 93-04 PC **A03**/MF **A01**

**ENVIRONMENTAL MONITORING AND SERVICES, INC., WASHINGTON, DC.**

Evaluation of the Potential Carcinogenicity of p-Toluidine (106-49-0).
*(EPA/600/8-91/188, OHEA-C-073-183)*
PB93-201192/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of o-Toluidine (95-53-4).
*(EPA/600/8-91/187, OHEA-C-073-182)*
PB93-201200/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Thiourea (62-56-6).
*(EPA/600/8-91/186, OHEA-C-073-181)*
PB93-201218/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Thioacetamide (62-55-5).
*(EPA/600/8-91/185, OHEA-C-073-180)*
PB93-201226/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Tetrachloroethylene (127-18-4).
*(EPA/600/8-91/184, OHEA-C-073-179)*
PB93-201234/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1,2,2-Tetrachloroethane (79-34-5).
*(EPA/600/8-91/183, OHEA-C-073-178)*
PB93-201242/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1,1,2-Tetrachloroethane (630-20-6).
*(EPA/600/8-91/182, OHEA-C-073-177)*
PB93-201259/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (1746-01-6).
*(EPA/600/8-91/181, OHEA-C-073-176)*
PB93-201267/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Streptozotocin (18883-66-4).
*(EPA/600/8-91/180, OHEA-C-073-175)*
PB93-201275/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Selenium Sulfide (Selenium Disulfide) (7488-56-4).
*(EPA/600/8-91/179, OHEA-C-073-174)*
PB93-201283/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Safrole (94-59-7).
*(EPA/600/8-91/178, OHEA-C-073-173)*
PB93-201291/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Vinyl Chloride (75-01-4).
*(EPA/600/8-91/199, OHEA-C-073-194)*
PB93-202257/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Uracil Mustard (66-75-1).
*(EPA/600/8-91/198, OHEA-C-073-193)*
PB93-202265/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trypan Blue (72-57-1).
*(EPA/600/8-91/197, OHEA-C-073-192)*
PB93-202273/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Tris(2,3-Dibromopropyl) Phosphate (126-72-7).
*(EPA/600/8-91/196, OHEA-C-073-191)*
PB93-202281/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,4,6-Trichlorophenol (88-06-2).
*(EPA/600/8-91/195, OHEA-C-073-190)*
PB93-202299/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,4,5-Trichlorophenol (95-95-4).
*(EPA/600/8-91/194, OHEA-C-073-189)*
PB93-202307/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trichlorophenol (Mixed) (2516-78-22).
*(EPA/600/8-91/193, OHEA-C-073-188)*
PB93-202315/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Trichloroethylene (79-01-6).
*(EPA/600/8-91/192, OHEA-C-073-187)*
PB93-202323/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Toxaphene (8001-35-2).
*(EPA/600/8-91/190, OHEA-C-073-185)*
PB93-202331/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of o-Toluidine Hydrochloride (636-21-5).
*(EPA/600/8-91/189, OHEA-C-073-184)*
PB93-202349/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1,2-Trichloroethane (79-00-5).
*(EPA/600/8-91/191, OHEA-C-073-186)*
PB93-204584/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL MONITORING AND SUPPORT LAB.-CINCINNATI, OH. PHYSICAL AND CHEMICAL METHODS BRANCH.**

EMSL-1435
Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL MONITORING SYSTEMS LAB., CINCINNATI, OH.**

EPA/600/J-92/368
Macromolecular Adduction by Trichloroacetonitrile in the Fischer 344 Rat Following Oral Gavage.
PB93-107134/REB 93-01 PC **A03**/MF **A01**

EPA/600/R-92/121
Methods for the Determination of Chemical Substances in Marine and Estuarine Environmental Samples.
PB93-182913/REB 93-01 PC **A05**/MF **A01**

Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants (Revised).
PB93-212025/REB 93-04 PC **A05**/MF **A01**

**ENVIRONMENTAL MONITORING SYSTEMS LAB., LAS VEGAS, NV.**

EPA/600/8-91/008A
Geostatistical Environmental Assessment Software: User's Guide. GEO-EAS 1.2.1.
PB93-163236/REB 93-01 PC **A07**/MF **A02**

EPA/600/A-92/207
Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC **A02**/MF **A01**

EPA/600/A-93/074
Immunoassay for p-Nitrophenol in Urine (Chapter XX).
PB93-175552/REB 93-01 PC **A03**/MF **A01**

EPA/600/S4-88/009
Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-228500/REB 93-04 PC **A02**/MF **A01**

EPA/600/S4-88/012
Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.
PB93-228492/REB 93-04 PC **A02**/MF **A01**

EPA/600/S4-88/025
Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).
PB93-222586/REB 93-04 PC **A01**/MF **A01**

ASSESS User's Guide.
*(EPA/SW/DK-93/044A)*
PB93-163251/REB 93-01 PC **A03**/MF **A01**

Geophysics Advisor Expert System, Version 2.0.
*(EPA/SW/DK-93/042A)*
PB93-163285/REB 93-01 PC **A03**/MF **A01**

Geo-EAS: Software for Geostatistics 1.2.1 (5 1/4 Inch Version) (for Microcomputers).
*(EPA/SW/DK-93/039)*
PB93-504959/REB 93-01 CP **D02**

Geo-EAS: Software for Geostatistics 1.2.1 (3 1/2 inch Version) (for Microcomputers).
*(EPA/SW/DK-93/040)*
PB93-504967/REB 93-01 CP **D02**

ASESS 1.01A (3 1/2 Inch Diskette) (for Microcomputers).
*(EPA/SW/DK-93/041)*
PB93-505154/REB 93-01 CP **D02**

Geophysics Advisor Expert System (Version 2.0) (for Microcomputers).
*(EPA/SW/DK-93/042)*
PB93-505162/REB 93-01 CP **D02**

ASSESS 1.01A (5 1/4 Inch Diskette) (for Microcomputers).
*(EPA/SW/DK-93/044)*
PB93-505295/REB 93-01 CP **D02**

SCOUT: A Data Analysis Program (Version 1.40) (for Microcomputers).
*(EPA/SW/DK-93/045)*
PB93-505303/REB 93-01 CP **D02**

**ENVIRONMENTAL MONITORING SYSTEMS LAB., LAS VEGAS, NV. EXPOSURE ASSESSMENT RESEARCH DIV.**

EPA/600/J-92/353
Decision Model for Biomarkers of Exposure.
PB93-106995/REB 93-01 PC **A03**/MF **A01**

EPA/620/R-93/001
Environmental Monitoring and Assessment Program: EMAP-Arid Colorado Plateau Pilot Study, 1992. Implementation Plan.
PB93-181618/REB 93-01 PC **A08**/MF **A02**

**ENVIRONMENTAL MONITORING SYSTEMS LAB., RESEARCH TRIANGLE PARK, NC.**

EPA/600/S4-88/028
Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC **A02**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, ANN ARBOR, MI. CERTIFICATION DIV.**

EPA/AA/CA/CPSB-90/01
Formation and Control of Combustion Pollutants from Gasoline-Fueled Spark-Ignition Motor Vehicle Engines. (Revised November 1992).
PB93-141C42/REB 93-01 PC **A04**/MF **A01**

EPA/420/R-93/007
Federal Test Procedure Review Project: Preliminary Technical Report.
PB93-207975/REB 93-04 PC **A11**/MF **A03**

Emissions and Fuel Economy Results 1992 Car Models (for Microcomputers).
*(EPA/SW/DK-93/048)*
PB93-504546/REB 93-01 CP **D02**

Emissions and Fuel Economy Results 1993 Car Models (for Microcomputers).
*(EPA/SW/DK-93/049)*
PB93-504553/REB 93-01 CP **D02**

**ENVIRONMENTAL PROTECTION AGENCY, ANN ARBOR, MI. CONTROL TECHNOLOGY AND APPLICATIONS BRANCH.**

EPA/AA/CTAB-92/02
Evaluation of Resistively Heated Fuel Injection Technology to Reduce Cold Start Emissions and Assist Starting/Driveaway of a Methanol-Fueled Vehicle.
PB93-144350/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, ANN ARBOR, MI. EMISSION CONTROL TECHNOLOGY DIV.**

EPA/AA/TEB-92/01
Emissions and Fuel Economy Effects of the Fuelon Power Gasoline Fuel Additive.
PB93-236701/REB 93-04 PC **A03**/MF **A01**

EPA/AA/TEB-511/92/01
EPA Evaluation of the Fuelon Power Gasoline Fuel Additive under Section 511 of the Motor Vehicle Information and Cost Savings Act.
PB93-236693/REB 93-04 PC **A03**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, ANN ARBOR, MI. EMISSION PLANNING AND STRATEGIES DIV.**

EPA/AA/EPSD-I/M-92-01
Report on the EPA/Manufacturer Cooperative I/M Testing Program.
PB93-208015/REB 93-04 PC **A10**/MF **A03**

**ENVIRONMENTAL PROTECTION AGENCY, ANN ARBOR, MI. ENGINE AND VEHICLE REGULATION BRANCH.**

EPA/AA/EVRB-92/01
Development of Conversion Factors for Heavy-Duty Bus Engines G/BHP-HR to G/Mile.
PB93-232932/REB 93-04 PC **A03**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, ANN ARBOR, MI. MOTOR VEHICLE EMISSION LAB.**

Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines. Federal Certification Test Results for 1993 Model Year.
PB93-164523/REB 93-01 PC **A15**/MF **A03**

**ENVIRONMENTAL PROTECTION AGENCY, ANN ARBOR, MI. OFFICE OF MOBILE SOURCES.**

EPA/AA/CTAB-92/04
Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03**/MF **A01**

EPA/AA/TDG-93/01
Light-Duty Automotive Technology and Fuel Economy Trends through 1993.
PB93-199255/REB 93-01 PC **A06/MF A02**

Regulatory Impact Analysis: Control of Sulfur and Aromatics Contents of on-Highway Diesel Fuel.
PB93-207660/REB 93-04 PC **A12/MF A03**

Final Regulatory Impact Analysis and Summary and Analysis of Comments: Control of Vehicular Evaporative Emissions.
PB93-228138/REB 93-04 PC **A07/MF A02**

**ENVIRONMENTAL PROTECTION AGENCY, ANN ARBOR, MI. TECHNICAL SUPPORT STAFF.**
Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC **A24/MF A04**

**ENVIRONMENTAL PROTECTION AGENCY, ANN ARBOR, MI. TECHNOLOGY DEVELOPMENT GROUP.**
EPA/AA/TDG-92/06
Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC **A03/MF A01**

EPA/AA/TDG-93/02A
Cold Starting an Alcohol-Fueled Engine with Ultrasonic Fuel Atomization.
PB93-206597/REB 93-04 PC **A03/MF A01**

EPA/AA/TDG-93/03
Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.
PB93-216869/REB 93-04 PC **A03/MF A01**

EPA/AA/TDG-93/04
Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel - Final Report.
PB93-197929/REB 93-01 PC **A03/MF A01**

EPA/AA/TDG-93/05
Spray Characteristics of Two Types of Fuel Injectors.
PB93-180859/REB 93-01 PC **A03/MF A01**

**ENVIRONMENTAL PROTECTION AGENCY, ANN ARBOR, MI. TECHNOLOGY EVALUATION AND TESTING SUPPORT BRANCH.**
EPA/AA/TETSB-93/01
Heavy-Duty Engine Testing Report Non-Road Engine Configurations Injection Timing Effects Test Results, 1992.
PB93-236164/REB 93-04 PC **A05/MF A01**

EPA/AA/TETSB-93/02
Heavy-Duty Engine Testing Report Cummins/EPA/Taiwan Correlation Test Results, 1993.
PB93-236172/REB 93-04 PC **A03/MF A01**

**ENVIRONMENTAL PROTECTION AGENCY, ANNAPOLIS, MD. CHESAPEAKE BAY PROGRAM.**
CBP/APR-92/100
Chesapeake Bay Striped Bass Fishery Management Plan: Chesapeake Bay Program. Annual Progress Report (April 1992).
PB93-114585/REB 93-01 PC **A03/MF A01**

CBP/APR-92/101
Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans.
PB93-122182/REB 93-01 PC **A03/MF A01**

CBP/APR-92/102
Waterfowl Workgroup Living Resources Subcommittee: Annual Progress Report.
PB93-112704/REB 93-01 PC **A03/MF A01**

CBP/APR-92/104
Living Resources Monitoring Plan: Annual Progress Report.
PB93-116580/REB 93-01 PC **A03/MF A01**

CBP/APR-92/105
Chesapeake Bay Program Annual Progress Report, Wetlands Workgroup, December 1991.
PB93-136893/REB 93-01 PC **A03/MF A01**

CBP/MAY-93/101
Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans, December 1992.
PB93-226056/REB 93-04 PC **A04/MF A01**

CBP/TRS-68/92
Trends in Nitrogen in the Chesapeake Bay, 1984-1990.
PB93-122174/REB 93-01 PC **A04/MF A01**

CBP/TRS-74/93
Comparison of Mid-Bay and Lateral Station Water Quality Data in the Chesapeake Bay Mainstem: Chesapeake Bay Program.
PB93-206288/REB 93-04 PC **A05/MF A01**

CBP/TRS-75/93
Incorporating Uncertainty Associated with Censored Water Quality Data in Parametric Trend Analysis.
PB93-206262/REB 93-04 PC **A03/MF A01**

CBP/TRS-76/93
Chesapeake Bay Coordinated Split Sample Program Annual Report, 1990-1991: Analytical Methods and Quality Assurance Workgroup of the Chesapeake Bay Program Monitoring Subcommittee.
PB93-206270/REB 93-04 PC **A06/MF A02**

CBP/TRS-78/92
Guide to Using Chesapeake Bay Program Water Quality Monitoring Data.
PB93-205888/REB 93-04 PC **A07/MF A02**

CBP/TRS-79/92
Restoration of the Anacostia River.
PB93-136364/REB 93-01 PC **A05/MF A01**

CBP/TRS-85/93
Baseline Point Source Load Inventory, 1985. 1991 Re-evaluation Report No. 2.
PB93-193761/REB 93-01 PC **A03/MF A01**

CBP/TRS-86/93
Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Atmospheric Deposition of. Critical Issue Forum. Held in Annapolis, Maryland on November 5, 1992.
PB93-193738/REB 93-01 PC **A03/MF A01**

CBP/TRS-87/93
Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Contaminated Sediments Critical Issue Forum. Held in Annapolis, Maryland on December 10, 1992.
PB93-194017/REB 93-01 PC **A03/MF A01**

CBP/TRS-91/93
Role and Function of Forest Buffers in the Chesapeake Bay Basin for Nonpoint Source Management.
PB93-207405/REB 93-04 PC **A03/MF A01**

Living Resources Subcommittee: Annual Summary.
PB93-112506/REB 93-01 PC **A03/MF A01**

Implementation Plan for Removing Impediments to Migratory Fishes in the Chesapeake Bay Watershed (January-December 1991).
PB93-116572/REB 93-01 PC **A03/MF A01**

Cost of Providing Government Services to Alternative Residential Patterns.
PB93-207728/REB 93-04 PC **A09/MF A02**

Chesapeake Bay American Eel Fishery Management Plan. Agreement Commitment Report 1991.
PB93-226017/REB 93-04 PC **A03/MF A01**

Chesapeake Bay Atlantic Croaker and Spot Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226629/REB 93-04 PC **A03/MF A01**

Chesapeake Bay Summer Flounder Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226637/REB 93-04 PC **A03/MF A01**

**ENVIRONMENTAL PROTECTION AGENCY, ARLINGTON, VA.**
Oil and Hazardous Materials Technical Assistance Data System, (OHM-TADS) Fields and Their Definitions. Users' Guide.
*(EPA/DF/DK-93/010A)*
PB93-111706/REB 93-01 PC **A03/MF A01**

Oil and Hazardous Materials, Technical Assistance Data System (OHM-TADS) (for Microcomputers).
*(EPA/DF/DK-93/010)*
PB93-500577/REB 93-01 CP **D06**

**ENVIRONMENTAL PROTECTION AGENCY, ARLINGTON, VA. SPECIAL REVIEW AND REREGISTRATION DIV.**
EPA-22T-1001
Pesticide Reregistration Progress Report, October 1991.
PB93-206605/REB 93-04 PC **A03/MF A01**

EPA/540/FS-93/230
RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC **A02/MF A01**

EPA/540/RS-93/228
Reregistration Eligibility Document (RED): Streptomycin and Streptomycin Sulfate.
PB93-100386/REB 93-01 PC **A09/MF A02**

EPA/540/RS-93/229
Reregistration Eligibility Document (RED) Zinc Salts.
PB93-101657/REB 93-01 PC **A11/MF A03**

EPA/738/F-92/007
RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC **A02/MF A01**

EPA/738/F-93/005
RED Facts: Silver.
PB93-232924/REB 93-04 PC **A02/MF A01**

EPA/738/R-93/001
Pesticide Reregistration Progress Report.
PB93-178994/REB 93-01 PC **A03/MF A01**

EPA/738/R-93/002
Reregistration Eligibility Document (RED) Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-234763/REB 93-04 PC **A07/MF A02**

EPA/738/R-93/005
Reregistration Eligibility Document (RED): Silver.
PB93-232973/REB 93-04 PC **A05/MF A02**

EPA/738/R-93/007
Reregistration Eligibility Document (RED) 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-234755/REB 93-04 PC **A07/MF A02**

**ENVIRONMENTAL PROTECTION AGENCY, ATLANTA, GA. REGION IV.**
Evaporative Emission Model (EVAP 3.0) (for Microcomputers).
*(EPA/SW/DK-93/086)*
PB93-506301/REB 93-04 CP **D02**

**ENVIRONMENTAL PROTECTION AGENCY, CHAMBLEE, GA. OFFICE OF PESTICIDES PROGRAMS.**
EPA/737/F-93/005
Pesticide Fact Sheet: Polyhedral Occlusion Bodies of the Nuclear Polyhedrosis Virus of 'Spodoptera exigua'.
PB93-206779/REB 93-01 PC **A02/MF A01**

**ENVIRONMENTAL PROTECTION AGENCY, CHICAGO, IL. REGION V.**
EPA/905/9-89/003
Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC **A07/MF A02**

EPA/905/9-89/0087
Proceedings of the 1989 Midwest Pollution Control Biologists Meeting. Held in Chicago, Illinois on February 14-17, 1989.
PB93-143691/REB 93-01 PC **A08/MF A02**

EPA/905/9-91/021
Pollution Prevention: Meeting the Environmental Challenges of the 1990s. Region 5 FY 91 Accomplishments.
PB93-128106/REB 93-01 PC **A04/MF A01**

EPA/905/9-91/025
Development of Index of Biotic Integrity Expectations for the Ecoregions of Indiana. I. Central Corn Belt Plain.
PB93-149383/REB 93-01 PC **A06/MF A02**

EPA/905/R-92/003
Proceedings of the Midwest Pollution Control Biologists Meeting, 1991. Environmental Indicators: Measurement and Assessment Endpoints. Held in Lincolnwood, Illinois on March 19-22, 1991.
PB93-145712/REB 93-01 PC **A06/MF A02**

**ENVIRONMENTAL PROTECTION AGENCY, CHICAGO, IL. WATER DIV.**
EPA/910/9-91/035
Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC **A14/MF A03**

**ENVIRONMENTAL PROTECTION AGENCY, CINCINNATI, OH.**
EPA/600/J093/003
Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC **A03/MF A01**

**ENVIRONMENTAL PROTECTION AGENCY, CINCINNATI, OH. CENTER FOR ENVIRONMENTAL RESEARCH INFORMATION.**
EPA/625/5-85/016
Environmental Pollution Control Alternatives: Reducing Water Pollution Control Costs in the Electroplating Industry. (Revised).
PB93-122240/REB 93-01 PC **A04/MF A01**

EPA/625/R-92/004
Guidelines for Water Use.
PB93-222180/REB 93-04 PC **A12/MF A03**

EPA/625/R-92/014
RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC **A05/MF A01**

Organic Air Emissions from Waste Management Facilities.
*(EPA/625/R-92/003)*
PB93-215598/REB 93-04 PC **A07/MF A02**

**ENVIRONMENTAL PROTECTION AGENCY, CINCINNATI, OH. DRINKING WATER RESEARCH DIV.**
EPA/600/J-93/004
Removal of Beryllium from Drinking Water by Chemical Coagulation and Lime Softening.
PB93-150134/REB 93-01 PC **A03/MF A01**

**ENVIRONMENTAL PROTECTION AGENCY, CINCINNATI, OH. RISK REDUCTION ENGINEERING LAB.**
EPA/540/R-92/076
Superfund Innovative Technology Evaluation Program: Progress and Accomplishments Fiscal Year 1991. A 5th Report to Congress.
PB93-126613/REB 93-01 PC **A05/MF A01**

EPA/540/S5-91/005
Horsehead Resource Development Company, Inc., Flame Reactor Technology. Technology Demonstration Summary.
PB93-145639/REB 93-01 PC **A02/MF A01**

EPA/540/SR-92/017
Babcock and Wilcox Cyclone Furnace Vitrification. Technology Demonstration Summary.
PB93-145621/REB 93-01 PC **A02/MF A01**

EPA/600/A-92/199
Technical Issues on Long-Term Performance of Solidified/Stabilized Waste Forms.
PB93-106680/REB 93-01 PC **A03/MF A01**

EPA/600/A-92/200
Landfill Containment and Cover Systems.
PB93-106698/REB 93-01 PC **A03/MF A01**

EPA/600/A-92/201
FLEX: An Expert System for Reviewing the Chemical Resistance of Flexible Membrane Liners for Waste Management.
PB93-106706/REB 93-01 PC **A03/MF A01**

EPA/600/A-92/202
Resistance of Membranes in Cover Systems to Root Penetration by Grass and Trees.
PB93-106714/REB 93-01 PC **A02/MF A01**

EPA/600/A-92/203
Landfill Containment Systems Regulations.
PB93-106722/REB 93-01 PC **A03/MF A01**

EPA/600/A-92/260
Comparing the Accuracy of Equation Formats for Modeling Microbial Population Decay Rates.
PB93-131548/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-92/273
Opportunities for the Use of Geosynthetics in Waste Management Facilities.
PB93-131670/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/006
U.S. EPA's QA/QC Program for Waste Management Facilities. Proceedings of the GRI Seminar (6th), MQC/MQA and CQC/CQA of Geosynthetics. Held in Philadelphia, Pennsylvania on December 10-11, 1992.
PB93-149219/REB 93-01 PC **A02**/MF **A01**

EPA/600/A-93/007
Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/066
What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/067
Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/068
Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/091
Storm and Combined Sewer Overflow: An Overview of EPA's Research Program.
PB93-185957/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/093
Planning and Progress of EPA's Pollution Prevention Research Program.
PB93-185767/REB 93-01 PC **A02**/MF **A01**

EPA/600/A-93/096
Reclamation of Urban Stormwater.
PB93-185791/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/097
Program for Providing Engineering Technical Assistance to Site Remediation Managers.
PB93-185809/REB 93-01 PC **A02**/MF **A01**

EPA/600/A-93/098
Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/101
Nutrient Movement through Beach Media: Problems and Field Results Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191344/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/111
Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194181/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/112
EPA's Life Cycle Methodology: Guidelines for Use in Development of Packaging.
PB93-194199/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93.113
Life Cycle Analysis (Video Conference Paper).
PB93-194207/REB 93-01 PC **A02**/MF **A01**

EPA/600/A-93/117
Screening Methodology for Assessing Leaking UST Sites and Clean Up Technologies.
PB93-199404/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/118
Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/119
Corrosion Control Principles and Strategies for Reducing Lead and Copper in Drinking Water Systems.
PB93-199420/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/131
Determination of Nine Haloacetic Acids in Finished Drinking Water.
PB93-204121/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/154
EPA's Research in LCA Methodology.
PB93-212439/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/224
Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-93/225
Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-93/226
EPANET Water Quality Model.
PB93-236552/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-92/342
Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/402
Rapid Measurement of Aqueous Hydroxyl Radical Concentrations in Steady-State HO Flux Systems.
PB93-131779/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/403
Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-92/404
Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-92/412
Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/002
Pilot-Scale Evaluation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/006
Extraction and Recovery of Lead Species from Soil.
PB93-150142/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/011
Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/085
Effect of the Distribution System on Drinking-Water Quality.
PB93-173722/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/143
New Approaches to Estimation of Solid-Waste Quantity and Composition.
PB93-185908/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/144
Incineration of Hazardous Waste: A Critical Review Update.
PB93-185916/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/145
Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/146
Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC **A01**/MF **A01**

EPA/600/J-93/166
Evaluation of the Bioremediation of a Contaminated Soil with Phytotoxicity Tests.
PB93-191625/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/167
Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/190
Broad-Based Environmental Life Cycle Assessment.
PB93-199495/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/230
Modeling Contaminant Propagation in Drinking-Water Distribution Systems.
PB93-205136/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/237
Pollution Prevention Research Ongoing: EPA's Risk Reduction Engineering Laboratory.
PB93-212447/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/297
Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC **A01**/MF **A01**

EPA/600/J-93/298
Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/324
SITE Program Demonstration of the SBP Technologies, Inc., Membrane Filtration System on Creosote-Contaminated Water.
PB93-228567/REB 93-04 PC **A02**/MF **A01**

EPA/600/R-92/145
AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
*(EPA/SW/DK-92/053A)*
PB93-100113/REB 93-01 PC **A10**/MF **A03**

EPA/600/S-92/024
Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC **A02**/MF **A01**

Results of U.S. EPA Research Waste Combustion Residues.
PB93-106672/REB 93-01 PC **A03**/MF **A01**

Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
*(EPA/600/A-92/285)*
PB93-141109/REB 93-01 PC **A02**/MF **A01**

Removal of Radionuclides by Electrokinetic Soil Processing.
*(EPA/600/J-93/296)*
PB93-222875/REB 93-04 PC **A02**/MF **A01**

Field Applications of Robotic Systems in Hazardous Environments, p1-29 1993. See also PB86-176344 and PB92-166743.
*PB93-229755/REB* *93-04* PC **A03**/MF **A01**

AutoMOUSE (Modular Oriented Uncertainty SystEm) - An Improvement to the MOUSE Computerized Uncertainty Analysis Program (for Microcomputers).
*(EPA/SW/DK-92/053)*
PB93-500007/REB 93-01 CP **D03**

Flexible Membrane Liner Advisory Expert System (FLEX) (for Microcomputers) (Version 3.0).
*(EPA/SW/DK-93/029)*
PB93-502631/REB 93-01 CP **D02**

Protocol-A Computerized Solid Waste Quantity and Composition Estimation System (Version 1.02) (for Microcomputers).
*(EPA/SW/DK-93/074)*
PB93-506061/REB 93-04 CP **D03**

### ENVIRONMENTAL PROTECTION AGENCY/NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION TEAM ON NEAR COASTAL WATERS, ROCKVILLE, MD.

EPA/503/6-88/000
Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

Strategic Assessment of Near Coastal Waters: Northeast Case Study.
PB93-136521/REB 93-01 PC **A06**/MF **A02**

### ENVIRONMENTAL PROTECTION AGENCY, RESEARCH TRIANGLE PARK, NC.

MESOPUFF (for Microcomputers).
*(EPA/SW/DK-93/006)*
PB93-500247/REB 93-01 CP **D02**

### ENVIRONMENTAL PROTECTION AGENCY, RESEARCH TRIANGLE PARK, NC. AIR AND ENERGY ENGINEERING RESEARCH LAB.

EPA/600/A-92/186
Status of ASHRAE Standard 62. Ventilation for Acceptable Indoor Air Quality.
PB93-222040/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-92/197
Air Toxics: The Research Challenge of the 1990 Clean Air Act Amendments.
PB93-106664/REB 93-01 PC **A02**/MF **A01**

EPA/600/A-92/210
ASHRAE Standard 62: Ventilation for Acceptable Indoor Air Quality.
PB93-106797/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-92/216
Technologies Options for Acid Rain Control.
PB93-106854/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-92/266
Dry Flue Gas Cleaning Processes for Achieving Air Pollutant Emissions Requirements.
PB93-131605/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-92/268
Evaluating Materials for Healthy Buildings.
PB93-131621/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-92/272
Design of New Schools and Other Large Buildings Which Are Radon Resistant and Easy to Mitigate.
PB93-131662/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-92/937
Modeling Individual Exposure from Indoor Sources.
PB93-119840/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/061
Technological Options for Acid Rain Control.
PB93-173094/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/070
Simulation of Performance of Chlorine-Free Fluorinated Ethers and Fluorinated Hydrocarbons to Replace CFC-11 and CFC-114 in Chillers.
PB93-175511/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/077
Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC **A02**/MF **A01**

EPA/600/A-93/078
Sorption and Reemission of Formaldehyde by Gypsum Wallboard.
PB93-180917/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/109
Coprocessing of Fossil Fuels and Biomass for CO2 Emission Reduction in the Transportation Sector.
PB93-194165/REB 93-01 PC **A02**/MF **A01**

EPA/600/A-93/180
Establishing Priorities in the U.S. EPA's Indoor Air Engineering Research Program.
PB93-221984/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-93/182
Technological Considerations for Planning the Global Carbon Future.
PB93-222008/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/183
Removal Efficiencies in Terms of Particle Size and Concentration in a Suburban Home of Console Air Cleaners.
PB93-222016/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/195
Bioresponse Testing of Sources of Indoor Air Contaminants.
PB93-222032/REB 93-04 PC **A02/MF A01**

EPA/600/J-92/351
Technology for Reduction of CO2 Emissions from the Transportation Sector.
PB93-106987/REB 93-01 PC **A02/MF A01**

EPA/600/J-92/358
Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107043/REB 93-01 PC **A02/MF A01**

EPA/600/J-92/364
Measurement and Distribution of Radon and Radon Progeny: An Overview of Indoor Radon Risk Reduction in the United States.
PB93-107092/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/077
Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/078
Indoor Radon Reduction in Crawl-Space Houses: A Review of Alternative Approaches.
PB93-173177/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/086
Pollution Prevention for Cleaner Air: EPA's Air and Energy Engineering Research Laboratory.
PB93-173730/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/087
Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/088
Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/251
Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.
PB93-212579/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/274
Organic Combustion Fingerprints of Three Common Home Heating Fuels.
PB93-222123/REB 93-04 PC **A02/MF A01**

EPA/600/R-92/177
Contribution to Indoor Ozone Levels of an Ozone Generator.
PB93-234557/REB 93-04 PC **A03/MF A01**

EPA/600/R-92/209A
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 1. Sessions P, 0, 1A, 2A, 3A, 4A, 6A, 6B, 9C and 10B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124170/REB 93-01 PC **A20/MF A04**

EPA/600/R-92/209B
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 2. Sessions 1B, 2B, 3B, 4B, 7A, 7B, 8A, 8B and 9B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124188/REB 93-01 PC **A21/MF A04**

EPA/600/R-92/209C
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 3. Sessions 1C, 2C, 3C, 4C, 6C, 7C, 8C, 9A, and 10A/C. Held in Tampa, Florida on April 16-19, 1991.
PB93-124196/REB 93-01 PC **A21/MF A04**

EPA/600/R-93/083A
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24/MF A04**

EPA/600/R-93/083B
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24/MF A04**

EPA/600/R-93/083C
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25/MF A06**

EPA/600/S7-88/005
Clinton, New Jersey, Radon Mitigation Follow-Up and Long-Term Monitoring. Project Summary.
PB93-222594/REB 93-04 PC **A02/MF A01**

EPA/600/S7-88/011
Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.
PB93-222626/REB 93-04 PC **A01/MF A01**

EPA/600/S7-88/019
Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.
PB93-228468/REB 93-04 PC **A02/MF A01**

EPA/600/S7-89/005
Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-228450/REB 93-04 PC **A02/MF A01**

EPA/600/S7-89/006A
Evaluation of FGD Dry Injection Sorbents and Additives. Volume 1. Development of High Reactivity Sorbents. Project Summary.
PB93-228484/REB 93-04 PC **A02/MF A01**

EPA/600/S8-88/065
Industrial Boiler Furnace Sorbent Injection Algorithm Development.
PB93-222438/REB 93-04 PC **A01/MF A01**

EPA/600/S8-88/071
Advanced Utility Simulation Model. Project Summary.
PB93-222636/REB 93-04 PC **A02/MF A01**

EPA/600/S8-88/084
Preliminary Diagnostic Procedures for Radon Control. Project Summary.
PB93-222545/REB 93-04 PC **A01/MF A01**

EPA/600/S8-88/085
Guidelines for Stack Testing at Municipal Waste Combustion Facilities. Project Summary.
PB93-222610/REB 93-04 PC **A02/MF A01**

EPA/600/S8-88.088
Volatile Organic Compound Model Quality Assurance and Sensitivity Testing (Version 1.8).
PB93-223022/REB 93-04 PC **A01/MF A01**

EPA/600/S8-88/091
Industrial Boiler Low NOx Combustion Retrofit Cost Algorithm Development. Project Summary.
PB93-222578/REB 93-04 PC **A01/MF A01**

EPA/600/S8-88/102
Baseline Emissions Forecasts for Industrial Non-Boiler Sources. Project Summary.
PB93-222560/REB 93-04 PC **A01/MF A01**

EPA/600/S8-88/104
Projections of Regional Fuel Oil and Natural Gas Prices. Project Summary.
PB93-222552/REB 93-04 PC **A01/MF A01**

Proceedings: International Conference on Municipal Waste Combustion (2nd). Held in Tampa, Florida on April 16-19, 1991.
PB93-124162/REB 93-01 PC **E99/MF E99**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Held in Minneapolis, Minnesota on September 22-25, 1992.
PB93-196186/REB 93-01 PC **E99/MF E99**

**ENVIRONMENTAL PROTECTION AGENCY, RESEARCH TRIANGLE PARK, NC. ARCHITECTURAL MANAGEMENT AND PLANNING BRANCH.**

EPA/208/R-92/001
Information Technology Architecture.
PB93-122430/REB 93-01 PC **A03/MF A01**

**ENVIRONMENTAL PROTECTION AGENCY, RESEARCH TRIANGLE PARK, NC. ATMOSPHERIC RESEARCH AND EXPOSURE ASSESSMENT LAB.**

EPA/600/3-89/005
Summary of the 1987 EPA National Performance Audit Program on Source Measurements.
PB93-223444/REB 93-04 PC **A03/MF A01**

EPA/600/A-92/221
Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC **A03/MF A01**

EPA/600/A-92/228
Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119881/REB 93-01 PC **A03/MF A01**

EPA/600/A-92/234
Model Calculations of the Annual Atmospheric Deposition of Toxic Metals to Lake Michigan.
PB93-120905/REB 93-01 PC **A03/MF A01**

EPA/600/A-92/246
Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC **A02/MF A01**

EPA/600/A-92/248
Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC **A02/MF A01**

EPA/600/A-92/253
Proceedings of the EPA/A and WMA International Symposium (1992), Measurement of Toxic and Related Air Pollutants. Held in Durham, North Carolina on May 4-9, 1992.
PB93-121093/REB 93-01 PC **A01/MF A01**

EPA/600/A-92/259
Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02/MF A01**

EPA/600/A-93/002
Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03/MF A01**

EPA/600/A-93/054
Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC **A03/MF A01**

EPA/600/A-93/055
Analysis of Protocol Gases: An On-Going Quality Assurance Audit.
PB93-168839/REB 93-01 PC **A02/MF A01**

EPA/600/A-93/058
Assessing Potential Exposures from Routine Use of VOC-Contaminated Groundwater.
PB93-173060/REB 93-01 PC **A02/MF A01**

EPA/600/A-93/065
Agricultural Pesticide Emissions Associated with Common Crops in the United States.
PB93-173136/REB 93-01 PC **A03/MF A01**

EPA/600/A-93/075
Measurement of Biogenic Emissions from Corn.
PB93-180883/REB 93-01 PC **A02/MF A01**

EPA/600/A-93/079
Spatiotemporal Variability of Non-Urban Ozone Concentrations Over the Eastern United States and Its Potential Replication by Satellite Data.
PB93-191328/REB 93-01 PC **A03/MF A01**

EPA/600/A-93/081
Air Emissions Testing.
PB93-180933/REB 93-01 PC **A02/MF A01**

EPA/600/A-93/082
Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02/MF A01**

EPA/600/A-93/083
Protecting Confidentiality in Establishment Surveys.
PB93-180958/REB 93-01 PC **A03/MF A01**

EPA/600/A-93/085
Field-Deployable Monitors for Volatile Organic Compounds in Air. (Essential Capabilities of a Portable Gas Chromatograph).
PB93-185700/REB 93-01 PC **A03/MF A01**

EPA/600/A-93/087
Statistical Problems Arising from Environmental Issues.
PB93-185718/REB 93-01 PC **A01/MF A01**

EPA/600/A-93/088
Source Apportionment of Air Pollution in China: Extending the Usefulness of Receptor Modeling by Combining Multivariate and Chemical Mass Balance Models.
PB93-185726/REB 93-01 PC **A03/MF A01**

EPA/600/A-93/089
Multiple Metals Stack Emission Measurement Methodology for Stationary Sources, Current Status.
PB93-185734/REB 93-01 PC **A02/MF A01**

EPA/600/A-93/103
Discussion: Response to Internal Reviews of My Paper, 1993 Census Bureau Annual Research Conference.
PB93-191385/REB 93-01 PC **A02/MF A01**

EPA/600/A-93/104
Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03/MF A01**

EPA/600/A-93/105
Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC **A03/MF A01**

EPA/600/A-93/107
Two New Gas Standards Programs at the National Institute of Standards and Technology.
PB93-191427/REB 93-01 PC **A02/MF A01**

EPA/600/A-93/110
EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02/MF A01**

EPA/600/A-93/123
Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02/MF A01**

EPA/600/A-93/124
Development and Validation of a Source Test Method for 2,4-Toluene Diisocyanate.
PB93-204055/REB 93-01 PC **A03/MF A01**

EPA/600/A-93/127
Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03/MF A01**

EPA/600/A-93/128
Setting an Agenda for Research in the Federal Statistical System: Needs for Statistical Disclosure Limitation Procedures.
PB93-204097/REB 93-04 PC **A03/MF A01**

EPA/600/A-93/138
UV Monitoring Program at US EPA.
PB93-212272/REB 93-04 PC **A03/MF A01**

EPA/600/A-93/140
Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02/MF A01**

EPA/600/A-93/141
Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.
PB93-212306/REB 93-04 PC **A02/MF A01**

EPA/600/A-93/143
National Performance Audit Program (NPAP).
PB93-212322/REB 93-04 PC **A02/MF A01**

EPA/600/A-93/145
NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC **A02/MF A01**

EPA/600/A-93/162
Aerosol Measurement: Principles, Techniques, and Applications.
PB93-212827/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/167
Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-93/168
Analysis of Protocol Gases: An On-Going Quality Assurance Audit (May 1993).
PB93-221869/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/169
VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-93/170
Acid Aerosol Measurement Methods: A Summary of U.S. EPA Intercomparisons.
PB93-221885/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-93/197
Dynamometer Testing of On-Road Vehicles from the Los Angeles in-Use Emissions Study.
PB93-222297/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/203
Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.
PB93-229193/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-93/208
Total Volatile Organic Concentrations in 2700 Personal, Indoor, and Outdoor Air Samples Collected in the US EPA Team Studies.
PB93-229730/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/223
New Mathematical Model of Pollutant Dispersion Near a Building.
PB93-236529/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/229
Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.
PB93-236586/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/230
Wind-Tunnel Measurements of Flow Fields in the Vicinity of Buildings.
PB93-236594/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-92/363
CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 1. Technical Formulations.
PB93-107076/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/268
Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/317
Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.
PB93-229383/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/322
Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.
PB93-229425/REB 93-04 PC **A03**/MF **A01**

EPA/600/R-92/202
Survey of Data from the Continuous Sites of the 1990 Atlanta Ozone Precursor Study.
PB93-124618/REB 93-01 PC **A04**/MF **A01**

EPA/600/R-92/206A
Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 1.
PB93-122331/REB 93-01 PC **A99**/MF **A06**

EPA/600/R-92/206B
Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 2.
PB93-122349/REB 93-01 PC **A99**/MF **A06**

EPA/600/R-92/217
General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC **A04**/MF **A01**

EPA/600/R-92/222
Atmospheric Chemistry and Physical Fate of HCFCs and HFCs and Their Degradation Products.
PB93-131449/REB 93-01 PC **A03**/MF **A01**

EPA/600/R-92/225
Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03**/MF **A01**

EPA/600/R-93/037
Determination of the Strong Acidity of Atmospheric Fine-Particles (< 2.5 mum) Using Annular Denuder Technology. Standard Method, Enhanced Method.
PB93-178234/REB 93-01 PC **A07**/MF **A02**

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
*(EPA/600/A-92/227)*
PB93-119873/REB 93-01 PC **A02**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, RESEARCH TRIANGLE PARK, NC. MONITORING AND DATA ANALYSIS DIV.**

EPA/450/4-84/010
Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or Inhalable Particulate Data (Draft).
PB93-200640/REB 93-01 PC **A04**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, RESEARCH TRIANGLE PARK, NC. NEUROTOXICOLOGY DIV.**

EPA/600/J-92/424
Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-92/425
Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/427
Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, RESEARCH TRIANGLE PARK, NC. OFFICE OF AIR QUALITY PLANNING AND STANDARDS.**

AP-42-SUPPL-E
Compilation of Air Pollutant Emission Factors. Volume 1. Stationary Point and Area Sources. Supplement E.
PB93-157105/REB 93-01 PC **A10**/MF **A03**

EPA/340/1-85/019
Guide to Effective Inspection Reports for Air Pollution Violations. Stationary Source Compliance Training Series.
PB93-199107/REB 93-01 PC **A04**/MF **A01**

EPA/450/3-84/10B
Sewage Treatment Plant NSPS: Responses to Comments on April 1986 Proposed Revisions.
PB93-223584/REB 93-04 PC **A03**/MF **A01**

EPA/450/3-85/025B
Calciners and Dryers in Mineral Industries: Background Information for Promulgated Standards.
PB93-122448/REB 93-01 PC **A04**/MF **A01**

EPA/450/3-85/028
Enabling Document for New Source Performance Standards for Calciners and Dryers in Mineral Industries.
PB93-122455/REB 93-01 PC **A04**/MF **A01**

EPA/450/3-91/013
Enabling Document for Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants.
PB93-147007/REB 93-01 PC **A07**/MF **A02**

EPA/450/3-92/001A
VOC/HAP Emissions from Marine Vessel Loading Operations. Technical Support Document for Proposed Standards.
PB93-193910/REB 93-01 PC **A13**/MF **A03**

EPA/450/3-92/006B
National Emission Standards for Hazardous Air Pollutants Compliance Extensions for Early Reductions: Background Information for Promulgated Standards.
PB93-149425/REB 93-01 PC **A08**/MF **A02**

EPA/450/3-92/007A
Guidelines for MACT Determinations under Section 112(j) (Proposal).
PB93-183283/REB 93-04 PC **A08**/MF **A02**

EPA/450/3-92/009
Regulatory Impact Analysis for the National Emissions Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Seven Other Processes.
PB93-143972/REB 93-01 PC **A09**/MF **A02**

EPA/450/R-92/001
National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC **A07**/MF **A02**

EPA/452/B-93/006
Directory of OAQPS Information Services, May 1993.
PB93-196624/REB 93-01 PC **A03**/MF **A01**

EPA/452/R-92/006
State Air Pollution Control Programs: A Profile Report.
PB93-122364/REB 93-01 PC **A03**/MF **A01**

EPA/453/B-93/018
Medical Waste Incinerator Operator Training Program: Course Handbook.
PB93-781979/REB 93-04 PC**$56.00**/MF**$22.00**

EPA/453/D-92/016A
Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1A. National Impacts Assessment.
PB93-156552/REB 93-01 PC **A08**/MF **A02**

EPA/453/D-92/016B
Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1B. Control Technologies.
PB93-156560/REB 93-01 PC **A13**/MF **A03**

EPA/453/D-92/016C
Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1C. Model Emission Sources.
PB93-156578/REB 93-01 PC **A11**/MF **A03**

EPA/453/D-93/016
Ethylene Oxide Emissions from Commercial Sterilization/Fumigation Operations: Background Information for Proposed Standards.
PB93-226744/REB 93-04 PC **A13**/MF **A03**

EPA/453/R-92/011
Alternative Control Technology Document: Control of VOC Emissions from the Application of Agricultural Pesticides.
PB93-199131/REB 93-01 PC **A12**/MF **A03**

EPA/453/R-92/018
Control Techniques for Volatile Organic Compound Emissions from Stationary Sources, December 1992.
PB93-150258/REB 93-01 PC **A20**/MF **A04**

EPA/453/R-92/019
Alternative Control Technology Document: Carbon Reactivation Processes.
PB93-180826/REB 93-01 PC **A06**/MF **A02**

EPA/453/R-93/024
Report to Congress on Implementation of Section 112 of the Clean Air Act Amendments of 1990.
PB93-236008/REB 93-04 PC **A05**/MF **A01**

EPA/454/R-92/006
User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections.
PB93-210250/REB 93-04 PC **A05**/MF **A02**

EPA/454/R-92/019
Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised.
PB93-219095/REB 93-04 PC **A05**/MF **A01**

EPA/454/R-92/021
Modeling Protocol for Applying MESOPUFF II to Long Range Transport Problems.
PB93-226108/REB 93-04 PC **A04**/MF **A01**

EPA/454/R-93/024
Role of Ozone Precursors in Tropospheric Ozone Formation and Control: A Report to Congress.
PB93-226694/REB 93-04 PC **A04**/MF **A01**

EPA/454/R-93/025
Summary of Public Comments and EPA Responses on the Draft Report: The Role of Ozone Precursors in Tropospheric Ozone Formation and Control.
PB93-226702/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/202
Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-229185/REB 93-04 PC **A02**/MF **A01**

EPA/600/R-92/131
Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC **A02**/MF **A01**

Guideline on Air Quality Models (Revised): Appendix W of 40 CFR Part 51 (Supplement B).
PB93-213213/REB 93-04 PC **A03**/MF **A01**

COMPLEX1 (for Microcomputers).
*(EPA/SW/DK-89/176)*
PB93-504538/REB 93-01 CP **D05**

Crosswalk/Air Toxic Emission Factor Data Base Management System (XATEF) Version 2.0 (for Microcomputers).
*(EPA/SW/DK-92/038)*
PB93-504793/REB 93-01 CP **D02**

Volatile Organic Compound/Particulate Matter Speciation Data Base Management System (SPECIATE), Version 1.5 (for Microcomputers).
*(EPA/SW/DK-92/043)*
PB93-505238/REB 93-01 CP **D02**

**ENVIRONMENTAL PROTECTION AGENCY, RESEARCH TRIANGLE PARK, NC. OFFICE OF RESEARCH AND DEVELOPMENT.**

EPA/600/A-92/238
Design of the Clean Air Act Deposition Monitoring Network.
PB93-120947/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/433
Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02**/MF **A01**

Economic Growth Analysis System (E-GAS) for all EPA Regions (I through X) (for Microcomputers).
*(EPA/SW/DK-93/052)*
PB93-505469/REB 93-04 CP **D18**

Economic Growth Analysis System (E-GAS) for EPA Region I - New England States (for Microcomputers).
*(EPA/SW/DK-93/053)*
PB93-505477/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
*(EPA/SW/DK-93/054)*
PB93-505485/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).
*(EPA/SW/DK-93/055)*
PB93-505493/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).
*(EPA/SW/DK-93/056)*
PB93-505501/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).
*(EPA/SW/DK-93/057)*
PB93-505519/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).
*(EPA/SW/DK-93/058)*
PB93-505527/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
*(EPA/SW/DK-93/059)*
PB93-505535/REB 93-04 CP **D03**

Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).
*(EPA/SW/DK-93/060)*
PB93-505543/REB 93-04 CP **D03**

**ENVIRONMENTAL PROTECTION AGENCY, RESEARCH TRIANGLE PARK, NC. TECHNICAL SUPPORT DIV.**

EPA/450/3-91/019
General Provisions for 40 CFR Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories. Background Information for Proposed Regulation.
PB93-226090/REB 93-04 PC **A06**/MF **A02**

EPA/454/R-92/025
Protocol for Determining the Best Performing Model.
PB93-226082/REB 93-04 PC **A03**/MF **A01**

EPA/454/R-93/015
Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC **A06**/MF **A02**

**ENVIRONMENTAL PROTECTION AGENCY, SEATTLE, WA. ENVIRONMENTAL EVALUATIONS BRANCH.**

EPA/910/9-91/050
Potential Intertidal Habitat Restoration Sites in the Duwamish River Estuary.
PB93-122190/REB 93-01 PC **A05**/MF **A02**

**ENVIRONMENTAL PROTECTION AGENCY, SEATTLE, WA. ENVIRONMENTAL SERVICES DIV. LAB.**

EPA/910/9-92/013
Region 10 In-Stream Biological Monitoring Handbook: For Wadable Streams in the Pacific Northwest.
PB93-226611/REB 93-04 PC **A05**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, SEATTLE, WA. REGION X.**

EPA/910/9-91/019
Dynamic River Basin Water Quality Model.
PB93-190690/REB 93-01 PC **A05**/MF **A01**

EPA/910/9-92/028
Clean Water Act (Section 319): An Evaluation of Program Implementation in Region 10.
PB93-145654/REB 93-01 PC **A05**/MF **A01**

EPA/910/9-92/033
Restoration Potential of Diked Estuarine Wetlands in Washington and Oregon. Phase 2: Identification of Candidate Sites in Puget Sound.
PB93-145597/REB 93-01 PC **A04**/MF **A01**

EPA/910/R-93/006
Clark-Fork-Pend Oreille Basin Water Quality Study: A Summary of Findings and a Management Plan.
PB93-208148/REB 93-04 PC **A06**/MF **A02**

**ENVIRONMENTAL PROTECTION AGENCY, STENNIS SPACE CENTER, MS. GULF OF MEXICO PROGRAM.**

EPA/800/K-93/001
Public Health Action Agenda for the Gulf of Mexico: Frame Work for Action.
PB93-223428/REB 93-04 PC **A06**/MF **A02**

EPA/800/K-93/002
Marine Debris Action Agenda for the Gulf of Mexico: Framework for Action.
PB93-223469/REB 93-04 PC **A06**/MF **A02**

ISBN-0-16-036286-5
Public Health Action Agenda for the Gulf of Mexico: Frame Work for Action.
PB93-223428/REB 93-04 PC **A06**/MF **A02**

ISBN-0-16-036287-3
Marine Debris Action Agenda for the Gulf of Mexico: Framework for Action.
PB93-223469/REB 93-04 PC **A06**/MF **A02**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC.**

EPA/540/09-93/233
Proceedings of National Integrated Pest Management Forum. Held in Arlington, VA., on June 17-19, 1992.
PB93-124675/REB 93-01 PC **A07**/MF **A02**

EPA/600/9-90/038
Research to Improve Health Risk Assessments (RIHRA) Program.
PB93-116226/REB 93-01 PC **A06**/MF **A02**

EPA/600/J-93/336
Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC **A02**/MF **A01**

Federal Consistency Guidance: Federal Consistency with State Nonpoint Source Management Programs.
AD-A267 517/1/REB 93-04 PC **A03**/MF **A01**

Environmental Monitoring Methods Index. Version 1.0 Software. User's Manual.
*(EPA/821/B-92/001)*
PB92-169648/REB 93-01 PC **A06**/MF **A02**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, June 1992. Record and Data Element Description.
*(EPA/DF/MT-93/001A)*
PB93-100261/REB 93-01 PC **A03**/MF **A01**

Test Car List, 1992. Passenger Cars.
PB93-111185/REB 93-01 PC **A05**/MF **A01**

Fuel Economy Guide, 1992. 3-Number.
PB93-111193/REB 93-01 PC **A04**/MF **A01**

Fuel Economy Guide, 1992. 6-Number.
PB93-111201/REB 93-01 PC **A04**/MF **A01**

Federal Certification Test Results for 1992 Model Year. Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines.
PB93-111219/REB 93-01 PC **A13**/MF **A03**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, January 1993, Documentation.
PB93-155166/REB 93-01 PC **A03**/MF **A01**

Test Car List, 1993. Passenger Cars.
PB93-164531/REB 93-01 PC **A05**/MF **A02**

Fuel Economy Guide, 1993. 3-Number.
PB93-169340/REB 93-01 PC **A04**/MF **A01**

Fuel Economy Guide, 1993. 6 Number.
PB93-169357/REB 93-01 PC **A04**/MF **A01**

Video Teleconference on Emergency Planning for Potable Water Suppliers. Held on October 30-31, 1985.
PB93-184455/REB 93-01 PC **A10**/MF **A03**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, June 1992.
*(EPA/DF/MT-93/001)*
PB93-500197/REB 93-01 CP **T05**

Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, January 1993.
*(EPA/DF/MT-93/097)*
PB93-504595/REB 93-01 CP **T05**

Regulatory Impact Analysis (RIA) for the Proposed Great Lakes Water Quality Guidance (for Microcomputers).
*(EPA/DF/DK-93/063)*
PB93-505386/REB 93-04 CP **D02**

Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Initiative Guidance (for Microcomputers).
*(EPA/DF/DK-93/064)*
PB93-505394/REB 93-04 CP **D02**

Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study Technical Background Document (for Microcomputers).
*(EPA/DF/DK-93/065)*
PB93-505402/REB 93-04 CP **D04**

Site Assessment Information Directory (SAID) Region 1 (for Microcomputers). Date of Coverage: October 1991.
*(EPA/DF/DK-93/076)*
PB93-506111/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 2 (for Microcomputers). Date of Coverage: October 1991.
*(EPA/DF/DK-93/077)*
PB93-506129/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 3 (for Microcomputers). Date of Coverage: October 1991.
*(EPA/DF/DK-93/078)*
PB93-506137/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 4 (for Microcomputers). Date of Coverage: October 1991.
*(EPA/DF/DK-93/079)*
PB93-506145/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 5 (for Microcomputers). Date of Coverage: 1991.
*(EPA/DF/DK-93/080)*
PB93-506152/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 6 (for Microcomputers). Date of Coverage: October 1991.
*(EPA/DF/DK-93/081)*
PB93-506160/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 7 (for Microcomputers). Date of Coverage: October 1991.
*(EPA/DF/DK-93/082)*
PB93-506178/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 8 (for Microcomputers). Date of Coverage: 1991.
*(EPA/DF/DK-93/063)*
PB93-506186/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 9 (for Microcomputers). Date of Coverage: October 1991.
*(EPA/DF/DK-93/084)*
PB93-506194/REB 93-04 CP **D03**

Site Assessment Information Directory (SAID) Region 10 (for Microcomputers). Date of Coverage: October 1991.
*(EPA/DF/DK-93/085)*
PB93-506202/REB 93-04 CP **D03**

Health Effects Assessment Summary Tables.
PB93-921100/REB 93-01 Standing Order

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. EFFLUENT GUIDELINES DIV.**

EPA/440/1-79/049B
Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards, and Pretreatment Standards for the Paint Formulating Point Source Category.
PB93-206472/REB 93-04 PC **A21**/MF **A04**

EPA/440/1-80/073A
Development Document for Effluent Limitations Guidelines and Standards for the Aluminum Forming Point Source Category.
PB93-208213/REB 93-04 PC **A99**/MF **A06**

EPA/440/1-82/070B-VOL-1
Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 1.
PB93-206498/REB 93-04 PC **A24**/MF **A04**

EPA/440/1-82/070B-VOL-2
Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 2.
PB93-206506/REB 93-04 PC **A22**/MF **A04**

EPA/440/1-82/072
Development Document for Effluent Limitations Guidelines and Standards for the Porcelain Enameling. Point Source Category.
PB93-206514/REB 93-04 PC **A21**/MF **A04**

EPA/440/1-82/074B
Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category (Proposed).
PB93-206522/REB 93-04 PC **A23**/MF **A04**

EPA/440/1-82/084B
Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Pharmaceutical Manufacturing Point Source Category.
PB93-208221/REB 93-04 PC **A22**/MF **A04**

EPA/440/1-83/007B
Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Inorganic Chemicals Manufacturing Point Source Category, Phase 2 (Proposed).
PB93-206530/REB 93-04 PC **A24**/MF **A04**

EPA/440/1-83/084B
Development Document for Effluent Limitations Guidelines and Standards for the Pharmaceuticals Manufacturing. Point Source Category.
PB93-206969/REB 93-04 PC **A04**/MF **A01**

EPA/440/1-84/040
Proceedings of Annual Analytical Symposium (7th). Held in Norfolk, Virginia on March 28-29, 1984.
PB93-237519/REB 93-04 PC **A99**/MF **A06**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. ENGINEERING AND ANALYSIS DIV.**

EPA/440/1-91/009A
Supplement to the OCPSF Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category.
PB93-186096/REB 93-04 PC **A11**/MF **A03**

EPA/440/1-91/009B
Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry Using Revised Compliance Costs. (Revised January 1992).
PB93-186104/REB 93-01 PC **A03**/MF **A01**

EPA/821/R-92/007
Proceedings of the Annual EPA Conference on Analysis of Pollutants in the Environment (15th). Held in Norfolk, Virginia on May 6-7, 1992.
PB93-152601/REB 93-01 PC **A99**/MF **A06**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. ENVIRONMENTAL MONITORING AND ASSESSMENT PROGRAM.**

EPA/620/R-93/006
Virginian Province Demonstration Report. EMAP-Estuaries, 1990.
PB93-229854/REB 93-04 PC **A11**/MF **A03**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. HAZARDOUS SITE EVALUATION DIV.**

PA-Score (Preliminary Assessment Score) User's Manual and Tutorial. Version 2.1.
PB93-108322/REB 93-01 PC **A05**/MF **A01**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 3) (for Microcomputers).
*(EPA/SW/DK-93/002)*
PB93-500270/REB 93-01 CP **D02**

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 2) (for Microcomputers).
*(EPA/SW/DK-93/003)*
PB93-500288/REB 93-01 CP **D02**

PA-Score (Preliminary Assessment Score), Version 2.1, 5 1/4 inch (for Microcomputers).
*(EPA/SW/DK-93/008)*
PB93-500346/REB 93-01 CP **D02**

PA-Score (Preliminary Assessment Score), Version 2.1, 3 1/2 inch (for Microcomputers).
*(EPA/SW/DK-93/009)*
PB93-500353/REB 93-01 CP **D02**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 4) (for Microcomputers).
*(EPA/SW/DK-93/046)*
PB93-505345/REB 93-04 CP **D02**

Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 3) (for Microcomputers).
*(EPA/SW/DK-93/047)*
PB93-505352/REB 93-04 CP **D02**

Preliminary Ranking Evaluation Score (PREscore) Version 2.0 (for Microcomputers).
*(EPA/SW/DK-93/066)*
PB93-505915/REB 93-04 CP **D02**

Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 5) (for Microcomputers).
*(EPA/SW/DK-93/073)*
PB93-506053/REB 93-04 CP **D02**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. HEALTH AND ECOLOGICAL CRITERIA DIV.**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Diethylene Glycol Dinitrate (DEGDN).
PB93-117000/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. INDUSTRIAL TECHNOLOGY DIV.**

Proceedings of Annual Analytical Symposium (10th). U.S. Environmental Protection Agency, Office of Water, Industrial Technology Division. Held in Norfolk, Virginia on May 13-14, 1987.
PB93-234771/REB 93-04 PC **A99**/MF **E08**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. INFORMATION MANAGEMENT AND SERVICES DIV.**

EPA/220/B-92/021
Public Access: A How To Guide.
PB93-111029/REB 93-01 PC **A09**/MF **A03**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. INFORMATION MANAGEMENT DIV.**

Toxic Release Inventory, (TRI), 1991.
*(EPA/DF/MT-93/061)*
PB93-505873/REB 93-04 CP **T14**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. MANAGEMENT AND ORGANIZATION DIV.**

EPA-21M-1013
U.S. Environmental Protection Agency Advisory Committees Charters, Rosters and Accomplishments.
PB93-130094/REB 93-01 PC **A05**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF ACID DEPOSITION, ENVIRONMENTAL MONITORING, AND QUALITY ASSURANCE.**

EPA/600/3-89/061A
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC **A14**/MF **A03**

EPA/600/3-89/061B
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC **A18**/MF **A04**

EPA/600/3-89/061C
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC **A14**/MF **A03**

EPA/600/3-89/061D
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC **A14**/MF **A03**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF ADMINISTRATION.**

EPA (Environmental Protection Agency) Publications Bibliography, Quarterly Abstract Bulletin.
PB93-904200/REB 93-01 Subscription

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF ADMINISTRATION AND RESOURCES MANAGEMENT.**

EPA/202/B-92/006
Financing Models for Environmental Protection: Helping Communities Meet Their Environmental Goals.
PB93-124998/REB 93-01 PC **A05**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF AIR AND RADIATION.**

EPA/420/R-93/006
Federal Test Procedure Review Project: Status Report.
PB93-197903/REB 93-01 PC **A03**/MF **A01**

EPA/450/2-76/005-9
Aeros Manual Series. Volume 5. Aeros Manual of Codes. Update Number 9.
PB93-200798/REB 93-01 PC **A10**/MF **A03**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF DRINKING WATER.**

EPA/570/9-89/003
Underground Injection Control Program.
PB93-115905/REB 93-01 PC **A03**/MF **A01**

EPA/570/F-90/017
Drinking Water Regulations under the Safe Drinking Water Act.
PB93-194033/REB 93-01 PC **A03**/MF **A01**

EPA/570/F-91/044
Phase II Fact Sheet: National Primary Drinking Water Regulations for 38 Inorganic and Synthetic Organic Chemicals.
PB93-193787/REB 93-01 PC **A03**/MF **A01**

EPA/811/R-92/001
Simulation of Raw Water and Treatment Parameters in Support of the Disinfection By-Products Regulatory Impact Analysis.
PB93-134401/REB 93-01 PC **A03**/MF **A01**

EPA/812/B-92/002
Lead in Drinking Water Regulation: Public Education Guidance (Guidance for Conducting a Community-Based Public Education Program on Lead in Drinking Water).
PB93-101079/REB 93-01 PC **A04**/MF **A01**

EPA/814/B-92/002
Manual for the Certification of Laboratories Analyzing Drinking Water. Criteria and Procedures Quality Assurance (Third Edition).
PB93-145688/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF EMERGENCY AND REMEDIAL RESPONSE.**

EPA/ROD/R01-92/064
Superfund Record of Decision (EPA Region 1): Darling Hill Dump, Lyndon, VT. (First Remedial Action), June 1992.
PB93-963702/REB 93-01 PC **A03**/MF **A01**

EPA/ROD/R01-92/066
Superfund Record of Decision (EPA Region 1): Brunswick Naval Air Station, Operable Unit 2, ME. (Second Remedial Action), June 1992.
PB93-963706/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R01-92/067
Superfund Record of Decision (EPA Region 1): Revere Textile Prints, Sterling, CT. (First Remedial Action), September 1992.
PB93-963703/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R01-92/068
Superfund Record of Decision (EPA Region 1): Tibbetts Road, Barrington, NH. (First Remedial Action), September 1992.
PB93-963709/REB 93-04 PC **A07**/MF **A02**

EPA/ROD/R01-92/069
Superfund Record of Decision (EPA Region 1): PSC Resources Site, Palmer, MA. (First Remedial Action), September 1992.
PB93-963708/REB 93-04 PC **A09**/MF **A02**

EPA/ROD/R01-92/070
Superfund Record of Decision (EPA Region 1): Town Garage Radio Beacon, Londonderry, NH. (First Remedial Action), September 1992.
PB93-963705/REB 93-04 PC **A06**/MF **A02**

EPA/ROD/R01-92/071
Superfund Record of Decision (EPA Region 1): Otis Air National Guard/Camp Edwards, MA. (First Remedial Action), May 1992.
PB93-963704/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R01-92/072
Superfund Record of Decision (EPA Region 1): Newport Naval Education/Training Center, Newport, RI. (First Remedial Action), September 1992.
PB93-963707/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R02-92/169
Superfund Record of Decision (EPA Region 2): Ramapo Landfill Site, Rockland County, NY. (First Remedial Action), March 1992.
PB93-963801/REB 93-01 PC **A04**/MF **A01**

EPA/ROD/R02-92/171
Superfund Record of Decision (EPA Region 2): Pasley Solvents and Chemicals, Town of Hempstead, Nassau County, NY. (First Remedial Action), April 1992.
PB93-963805/REB 93-01 PC **A06**/MF **A02**

EPA/ROD/R02-92/173
Superfund Record of Decision (EPA Region 2): Facet Enterprises, Village of Elmira Heights, Chemung County, NY. (First Remedial Action), September 1992.
PB93-963822/REB 93-04 PC **A07**/MF **A02**

EPA/ROD/R02-92/175
Superfund Record of Decision (EPA Region 2): North Sea Municipal Landfill, Suffolk County, Southampton, NY. (Second Remedial Action), September 1992.
PB93-963811/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R02-92/176
Superfund Record of Decision (EPA Region 2): Ellis Property, Sharp Road, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963820/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R02-92/177
Superfund Record of Decision (EPA Region 2): Witco Chemical (Oakland Plant), Bergen County, Oakland, NJ. (First Remedial Action), September 1992.
PB93-963812/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R02-92/178
Superfund Record of Decision (EPA Region 2): FAA Technical Center, Atlantic County, Atlantic City International Airport, NJ. (Third Remedial Action), September 1992.
PB93-963808/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R02-92/179
Superfund Record of Decision (EPA Region 2): Rowe Industries Groundwater Contamination, Sag Harbor, NY. (First Remedial Action), September 1992.
PB93-963827/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R02-92/180
Superfund Record of Decision (EPA Region 2): Higgins Farm, Franklin Township, Somerset County, NJ. (Second Remedial Action), September 1992.
PB93-963813/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R02-92/181
Superfund Record of Decision (EPA Region 2): Preferred Plating, Suffolk County, Farmingdale, NY. (Second Remedial Action), September 1992.
PB93-963817/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R02-92/182
Superfund Record of Decision (EPA Region 2): Bioclinical Laboratories, Town of Islip, Suffolk County, NY. (First Remedial Action), September 1992.
PB93-963807/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R02-92/183
Superfund Record of Decision (EPA Region 2): Islip Municipal Sanitary Landfill, Town of Islip, NY. (First Remedial Action), September 1992.
PB93-963825/REB 93-04 PC **A05**/MF **A02**

EPA/ROD/R02-92/184
Superfund Record of Decision (EPA Region 2): Endicott Village Well Field, Broome County, NY. (Third Remedial Action), September 1992.
PB93-963821/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R02-92/185
Superfund Record of Decision (EPA Region 2): Industrial Latex, Bergen County, Wallington, NJ. (First Remedial Action), September 1992.
PB93-963824/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R02-92/186
Superfund Record of Decision (EPA Region 2): Imperial Oil/Champion Chemicals, Monmouth County, NJ. (Second Remedial Action), September 1992.
PB93-963823/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R02-92/187
Superfund Record of Decision (EPA Region 2): Cosden Chemical Coatings, City of Beverly, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963818/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R02-92/188
Superfund Record of Decision (EPA Region 2): Evor Phillips Leasing Company, Old Bridge Township, Middlesex County, NJ. (First Remedial Action), September 1992.
PB93-963814/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R02-92/189
Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 1), Clinton County, NY. (First Remedial Action), September 1992.
PB93-963815/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R02-92/190
Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 3), Clinton County, NY. (Second Remedial Action), September 1992.
PB93-963816/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R02-92/191
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 5), Lakehurst, NJ. (Sixth Remedial Action), January 1992.
PB93-963809/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R02-92/192
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 6), Lakehurst, NJ. (Fifth Remedial Action), December 1991.
PB93-963810/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R02-92/193
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 7), Ocean County, NJ. (Seventh Remedial Action), March 1992.
PB93-963826/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R02-92/194
Superfund Record of Decision (EPA Region 2): Dover Municipal Well 4, Morris County, Dover, NJ. (First Remedial Action), September 1992.
PB93-963819/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R03-92/141
Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, Operable Unit 1, Richmond, VA. (First Remedial Action), May 1992.
PB93-963923/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R03-92/142
Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, (Operable Unit 5), Richmond, VA. (First Remedial Action), March 1992.
PB93-963901/REB 93-01 PC **A04**/MF **A01**

EPA/ROD/R03-92/143
Superfund Record of Decision (EPA Region 3): Strasburg Landfill, Newlin Township, Chester County, PA. (Third Remedial Action), March 1992.
PB93-963916/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R03-92/144
Superfund Record of Decision (EPA Region 3): Raymark Site, Operable Unit 1, Montgomery County, PA. (First Remedial Action), December 1991.
PB93-963902/REB 93-01 PC **A07**/MF **A02**

EPA/ROD/R03-92/145
Superfund Record of Decision (EPA Region 3): Dublin Water Supply, Bucks County, PA. (First Remedial Action), December 1991.
PB93-963903/REB 93-01 PC **A06**/MF **A02**

EPA/ROD/R03-92/149
Superfund Record of Decision (EPA Region 3): Butz Landfill, Pocono and Jackson Townships, Monroe County, PA. (Second Remedial Action), June 1992.
PB93-963919/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R03-92/150
Superfund Record of Decision (EPA Region 3): Brown's Battery Breaking, Tilden Township, Berks County, PA. (Second Remedial Action), July 1992.
PB93-963918/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R03-92/152
Superfund Record of Decision (EPA Region 3): Eastern Diversified Metals Site, Schuylkill County, Hometown, PA. (Second Remedial Action), July 1992.
PB93-963914/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R03-92/153
Superfund Record of Decision (EPA Region 3): MW Manufacturing Site, Montour County, PA. (Subsequent Remedial Action), June 1992.
PB93-963904/REB 93-01 PC **A05**/MF **A01**

EPA/ROD/R03-92/155
Superfund Record of Decision (EPA Region 3): Commodore Semiconductor Group, Lower Providence Township, PA. (First Remedial Action), September 1992.
PB93-963920/REB 93-04 PC **A06**/MF **A02**

EPA/ROD/R03-92/156
Superfund Record of Decision (EPA Region 3): Tonolli Corporation, Nesquehoning Borough, Carbon County, PA. (First Remedial Action), September 1992.
PB93-963922/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R03-92/157
Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.
PB93-963912/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R03-92/158
Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.
PB93-963913/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R03-92/159
Superfund Record of Decision (EPA Region 3): Abex Corporation, Portsmouth, VA. (First Remedial Action), September 1992.
PB93-963917/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R03-92/160
Superfund Record of Decision (EPA Region 3): Rhinehart Tire Fire Dump, Operable Unit 2, Winchester, VA. (Second Remedial Action), September 1992.
PB93-963921/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R03-92/161
Superfund Record of Decision (EPA Region 3): Dixie Caverns Landfill Site, Operable Unit 2, Roanoke County, VA. (Second Remedial Action), September 1992.
PB93-963907/REB 93-01 PC **A03**/MF **A01**

EPA/ROD/R03-92/162
Superfund Record of Decision (EPA Region 3): USA Aberdeen, Operable Unit One, Michaelsville, MD. (Second Remedial Action), June 1992.
PB93-963915/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R04-92/103
Superfund Record of Decision (EPA Region 4): Yellow Water Road Dump, Duval County, Baldwin, FL. (Second Remedial Action), June 1992.
PB93-964015/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R04-92/104
Superfund Record of Decision (EPA Region 4): Benfield Industries, Haywood County, Hazelwood, NC. (First Remedial Action), July 1992.
PB93-964018/REB 93-04 PC **A09**/MF **A02**

EPA/ROD/R04-92/108
Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 1, SC. (First Remedial Action), June 1992.
PB93-964023/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R04-92/109
Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 2, SC. (Second Remedial Action), June 1992.
PB93-964024/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R04-92/110
Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), A/M Area Groundwater Operable Unit 3, Aiken County, SC. (Third Remedial Action), June 1992.
PB93-964013/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R04-92/112
Superfund Record of Decision (EPA Region 4): Carrier Air Conditioning, Collierville, TN. (First Remedial Action), September 1992.
PB93-964019/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R04-92/115
Superfund Record of Decision (EPA Region 4): Madison County Sanitary Landfill, Madison, FL. (First Remedial Action), September 1992.
PB93-964021/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R04-92/116
Superfund Record of Decision (EPA Region 4): Standard Auto Bumper Site, Dade County, Hialeah, FL. (First Remedial Action), September 1992.
PB93-964014/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R04-92/118
Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation, Operable Unit 6, Roane County, TN. (Fourth Remedial Action), September 1992.
PB93-964025/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R04-92/119
Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.
PB93-964010/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R04-92/120
Superfund Record of Decision (EPA Region 4): USMC Camp Lejeune Military Reservation, NC. (First Remedial Action), September 1992.
PB93-964026/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R04-92/121
Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.
PB93-964012/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R04-92/122
Superfund Record of Decision (EPA Region 4): Florida Steel Corporation, Martin County, Indiantown, FL. (First Remedial Action), June 1992.
PB93-964020/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R04-92/123
Superfund Record of Decision (EPA Region 4): Agrico Chemical, Escambia County, Pensacola, FL. (First Remedial Action), September 1992.
PB93-964017/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R04-92/124
Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964011/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R04-92/125
Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964009/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R04-92/126
Superfund Record of Decision (EPA Region 4): Milan Army Ammunition Plant, TN. (First Remedial Action), September 1992.
PB93-964022/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R04-92/127
Superfund Record of Decision (EPA Region 4): National Electric Coil/Cooper Industries, KY. (First Remedial Action), September 1992.
PB93-964016/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R05-92/192
Superfund Record of Decision (EPA Region 5): Twin Cities AF Reserve (SAR Landfill), MN. (First Remedial Action), March 1992.
PB93-964103/REB 93-01 PC **A04**/MF **A01**

EPA/ROD/R05-92/193
Superfund Record of Decision (EPA Region 5): Midco II, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964102/REB 93-01 PC **A05**/MF **A01**

EPA/ROD/R05-92/194
Superfund Record of Decision (EPA Region 5): Columbus Old Municipal Landfill, Columbus, IN. (First Remedial Action), March 1992.
PB93-964104/REB 93-01 PC **A03**/MF **A01**

EPA/ROD/R05-92/195
Superfund Record of Decision (EPA Region 5): Grand Traverse Overall Supply Site, Grellickville, MI. (First Remedial Action), February 1992.
PB93-964101/REB 93-01 PC **A03**/MF **A01**

EPA/ROD/R05-92/196
Superfund Record of Decision (EPA Region 5): MIDCO I, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964130/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R05-92/199
Superfund Record of Decision (EPA Region 5): Metal Working Shop, Benzie County, Lake Ann, MI. (First Remedial Action), June 1992.
PB93-964113/REB 93-01 PC **A03**/MF **A01**

EPA/ROD/R05-92/200
Superfund Record of Decision (EPA Region 5): Savanna Army Depot, Savanna, IL. (First Remedial Action), March 1992.
PB93-964116/REB 93-01 PC **A04**/MF **A01**

EPA/ROD/R05-92/202
Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 2, Anoka County, Andover, MN. (Second Remedial Action), December 1992.
PB93-964132/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R05-92/203
Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 1, Anoka County, Andover, MN. (Second Remedial Action), (Amendment), June 1992.
PB93-964123/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R05-92/206
Superfund Record of Decision (EPA Region 5): Kohler Landfill, Kohler, WI. (First Remedial Action), March 1992.
PB93-964111/REB 93-01 PC **A05**/MF **A02**

EPA/ROD/R05-92/209
Superfund Record of Decision (EPA Region 5): Clare Water Supply Site, Clare County, Clare, MI. (Second Remedial Action), September 1992.
PB93-964106/REB 93-01 PC **A04**/MF **A01**

EPA/ROD/R05-92/210
Superfund Record of Decision (EPA Region 5): New Brighton/Arden Hills, Ramsey County, MN. (Eighth Remedial Action), September 1992.
PB93-964131/REB 93-04 PC **A07**/MF **A02**

EPA/ROD/R05-92/213
Superfund Record of Decision (EPA Region 5): Reilly Tar and Chemical, St. Louis Park, MN. (Fourth Remedial Action), September 1992.
PB93-964124/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R05-92/214
Superfund Record of Decision (EPA Region 5): Alsco Anaconda Site, Gnadenhutten, OH. (Second Remedial Action), September 1992.
PB93-964121/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R05-92/215
Superfund Record of Decision (EPA Region 5): Torch Lake Site, Operable Units 1 and 3, Houghton County, MI. (First Remedial Action), September 1992.
PB93-964120/REB 93-01 PC **A04**/MF **A01**

EPA/ROD/R05-92/217
Superfund Record of Decision (EPA Region 5): American Chemical Services, Griffith, IN. (First Remedial Action), September 1992.
PB93-964125/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R05-92/218
Superfund Record of Decision (EPA Region 5): Tri County/Elgin Landfill Site, Elgin, IL. (First Remedial Action), September 1992.
PB93-964133/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R05-92/219
Superfund Record of Decision (EPA Region 5): Central Illinois Public Service, Taylorville Manufactured Gas Plant Site, Christian County, IL. (First Remedial Action), September 1992.
PB93-964127/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R05-92/220
Superfund Record of Decision (EPA Region 5): Cannelton Industries Site, Sault Sainte Marie, MI. (First Remedial Action), September 1992.
PB93-964126/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R05-92/221
Superfund Record of Decision (EPA Region 5): Butterworth No. 2 Landfill Site, Grand Rapids, MI. (First Remedial Action), September 1992.
PB93-964122/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R05-92/222
Superfund Record of Decision (EPA Region 5): City Disposal Sanitary Landfill, Dane County, WI. (First Remedial Action), September 1992.
PB93-964128/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R05-92/223
Superfund Record of Decision (EPA Region 5): H. Brown Company, Walker, MI. (First Remedial Action), September 1992.
PB93-964129/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R06-92/068
Superfund Record of Decision (EPA Region 6): Koppers (Texarkana Plant), TX. (First Remedial Action), (Amendment), March 1992.
PB93-964208/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R06-92/073
Superfund Record of Decision (EPA Region 6): Double Eagle Refinery, Oklahoma City, OK. (First Remedial Action), September 1992.
PB93-964210/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R06-92/074
Superfund Record of Decision (EPA Region 6): Prewitt Abandoned Refinery, Prewitt, NM. (First Remedial Action), September 1992.
PB93-964209/REB 93-04 PC **A09**/MF **A02**

EPA/ROD/R06-92/075
Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 2), Vermilion Parish, LA. (First Remedial Action), September 1992.
PB93-964206/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R06-92/076
Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 1), Vermilion Parish, LA. (Second Remedial Action), September 1992.
PB93-964207/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R07-92/060
Superfund Record of Decision (EPA Region 7): Pester Refinery, Butler County, El Dorado, KS. (First Remedial Action), September 1992.
PB93-964305/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R07-92/061
Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.
PB93-964304/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R08-92/056
Superfund Record of Decision (EPA Region 8): Portland Cement Co. (Kiln Dust No. 2 and No. 3), Operable Unit 2, Salt Lake City, UT. (Second Remedial Action), March 1992.
PB93-964410/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R08-92/058
Superfund Record of Decision (EPA Region 8): Idaho Pole National Priorities List Site, Bozeman, MT. (First Remedial Action), September 1992.
PB93-964406/REB 93-04 PC **A07**/MF **A02**

EPA/ROD/R08-92/059
Superfund Record of Decision (EPA Region 8): Silver Bow Creek/Butte Area, MT. (Second Remedial Action), June 1992.
PB93-964412/REB 93-04 PC **A07**/MF **A02**

EPA/ROD/R08-92/060
Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 1, Weber County, UT. (Second Remedial Action), June 1992.
PB93-964407/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R08-92/061
Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 4, UT. (Third Remedial Action), September 1992.
PB93-964409/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R08-92/062
Superfund Record of Decision (EPA Region 8): Denver Radium, Operable Unit 9, Denver, CO. (Eighth Remedial Action), December 1991.
PB93-964402/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R08-92/063
Superfund Record of Decision (EPA Region 8): Denver Radium Site, Operable Unit 8, Denver, CO. (Ninth Remedial Action), January 1992.
PB93-964405/REB 93-04 PC **A06**/MF **A02**

EPA/ROD/R08-92/064
Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), (Operable Unit 4), Golden, CO. (Third Remedial Action), April 1992.
PB93-964404/REB 93-04 PC **A06**/MF **A02**

EPA/ROD/R08-92/065
Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), Operable Unit 2, Golden, CO. (Fourth Remedial Action), September 1992.
PB93-964411/REB 93-04 PC **A19**/MF **A04**

EPA/ROD/R08-92/066
Superfund Record of Decision (EPA Region 8): Hill Air Force Base, UT. (Second Remedial Action), September 1992.
PB93-964403/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R08-92/067
Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 3, Weber County, UT. (Fourth Remedial Action), September 1992.
PB93-964408/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R09-92/077
Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 3, Sacramento, CA. (Second Remedial Action), December 1991.
PB93-964509/REB 93-04 PC **A09**/MF **A03**

EPA/ROD/R09-92/079
Superfund Record of Decision (EPA Region 9): Westinghouse Electric (Sunnyvale Plant), Sunnyvale, CA. (First Remedial Action), October 1991.
PB93-964501/REB 93-01 PC **A05**/MF **A01**

EPA/ROD/R09-92/082
Superfund Record of Decision (EPA Region 9): Hassayampa Landfill, AZ. (First Remedial Action), August 1992.
PB93-964505/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R09-92/083
Superfund Record of Decision (EPA Region 9): Iron Mountain Mine, Shasta County, CA. (Second Remedial Action), September 1992.
PB93-964506/REB 93-04 PC **A06**/MF **A02**

EPA/ROD/R09-92/084
Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 4, Sacramento, CA. (Third Remedial Action), September 1992.
PB93-964510/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R09-92/085
Superfund Record of Decision (EPA Region 9): Jasco Chemical Company, Mountain View, CA. (First Remedial Action), September 1992.
PB93-964507/REB 93-04 PC **A05**/MF **A01**

EPA/ROD/R09-92/086
Superfund Record of Decision (EPA Region 9): Purity Oil Sales, Fresno County, CA. (Second Remedial Action), September 1992.
PB93-964508/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R10-92/034
Superfund Record of Decision (EPA Region 10): Naval Air Station Whidbey Island - Ault Field, (Operable Unit 1, Area 6), Oak Harbor, WA. (First Remedial Action), April 1992.
PB93-964609/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R10-92/039
Superfund Record of Decision (EPA Region 10): Arrcom (Drexler Enterprise), Rathdrum, ID. (First Remedial Action), June 1992.
PB93-964606/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R10-92/040
Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 23, ID. (Second Remedial Action), June 1992.
PB93-964617/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R10-92/041
Superfund Record of Decision (EPA Region 10): Bunker Hill Mining and Metallurgical Complex, Shoshone County, ID. (Second Remedial Action), September 1992.
PB93-964611/REB 93-04 PC **A08**/MF **A02**

EPA/ROD/R10-92/042
Superfund Record of Decision (EPA Region 10): Pesticide Laboratory, Yakima, WA. (First Remedial Action), September 1992.
PB93-964608/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R10-92/043
Superfund Record of Decision (EPA Region 10): Joseph Forest Products, Wallowa County, OR. (First Remedial Action), September 1992.
PB93-964613/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R10-92/044
Superfund Record of Decision (EPA Region 10): Elmendorf Air Force Base, Operable Unit 2, Source Area ST41, Anchorage, AK. (First Remedial Action), September 1992.
PB93-964604/REB 93-01 PC **A03**/MF **A01**

EPA/ROD/R10-92/045
Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 2, ID. (Third Remedial Action), September 1992.
PB93-964615/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R10-92/046
Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 22, ID. (Fourth Remedial Action), September 1992.
PB93-964616/REB 93-04 PC **A03**/MF **A01**

EPA/ROD/R10-92/047
Superfund Record of Decision (EPA Region 10): Wyckoff/Eagle Harbor, WA. (First Remedial Action), September 1992.
PB93-964618/REB 93-04 PC **A07**/MF **A02**

EPA/ROD/R10-92/048
Superfund Record of Decision (EPA Region 10): McChord AFB, Washrack Treatment Area, WA. (First Remedial Action), September 1992.
PB93-964614/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R10-92/049
Superfund Record of Decision (EPA Region 10): Fort Lewis Military Reservation, Landfill No. 5, Pierce County, WA. (First Remedial Action), July 1992.
PB93-964607/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R10-92/050
Superfund Record of Decision (EPA Region 10): Eielson Air Force Base, AK. (First Remedial Action), September 1992.
PB93-964612/REB 93-04 PC **A04**/MF **A01**

EPA/ROD/R10-92/051
Superfund Record of Decision (EPA Region 10): Umatilla Army Depot (Lagoons), Soils Operable Unit 2, Hermiston, OR. (First Remedial Action), September 1992.
PB93-964610/REB 93-04 PC **A04**/MF **A01**

EPA/540/2-90/012
International Evaluation of In-situ Biorestoration of Contaminated Soil and Groundwater (September 1990)--Translation.
PB93-207553/REB 93-04 PC **A03**/MF **A01**

EPA/540/2-91/002
Understanding Bioremediation: A Guidebook for Citizens.
PB93-205870/REB 93-04 PC **A03**/MF **A01**

EPA/540/8-90/101
Superfund: Environmental Progress.
PB93-206209/REB 93-04 PC **A03**/MF **A01**

EPA/540/8-91/005
Superfund Innovative Technology Evaluation (SITE) Program.
PB93-116093/REB 93-01 PC **A03**/MF **A01**

EPA/540/C-93/003
Field Certification Tracking System (FCTS). User's Guide. Version 2.1.
PB93-963415/REB 93-04 PC **A04**/MF **A01**

EPA/540/F-93/042
Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis.
PB93-963297/REB 93-04 PC **A03**/MF **A01**

EPA/540/R-92/020
Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC **A09**/MF **A02**

EPA/540/R-92/021
Guidance for Performing Site Inspections under CERCLA.
PB92-963375/REB 93-01 PC **A11**/MF **A03**

EPA/540/R-92/026
Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC **A22**/MF **A04**

EPA/540/R-92/027
OSWER Superfund Telephone Directory.
PB92-963289/REB 93-01 PC **A03**/MF **A01**

EPA/540/R-92/029
Mentor-Protege Program.
PB93-963251/REB 93-01 PC **A02**/MF **A01**

EPA/540/R-92/071A
Guide for Conducting Treatability Studies under CERCLA.
PB93-126787/REB 93-01 PC **A05**/MF **A01**

EPA/540/S-92/008
Engineering Bulletin: Slurry Walls.
PB93-105575/REB 93-01 PC **A02**/MF **A01**

EPA/540/S-92/009
Engineering Bulletin: Technology Preselection Data Requirements.
PB93-105591/REB 93-01 PC **A02**/MF **A01**

EPA/540/S-92/010
Engineering Bulletin: Pyrolysis Treatment.
PB93-105583/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/007
Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC **A03**/MF **A01**

OSWER DIRECTIVE-9380.3-10
Guide for Conducting Treatability Studies under CERCLA.
PB93-126787/REB 93-01 PC **A05**/MF **A01**

OSWER-9200.0-03F
OSWER Superfund Telephone Directory.
PB92-963289/REB 93-01 PC **A03**/MF **A01**

OSWER-9200.1-12-3
Superfund Progress: Fall/Winter 1992.
PB93-963254/REB 93-01 PC **A03**/MF **A01**

OSWER-9200.1-12C
Superfund Progress. Aficionado's Version. Progress as of September 30, 1992.
PB93-963255/REB 93-01 PC **A03**/MF **A01**

OSWER-9200.3-01H-3
Highlights: Superfund Program Management. Fiscal Year 1993.
PB93-963261/REB 93-01 PC **A03**/MF **A01**

OSWER-9200.5-216I-VOL-7-NO-2
Superfund Records of Decision Update. Volume 7, Number 2, November 1992.
PB93-963256/REB 93-01 PC **A02**/MF **A01**

OSWER-9202.1-07
Superfund: Report of the EPA Superfund Revitalization Public Meeting Held on June 24, 1992. Volumes 1 and 2.
PB92-963288/REB 93-01 PC **A06**/MF **A02**

OSWER-9203.1-02I-VOL-1-NO-4
Superfund Accelerated Cleanup Model (SACM). Volume 1, Number 4, November 1992.
PB92-963287/REB 93-01 PC **A01**/MF **A01**

OSWER-9203.1-03
Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP.
PB93-963252/REB 93-01 PC **A03**/MF **A01**

OSWER-9203.1-03A
Exercising Flexibility through the Superfund Accelerated Cleanup Model (SACM).
PB93-963253/REB 93-01 PC **A01**/MF **A01**

OSWER-9242.6-12
Mentor-Protege Program.
PB93-963251/REB 93-01 PC **A02**/MF **A01**

OSWER-9285.3-03
Field Certification Tracking System (FCTS). User's Guide. Version 2.1.
PB93-963415/REB 93-04 PC **A04**/MF **A01**

OSWER-9345.1-05
Guidance for Performing Site Inspections under CERCLA.
PB92-963375/REB 93-01 PC **A11**/MF **A03**

OSWER-9345.1-07
Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC **A22**/MF **A04**

OSWER-9355.3-20
Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis.
PB93-963297/REB 93-04 PC **A03**/MF **A01**

OSWER-9360.3-02FS
Consideration of ARARs during Removal Actions.
PB92-963410/REB 93-01 PC **A02**/MF **A01**

OSWER-9360.6-09
Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC **A09**/MF **A02**

OSWER-9834.17
Guidance on CERCLA Settlements with De Micromis Waste Contributors.
PB93-963619/REB 93-04 PC **A03**/MF **A01**

Field Certification Tracking System (FCTS), Version 2.1 (for Microcomputers).
*(EPA/SW/DK-93/088)*
PB93-506582/REB 93-04 CP **D02**

Superfund: Environmental Response and Health and Safety (Training Materials).
PB93-963100/REB 93-01 Standing Order

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF ENFORCEMENT.**

EPA/OE/LE-133
Enforcement Four-Year Strategic Plan: Enhanced Environmental Enforcement for the 1990's.
PB93-129724/REB 93-01 PC **A05**/MF **A01**

EPA/400/R-92/008
National List of Asbestos Landfills.
PB93-200517/REB 93-01 PC **A10/MF A03**

Environmental Protection Agency Civil Enforcement Docket.
PB93-921700/REB 93-01 Subscription

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF GROUND WATER AND DRINKING WATER.**

EPA/570/F-91/047
Fact Sheet: National Primary Drinking Water Regulations for Lead and Copper.
PB93-193746/REB 93-01 PC **A03/MF A01**

EPA/810/B-92/016
Drinking Water Handbook for Public Officials.
PB93-226595/REB 93-04 PC **A04/MF A01**

National Public Water System Supervision Program. FY 1992 Compliance Report.
PB93-180867/REB 93-01 PC **A04/MF A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF GROUND-WATER PROTECTION.**

EPA/440/5-93/001
Guidelines for Delineation of Wellhead Protection Areas, 1993.
PB93-215861/REB 93-04 PC **A10/MF A03**

EPA/440/6-89/002
Wellhead Protection Programs: Tools for Local Governments.
PB93-101111/REB 93-01 PC **A04/MF A01**

EPA/440/6-90/004
Citizen's Guide to Ground-Water Protection.
PB93-115814/REB 93-01 PC **A03/MF A01**

EPA/440/6-90/008
Compendium of Federal Financial Assistance Programs: Targeting Programs for State and Local Ground-Water Protection.
PB93-116069/REB 93-01 PC **A06/MF A02**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF HEALTH AND ENVIRONMENTAL ASSESSMENT.**

EPA/600/6-90/006F
Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders.
PB93-134419/REB 93-01 PC**$29.00**/MF **A04**

EPA/600/8-89/053
Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04/MF A01**

EPA/600/8-90/045F
Air Quality Criteria for Carbon Monoxide.
PB93-167492/REB 93-01 PC **A99/MF A06**

EPA/600/J-90/119
Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/169
Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC **A01/MF A01**

EPA/600/J-93/176
Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/185
Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/186
Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/188
Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.
PB93-222081/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/203
Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/208
Quantification of Germ-Cell Risk Associated with the Induction of Heritable Translocations.
PB93-199677/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/293
Armitage-Doll Two-Stage Model: Implications and Extension.
PB93-222842/REB 93-04 PC **A02/MF A01**

OHEA-C-073
Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04/MF A01**

OHEA-C-462
Armitage-Doll Two-Stage Model: Implications and Extension.
PB93-222842/REB 93-04 PC **A02/MF A01**

OHEA-C-502
Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.
PB93-222081/REB 93-04 PC **A03/MF A01**

OHEA-E-325
Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03/MF A01**

OHEA-R-472
Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC **A01/MF A01**

OHEA-R-479
Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC **A03/MF A01**

OHEA-R-495
Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03/MF A01**

OHEA-R-496
Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03/MF A01**

OHEA-R-501
Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC **A02/MF A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF INTERNATIONAL ACTIVITIES.**

EPA/600/M-91/031
Hazardous Waste Management.
PB93-116135/REB 93-01 PC **A03/MF A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF MARINE AND ESTUARINE PROTECTION.**

EPA/503/6-90/001
Report to Congress on Implementation of Section 403(c) of the Federal Water Pollution Control Act.
PB93-207488/REB 93-04 PC **A07/MF A02**

EPA/503/8-88/003
Estuary Program Primer. National Estuary Program.
PB93-193753/REB 93-01 PC **A06/MF A02**

EPA/503/9-89/009
Proceedings of the Ocean Dumping Workshop 106-Mile Site. Held in Ocean City, NJ., on March 28-30, 1989.
PB93-208072/REB 93-04 PC **A07/MF A02**

EPA/556/1-87/005
Proceeding of the Workshop on the Sea-Surface Microlayer in Relation to Ocean Disposal. Held in Airlie, Virginia on December 18-19, 1985.
PB93-206993/REB 93-04 PC **A06/MF A02**

Proceedings and Summary of the Workshop on Finfish as Indicators of Toxic Contamination. Held in Airlie, Virginia on July 27-28, 1986.
PB93-208320/REB 93-04 PC **A06/MF A02**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF MODELING, MONITORING SYSTEMS AND QUALITY ASSURANCE.**

EPA/600/R-93/033
Environmental Monitoring Issues: Results of Workshops Held in July 1992 as Part of EPA's Eighth Annual Waste Testing and Quality Assurance Symposium.
PB93-216075/REB 93-04 PC **A12/MF A03**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF PESTICIDE PROGRAMS.**

EPA/540/09-89/012
Federal Insecticide, Fungicide, and Rodenticide Act as Amended.
PB93-116085/REB 93-01 PC **A05/MF A01**

EPA/540/09-93/240
PR Notice 86-5. Notice to Producers, Formulators, Distributors and Registrants.
PB93-144053/REB 93-01 PC **A03/MF A01**

EPA/540/09-93/241
PR Notice 86-4. Notice to Registrants of Pesticides, and Applicants for Pesticide Registration.
PB93-144046/REB 93-01 PC **A02/MF A01**

EPA/540/09-93/242
PR Notice 86-3. Notice to Producers, Registrants, and Formulators.
PB93-144038/REB 93-01 PC **A01/MF A01**

EPA/540/09-93/243
PR Notice 86-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144020/REB 93-01 PC **A01/MF A01**

EPA/540/09-93/244
PR Notice 86-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144012/REB 93-01 PC **A01/MF A01**

EPA/540/09-93/246
PR Notice 87-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-141687/REB 93-01 PC **A03/MF A01**

EPA/540/09-93/247
PR Notice 87-2. Notice to Procedures, Registrants, and Formulators.
PB93-144061/REB 93-01 PC **A01/MF A01**

EPA/540/09-93/248
PR Notice 87-3. Notice to Manufacturers, Formulators, Distributors and Registrants of Pesticide Products.
PB93-144079/REB 93-01 PC **A01/MF A01**

EPA/540/09-93/249
PR Notice 87-4. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-141695/REB 93-01 PC **A03/MF A01**

EPA/540/09-93/250
PR Notice 87-5. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-144087/REB 93-01 PC **A03/MF A01**

EPA/540/09-93/251
PR Notice 87-6. Notice to Manufacturers, Formulators, Procedures, and Registrants of Pesticide Products.
PB93-144095/REB 93-01 PC **A02/MF A01**

EPA/540/09-93/252
PR Notice 87-7. Notice to Producers, Formulators and Registrants of Pesticides.
PB93-146108/REB 93-01 PC **A02/MF A01**

EPA/540/09-93/253
PR Notice 87-8. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-147015/REB 93-01 PC **A02/MF A01**

EPA/540/09-93/254
PR Notice 87-9. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149151/REB 93-01 PC **A01/MF A01**

EPA/540/09-93/255
PR Notice 87-10. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149169/REB 93-01 PC **A01/MF A01**

EPA/540/09-93/256
PR Notice 87-11. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-149664/REB 93-01 PC **A01/MF A01**

EPA/540/FS-92/216
EPA Pesticide RED FACTS Sheets: Indole-3-Butyric Acid.
PB93-107282/REB 93-01 PC **A02/MF A01**

EPA/540/FS-92/219
RED Facts: Capsaicin.
PB93-100311/REB 93-01 PC **A02/MF A01**

EPA/540/FS-92/224
RED Facts: Ethylene.
PB93-100345/REB 93-01 PC **A02/MF A01**

EPA/540/FS-93/225
RED Facts: 'Nosema locustae'.
PB93-100352/REB 93-01 PC **A02/MF A01**

EPA/540/FS-93/227
RED Facts: Streptomycin and Streptomycin Sulfate.
PB93-100378/REB 93-01 PC **A02/MF A01**

EPA/540/FS-93/232
RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02/MF A01**

EPA/540/FS-93/236
Pesticide Fact Sheet Number 236: Pyridate.
PB93-130441/REB 93-01 PC **A03/MF A01**

EPA/540-FS-93/238
Pesticide Fact Sheet Number 20.1: Amitrole.
PB93-149680/REB 93-01 PC **A02/MF A01**

EPA/540/FS-93/239
Pesticide Fact Sheet Number 20.2: Amitrole.
PB93-144368/REB 93-01 PC **A02/MF A01**

EPA/540/RS-92/222
Reregistration Eligibility Document (RED): Capsaicin. (List D, Case 4018).
PB93-101434/REB 93-01 PC **A08/MF A02**

EPA/540/RS-93/226
Reregistration Eligibility Document (RED) 'Nosema locustae'.
PB93-100360/REB 93-01 PC **A07/MF A02**

EPA/540/RS-93/231
Reregistration Eligibility Document (RED) Soap Salts.
PB93-101673/REB 93-01 PC **A13/MF A03**

EPA/540/RS-93/235
Reregistration Eligibility Document (RED): Sodium Hydroxide.
PB93-124691/REB 93-01 PC **A07/MF A02**

EPA/731/N-92/001
PR Notice 92-1. Notice to Manufacturers, Formulators, Producers, and Registrants of Pesticide Products.
PB93-219467/REB 93-04 PC **A02/MF A01**

EPA/731/N-92/002
PR Notice 92-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219475/REB 93-04 PC **A01/MF A01**

EPA/731/N-92/003
PR Notice 92-3. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticide Products.
PB93-219483/REB 93-04 PC **A03/MF A01**

EPA/731/N-92/004
PR Notice 92-4. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219491/REB 93-04 PC **A01/MF A01**

EPA/731/N-92/005
PR Notice 92-5. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219509/REB 93-04 PC **A01/MF A01**

EPA/733/K-92/001
Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC **A03**/MF **A01**

EPA/734/12-92/011
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC **A05**/MF **A01**

EPA/734/R-92/001
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC **A10**/MF **A03**

EPA/734/R-92/002
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC **A08**/MF **A02**

EPA/734/R-92/003
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC **A08**/MF **A02**

EPA/734/R-92/004
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC **A06**/MF **A02**

EPA/734/R-92/005
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC **A99**/MF **E11**

EPA/734/R-92/006
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC **A21**/MF **A04**

EPA/734/R-92/007
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC **A07**/MF **A02**

EPA/734/R-92/008
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC **A20**/MF **A04**

EPA/734/R-92/009
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC **A06**/MF **A02**

EPA/734/R-92/010
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC **A24**/MF **A04**

EPA/737/F-90/009
Pesticide Fact Sheet: GY-81/Enzone.
PB93-219848/REB 93-04 PC **A03**/MF **A01**

EPA/737/F-92/003
Pesticide Fact Sheet Number 239: Cimectacarb.
PB93-206753/REB 93-04 PC **A02**/MF **A01**

EPA/737/F-93/001
Pesticide Fact Sheet Number 240: Dimethenamid. SAN 582H/Frontier (Trade Name) Herbicide.
PB93-198695/REB 93-01 PC **A03**/MF **A01**

EPA/737/F-93/002
Pesticide Fact Sheet: 'Pseudomonas cepacia' Type Wisconsin.
PB93-206746/REB 93-04 PC **A02**/MF **A01**

EPA/737/F-93/004
Pesticide Fact Sheet: Streptomyces sp. Strain K61.
PB93-206761/REB 93-04 PC **A02**/MF **A01**

EPA/737/F-93/007
Pesticide Fact Sheet: 1-Indole-3-Butanethioic Acid, S-Phenyl Ester.
PB93-219822/REB 93-04 PC **A02**/MF **A01**

EPA/737/F-93/010
Pesticide Fact Sheet: Glufosinate Ammonium.
PB93-219830/REB 93-04 PC **A03**/MF **A01**

EPA/737/R-92/006
PR Notice 92-6. Notice to Manufacturers, Producers, Formulators and Registrants of Pesticides.
PB93-219517/REB 93-04 PC **A01**/MF **A01**

EPA/737/R-93/001
Pesticide Reregistration Rejection Rate Analysis Residue Chemistry. Follow-up Guidance for Generating Storage Stability Data; Submission of Raw Data; Maximum Theoretical Concentration Factors; Flowchart Diagrams.
PB93-193696/REB 93-01 PC **A04**/MF **A01**

EPA/738/B-93/001
Pesticide Reregistration Rejection Rate Analysis Residue Chemistry/Environmental Fate Follow Up Guidance for Conducting Rotational Crop Studies.
PB93-194041/REB 93-01 PC **A03**/MF **A01**

EPA/738/F-92/008
RED Facts: Sodium Hydroxide.
PB93-124683/REB 93-01 PC **A02**/MF **A01**

EPA/738/F-92/009
RED Facts: Streptomycin and Streptomycin Sulfate.
PB93-100378/REB 93-01 PC **A02**/MF **A01**

EPA/738/F-92/011
RED Facts: 'Nosema locustae'.
PB93-100352/REB 93-01 PC **A02**/MF **A01**

EPA/738/F-92/013
RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02**/MF **A01**

EPA/738/F-92/014
RED Facts: Oxalic Acid.
PB93-173953/REB 93-01 PC **A02**/MF **A01**

EPA/738/F-93/001
RED Facts: Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-232916/REB 93-04 PC **A02**/MF **A01**

EPA/738/F-93/002
RED Facts: Iron Salts.
PB93-198703/REB 93-01 PC **A02**/MF **A01**

EPA/738/F-93/003
Pesticide Fact Sheet: Arsenic Acid (H3AsO4).
PB93-198711/REB 93-01 PC **A02**/MF **A01**

EPA/738/F-93/003
RED Facts: 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-232908/REB 93-04 PC **A02**/MF **A01**

EPA/738/R-92/004
Reregistration Eligibility Document (RED): Oxalic Acid.
PB93-169100/REB 93-01 PC **A06**/MF **A02**

EPA/738/R-93/009
Status of Pesticides in Reregistration and Special Review (Rainbow Report), June 1993.
PB93-230829/REB 93-04 PC **A17**/MF **A03**

EPA/738/S-93/001
Reregistration Eligibility Document (RED): Iron Salts.
PB93-200780/REB 93-01 PC **A05**/MF **A02**

ISBN-0-16-0362645-2
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC **A10**/MF **A03**

General Information on Applying for Registration of Pesticides in the United States.
PB93-115939/REB 93-01 PC **A08**/MF **A02**

PR Notices 86-1 through 86-5.
PB93-144004/REB 93-01 PC **E99**/MF **E99**

Pesticide Safety and Training Materials Catalog (Catalogo de Materiales Educativos y Proteccion Sobre Pesticidas).
PB93-200814/REB 93-01 PC **A07**/MF **A02**

PR Notices 92-1 through 92-6.
PB93-219459/REB 93-04 PC **E99**/MF **E99**

Pesticide Compact Label File - 1990 Updates.
PB93-911600/REB 93-01 Subscription

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF PESTICIDES AND TOXIC SUBSTANCES.**

EPA-21T-1004
Pesticide Reregistration, March 1991.
PB93-205896/REB 93-04 PC **A03**/MF **A01**

EPA/560/4-88/004A
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Monofilament Fiber Manufacturing.
PB93-205961/REB 93-04 PC **A02**/MF **A01**

EPA/560/4-88/004B
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Printing Operations.
PB93-205979/REB 93-04 PC **A02**/MF **A01**

EPA/560/4-88/004C
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electrodeposition of Organic Coatings.
PB93-205987/REB 93-04 PC **A02**/MF **A01**

EPA/560/4-88/004D
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Spray Application of Organic Coatings.
PB93-205995/REB 93-04 PC **A02**/MF **A01**

EPA/560/4-88/004E
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Semiconductor Manufacturing.
PB93-206001/REB 93-04 PC **A02**/MF **A01**

EPA/560/4-88/004F
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Formulation of Aqueous Solutions.
PB93-206019/REB 93-04 PC **A02**/MF **A01**

EPA/560/4-88/004G
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electroplating Operations.
PB93-206027/REB 93-04 PC **A02**/MF **A01**

EPA/560/4-88/004H
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Textile Dyeing.
PB93-206035/REB 93-04 PC **A02**/MF **A01**

EPA/560/4-88/004I
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Presswood and Laminated Wood Products Manufacturing.
PB93-206043/REB 93-04 PC **A02**/MF **A01**

EPA/560/4-88/004J
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Roller, Knife, and Gravure Coating Operations.
PB93-206050/REB 93-04 PC **A03**/MF **A01**

EPA/560/4-88/004K
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Paper and Paperboard Production.
PB93-206068/REB 93-04 PC **A03**/MF **A01**

EPA/560/4-88/004L
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Leather Tanning and Finishing.
PB93-206076/REB 93-04 PC **A03**/MF **A01**

EPA/560/4-88/004P
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Wood Preserving Operations.
PB93-206084/REB 93-04 PC **A03**/MF **A01**

EPA/560/4-88/004Q
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Rubber Production and Compounding.
PB93-206092/REB 93-04 PC **A03**/MF **A01**

EPA/560/4-91/006
Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (1991).
PB93-205854/REB 93-04 PC **A03**/MF **A01**

EPA/560/4-92/002
Emergency Planning and Community Right-to-Know Act: Section 313 Release Reporting Requirements (August 1991).
PB93-205847/REB 93-04 PC **A03**/MF **A01**

EPA/730/R-93/001
Pesticide Reregistration Progress Report, April 1993.
PB93-226199/REB 93-04 PC **A03**/MF **A01**

EPA/737/F-93/006
Pesticide Fact Sheet: 'Metarhizium anisopliae' Strain ESF1.
PB93-206787/REB 93-01 PC **A01**/MF **A01**

National Pesticide Survey: Glossary.
PB93-115970/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Project Summary.
PB93-115988/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Summary Results of EPA's National Survey of Pesticides in Drinking Water Wells.
PB93-115996/REB 93-01 PC **A03**/MF **A01**

National Pesticide Survey: Survey Design.
PB93-116002/REB 93-01 PC **A02**/MF **A01**

National Pesticide Survey: Survey Analytes.
PB93-116010/REB 93-01 PC **A03**/MF **A01**

Course 1. Model Curriculum for Training Asbestos Abatement Contractors and Supervisors (Training Manual).
PB93-780773/REB 93-01 PC**$182.00**

Course 2. Model Curriculum for School Building Inspectors (Training Manual).
PB93-780823/REB 93-01 PC**$136.00**

Course 3. Model Curriculum for School Asbestos Management Planners (Training Manual).
PB93-780872/REB 93-01 PC**$81.00**

Course 4. Model Curriculum for Asbestos Abatement Workers (English Version) (Training Manual).
PB93-780922/REB 93-01 PC**$235.00**

EPA Model Asbestos Worker Training Instructor's Resources. Course 4 (English Version) (Training Manual).
PB93-780955/REB 93-01 PC **A09**

Course 5. Presentation to Accompany 'Guidance for Controlling Asbestos-Containing Materials in Buildings' (Training Manual).
PB93-780971/REB 93-01 PC**$41.00**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF PLANNING AND EVALUATION.**

EPA/230/R-92/004
Overview of Strategic Planning at the Environmental Protection Agency.
PB93-128064/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF POLICY, PLANNING AND EVALUATION.**

EPA/230/1-73/026
Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC **A07**/MF **A02**

EPA/230/B-93/001
Guide to Federal Water Quality Programs and Information: A Guide with Computer Software Developed by the Interagency Work Group on Water Quality.
PB93-186245/REB 93-01 PC **A09**/MF **A02**

EPA/230/R-93/006
International Trade in Environmental Protection Equipment: An Assessment of Existing Data.
PB93-236206/REB 93-04 PC **A04**/MF **A01**

ISBN-0-16-041708-2
Guide to Federal Water Quality Programs and Information: A Guide with Computer Software Developed by the Interagency Work Group on Water Quality.
PB93-186245/REB 93-01 PC **A09**/MF **A02**

Assessing the Environmental Consumer Market.
PB93-116026/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF POLLUTION, PREVENTION, AND TOXICS.**

EPA/700/B-92/001
Guide to Performing Reinspections under the Asbestos Hazard Emergency Response Act (AHERA).
PB93-128007/REB 93-01 PC **A06**/MF **A02**

EPA/744/R-93/001
Determination of Rates of Reaction in the Gas-Phase in the Troposphere. Theory and Practice. 5. Rate of Indirect Photoreaction.
PB93-149334/REB 93-01 PC **A08**/MF **A02**

EPA/745/F-93/002
Toxics Release Inventory. Public Data Release. State Fact Sheets, 1991.
PB93-206668/REB 93-04 PC **A06**/MF **A02**

EPA/745/K-93/001
Toxic Chemical Release Inventory Reporting Form R and Instructions. Revised 1992 Version. Section 313 of the Emergency Planning and Community Right-to-Know Act.
PB93-194140/REB 93-01 PC **A06**/MF **A02**

EPA/745/R-93/003
Toxics Release Inventory: Public Release Data, 1991.
PB93-219988/REB 93-04 PC **A16**/MF **A03**

TSCA Confidential Business Information Security Manual.
PB93-184844/REB 93-01 PC **A07**/MF **A02**

ADL Migration Estimation Model (for Microcomputers) (Release Number 1).
*(EPA/SW/DK-93/012)*
PB93-500684/REB 93-01 CP **D02**

Toxic Release Inventory (TRI), 1987-1990 (on CD-ROM).
*(EPA/DF/CD-93/020)*
PB93-500742/REB 93-01 CD-ROM$45.00

Toxic Release Inventory, 1991 Reporting Facilities Names and Addresses.
*(EPA/DF/MT-93/062)*
PB93-505881/REB 93-04 CP **T02**

Toxic Release Inventory (TRI), 1987.
*(EPA/DF/MT-93/068)*
PB93-506004/REB 93-04 CP **T16**

Toxic Release Inventory (TRI), 1988.
*(EPA/DF/MT-93/069)*
PB93-506012/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1989.
*(EPA/DF/MT-93/070)*
PB93-506020/REB 93-04 CP **T14**

Toxic Release Inventory (TRI), 1990.
*(EPA/DF/MT-93/071)*
PB93-506038/REB 93-04 CP **T14**

Environmental Fate Data Base (EFDB) Complete: XREF, CASLST, DATALOG, BIOLOG, CHEMFATE, and BIODEG. (Date of Coverage 1993).
*(EPA/DF/MT-93/067)*
PB93-506426/REB 93-04 CP **T05**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF RADIATION AND INDOOR AIR.**

EPA/402/R-92/014
Radon Measurement in Schools: Revised Edition.
PB93-237493/REB 93-04 PC **A04**/MF **A01**

EPA/402/R-93/011
Environmental Characteristics of EPA, NRC, and DOE Sites Contaminated with Radioactive Substances.
PB93-185551/REB 93-01 PC **A05**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF RESEARCH AND DEVELOPMENT.**

EPA/600/4-90/033
Near Coastal Program Plan for 1991: Estuaries.
PB93-116176/REB 93-01 PC **A12**/MF **A03**

EPA/600/9-90/028
Environmental Monitoring and Assessment Program: 1990 Project Descriptors.
PB93-116150/REB 93-01 PC **A04**/MF **A01**

EPA/600/9-90/041
Bioremediation of Hazardous Wastes.
PB93-116143/REB 93-01 PC **A04**/MF **A01**

EPA/600/9-90/053
Strategy for Environmental Health Research at EPA.
PB93-116168/REB 93-01 PC **A06**/MF **A02**

EPA/600/J-93/127
Program to Analyze Aquifer Test Data and Check for Validity with the Jacob Method.
PB93-181154/REB 93-01 PC **A02**/MF **A01**

EPA/625/4-91/030
Seminar Publication. Medical and Institutional Waste Incineration: Regulations, Management, Technology, Emissions, and Operations.
PB93-116283/REB 93-01 PC **A03**/MF **A01**

EPA/625/6-91/028
Handbook: Remediation of Contaminated Sediments.
PB93-116275/REB 93-01 PC **A04**/MF **A01**

OHEA-E-493
Program to Analyze Aquifer Test Data and Check for Validity with the Jacob Method.
PB93-181154/REB 93-01 PC **A02**/MF **A01**

Protecting the Environment: A Research Strategy for the 1990s.
PB93-115954/REB 93-01 PC **A04**/MF **A01**

Economic Growth Analysis System: Reference Manual.
*(EPA/600/R-93/067A)*
PB93-183408/REB 93-04 PC **A12**/MF **A03**

Economic Growth Analysis System: User's Guide.
*(EPA/600/R-93/067B)*
PB93-183416/REB 93-04 PC **A04**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF SCIENCE AND TECHNOLOGY.**

EPA/823/R-92/009
Proceedings of the National Conference (3rd): Water Quality Standards for the 21st Century. Held in Las Vegas, Nevada on August 31-September 3, 1992.
PB93-144210/REB 93-01 PC **A16**/MF **A03**

Industrial Source Complex Short Term (ISCST) (for Microcomputers).
*(EPA/SW/DK-93/004)*
PB93-500221/REB 93-01 CP **D03**

Industrial Source Complex LongTerm (ISCLT) (for Microcomputers).
*(EPA/SW/DK-93/005)*
PB93-500239/REB 93-01 CP **D03**

CALINE: California Line Source Model (for Microcomputers).
*(EPA/SW/DK-93/007)*
PB93-500254/REB 93-01 CP **D02**

Preamble and Final Sludge Rule (for Microcomputers).
*(EPA/DF/DK-93/011)*
PB93-500478/REB 93-01 CP **D01**

PRELIM, Version 4.0 (for Microcomputers).
*(EPA/SW/DK-93/072)*
PB93-505980/REB 93-04 CP **D03**

EPA Model Pretreatment Ordinance (for Microcomputers).
*(EPA/SW/DK-93/075)*
PB93-506079/REB 93-04 CP **D02**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF SOLID WASTE.**

EPA/530/R-93/001
RCRA Ground-Water Monitoring: Draft Technical Guidance.
PB93-139350/REB 93-01 PC **A10**/MF **A03**

EPA/530/R-93/002
Geotechnical Systems for Structures on Contaminated Sites: A Technical Guidance Document.
PB93-209419/REB 93-04 PC **A08**/MF **A02**

EPA/530/R-93/010
Hazardous Waste Management Planning Needs and Practices: A Review of Several State Agency Approaches.
PB93-193225/REB 93-04 PC **A04**/MF **A01**

EPA/530/SW-90/071A
Markets for Recovered Glass.
PB93-169845/REB 93-01 PC **A03**/MF **A01**

EPA/811/P-92/001
Draft Ground-Water Disinfection Rule.
PB93-134351/REB 93-01 PC **A05**/MF **A01**

Instruction Manual for the Biennial Reporting System (BRS) NTIS Data Tape.
PB93-233740/REB 93-04 PC **A05**/MF **A01**

Hazardous Waste Report, 1991: Instructions and Forms.
PB93-233757/REB 93-04 PC **A08**/MF **A02**

Biennial Reporting System (BRS) 1989 (Date of Coverage: 1989).
*(EPA/DF/MT-93/089)*
PB93-507044/REB 93-04 CP **T04**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE.**

EPA/500/B-92/006
Ground-Water Modeling Compendium. Model Fact Sheets, Descriptions, Applications and Assessment Framework.
PB93-207504/REB 93-04 PC **A08**/MF **A02**

EPA/520/F-92/006
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Valley of the Drums, Bullitt County, Kentucky).
PB92-963618/REB 93-01 PC **A02**/MF **A01**

EPA/520/F-92/009
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (American Thermostat Corporation, New York).
PB92-963627/REB 93-01 PC **A02**/MF **A01**

EPA/520/F-92/010
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Wide Beach Section of Brant, New York).
PB92-963628/REB 93-01 PC **A02**/MF **A01**

EPA/520/F-92/011
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Krysowaty Farm, Hillsborough, New Jersey).
PB92-963629/REB 93-01 PC **A02**/MF **A01**

EPA/520/F-92/017
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Ciba-Geigy Corporation, McIntosh, Alabama).
PB92-963630/REB 93-01 PC **A02**/MF **A01**

EPA/520/F-93/007
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Harvey and Knott Drum Site, New Castle County, Delaware).
PB93-963614/REB 93-04 PC **A01**/MF **A01**

EPA/520/F-93/008
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Fulton Terminals Site Profile, Oswego County, NY).
PB93-963616/REB 93-04 PC **A02**/MF **A01**

EPA/530/R-92/017
RCRA Implementation Plan, FY 1993.
PB93-176956/REB 93-01 PC **A05**/MF **A02**

EPA/530/R-93/006
RCRA Public Involvement Manual.
PB93-231066/REB 93-04 PC **A11**/MF **A03**

EPA/530/R-93/014
Guidance for Capacity Assurance Planning. Capacity Planning Pursuant to CERCLA Section 104(c)(9).
PB93-209898/REB 93-04 PC **A09**/MF **A02**

EPA/530/SW-90/072A
Markets for Recovered Aluminum.
PB93-170132/REB 93-01 PC **A03**/MF **A01**

EPA/540/2-90/004
Bioremediation in the Field: Number 1, November 1990.
PB93-206340/REB 93-04 PC **A03**/MF **A01**

EPA/540/F-93/004
Required Contracts Management Training for Regional Superfund Personnel.
PB93-963258/REB 93-01 PC **A01**/MF **A01**

EPA/540/F-93-005
Extending the Tracking of Analytical Services to Potentially Responsible Party-Lead Superfund Sites (Supplemental Guidance on OSWER Directive 9240.0-2A).
PB93-963502/REB 93-01 PC **A03**/MF **A01**

EPA/540/F-93/006
Reassignment of CLP Transportation Functions.
PB93-963501/REB 93-01 PC **A01**/MF **A01**

EPA/540/F-93-007
OSWER Integrated Health and Safety Standard Operating Practices.
PB93-963401/REB 93-01 PC **A01**/MF **A01**

EPA/540/F-93/008
SARA '200' Remedial Action Starts Requirement.
PB93-963324/REB 93-01 PC **A01**/MF **A01**

EPA/540/F-93/009
Permits and Permit 'Equivalency' Processes for CERCLA On-Site Response Actions.
PB93-963325/REB 93-01 PC **A02**/MF **A01**

EPA/540/F-93/010
Use of Time and Materials and Cost Reimbursement Subcontracts for Remedial Actions under the Alternative Remedial Contracting Strategy Contracts.
PB93-963282/REB 93-01 PC **A02**/MF **A01**

EPA/540/F-93/011
Clarification of Delegation to Approve Consistency Exemptions at NPL Sites.
PB93-963281/REB 93-01 PC **A01**/MF **A01**

EPA/540/F-93/012
Guidance on Program Management Activities under ARCS.
PB93-963280/REB 93-01 PC **A03**/MF **A01**

EPA/540/F-93/013
Amendment to Historical Definitions of NPL Deletion Start and Completion Dates.
PB93-963278/REB 93-01 PC **A01**/MF **A01**

EPA/540/F-93/014
Identification of a Senior Superfund Official for Addressing Special NPL Site-Related Issues.
PB93-963279/REB 93-01 PC **A01**/MF **A01**

EPA/540/F-93/015
Performance Tracking under ARCS Contracts.
PB93-963276/REB 93-01 PC **A01**/MF **A01**

EPA/540/F-93/016
Initiatives to Streamline the Alternative Remedial Contracting Strategy (ARCS) Contracts' Award Fee Process.
PB93-963275/REB 93-01 PC **A03**/MF **A01**

EPA/540/F-93/019
NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC **A01**/MF **A01**

EPA/540/F-93/020
Technology Selection Guide for Wood Treater Sites.
PB93-963329/REB 93-04 PC **A02**/MF **A01**

EPA/540/F-93/024
Superfund Accelerated Cleanup Model (SACM): Questions and Answers.
PB93-963286/REB 93-04 PC **A01**/MF **A01**

EPA/540/F-93/029
Facility Response Plans.
PB93-963408/REB 93-01 PC **A01**/MF **A01**

EPA/540/F-93/030
Guidance on Setting Priorities for NPL Candidate Sites.
PB93-963333/REB 93-01 PC **A02**/MF **A01**

EPA/540/F-93/032
Questions and Answers on Release Notification Requirements and Reportable Quantity Adjustments.
PB93-963411/REB 93-01 PC **A03**/MF **A01**

EPA/540/F-93/033
Expedited Response Actions.
PB93-963410/REB 93-01 PC **A02**/MF **A01**

EPA/540/F-93/035
Presumptive Remedy for CERCLA Municipal Landfill Sites.
PB93-963339/REB 93-04 PC **A03**/MF **A01**

EPA/540/F-93/039
Determination of Imminent and Substantial Endangerment for Removal Actions.
PB93-963416/REB 93-04 PC **A01**/MF **A01**

EPA/540/F-93/047
Presumptive Remedies: Policy and Procedures.
PB93-963345/REB 93-04 PC **A02**/MF **A01**

EPA/540/F-93/048
Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites with Volatile Organic Compounds in Soils.
PB93-963346/REB 93-04 PC **A03**/MF **A01**

EPA/540/N-92/001
Bioremediation: An Information Update on Applying Bioremediation to Site Cleanup.
PB93-126175/REB 93-01 PC **A03**/MF **A01**

EPA/540/R-93/001
National Priorities List Sites: Alabama, 1992.
PB93-963201/REB
93-01
see individual report for order number and price

EPA/540/R-93/002
National Priorities List Sites: Alaska, 1992.
PB93-963202/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/003
National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/004
National Priorities List Sites: Arkansas, 1992.
PB93-963205/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/005
National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC **A12**/MF **A03**

EPA/540/R-93/006
National Priorities List Sites: Colorado, 1992.
PB93-963207/REB 93-01 PC **A05**/MF **A01**

EPA/540/R-93/007
National Priorities List Sites: Connecticut, 1992.
PB93-963208/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/008
National Priorities List Sites: Delaware, 1992.
PB93-963209/REB 93-01 PC **A05**/MF **A01**

EPA/540/R-93/009
National Priorities List Sites: Florida, 1992.
PB93-963210/REB 93-01 PC **A08**/MF **A02**

EPA/540/R-93/010
National Priorities List Sites: Georgia, 1992.
PB93-963211/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/011
National Priorities List Sites: Idaho, 1992.
PB93-963212/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/012
National Priorities List Sites: Illinois, 1992.
PB93-963213/REB 93-01 PC **A06**/MF **A02**

EPA/540/R-93/013
National Priorities List Sites: Indiana, 1992.
PB93-963214/REB 93-01 PC **A06**/MF **A02**

EPA/540/R-93/014
National Priorities List Sites: Iowa, 1992.
PB93-963215/REB 93-01 PC **A05**/MF **A01**

EPA/540/R-93/015
National Priorities List Sites: Kansas, 1992.
PB93-963216/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/016
National Priorities List Sites: Kentucky, 1992.
PB93-963217/REB 93-01 PC **A05**/MF **A01**

EPA/540/R-93/017
National Priorities List Sites: Louisiana, 1992.
PB93-963218/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/018
National Priorities List Sites: Maine, 1992.
PB93-963219/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/019
National Priorities List Sites: Maryland, 1992.
PB93-963220/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/020
National Priorities List Sites: Massachusetts, 1992.
PB93-963221/REB 93-01 PC **A06**/MF **A02**

EPA/540/R-93/021
National Priorities List Sites: Michigan, 1992.
PB93-963222/REB 93-01 PC **A10**/MF **A03**

EPA/540/R-93/022
National Priorities List Sites: Minnesota, 1992.
PB93-963223/REB 93-01 PC **A07**/MF **A02**

EPA/540/R-93/023
National Priorities List Sites: Mississippi, 1992.
PB93-963224/REB 93-01 PC **A03**/MF **A01**

EPA/540/R-93/024
National Priorities List Sites: Missouri, 1992.
PB93-963225/REB 93-01 PC **A05**/MF **A02**

EPA/540/R-93/025
National Priorities List Sites: Montana, 1992.
PB93-963226/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/026
National Priorities List Sites: Nebraska, 1992.
PB93-963227/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/027
National Priorities List Sites: New Hampshire, 1992.
PB93-963228/REB 93-01 PC **A05**/MF **A01**

EPA/540/R-93/028
National Priorities List Sites: New Jersey, 1992.
PB93-963229/REB 93-01 PC **A14**/MF **A03**

EPA/540/R-93/029
National Priorities List Sites: New Mexico, 1992.
PB93-963230/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/030
National Priorities List Sites: New York, 1992.
PB93-963231/REB 93-01 PC **A11**/MF **A03**

EPA/540/R-93/031
National Priorities List Sites: North Carolina, 1992.
PB93-963232/REB 93-01 PC **A05**/MF **A01**

EPA/540/R-93/032
National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/033
National Priorities List Sites: Ohio, 1992.
PB93-963234/REB 93-01 PC **A06**/MF **A02**

EPA/540/R-93/034
National Priorities List Sites: Oklahoma, 1992.
PB93-963235/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/035
National Priorities List Sites: Oregon, 1992.
PB93-963236/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/036
National Priorities List Sites: Pennsylvania, 1992.
PB93-963237/REB 93-01 PC **A12**/MF **A03**

EPA/540/R-93/037
National Priorities List Sites: Rhode Island, 1992.
PB93-963239/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/038
National Priorities List Sites: South Carolina, 1992.
PB93-963240/REB 93-01 PC **A05**/MF **A01**

EPA/540/R-93/039
National Priorities List Sites: Tennessee, 1992.
PB93-963241/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/040
National Priorities List Sites: Texas, 1992.
PB93-963242/REB 93-01 PC **A06**/MF **A02**

EPA/540/R-93/041
National Priorities List Sites: Utah, 1992.
PB93-963243/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/042
National Priorities List Sites: Vermont, 1992.
PB93-963244/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/043
National Priorities List Sites: Virginia, 1992.
PB93-963245/REB 93-01 PC **A05**/MF **A01**

EPA/540/R-93/044
National Priorities List Sites: Washington, 1992.
PB93-963246/REB 93-01 PC **A08**/MF **A02**

EPA/540/R-93/045
National Priorities List Sites: West Virginia, 1992.
PB93-963247/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/046
National Priorities List Sites: Wisconsin, 1992.
PB93-963248/REB 93-01 PC **A07**/MF **A02**

EPA/540/R-93/047
National Priorities List Sites: Wyoming, 1992.
PB93-963249/REB 93-01 PC **A03**/MF **A01**

EPA/540/R-93/048
National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/049
National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/055
Superfund: EPA/ICMA Superfund Revitalization Conference. Held in Chicago, Illinois on November 12-13, 1992.
PB93-963274/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/057
Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA.
PB93-963402/REB 93-04 PC **A04**/MF **A01**

EPA/540/R-93/059
Compendium of ROD Language for FY 1993 Focus Areas.
PB93-963328/REB 93-01 PC **A04**/MF **A01**

EPA/540/R-93/067
Superfund Administrative Improvements. Executive Summary.
PB93-963294/REB 93-04 PC **A03**/MF **A01**

EPA/540/R-93/068
Superfund Administrative Improvements. Final Report.
PB93-963295/REB 93-04 PC **A04**/MF **A01**

EPA/540/R-93/072
Superfund Reauthorization: NACEPT Subcommittee Handbook.
PB93-963298/REB 93-04 PC **A05**/MF **A02**

EPA/542/B-92/004
Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC **A03**/MF **A01**

EPA/542/B-92/005A
OSWER Source Book. Volume 1. Training and Technology Transfer Resources, 1992-1993.
PB93-143980/REB 93-01 PC **A10**/MF **A03**

EPA/542/B-92/005B
OSWER Source Book. Volume 2. Training and Technology Transfer Resources, 1992-1993.
PB93-144129/REB 93-01 PC **A11**/MF **A03**

EPA/542/B-93/001
Online Guided Tour of the Cleanup Information Bulletin Board System. (CLU-IN: Cleanup Information Bulletin Board).
PB93-193704/REB 93-01 PC **A03**/MF **A01**

EPA/550/B-93/002
Opportunities and Challenges for Local Emergency Planning Committees: Bestseller in EPCRA.
PB93-234789/REB 93-04 PC **A02**/MF **A01**

EPA/550/K-93/001
Chemical Emergency Preparedness and Prevention Advisory: Hydrogen Fluoride, Series 8, No. 3.
PB93-234797/REB 93-04 PC **A02**/MF **A01**

EPA/600/X-93/062
Summary of GIS Support to Superfund.
PB93-963506/REB 93-04 PC **A04**/MF **A01**

EPA/9360.7-06
Guidance for Federal Facilities on Release Notification Requirements under CERCLA and SARA Title III.
PB93-963412/REB 93-01 PC **A03**/MF **A01**

ISBN-0-16-036253-9
Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC **A03**/MF **A01**

OSWER-DIRECTIVE-9010.02
Guidance for Capacity Assurance Planning. Capacity Planning Pursuant to CERCLA Section 104(c)(9).
PB93-209898/REB 93-04 PC **A09**/MF **A02**

OSWER DIRECTIVE-9420.00-08
RCRA Implementation Plan, FY 1993.
PB93-176956/REB 93-01 PC **A05**/MF **A02**

OSWER-88-005
Community Right-to-Know and Small Business: Understanding Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act of 1986.
PB93-207538/REB 93-04 PC **A03**/MF **A01**

OSWER-91-006.1
Successful Practices in Title III Implementation. Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Cameron County, Texas; Bucks County, Pennsylvania; Harford County, Maryland; Dallas County, Texas. Series 6, Number 7.
PB93-130086/REB 93-01 PC **A03**/MF **A01**

OSWER-91-006.2
Successful Practices in Title 3 Implementation Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Series 6, Number 8.
PB93-126126/REB 93-01 PC **A03**/MF **A01**

OSWER-9200.0-14-1
Superfund Administrative Improvements. Executive Summary.
PB93-963294/REB 93-04 PC **A03**/MF **A01**

OSWER-9200.1-14
Superfund Reauthorization: NACEPT Subcommittee Handbook.
PB93-963298/REB 93-04 PC **A05**/MF **A02**

OSWER-9200.2-15FS
Overview of the Outyear Liability Model (OLM).
PB93-963259/REB 93-01 PC **A02**/MF **A01**

OSWER-9200.5-702B
National Priorities List Sites: Alabama, 1992.
PB93-963201/REB
93-01
see individual report for order number and price

OSWER-9200.5-703B
National Priorities List Sites: Alaska, 1992.
PB93-963202/REB 93-01 PC **A04**/MF **A01**

OSWER-9200.5-704B
National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC **A04**/MF **A01**

OSWER-9200.5-705B
National Priorities List Sites: Arkansas, 1992.
PB93-963205/REB 93-01 PC **A04**/MF **A01**

OSWER-9200.5-706B
National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC **A12**/MF **A03**

OSWER-9200.5-707B
National Priorities List Sites: Colorado, 1992.
PB93-963207/REB 93-01 PC **A05**/MF **A01**

OSWER-9200.5-708B
National Priorities List Sites: Connecticut, 1992.
PB93-963208/REB 93-01 PC **A04**/MF **A01**

OSWER-9200.5-709B
National Priorities List Sites: Delaware, 1992.
PB93-963209/REB 93-01 PC **A05**/MF **A01**

OSWER-9200.5-710B
National Priorities List Sites: Florida, 1992.
PB93-963210/REB 93-01 PC **A08**/MF **A02**

OSWER-9200.5-711B
National Priorities List Sites: Georgia, 1992.
PB93-963211/REB 93-01 PC **A04**/MF **A01**

OSWER-9200.5-713B
National Priorities List Sites: Idaho, 1992.
PB93-963212/REB 93-01 PC A04/MF A01

OSWER-9200.5-714B
National Priorities List Sites: Illinois, 1992.
PB93-963213/REB 93-01 PC A06/MF A02

OSWER-9200.5-715B
National Priorities List Sites: Indiana, 1992.
PB93-963214/REB 93-01 PC A06/MF A02

OSWER-9200.5-716B
National Priorities List Sites: Iowa, 1992.
PB93-963215/REB 93-01 PC A05/MF A01

OSWER-9200.5-717B
National Priorities List Sites: Kansas, 1992.
PB93-963216/REB 93-01 PC A04/MF A01

OSWER-9200.5-718B
National Priorities List Sites: Kentucky, 1992.
PB93-963217/REB 93-01 PC A05/MF A01

OSWER-9200.5-719B
National Priorities List Sites: Louisiana, 1992.
PB93-963218/REB 93-01 PC A04/MF A01

OSWER-9200.5-720B
National Priorities List Sites: Maine, 1992.
PB93-963219/REB 93-01 PC A04/MF A01

OSWER-9200.5-721B
National Priorities List Sites: Maryland, 1992.
PB93-963220/REB 93-01 PC A04/MF A01

OSWER-9200.5-722B
National Priorities List Sites: Massachusetts, 1992.
PB93-963221/REB 93-01 PC A06/MF A02

OSWER-9200.5-723B
National Priorities List Sites: Michigan, 1992.
PB93-963222/REB 93-01 PC A10/MF A03

OSWER-9200.5-724B
National Priorities List Sites: Minnesota, 1992.
PB93-963223/REB 93-01 PC A07/MF A02

OSWER-9200.5-725B
National Priorities List Sites: Mississippi, 1992.
PB93-963224/REB 93-01 PC A03/MF A01

OSWER-9200.5-726B
National Priorities List Sites: Missouri, 1992.
PB93-963225/REB 93-01 PC A05/MF A02

OSWER-9200.5-727B
National Priorities List Sites: Montana, 1992.
PB93-963226/REB 93-01 PC A04/MF A01

OSWER-9200.5-728B
National Priorities List Sites: Nebraska, 1992.
PB93-963227/REB 93-01 PC A04/MF A01

OSWER-9200.5-729B
National Priorities List Sites: New Hampshire, 1992.
PB93-963228/REB 93-01 PC A05/MF A01

OSWER-9200.5-730B
National Priorities List Sites: New Jersey, 1992.
PB93-963229/REB 93-01 PC A14/MF A03

OSWER-9200.5-731B
National Priorities List Sites: New Mexico, 1992.
PB93-963230/REB 93-01 PC A04/MF A01

OSWER-9200.5-732B
National Priorities List Sites: New York, 1992.
PB93-963231/REB 93-01 PC A11/MF A03

OSWER-9200.5-733B
National Priorities List Sites: North Carolina, 1992.
PB93-963232/REB 93-01 PC A05/MF A01

OSWER-9200.5-734B
National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC A04/MF A01

OSWER-9200.5-735B
National Priorities List Sites: Ohio, 1992.
PB93-963234/REB 93-01 PC A06/MF A02

OSWER-9200.5-736B
National Priorities List Sites: Oklahoma, 1992.
PB93-963235/REB 93-01 PC A04/MF A01

OSWER-9200.5-737B
National Priorities List Sites: Oregon, 1992.
PB93-963236/REB 93-01 PC A04/MF A01

OSWER-9200.5-738B
National Priorities List Sites: Pennsylvania, 1992.
PB93-963237/REB 93-01 PC A12/MF A03

OSWER-9200.5-739B
National Priorities List Sites: Rhode Island, 1992.
PB93-963239/REB 93-01 PC A04/MF A01

OSWER-9200.5-740B
National Priorities List Sites: South Carolina, 1992.
PB93-963240/REB 93-01 PC A05/MF A01

OSWER-9200.5-741B
National Priorities List Sites: Tennessee, 1992.
PB93-963241/REB 93-01 PC A04/MF A01

OSWER-9200.5-742B
National Priorities List Sites: Texas, 1992.
PB93-963242/REB 93-01 PC A06/MF A02

OSWER-9200.5-743B
National Priorities List Sites: Utah, 1992.
PB93-963243/REB 93-01 PC A04/MF A01

OSWER-9200.5-744B
National Priorities List Sites: Vermont, 1992.
PB93-963244/REB 93-01 PC A04/MF A01

OSWER-9200.5-745B
National Priorities List Sites: Virginia, 1992.
PB93-963245/REB 93-01 PC A05/MF A01

OSWER-9200.5-746B
National Priorities List Sites: Washington, 1992.
PB93-963246/REB 93-01 PC A08/MF A02

OSWER-9200.5-747B
National Priorities List Sites: West Virginia, 1992.
PB93-963247/REB 93-01 PC A04/MF A01

OSWER-9200.5-748B
National Priorities List Sites: Wisconsin, 1992.
PB93-963248/REB 93-01 PC A07/MF A02

OSWER-9200.5-749B
National Priorities List Sites: Wyoming, 1992.
PB93-963249/REB 93-01 PC A03/MF A01

OSWER-9200.5-750B
National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC A04/MF A01

OSWER-9200.5-751B
National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC A04/MF A01

OSWER-9202.1-02I-VOL-1-NO-2
Smart Moves in Superfund - Regional Pilots and Initiatives. Volume 1, Number 2, September 1992.
PB93-963283/REB 93-01 PC A01/MF A01

OSWER-9202.1-02I-VOL-1-NO-3
Smart Moves in Superfund - Revitalization One Year Later. Volume 1, Number 3, January 1993.
PB93-963284/REB 93-01 PC A01/MF A01

OSWER-9202.1-02I-VOL-2-NO-1
Response Action Contractor Final Indemnification Guidelines. Volume 2, Number 1, March 1993.
PB93-963290/REB 93-01 PC A01/MF A01

OSWER-9202.1-04
Identification of a Senior Superfund Official for Addressing Special NPL Site-Related Issues.
PB93-963279/REB 93-01 PC A01/MF A01

OSWER-9202.1-05
Required Contracts Management Training for Regional Superfund Personnel.
PB93-963258/REB 93-01 PC A01/MF A01

OSWER-9202.1-06
Initiatives to Streamline the Alternative Remedial Contracting Strategy (ARCS) Contracts' Award Fee Process.
PB93-963275/REB 93-01 PC A03/MF A01

OSWER-9202.1-09
Guidance on Program Management Activities under ARCS.
PB93-963280/REB 93-01 PC A03/MF A01

OSWER-9202.1-11
Superfund: EPA/ICMA Superfund Revitalization Conference. Held in Chicago, Illinois on November 12-13, 1992.
PB93-963274/REB 93-01 PC A04/MF A01

OSWER-9203.1-06
Guidance on Setting Priorities for NPL Candidate Sites.
PB93-963333/REB 93-01 PC A02/MF A01

OSWER-9203.1-07I-VOL-1-NO-1
HSED SACM Report. Volume 1, Number 1, January 1993.
PB93-963289/REB 93-01 PC A01/MF A01

OSWER-9203.1-08
Further Direction on Implementing the Superfund Accelerated Cleanup Model (SACM).
PB93-963291/REB 93-01 PC A02/MF A01

OSWER-9203.1-10FS
Superfund Accelerated Cleanup Model (SACM): Questions and Answers.
PB93-963286/REB 93-04 PC A01/MF A01

OSWER-9203.1-11
Superfund Accelerated Cleanup Model (SACM) Coordination Strategy.
PB94-963201/REB 93-04 PC A01/MF A01

OSWER-9234.2-22FS
ARARs Fact Sheet: Compliance with the Clean Air Act and Associated Air Quality Requirements.
PB92-963282/REB 93-01 PC A03/MF A01

OSWER-9240.0-02B
Extending the Tracking of Analytical Services to Potentially Responsible Party-Lead Superfund Sites (Supplemental Guidance on OSWER Directive 9240.0-2A).
PB93-963502/REB 93-01 PC A03/MF A01

OSWER-9240.0-25
Reassignment of CLP Transportation Functions.
PB93-963501/REB 93-01 PC A01/MF A01

OSWER-9242.2-08FS
Superfund Response Action Contracts.
PB93-963292/REB 93-01 PC A01/MF A01

OSWER-9242.3-09
Use of Time and Materials and Cost Reimbursement Subcontracts for Remedial Actions under the Alternative Remedial Contracting Strategy Contracts.
PB93-963282/REB 93-01 PC A02/MF A01

OSWER-9242.6-13
Performance Tracking under ARCS Contracts.
PB93-963276/REB 93-01 PC A01/MF A01

OSWER-9285.0-01A
OSWER Integrated Health and Safety Standard Operating Practices.
PB93-963401/REB 93-01 PC A01/MF A01

OSWER-9285.4-06
ATSDR Health Consultations under CERCLA.
PB93-963334/REB 93-01 PC A01/MF A01

OSWER-9320.1-11
Discussions with the Public Concerning NPL Listings.
PB93-963338/REB 93-01 PC A03/MF A01

OSWER-9320.2-05
Amendment to Historical Definitions of NPL Deletion Start and Completion Dates.
PB93-963278/REB 93-01 PC A01/MF A01

OSWER-9320.2-06
NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC A01/MF A01

OSWER-9345.0-07
Standard Document for Remedial Site Assessment Decisions.
PB93-963268/REB 93-01 PC A01/MF A01

OSWER-9345.0-08
PA Review Checklist.
PB93-963342/REB 93-04 PC A03/MF A01

OSWER-9345.4-02FS
Guide to Community Involvement for Site Assessment Managers.
PB93-963348/REB 93-04 PC A02/MF A01

OSWER-9345.4-03FS
Site Assessment: Evaluating Risks at Superfund Sites.
PB93-963347/REB 93-04 PC A02/MF A01

OSWER-9355.0-24A
SARA '200' Remedial Action Starts Requirement.
PB93-963324/REB 93-01 PC A01/MF A01

OSWER-9355.0-47FS
Presumptive Remedies: Policy and Procedures.
PB93-963345/REB 93-04 PC A02/MF A01

OSWER-9355.0-48FS
Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites with Volatile Organic Compounds in Soils.
PB93-963346/REB 93-04 PC A03/MF A01

OSWER-9355.0-49FS
Presumptive Remedy for CERCLA Municipal Landfill Sites.
PB93-963339/REB 93-04 PC A03/MF A01

OSWER-9355.3-17
Compendium of ROD Language for FY 1993 Focus Areas.
PB93-963328/REB 93-01 PC A04/MF A01

OSWER-9355.7-03
Permits and Permit 'Equivalency' Processes for CERCLA On-Site Response Actions.
PB93-963325/REB 93-01 PC A02/MF A01

OSWER-9360.0-10
Expedited Response Actions.
PB93-963410/REB 93-01 PC A02/MF A01

OSWER-9360.0.13
Guidance on Implementation of the 'Contribute to Remedial Performance' Provision.
PB93-963413/REB 93-04 PC A02/MF A01

OSWER-9360.0-31FS
Effect of OSHA's Bloodborne Pathogens Standard on Hazardous Waste Cleanup Activities.
PB93-963419/REB 93-04 PC A02/MF A01

OSWER-9360.0-32
Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA.
PB93-963402/REB 93-04 PC A04/MF A01

OSWER-9360.0-34
Determination of Imminent and Substantial Endangerment for Removal Actions.
PB93-963416/REB 93-04 PC A01/MF A01

OSWER-9360.0-46FS
Technology Selection Guide for Wood Treater Sites.
PB93-963329/REB 93-04 PC A02/MF A01

OSWER-9360.2-04A
Clarification of Delegation to Approve Consistency Exemptions at NPL Sites.
PB93-963281/REB 93-01 PC A01/MF A01

OSWER-9360.7-11
Questions and Answers on Release Notification Requirements and Reportable Quantity Adjustments.
PB93-963411/REB 93-01 PC A03/MF A01

OSWER-9360.8-06FS
Facility Response Plans.
PB93-963408/REB 93-01 PC A01/MF A01

OSWER-9360.8-17FS
Personal Air Sampling and Air Monitoring Requirements under 29 CFR 1910.120.
PB93-963420/REB 93-04 PC A03/MF A01

OSWER-9375.5-06A/FS
Cost of Remedial Action Model.
PB93-963304/REB 93-04 PC A01/MF A01

OSWER-9375.5-13FS
Superfund: Qualified Disadvantaged Business Utilization in State Response.
PB92-963283/REB 93-01 PC A01/MF A01

OSWER-9375.5-19
Cost of Remedial Actions (CORA) Model: Overview and Applications.
PB93-963318/REB 93-04 PC A03/MF A01

OSWER-9375.7-01
Ensuring the Adequacy of Cost Share Provisions in Superfund State Contracts.
PB93-963336/REB 93-01 PC **A03**/MF **A01**

OSWER-9375.7-02
Obligation of Funds under Superfund State Contracts.
PB93-963326/REB 93-04 PC **A01**/MF **A01**

Instruction Manual for the Resource Conservation and Recovery Information System (RCRIS) Extract Data Tapes.
PB93-183499/REB 93-04 PC **A03**/MF **A01**

Resource Conservation and Recovery Information System (RCRIS) Data Element Dictionary.
PB93-192656/REB 93-04 PC **A24**/MF **A04**

PREscore Software: Users Manual and Tutorial Version 2.0.
*(EPA/SW/DK-93/066A)*
PB93-192698/REB 93-04 PC **A05**/MF **A01**

Resource Conservation and Recovery Information System (RCRIS) Extract Tapes.
PB93-592570/REB
93-04 SubscriptionPC**$2540.00**

National Priorities List Sites (1992).
PB93-963250/REB 93-01 PC**$700.00**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF THE ASSISTANT ADMINISTRATOR FOR WATER.**

EPA/440/1-86/016S
Supplementary Development Document for Effluent Limitations Guidelines for the Leather Tanning and Finishing Point Source Category.
PB93-207934/REB 93-04 PC **A06**/MF **A02**

EPA/440/4-90/010
Volunteer Water Monitoring: A Guide for State Managers.
PB93-202596/REB 93-01 PC **A05**/MF **A01**

EPA/503/2-89/001
Compendium of Methods for Marine and Estuarine Environmental Studies.
PB93-202570/REB 93-01 PC **A10**/MF **A03**

EPA/503/2-91/004
Portraits of Our Coastal Waters. Supplement to the National Water Quality Inventory. Report from the EPA Regions.
PB93-207546/REB 93-04 PC **A03**/MF **A01**

EPA/503/4-91/001
Monitoring, Research, and Surveillance Plan for the 106-Mile Deepwater Municipal Sludge Dump Site and Environs.
PB93-207744/REB 93-04 PC **A07**/MF **A02**

EPA/503/8-90/005
Saving Bays and Estuaries: A Primer for Establishing and Managing Estuary Programs. Appendices G, H, and I.
PB93-116077/REB 93-01 PC **A05**/MF **A02**

EPA/503/9-89/002
Marine and Estuarine Protection: Programs and Activities.
PB93-179000/REB 93-01 PC **A03**/MF **A01**

EPA/570/9-88/003
Sanitary Survey Training: Instructor's Guide for Inspectors of Small Water Systems.
PB93-115871/REB 93-01 PC **A05**/MF **A01**

EPA/570/9-88/004
Sanitary Survey Training: Instructor's Guide for Sanitarians of Micronesia.
PB93-115889/REB 93-01 PC **A09**/MF **A02**

EPA/570/9-91/006
Florida Small Systems Compliance Project.
PB93-115855/REB 93-01 PC **A04**/MF **A01**

EPA/570/9-91/023
Managing Ground Water Contamination Sources in Wellhead Protection Areas: A Priority Setting Approach.
PB93-115863/REB 93-01 PC **A12**/MF **A03**

EPA/570/9-91/033
Guide for Conducting Contaminant Source Inventories for Public Drinking Water Supplies. Technical Assistance Document.
PB93-126407/REB 93-01 PC **A06**/MF **A02**

EPA/570/9-91/035
Restructuring Manual: A Training Manual for State Drinking Water Personnel as They Meet the Challenges of the 1986 Safe Drinking Water Act Amendments.
PB93-180842/REB 93-01 PC **A04**/MF **A01**

EPA/570/9-91/040
Status Report on Development of Regulations for Disinfectants and Disinfection By-Products.
PB93-134914/REB 93-01 PC **A03**/MF **A01**

EPA/570/9-91/700
Radionuclides in Drinking Water. National Primary Drinking Water Regulations for Radionuclides. Proposed Rules.
PB93-194058/REB 93-01 PC **A03**/MF **A01**

EPA/625/1-91/024
Manual: Alternative Wastewater Collection Systems.
PB93-116259/REB 93-01 PC **A10**/MF **A03**

EPA/800/B-92/001
Office of Water Environmental and Program Information Systems Compendium, FY 1992.
PB93-186203/REB 93-01 PC **A08**/MF **A02**

EPA/810/R-92/001
EPA's Ground Water and Drinking Water Program: Making a Difference.
PB93-136612/REB 93-01 PC **A03**/MF **A01**

EPA/811/R-92/002
Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

EPA/811/R-92/004
Status Report on Analytical Methods to Support the Disinfectant/Disinfection By-Products Regulation.
PB93-134898/REB 93-01 PC **A03**/MF **A01**

EPA/811/R-92/005
Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC **A05**/MF **A01**

EPA/811/R-92/006
Status Report on the Development of Draft MCLGs for Disinfectants and By-Products.
PB93-134906/REB 93-01 PC **A05**/MF **A01**

EPA/811/R-92/007
Simulation of Microbial Occurrence, Exposure and Health Risks after Drinking Water Treatment Processes.
PB93-134393/REB 93-01 PC **A05**/MF **A02**

EPA/811/S-92/001
Use of Microbial Risk Assessment in Setting U.S. Drinking Water Standards.
PB93-134930/REB 93-01 PC **A03**/MF **A01**

EPA/812/B-92/004
Lead and Copper Monitoring Guidance for Water Systems Serving 101 to 500 Persons.
PB93-174522/REB 93-01 PC **A03**/MF **A01**

EPA/812/B-92/005
Lead and Copper Monitoring Guidance for Water Systems Serving 501 to 3,300 Persons.
PB93-174530/REB 93-01 PC **A03**/MF **A01**

EPA/812/B-92/006
Lead and Copper Monitoring Guidance for Water Systems Serving 3,301 to 10,000 Persons.
PB93-174548/REB 93-01 PC **A03**/MF **A01**

EPA/812/B-92/007
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 10,001 to 50,000 Persons.
PB93-174555/REB 93-01 PC **A04**/MF **A01**

EPA/812/B-92/008
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 50,001 to 100,000 Persons.
PB93-174514/REB 93-01 PC **A04**/MF **A01**

EPA/812/B-92/009
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving > 100,000 Persons.
PB93-174563/REB 93-01 PC **A04**/MF **A01**

EPA/812/B-93/004
Indian Primacy Procedures Handbook for the Public Water System Supervision (PWSS) Program and the Underground Injection Control (UIC) Program.
PB93-185585/REB 93-01 PC **A09**/MF **A02**

EPA/812/B-93/005
Tribal Water Utility Management.
PB93-190908/REB 93-01 PC **A09**/MF **A02**

EPA/812/R-92/001
Overview of Existing State Alternative Financing Programs: Financing Drinking Water System Capital Needs in the 1990's.
PB93-132637/REB 93-01 PC **A05**/MF **A01**

EPA/812/R-92/003
Guidance on Enforcement of the Requirements of the Surface Water Treatment Rule.
PB93-186633/REB 93-01 PC **A03**/MF **A01**

EPA/812/R-93/002
Institutional Solutions to Drinking Water Problems: Maine Case Studies.
PB93-180834/REB 93-01 PC **A03**/MF **A01**

EPA/812/R-93/003
Medium Systems That Failed to Conduct Required Initial Lead Tap Monitoring and Reporting.
PB93-196632/REB 93-01 PC **A03**/MF **A01**

EPA/813/R-92/002
Case Studies in Wellhead Protection: Ten Examples of Innovative Wellhead Protection Programs.
PB93-207363/REB 93-04 PC **A03**/MF **A01**

EPA/820/B-92/002
Publications Office of Science and Technology: Catalog.
PB93-152577/REB 93-01 PC **A06**/MF **A02**

EPA/823/N-92/001
Contaminated Sediments News: Number 5, April, 1992.
PB93-207413/REB 93-04 PC **A02**/MF **A01**

EPA/823/R-92/007
Proceedings of the EPA's Contaminated Sediment Management Strategy Forums.
PB93-126399/REB 93-01 PC **A10**/MF **A03**

EPA/823/R-92/008A
National Study of Chemical Residues in Fish. Volume 1.
PB93-114981/REB 93-01 PC **E09**/MF **A01**

EPA/823/R-92/008B
National Study of Chemical Residues in Fish. Volume 2.
PB93-114999/REB 93-01 PC **E11**/MF **A04**

EPA/823/R-93/001
Proceedings: Tiered Testing Issues for Freshwater and Marine Sediments. Held in Washington, DC. on September 16-18, 1992.
PB93-152619/REB 93-01 PC **A22**/MF **A04**

EPA/831/S-92/002
Introduction to Water Quality-Based Toxics Control for the NPDES Program.
PB93-207967/REB 93-04 PC **A03**/MF **A01**

EPA/832/B-92/001
Municipal Water Pollution Prevention Bibliography: 1992, the Year of Clean Water. Celebration and Commitment.
PB93-141083/REB 93-01 PC **A03**/MF **A01**

EPA/833/B-92/004
U.S. EPA NPDES: Basic Permit Writers' Course. Workbook.
PB93-185619/REB 93-01 PC **A17**/MF **A03**

EPA/833/B-93/003
Training Manual for NPDES Permit Writers.
PB93-217644/REB 93-04 PC **A09**/MF **A02**

EPA/833/K-93/001
Urban Runoff Management Information/Education Products. Version 1.
PB93-190932/REB 93-01 PC **A09**/MF **A03**

EPA/841/B-93/003
Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance.
PB93-193795/REB 93-01 PC **A05**/MF **A01**

EPA/841/N-92/003
News Notes, Number 22: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-126183/REB 93-01 PC **A03**/MF **A01**

EPA/841/N-92/005
News-Notes Number 23: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-204006/REB 93-01 PC **A03**/MF **A01**

EPA/842/B-92/009
Summary of Implementation and Demonstration Projects in Bays and Estuaries.
PB93-194637/REB 93-01 PC **A07**/MF **A02**

Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC **A05**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Tetranitromethane (TNM).
PB93-116994/REB 93-01 PC **A03**/MF **A01**

Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

Drinking Water Toxicity Profiles.
PB93-122406/REB 93-01 PC **A09**/MF **A02**

State Sludge Management Program Guidance Manual.
PB93-128122/REB 93-01 PC **A06**/MF **A02**

Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Human Health (February 1993 Draft).
PB93-154680/REB 93-01 PC **A09**/MF **A03**

Great Lakes Water Quality Initiative Technical Support Document for Human Health Criteria and Values (January 1993 Draft).
PB93-154698/REB 93-01 PC **A05**/MF **A01**

Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC **A04**/MF **A01**

Proposed Water Quality Guidance for the Great Lakes System.
PB93-164515/REB 93-01 PC **A14**/MF **A03**

Federal Register, Volume 58, No. 72. Part 2. Environmental Protection Agency, 40 CFR Parts 122 et al. Water Quality Guidance for the Great Lakes System and Correction; Proposed Rules.
PB93-183002/REB 93-01 PC **A11**/MF **A03**

Guidance Manual for POTW Pretreatment Program Development.
PB93-186112/REB 93-01 PC **A14**/MF **A03**

Surface Water Treatment Rule. Implementation Manual (Including Appendix D).
PB93-186641/REB 93-01 PC **A07**/MF **A02**

Total Coliform Rule: Implementation Manual (Including Appendix D).
PB93-186658/REB 93-01 PC **A05**/MF **A02**

Managing Nonpoint Source Pollution. Final Report to Congress on Section 319 of the Clean Water Act (1989).
PB93-200897/REB 93-01 PC **A10**/MF **A03**

Drinking Water Training Resources Directory: A National Training Coalition Directory of Current Training Materials. First Edition.
PB93-202802/REB 93-01 PC **A07**/MF **A02**

News-Notes Number 21: The Condition of the Environment and the Nonpoint Sources of Water Pollution.
PB93-204030/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF UNDERGROUND STORAGE TANKS.**
EPA/542/R-92/010
Technologies and Options for UST Corrective Actions: Overview of Current Practice.
PB93-145589/REB 93-01 PC **A05**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF WASTE PROGRAMS ENFORCEMENT.**
Site Enforcement Tracking System (SETS): PRP Listing by Site for Region 4.
PB93-177178/REB 93-01 PC **A99**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF WASTEWATER ENFORCEMENT AND COMPLIANCE.**
EPA/833/F-93/002
NPDES Storm Water Program. Question and Answer Document. Volume 1.
PB93-223410/REB 93-04 PC **A03**/MF **A01**

Guidance for Writing Permits for the Use or Disposal of Sewage Sludge.
PB93-217537/REB 93-04 PC **A18**/MF **A04**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF WATER.**
EPA/440/1-76/081C
Supplemental for Pretreatment to the Interim Final Development Document for the Secondary Aluminum Segment of the Nonferrous Metals Manufacturing. Point Source Category.
PB93-232122/REB 93-04 PC **A07**/MF **A02**

EPA/570/09-91/007
Protecting Local Ground-Water Supplies through Wellhead Protection.
PB93-216109/REB 93-04 PC **A03**/MF **A01**

EPA/625/R-93/002
Wellhead Protection: A Guide for Small Communities.
PB93-215580/REB 93-04 PC **A08**/MF **A02**

EPA/810/F-93/002
Emergency Disinfection of Drinking Water.
PB93-223188/REB 93-04 PC **A01**/MF **A01**

EPA/813/R-93/001
Guide for Cost-Effectiveness and Cost-Benefit Analysis of State and Local Ground Water Protection Programs.
PB93-207397/REB 93-04 PC **A06**/MF **A02**

EPA/821/B-93/001
Guidance on Evaluation, Resolution, and Documentation of Analytical Problems Associated with Compliance Monitoring.
PB93-229647/REB 93-04 PC **A03**/MF **A01**

EPA/821/R-93/007
Supplement to the Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics and Synthetic Fibers Point Source Category.
PB93-214336/REB 93-04 PC **A08**/MF **A02**

EPA/821/R-93/008
Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry.
PB93-214328/REB 93-04 PC **A03**/MF **A01**

EPA/821/R-93/009
Preliminary Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease.
PB93-214344/REB 93-04 PC **A05**/MF **A02**

EPA/822/R-93/006
Wildlife Criteria Portions of the Proposed Water Quality Guidance for the Great Lakes System.
PB93-227866/REB 93-04 PC **A05**/MF **A01**

EPA/823/B-93/001
Selecting Remediation Techniques for Contaminated Sediment.
PB93-216273/REB 93-04 PC **A10**/MF **A03**

EPA/823/R-93/002
Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1. Fish Sampling and Analysis.
PB93-237899/REB 93-04 PC **A16**/MF **A03**

EPA/830/K-93/001
Office of Wastewater Enforcement and Compliance (OWEC): Primer.
PB93-226736/REB 93-04 PC **A05**/MF **A01**

EPA/830/R-93/001
Office of Wastewater Enforcement and Compliance Strategic Plan.
PB93-223204/REB 93-04 PC **A03**/MF **A01**

EPA/832/F-93/004
Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.
PB93-212033/REB 93-04 PC **A01**/MF **A01**

EPA/832/R-93/001
Municipal Water Pollution Prevention Program, National MWPP Conference. Held in Washington, DC. on April 27-28, 1993.
PB93-231140/REB 93-04 PC **A03**/MF **A01**

EPA/833/R-92/001
Storm Water Management for Construction Activities. Developing Pollution Prevention Plans and Best Management Practices. Summary Guidance.
PB93-223550/REB 93-04 PC **A03**/MF **A01**

EPA/833/Z-90/100
National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges (40CFR Parts 122, 123, and 124 Final Rule).
PB93-226728/REB 93-04 PC **A06**/MF **A02**

EPA/840/B-92/002
Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters.
PB93-234672/REB 93-04 PC **A99**/MF **E08**

EPA/840/B-93/001
Xeriscape Landscaping: Preventing Pollution and Using Resources Efficiently.
PB93-210219/REB 93-04 PC **A03**/MF **A01**

EPA/841/K-92/001
Quality of Our Nation's Water: 1990.
PB93-205904/REB 93-04 PC **A03**/MF **A01**

EPA/841/R-93/003
State and Local Funding of Nonpoint Source Control Programs.
PB93-228146/REB 93-04 PC **A09**/MF **A02**

EPA/842/B-92/002
National Estuary Program Guidance. Comprehensive Conservation and Management Plans: Content and Approval Requirements.
PB93-217172/REB 93-04 PC **A03**/MF **A01**

EPA/842/B-92/003
Turning the Tide on Trash: A Learning Guide on Marine Debris.
PB93-216992/REB 93-04 PC **A05**/MF **A01**

EPA/842/B-92/006
Dredged Material Ocean Dumping Reference Document.
PB93-223568/REB 93-04 PC **A04**/MF **A01**

EPA/842/B-92/007
Guidance Manual for the Review of Permitted and Civil Works Projects for the Ocean Disposal of Dredged Material.
PB93-223048/REB 93-04 PC **A14**/MF **A03**

OPA-87-016
America's Wetlands: Our Vital Link between Land and Water.
PB93-206399/REB 93-04 PC **A02**/MF **A01**

PRELIM Version 4.0 Users Guide. Documentation for the EPA Computer Program for Development of Local Discharge Limitations under the Pretreatment Program. Data Tape Documentation.
*(EPA/SW/DK-93/072A)*
PB93-192748/REB 93-04 PC **A05**/MF **A01**

Report to the United States Congress on Radionuclides in Drinking Water: Multimedia Risk and Cost Assessment of Radon in Drinking Water.
PB93-209427/REB 93-04 PC **A08**/MF **A02**

Revision of Methodology for Deriving National Ambient Water Quality Criteria for the Protection of Human Health: Report of Workshop and EPA's Preliminary Recommendations for Revision.
PB93-213494/REB 93-04 PC **A06**/MF **A02**

Comparative Health Effects Assessment of Drinking Water Treatment Technologies: Report to Congress.
PB93-216950/REB 93-04 PC **A03**/MF **A01**

Water Employees Together with America's Youth (WET WAY). Celebration of the 20th Anniversary of the Clean Water Act and Promotion of National Geography Awareness Week.
PB93-222941/REB 93-04 PC **A07**/MF **A02**

Drinking Water Information Guide.
PB93-222958/REB 93-04 PC **A06**/MF **A02**

Private Wells: Guidance for What to Do After the Flood.
PB93-226710/REB 93-04 PC **A02**/MF **A01**

Federal Register Volume 57 No. 175 Wednesday, September 9, 1992 Notices. Part 2. Final NPDES General Permits for Storm Water Discharges from Construction Sites; Fact Sheet.
PB93-227635/REB 93-04 PC **A03**/MF **A01**

Drinking Water State Revolving Fund: Ensuring Safe Drinking Water for America.
PB93-227858/REB 93-04 PC **A02**/MF **A01**

Assessment and Control of Bioconcentratable Contaminants in Surface Waters.
PB93-229813/REB 93-04 PC **A13**/MF **A03**

Guide to Nonpoint Source Pollution Control. Controlling Nonpoint Source Pollution: A Guide.
PB93-234292/REB 93-04 PC **A07**/MF **A02**

Analytical Methods for the National Sewage Sludge Survey.
PB93-236024/REB 93-04 PC **A12**/MF **A03**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF WATER ENFORCEMENT AND COMPLIANCE.**
EPA/560/4-91/008
Toxic Chemical Release Inventory Magnetic Media Submission Instructions. Section 313 of the Emergency Planning and Community Right-to-Know Act (Revised 1990 Version).
PB93-116127/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF WATER ENFORCEMENT AND PERMITS.**
EPA/440/4-87/005
Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.
PB93-184620/REB 93-01 PC **A03**/MF **A01**

Guidance Manual for Control of Slug Loadings to POTWs.
PB93-202745/REB 93-01 PC **A08**/MF **A02**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF WATER PLANNING AND STANDARDS.**
EPA/230/1-76/041A
Economic Analysis of Pretreatment Standards: The Secondary Copper and Aluminum Subcategories of the Nonferrous Metals Manufacturing Point Source Category.
PB93-167757/REB 93-01 PC **A07**/MF **A02**

EPA/230/1-76/065E
Economic Analysis of Interim Final Effluent Guidelines for the Gum and Wood Chemicals Industry. Group 2.
PB93-167740/REB 93-01 PC **A04**/MF **A01**

EPA/230/2-74/059A
Economic Analysis of Effluent Guidelines: Mineral Mining and Processing Industry.
PB93-167765/REB 93-01 PC **A14**/MF **A03**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF WATER REGULATIONS AND STANDARDS.**
EPA/841/B-87/110
Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC **A04**/MF **A01**

Cost Effectiveness Analysis of Effluent Guidelines and Standards for the Aluminum Forming Category.
PB93-156107/REB 93-01 PC **A03**/MF **A01**

Guidelines for Deriving Ambient Aquatic Life Advisory Concentrations.
PB93-236057/REB 93-04 PC **A03**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OFFICE OF WETLANDS, OCEANS AND WATERSHEDS.**
EPA/840/S-92/001
Protecting the Nation's Wetlands, Oceans, and Watersheds: An Overview of Programs and Activities.
PB93-105609/REB 93-01 PC **A03**/MF **A01**

EPA/841/R-93/001
Commitment to Watershed Protection: A Review of the Clean Lakes Program.
PB93-210300/REB 93-04 PC **A04**/MF **A01**

EPA/842/B-92/001
Global Oceans Directory. A Compendium of Organizations Dedicated to Marine Conservation.
PB93-206555/REB 93-04 PC **A08**/MF **A02**

Nonpoint Source Pollution: Land Use and Water Quality.
PB93-223014/REB 93-04 PC **A03**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. OIL AND SPECIAL MATERIALS CONTROL DIV.**
Proposed Revisions to Ocean Dumping Criteria: Final Environmental Impact Statement. Volume 2.
PB93-206548/REB 93-04 PC **A99**/MF **A06**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. REPRODUCTIVE AND DEVELOPMENTAL TOXICOLOGY BRANCH.**
EPA/600/J-93/047
Developing Improved Strategies to Determine Male Reproductive Risk from Environmental Toxins.
PB93-167286/REB 93-01 PC **A03**/MF **A01**

OHEA-R-469
Developing Improved Strategies to Determine Male Reproductive Risk from Environmental Toxins.
PB93-167286/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. RISK ASSESSMENT FORUM.**
EPA/630/R-92/001
Framework for Ecological Risk Assessment.
PB93-102192/REB 93-01 PC **A04**/MF **A01**

EPA/630/R-92/002
Report on the Ecological Risk Assessment Guidelines Strategic Planning Workshop. Held in Miami, Florida on April 30-May 2, 1991.
PB93-102200/REB 93-01 PC **A05**/MF **A01**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. SEDIMENT OVERSIGHT TECHNICAL COMMITTEE.**
EPA/823/R-92/006
Sediment Classification Methods Compendium.
PB93-115186/REB 93-01 PC **A11**/MF **A03**

**ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC. TECHNOLOGY INNOVATION OFFICE.**
EPA/542/R-92/011
Innovative Treatment Technologies: Semi-Annual Status Report (Fourth Edition).
PB93-133387/REB 93-01 PC **A05**/MF **A01**

**ENVIRONMENTAL QUALITY MANAGEMENT, INC., CINCINNATI, OH.**
Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.
*(EPA/600/R-93/152)*
PB93-218501/REB 93-04 PC **A07**/MF **A02**

Evaluation of Three Cleaning Methods for Removing Asbestos from Carpet: Determination of Airborne Asbestos Concentrations Associated with Each Method.
*(EPA/600/R-93/155)*
PB93-218568/REB 93-04 PC **A05**/MF **A01**

Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
*(EPA/600/R-93/159)*
PB93-227551/REB 93-04 PC **A06**/MF **A02**

**ENVIRONMENTAL RESEARCH LAB., ATHENS, GA.**

EPA/600/A-92/217
Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-92/218
Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/042
Photochemical Conversion of Solar Energy in the Environment.
PB93-167187/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/227
Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.
PB93-205102/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/228
FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/229
Possible Influence of Hydrogen Concentration on Microbial Methane Stable Hydrogen Isotopic Composition.
PB93-205128/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/280
Global Flux of Methane from Shallow Submarine Sediments.
PB93-222388/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/282
Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.
PB93-222404/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/283
Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/284
Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/285
Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02**/MF **A01**

EPA/600/R-93/131
Anaerobic Dehalogenation and Its Environmental Implications. Abstracts of 1992 American Society for Microbiology Conference. Held in Athens, Georgia on August 30-September 4, 1992.
PB93-217792/REB 93-04 PC **A04**/MF **A01**

EPA/600/R-93/132
Environmental Fate Constants for Organic Chemicals under Consideration for EPA's Hazardous Waste Identification Projects.
PB93-221646/REB 93-04 PC **A09**/MF **A02**

**ENVIRONMENTAL RESEARCH LAB., ATHENS, GA. CENTER FOR EXPOSURE ASSESSMENT MODELING.**

EPA/823/R-92/005
Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

**ENVIRONMENTAL RESEARCH LAB., ATHENS, GA. OFFICE OF RESEARCH AND DEVELOPMENT.**

EPA/600/S3-88/001
Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC **A02**/MF **A01**

**ENVIRONMENTAL RESEARCH LAB.-DULUTH, GROSSE ILE, MI. LARGE LAKES RESEARCH STATION.**

Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
*(EPA/600/J-93/202)*
PB93-199610/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL RESEARCH LAB.-DULUTH, MN.**

EPA/440/5-88/092
Ambient Aquatic Life Water Quality Criteria for Hexachlorobenzene.
PB93-202760/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/413
Sampling, Characterizing and Mapping Contaminated Sediments in River Harbors.
PB93-135705/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/277
Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.
PB93-222354/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/278
Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.
PB93-222362/REB 93-04 PC **A03**/MF **A01**

EPA/600/R-93/055
Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202826/REB 93-01 PC **A08**/MF **A02**

Aquatic Toxicity Information Retrieval Data Base: A Technical Support Document. (Revised July 1992).
*(EPA/DF/MT-93/050A, EPA/600/C-93/001)*
PB93-192631/REB 93-04 PC **A03**/MF **A01**

Aquatic Toxicity Information Retrieval Data Base (AQUIRE).
*(EPA/DF/MT-93/050)*
PB93-505725/REB 93-04 CP **T02**

Aquatic Toxicity Information on VAX VMS Backup (AQUIRE for VMS).
*(EPA/DF/MT-93/051)*
PB93-505733/REB 93-01 CP **T02**

**ENVIRONMENTAL RESEARCH LAB., GULF BREEZE, FL.**

CONTRIB-372
Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03**/MF **A01**

CONTRIB-737
Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC **A03**/MF **A01**

CONTRIB-738
Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02**/MF **A01**

CONTRIB-741
Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03**/MF **A01**

CONTRIB-745
Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03**/MF **A01**

CONTRIB-746
Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204980/REB 93-01 PC **A03**/MF **A01**

CONTRIB-751
Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC **A23**/MF **A04**

CONTRIB-751
Importance of Fish Diseases: An Overview.
PB93-204113/REB 93-01 PC **A03**/MF **A01**

CONTRIB-753
Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC **A03**/MF **A01**

CONTRIB-763
Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

CONTRIB-765
Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02**/MF **A01**

CONTRIB-774
Effects of 'Beauveria bassiana' on Embryos of the Inland Silverside Fish ('Menidia beryllina').
PB93-131811/REB 93-01 PC **A02**/MF **A01**

CONTRIB-777
Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

CONTRIB-779
Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02**/MF **A01**

CONTRIB-780
Observations on the State of Marine Disease Studies (Chapter 18).
PB93-204170/REB 93-01 PC **A03**/MF **A01**

CONTRIB-795
Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

CONTRIB-803
Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-92/222
Physiological and Nonspecific Biomarkers.
PB93-119832/REB 93-01 PC **A05**/MF **A01**

EPA/600/A-93/056
Effects of Kraft Mill Effluent on the Sexuality of Fishes: An Environmental Early Warning.
PB93-168847/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/130
Importance of Fish Diseases: An Overview.
PB93-204113/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/136
Observations on the State of Marine Disease Studies (Chapter 18).
PB93-204170/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/381
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/383
Use of Inoculation in Bioremediation.
PB93-121150/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/384
Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-92/387
Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-92/388
Application of DNA Probes to Analysis of Bacteriophage Distribution Patterns in the Environment.
PB93-121200/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-92/389
UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-92/390
Bioremediation as a Technology: Experiences with the Exxon Valdez Oil Spill.
PB93-121226/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/406
Effects of 'Beauveria bassiana' on Embryos of the Inland Silverside Fish ('Menidia beryllina').
PB93-131811/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-92/408
Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/058
Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/059
Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

EPA/600/J-93/061
Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/062
Effects of Chemical Contaminants on Blood Chemistry of Teleost Fish: A Bibliography and Synopsis of Selected Effects.
PB93-168961/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/063
Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/065
Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/066
Use of a Novel Plasmid to Monitor the Fate of a Genetically Engineered 'Pseudomonas putida' Strain.
PB93-169001/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/067
Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/069
Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/070
Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/071
Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/072
Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/215
Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204980/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/216
Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows ('Cyprinodon variegatus').
PB93-204998/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/217
Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/226
Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/287
Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/382
Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/383
Cholinesterases of Aquatic Animals.
PB93-236222/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/388
Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/389
Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/390
Recent Developments in Cleanup Technologies.
PB93-236289/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/391
Spawning Periodicity of the Inland Silverside, 'Menidia beryllina' (Pisces: Atherinidae) in the Laboratory: Relationship to Lunar Cycles.
PB93-236297/REB 93-04 PC **A02/MF A01**

EPA/600/R-92/232
Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC **A23/MF A04**

**ENVIRONMENTAL RESEARCH LAB.-NARRAGANSETT, NEWPORT, OR.**

EPA/600/A-93/108
Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03/MF A01**

EPA/600/A-93/120
Field and Laboratory Studies of Chemical Contamination and Environmentally Related Diseases in Fish and Molluscs of New England.
PB93-199438/REB 93-01 PC **A02/MF A01**

EPA/600/A-93/163
Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/083
Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/084
Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/195
Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC **A02/MF A01**

EPA/600/R-93/097
Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-196988/REB 93-01 PC **A03/MF A01**

ERLN-N139
Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03/MF A01**

ERLN-N143
Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC **A03/MF A01**

ERLN-N144
Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03/MF A01**

ERLN-N175
Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03/MF A01**

ERLN-N206
Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-196988/REB 93-01 PC **A03/MF A01**

ERLN-NX12
Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC **A02/MF A01**

ERLN-1408
Field and Laboratory Studies of Chemical Contamination and Environmentally Related Diseases in Fish and Molluscs of New England.
PB93-199438/REB 93-01 PC **A02/MF A01**

**ENVIRONMENTAL RESEARCH LAB.-NARRAGANSETT, NEWPORT, OR. MARK O. HATFIELD MARINE SCIENCE CENTER.**

CONTRIB-1272
Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/138
Taxonomic Level Sufficient for Assessing a Moderate Impact on Macrobenthic Communities in Puget Sound, Washington, USA.
PB93-185858/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/309
Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC **A03/MF A01**

ERLN-N183
Taxonomic Level Sufficient for Assessing a Moderate Impact on Macrobenthic Communities in Puget Sound, Washington, USA.
PB93-185858/REB 93-01 PC **A02/MF A01**

**ENVIRONMENTAL RESEARCH LAB.-NARRAGANSETT, NEWPORT, OR. PACIFIC ECOSYSTEMS BRANCH.**

CBP/TRS-89/93
Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11/MF A03**

CONTRIB-N-240
Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11/MF A03**

EPA/600/A-93/156
Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.
PB93-212769/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/196
Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC **A02/MF A01**

ERNL-N087
Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC **A02/MF A01**

ISBN-0-87371-450-4
Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.
PB93-212769/REB 93-04 PC **A03/MF A01**

**ENVIRONMENTAL RESEARCH LAB., NARRAGANSETT, RI.**

EPA/440/5-87/011
Ambient Aquatic Life Water Quality Criteria for Silver.
PB93-202604/REB 93-01 PC **A06/MF A02**

EPA/600/A-93/164
DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03/MF A01**

EPA/600/A-93/165
Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).
PB93-221836/REB 93-04 PC **A03/MF A01**

EPA/600/A-93/193
Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04/MF A01**

EPA/600/A-93/194
Chemically Induced Histopathology in Aquatic Invertebrates (Chapter 14).
PB93-222263/REB 93-04 PC **A03/MF A01**

EPA/600/A-93/204
Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/082
Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/128
Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/137
Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/183
Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/184
Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/189
Transport of Low-Level Radioactive Soil at Deep-Ocean Disposal Site.
PB93-199487/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/197
Application of the Ecotone Concept in Defining Nutrient Management Requirements for the Upper Potomac River Basin.
PB93-199560/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/199
Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/212
Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/273
Measurement of Sediment Resuspension Rates in Long Island Sound.
PB93-222115/REB 93-04 PC **A01/MF A01**

EPA/600/J-93/308
Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/310
Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/312
Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/313
Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02/MF A01**

ERLN/CONTRIB-1083
Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC **A03/MF A01**

ERLN-X187
Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).
PB93-221836/REB 93-04 PC **A03/MF A01**

ERLN-1087
DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03/MF A01**

ERLN-1187
Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03/MF A01**

ERLN-1214
Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC **A03/MF A01**

ERLN-1228
Chemically Induced Histopathology in Aquatic Invertebrates (Chapter 14).
PB93-222263/REB 93-04 PC **A03/MF A01**

ERLN-1274
Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02/MF A01**

ERLN-1281
Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02/MF A01**

ERLN-1329
Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC **A02/MF A01**

ERLN-1331
Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02/MF A01**

ERLN-1332
Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03/MF A01**

ERLN-1340
Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03/MF A01**

ERLN-1357
Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04/MF A01**

ERLN-1420
Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02**/MF **A01**

ERLN-1436
Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC **A03**/MF **A01**

ERLN-1438
Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02**/MF **A01**

ERLN-1504
Application of the Ecotone Concept in Defining Nutrient Management Requirements for the Upper Potomac River Basin.
PB93-199560/REB 93-01 PC **A03**/MF **A01**

**ENVIRONMENTAL RESOURCES MANAGEMENT-SOUTHEAST, INC., MARIETTA, GA.**
Summary of the 1987 Carver-Greenfield Sludge Drying Technology Workshop: Problems and Solutions. Held in Los Angeles, California on March 10-11, 1987.
*(EPA/430/9-87/010)*
PB93-174506/REB 93-01 PC **A04**/MF **A01**

**ENVIRONMENTAL RISK LTD., BLOOMFIELD, CT.**
Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 1.
*(NYSERDA-92-08-VOL-1)*
PB93-198950/REB 93-01 PC **A17**/MF **A04**

Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 2, Appendices.
*(NYSERDA-92-08-VOL-2)*
PB93-198968/REB 93-01 PC **A07**/MF **A02**

**ENVIRONMENTAL SCIENCE AND ENGINEERING, INC., DURHAM, NC.**
Acidic Gases and Aerosols in the Eastern and Western United States.
*(EPA/600/A-92/275)*
PB93-131696/REB 93-01 PC **A03**/MF **A01**

Dry Deposition Flux Calculations for the National Dry Deposition Network.
*(EPA/600/R-93/065)*
PB93-178242/REB 93-01 PC **A05**/MF **A02**

**ENVIRONMENTAL SCIENCES, INC., TUCSON, AZ.**
Model EPA Curriculum for Training Building Inspectors. Student Notebook. Course 2 (Training Manual).
PB93-780831/REB 93-01 PC **A17**

Model EPA Curriculum for Training Building Inspectors. Instructor's Course Syllabus. Course 2 (Training Manual).
PB93-780849/REB 93-01 PC **A07**

Model EPA Curriculum for Training Management Planners. Student Notebook. Course 3 (Training Manual).
PB93-780880/REB 93-01 PC **A07**

Model EPA Curriculum for Training Management Planners. Instructor's Course Syllabus. Course 3 (Training Manual).
PB93-780898/REB 93-01 PC **A04**

**ERIE COUNTY DEPT. OF ENVIRONMENT AND PLANNING, BUFFALO, NY.**
Replacement of Hazardous Material in Wide Web Flexographic Printing Process.
*(EPA/600/R-93/149)*
PB93-229128/REB 93-04 PC **A05**/MF **A01**

**FAUCETT (JACK) ASSOCIATES, BETHESDA, MD.**
JACKFAU-92-444-1
Nonroad Mobile Source Sales and Attrition Study: Identification and Evaluation of Available Data Sources.
*(EPA/420/R-93/004)*
PB93-190098/REB 93-01 PC **A11**/MF **A03**

**FEDERAL REMEDIATION TECHNOLOGIES ROUNDTABLE.**
EPA/542/B-92/003
Synopses of Federal Demonstrations of Innovative Site Remediation Technologies.
PB93-144111/REB 93-01 PC **A11**/MF **A03**

**FISH AND WILDLIFE SERVICE, JAMESTOWN, ND. NORTHERN PRAIRIE WILDLIFE RESEARCH CENTER.**
Glossary for Avian Conservation Biology.
*(EPA/600/A-92/196)*
PB93-106656/REB 93-01 PC **A03**/MF **A01**

**FLORIDA ATLANTIC UNIV., BOCA RATON. DEPT. OF OCEAN ENGINEERING.**
Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
*(EPA/600/A-93/206)*
PB93-229714/REB 93-04 PC **A02**/MF **A01**

**FLORIDA UNIV., GAINESVILLE. DEPT. OF NUCLEAR ENGINEERING SCIENCES.**
Proceedings of the Indoor Radon Modeling Workshop, Florida Radon Research Program. Held in Tampa, Florida on April 16-17, 1991.
*(EPA/600/R-93/052)*
PB93-172922/REB 93-01 PC **A09**/MF **A02**

**FOREST PRODUCTS LAB., MADISON, WI.**
Oxidative Degradation of Phenanthrene by the Ligninolytic Fungus 'Phanerochaete chrysosposium'.
*(EPA/600/J-93/192)*
PB93-199511/REB 93-01 PC **A02**/MF **A01**

**FOSTER WHEELER ENVIRESPONSE, INC., EDISON, NJ.**
Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
*(EPA/540/S-92/011)*
PB93-121333/REB 93-01 PC **A03**/MF **A01**

**FOSTER WHEELER ENVIRESPONSE, INC., LIVINGSTON, NJ.**
Foam Scrubbing (Chapter 9).
*(EPA/600/A-93/227)*
PB93-236560/REB 93-04 PC **A03**/MF **A01**

**GALVESTON BAY NATIONAL ESTUARY PROGRAM,, AUSTIN, TX.**
GBNEP-6
Proceedings: Galveston Bay Characterization Workshop. Held on February 21-23, 1991.
PB93-205672/REB 93-04 PC **A11**/MF **A03**

GBNEP-12
Shoreline Survey for Unpermitted Discharges to Galveston Bay.
PB93-205706/REB 93-04 PC **A03**/MF **A01**

GBNEP-13
Regulatory Effectiveness Study for the Armand Bayou Coastal Preserve.
PB93-205680/REB 93-04 PC **A08**/MF **A02**

GBNEP-14
Regulatory Effectiveness Study for the Christmas Bay Coastal Preserve.
PB93-205698/REB 93-04 PC **A09**/MF **A03**

GBNEP-15
Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1, Technical Report.
PB93-205722/REB 93-04 PC **A11**/MF **A03**

GBNEP-16
Wetland Plant Communities, Galveston Bay System.
PB93-205730/REB 93-04 PC **A07**/MF **A02**

GBNEP-18
Segmentation Development for Galveston Bay.
PB93-205748/REB 93-04 PC **A07**/MF **A02**

GBNEP-19
Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC **A20**/MF **A04**

GBNEP-20
Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16**/MF **A03**

GBNEP-21
Characterization of Selected Public Health Issues in Galveston Bay.
PB93-205771/REB 93-04 PC **A08**/MF **A02**

GBNEP-22
Ambient Water and Sediment Quality of Galveston Bay: Present Status and Historical Trends. Volume 1.
PB93-205789/REB 93-04 PC **A09**/MF **A03**

GBNEP-24
Environmental Management Inventory of Galveston Bay.
PB93-205797/REB 93-04 PC **A06**/MF **A02**

GBNEP-25
Recreational Fishery By-Catch in the Galveston Bay System.
PB93-205805/REB 93-04 PC **A06**/MF **A02**

**GENERAL ELECTRIC CO., SCHENECTADY, NY. BIOLOGICAL SCIENCES LAB.**
Cloning and Expression in 'Escherichia coli' of Pseudomonas Strain LB400 Genes Encoding Polychlorinated Biphenyl Degradation.
*(EPA/600/J-93/300)*
PB93-229227/REB 93-04 PC **A02**/MF **A01**

**GENERAL ELECTRIC CO., SCHENECTADY, NY. RESEARCH AND DEVELOPMENT CENTER.**
Sequence Similarities in the Genes Encoding Polychlorinated Biphenyl Degradation by 'Pseudomonas' Strain LB400 and 'Alcaligenes eutrophus' H850.
*(EPA/600/J-93/275)*
PB93-229201/REB 93-04 PC **A01**/MF **A01**

**GENERAL ELECTRIC CORPORATE RESEARCH AND DEVELOPMENT, SCHENECTADY, NY.**
Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
*(EPA/600/J-93/299)*
PB93-222909/REB 93-04 PC **A03**/MF **A01**

Genetic and Cell-Free Studies of PCB Biodegradation in 'Pseudomonas putida' LB400.
*(EPA/600/A-93/209)*
PB93-229748/REB 93-04 PC **A03**/MF **A01**

Biological Approaches for Polychlorinated Biphenyl Degradation.
*(EPA/600/A-93/211)*
PB93-229763/REB 93-04 PC **A03**/MF **A01**

**GEOLOGICAL SURVEY, ALBANY, NY.**
Role of Nitrate in the Acidification of Streams in the Catskill Mountains of New York.
*(EPA/600/J-93/008)*
PB93-150167/REB 93-01 PC **A03**/MF **A01**

**GEOLOGICAL SURVEY, DENVER, CO.**
Collection and Chemical Analysis of Lichens for Biomonitoring.
*(EPA/600/A-93/009)*
PB93-149862/REB 93-01 PC **A03**/MF **A01**

**GEOLOGICAL SURVEY, MARLBOROUGH, MA. WATER RESOURCES DIV.**
Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3, Hydraulic Conductivity Variability and Calculated Macrodispersivities.
*(EPA/600/J-92/359)*
PB93-107050/REB 93-01 PC **A03**/MF **A01**

**GEORGETOWN UNIV., WASHINGTON, DC. MEDICAL CENTER.**
Toxic and Hazardous Chemicals, Title III and Communities: An Outreach Manual for Community Groups.
*(EPA/560/1-89/002)*
PB93-200806/REB 93-01 PC **A08**/MF **A02**

**GEORGIA TECH RESEARCH INST., ATLANTA. ENVIRONMENT, HEALTH AND SAFETY DIV.**
Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Student Notebook. Course 1 (Training Manual).
PB93-780781/REB 93-01 PC **A21**

Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Instructor's Course Syllabus. Course 1 (Training Manual).
PB93-780799/REB 93-01 PC **A09**

**GEORGIA UNIV., ATHENS. DEPT. OF PHARMACOLOGY AND TOXICOLOGY.**
Distribution of Cardiac Output during Diurnal Changes of Activity in Rats.
*(EPA/600/J-93/109)*
PB93-180982/REB 93-01 PC **A02**/MF **A01**

Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
*(EPA/600/J-93/110)*
PB93-180990/REB 93-01 PC **A03**/MF **A01**

**GEORGIA UNIV., ATHENS. SCHOOL OF FOREST RESOURCES.**
Role and Design of Water Quality Monitoring on Forested Watersheds.
*(EPA/600/A-93/192)*
PB93-222248/REB 93-04 PC **A02**/MF **A01**

**GEOSYNTEC CONSULTANTS, ATLANTA, GA.**
LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
*(EPA/600/R-93/070)*
PB93-179885/REB 93-01 PC **A05**/MF **A01**

**GEOTRANS, INC., STERLING, VA.**
DNAPL Site Evaluation.
*(EPA/600/R-93/022)*
PB93-150217/REB 93-01 PC **A16**/MF **A03**

**GLOBAL GEOCHEMISTRY CORP., CANOGA PARK, CA.**
Analysis of Acid Precipitation Samples Collected by State Agencies. Sampling Period: January-December 1990.
*(EPA/600/R-93/006)*
PB93-144152/REB 93-01 PC **A12**/MF **A03**

**HART-CROWER ASSOCIATES, SEATTLE, WA.**
Hydraulic Conductivity of Three Geosynthetic Clay Liners.
*(EPA/600/J-92/392)*
PB93-131746/REB 93-01 PC **A02**/MF **A01**

**HARVARD SCHOOL OF PUBLIC HEALTH, BOSTON, MA.**
Comparison of Aerosol Acidity in Urban and Semi-Rural Environments.
*(EPA/600/A-92/278)*
PB93-131712/REB 93-01 PC **A03**/MF **A01**

**HARVARD SCHOOL OF PUBLIC HEALTH, BOSTON, MA. DEPT. OF ENVIRONMENTAL SCIENCE AND PHYSIOLOGY.**
Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
*(EPA/600/A-92/242)*
PB93-120988/REB 93-01 PC **A02**/MF **A01**

**HAWAII UNIV., HONOLULU.**
Interim Protocol for Testing the Effects of Microbial Pathogens on Subterranean Termites ('Isoptera: rhinotermitidae').
*(EPA/600/R-92/215)*
PB93-124634/REB 93-01 PC **A03**/MF **A01**

**HAZEN AND SAWYER, RALEIGH, NC.**
Technical Guidance Document: Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems.
*(EPA/540/R-92/073)*
PB93-105625/REB 93-01 PC **A05**/MF **A02**

**HEALTH EFFECTS RESEARCH LAB., CINCINNATI, OH.**
EPA/600/J-92/365
Ninety-Day Toxicity Study of Sodium Monochloroacetate in Sprague-Dawley Rats.
PB93-107100/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/366
Ninety-Day Toxicity Study of Chloral Hydrate in the Sprague-Dawley Rat.
PB93-107118/REB 93-01 PC **A03**/MF **A01**

**HEALTH EFFECTS RESEARCH LAB., CINCINNATI, OH. GENETIC TOXICOLOGY DIV.**
EPA/600/J-92/430
Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC **A01**/MF **A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC.**
EPA/600/J-92/024
Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02/MF A01**

EPA/600/J-92/373
Metabolism and Disposition of Inorganic Arsenic in Laboratory Animals and Humans.
PB93-107183/REB 93-01 PC **A02/MF A01**

EPA/600/J-92/422
V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02/MF A01**

EPA/600/J-92/426
Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC **A03/MF A01**

EPA/600/J-92/431
Review of the Literature on Potential Reproductive and Developmental Toxicity of Electric and Magnetic Fields.
PB93-141307/REB 93-01 PC **A03/MF A01**

EPA/600/J-92/434
Health Effects of Arsenic in Drinking Water: Research Needs.
PB93-141331/REB 93-01 PC **A02/MF A01**

EPA/600/J-92/437
Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC **A03/MF A01**

EPA/600/J-92/439
Application of the 'Tradescantia micronucleus' Assay for the Genetic Evaluation of Chemical Mixtures in Soil and Aqueous Media.
PB93-141380/REB 93-01 PC **A02/MF A01**

EPA/600/J-92/441
Behavioral Development Following Daily Episodes of Mother-Infant Separation in the Rat.
PB93-141406/REB 93-01 PC **A01/MF A01**

EPA/600/J-92/443
Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC **A03/MF A01**

EPA/600/J-92/449
Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/105
Use of Analytically Defined Estimates of Aerosol Respirable Fraction to Predict Lung Deposition Patterns.
PB93-175743/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/107
Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/108
Analysis of DNA Strand Breaks Induced in Rodent Liver In vivo, Hepatocytes in Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/114
Effect of Methoxychlor on Ovarian Steroidogenesis: Role in Early Pregnancy Loss.
PB93-181030/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/117
Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/121
Extrapolation Modeling of Aerosol Deposition in Human and Laboratory Rat Lungs.
PB93-181097/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/123
EPA Priorities for Biologic Markers Research in Environmental Health.
PB93-181113/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/125
Repeated Maternal Separation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/126
Competition Potentials of Environmentally Applied Bacteria with Human Fecal Microbiota.
PB93-181147/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/331
Maturational Changes in Dermal Absorption of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Fischer 344 Rats.
PB93-229490/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/332
Using Neuroblastoma Cell Lines to Examine Organophosphate Neurotoxicity.
PB93-229508/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/355
Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-228815/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/356
Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/362
Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-228880/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/366
EPA's Reassessment of Dioxin Risk: Directed Health Research.
PB93-228922/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/367
Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/368
Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.
PB93-228948/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/370
Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/379
Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.
PB93-231835/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/386
Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/392
Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.
PB93-236305/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/394
DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/396
Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/398
Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/399
Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.
PB93-236362/REB 93-04 PC **A04/MF A01**

EPA/600/J-93/403
Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/413
Evidence for Direct Effect of Magnetic Fields on Neurite Outgrowth.
PB93-236669/REB 93-04 PC **A02/MF A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC. CARCINOGENESIS AND METABOLISM BRANCH.**
EPA/600/A-92/176
32P-Postlabeling in Studies of PAH Activation.
PB93-106631/REB 93-01 PC **A03/MF A01**

EPA/600/J-92/440
PCR Primers Specific for Detection of a Rat Repetitive Sequence.
PB93-141398/REB 93-01 PC **A01/MF A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC. CLINICAL RESEARCH BRANCH.**
EPA/600/J-93/120
Human Upper Respiratory Tract Responses to Inhaled Pollutants with Emphasis on Nasal Lavage.
PB93-181089/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/358
Predictors of Individual Differences in Acute Response to Ozone Exposure.
PB93-228849/REB 93-04 PC **A02/MF A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC. DEVELOPMENTAL TOXICOLOGY DIV.**
EPA/600/J-93/373
Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/375
Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC **A01/MF A01**

EPA/600/J-93/377
Evaluation of the Effects of Methanol during Early Pregnancy in the Rat.
PB93-231850/REB 93-04 PC **A03/MF A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC. ENVIRONMENTAL TOXICOLOGY DIV.**
EPA/600/J-92/369
Dermal Penetration of ((14)C)Captan in Young and Adult Rats.
PB93-107142/REB 93-01 PC **A03/MF A01**

EPA/600/J-92/444
Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomegalovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/089
Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/099
Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/102
Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/122
Comments on Recent Data for Particle Deposition in Human Nasal Passages.
PB93-181105/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/124
Interspecies Modeling of Inhaled Particle Deposition Patterns.
PB93-181121/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/335
Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC **A02/MF A01**

EPA/600/J-93/401
Deposition of Sulfate Acid Aerosols in the Developing Human Lung.
PB93-236388/REB 93-04 PC **A03/MF A01**

Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
*(EPA/600/J-93/338)*
PB93-229565/REB 93-04 PC **A02/MF A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC. GENETIC TOXICOLOGY DIV.**
EPA/600/J-92/372
Genotoxicity of 2,4,5-Trichlorophenoxyacetic Acid Biodegradation Products in the 'Salmonella' Reversion and Lambda Prophage-Induction Bioassays.
PB93-107175/REB 93-01 PC **A02/MF A01**

EPA/600/J-92/423
Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02/MF A01**

EPA/600/J-92/445
Micronuclei and Other Nuclear Anomalies in Buccal Smears: A Field Test in Snuff Users.
PB93-141448/REB 93-01 PC **A03/MF A01**

EPA/600/J-92/446
Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC **A03/MF A01**

EPA/600/J-92/448
In vitro Mammalian Mutagenesis as a Model for Genetic Lesions in Human Cancer.
PB93-141471/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/094
Genetic Toxicology of Putative Nongenotoxic Carcinogens.
PB93-175636/REB 93-01 PC **A03/MF A01**

EPA/600/J-93/115
DNA Isolation from Small Tissue Samples Using Salt and Spermine.
PB93-181048/REB 93-01 PC **A01/MF A01**

EPA/600/J-93/359
Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02/MF A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC. HUMAN STUDIES DIV.**
EPA/600/J-92/432
Olfactory Evoked Responses to Odorous Stimuli of Different Intensities.
PB93-141315/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/092
Summary of Workshop III: Evoked Potentials.
PB93-175610/REB 93-01 PC **A01/MF A01**

EPA/600/J-93/093
Importance of Experimenter-Blind Procedure in Neurotoxicology (Mini-Review).
PB93-175628/REB 93-01 PC **A02/MF A01**

EPA/600/J-93/378
Human Health Effects of Air Pollution.
PB93-231843/REB 93-04 PC **A03/MF A01**

EPA/600/J-93/402
Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC **A02**/MF **A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC. IMMUNOTOXICOLOGY BRANCH.**

EPA/600/J-93/376
Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC **A02**/MF **A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC. NEUROTOXICOLOGY DIV.**

EPA/600/J-92/370
Thermal Influences on Nervous System Function.
PB93-107159/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/378
Animal Models for Assessing the Neurobehavioral Impact of Airborne Pollutants.
PB93-107233/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/091
Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/095
Relationship between Serum Cholinesterase Activity and the Change in Body Temperature and Motor Activity in the Rat: A Dose-Response Study of Diisopropyl Fluorophosphate.
PB93-175644/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/097
Olfactory Toxicity of Beta,Beta'-Iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/101
Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/103
Twenty-Four Hour Rhythms of Selected Ambient Temperature in Rat and Hamster.
PB93-175727/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/104
Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/353
Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/354
Strain Comparisons of DFP Neurotoxicity in Rats.
PB93-228609/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/361
Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.
PB93-228872/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/371
Acute and Delayed Effects of Diisopropyl Fluorophosphate on Body Temperature, Heart Rate and Motor Activity in the Awake, Unrestrained Rat.
PB93-228971/REB 93-04 PC **A03**/MF **A01**

EPA/600/J-93/374
Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/400
Bitertanol, a Triazole Fungicide, Increases Operant Responding but Not Motor Activity.
PB93-236370/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/404
Effects of Dopaminergic Drugs on Working and Reference Memory in Rats.
PB93-236412/REB 93-04 PC **A03**/MF **A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC. OFFICE OF HEALTH RESEARCH.**

EPA/600/J-93/357
Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-226831/REB 93-04 PC **A03**/MF **A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC. PERINATAL TOXICOLOGY BRANCH.**

EPA/600/J-92/350
Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-92/371
In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with In vivo Data.
PB93-107167/REB 93-01 PC **A03**/MF **A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC. REPRODUCTIVE TOXICOLOGY BRANCH.**

EPA/600/J-92/442
Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/106
Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Bensidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/113
Steroidogenic Assessment Using Ovary Culture in Cycling Rats: Effects of Bis(2-Diethylhexyl) Phthalate on Ovarian Steroid Production.
PB93-181022/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/119
Gonadal Effects of Fetal Exposure to the Azo Dye Congo Red in Mice: Infertility in Female but Not Male Offspring.
PB93-181071/REB 93-01 PC **A03**/MF **A01**

**HEALTH EFFECTS RESEARCH LAB., RESEARCH TRIANGLE PARK, NC. TOXICOLOGY BRANCH.**

EPA/600/J-92/374
Age-Related Changes in Disposition and Metabolism of Benzene in Male C57BL/6N Mice.
PB93-107191/REB 93-01 PC **A02**/MF **A01**

**ICF, INC., FAIRFAX, VA.**

National Radon Measurement Proficiency Program: Individual Proficiency Report.
*(EPA/402/R-93/079)*
PB93-209989/REB 93-04 PC **A16**/MF **A03**

National Radon Contractor Proficiency (RCP) Program. Proficiency Report, July 1993.
*(EPA/402/R-93/080)*
PB93-209997/REB 93-04 PC **A11**/MF **A03**

**ICF INTERNATIONAL, INC., FAIRFAX, VA.**

Marine Industry Characterization Report.
*(EPA/420/R-93/008)*
PB93-216174/REB 93-04 PC **A10**/MF **A03**

**IIT RESEARCH INST., CHICAGO, IL.**

Evaluation of Commercially-Available Portable Gas Chromatographs.
*(EPA/600/A-92/249)*
PB93-121051/REB 93-01 PC **A02**/MF **A01**

Evaluation of Portable Gas Chromatographs.
*(EPA/600/A-93/053)*
PB93-168813/REB 93-01 PC **A03**/MF **A01**

**ILLINOIS DEPT. OF ENERGY AND NATURAL RESOURCES, CHAMPAIGN. HAZARDOUS WASTE RESEARCH AND INFORMATION CENTER.**

Ink and Cleaner Waste Reduction Evaluation for Flexographic Printers.
*(EPA/600/R-93/086)*
PB93-191286/REB 93-01 PC **A03**/MF **A01**

Recycling Nickel Electroplating Rinse Waters by Low Temperature Evaporation and Reverse Osmosis.
*(EPA/600/R-93/160)*
PB93-218865/REB 93-04 PC **A04**/MF **A01**

Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
*(EPA/600/R-93/144)*
PB93-221638/REB 93-04 PC **A04**/MF **A01**

**ILLINOIS STATE ENVIRONMENTAL PROTECTION AGENCY, SPRINGFIELD.**

Pilot Project for Vehicle Scrapping in Illinois.
PB93-232890/REB 93-04 PC **A08**/MF **A02**

**ILLINOIS STATE ENVIRONMENTAL PROTECTION AGENCY, SPRINGFIELD. DIV. OF AIR POLLUTION CONTROL.**

IEAPA/APC/92-058
Illinois Annual Air Quality Report, 1991.
PB93-208775/REB 93-04 PC **A05**/MF **A01**

IEPA/APC/93-004
Illinois Annual Air Quality Report, 1992.
PB93-208759/REB 93-04 PC **A05**/MF **A01**

**ILLINOIS STATE ENVIRONMENTAL PROTECTION AGENCY, SPRINGFIELD. DIV. OF LAND POLLUTION CONTROL.**

IEPA/LPC/93-059
Companies that Generate, Treat, Dispose or Recover Hazardous Waste. 1991 Annual Report.
PB93-216638/REB 93-04 PC **A15**/MF **A03**

**ILLINOIS STATE ENVIRONMENTAL PROTECTION AGENCY, SPRINGFIELD. DIV. OF WATER POLLUTION CONTROL.**

IEAP/WPC-92-224
Water Quality in Illinois, 1990-1991.
PB93-210193/REB 93-04 PC **A03**/MF **A01**

IEPA/WPC/91-210
Lake Water Quality Assessment Program: Southern Illinois Lakes.
PB93-215929/REB 93-04 PC **A03**/MF **A01**

IEPA/WPC/92-110E
Volunteer Lake Monitoring Program, 1991. Volume 5. East-Central Illinois Region.
PB93-102234/REB 93-01 PC **A04**/MF **A01**

IEPA/WPC/92-114
Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

IEPA/WPC/92-220
Illinois Water Quality Management Plan.
PB93-138451/REB 93-01 PC **A07**/MF **A02**

IEPA/WPC/93-061A
Volunteer Lake Monitoring Program, 1992. Volume 1: Statewide Summary.
PB93-216927/REB 93-04 PC **A06**/MF **A02**

IEPA/WPC/93-061B
Volunteer Lake Monitoring Program, 1992. Volume 2: Northwestern Illinois Region.
PB93-217214/REB 93-04 PC **A04**/MF **A01**

IEPA/WPC/93-061D
Volunteer Lake Monitoring Program, 1992. Volume 4. West Central Illinois Region.
PB93-219111/REB 93-04 PC **A04**/MF **A01**

IEPA/WPC/93-061E
Volunteer Lake Monitoring Program, 1992. Volume 5. East-Central Illinois Region.
PB93-223162/REB 93-04 PC **A05**/MF **A01**

IEPA/WPC-93-063
Biological and Water Quality Survey of Sugar Creek and Tributaries Crawford County, Illinois, August and September 1992.
PB93-217180/REB 93-04 PC **A04**/MF **A01**

**ILLINOIS UNIV. AT CHICAGO. DEPT. OF MICROBIOLOGY AND IMMUNOLOGY.**

Molecular Basis of Biodegradation of Chloroaromatic Compounds.
*(EPA/600/J-93/234)*
PB93-205169/REB 93-04 PC **A03**/MF **A01**

**ILLINOIS UNIV. AT THE MEDICAL CENTER, CHICAGO. DEPT. OF MICROBIOLOGY AND IMMUNOLOGY.**

Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
*(EPA/600/A-93/132)*
PB93-204139/REB 93-01 PC **A03**/MF **A01**

Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
*(EPA/600/A-93/135)*
PB93-204162/REB 93-01 PC **A03**/MF **A01**

Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
*(EPA/600/J-93/214)*
PB93-204972/REB 93-04 PC **A03**/MF **A01**

Repeated Sequences Including RS1100 'Pseudomonas cepacia' AC1100 Function as IS Elements.
*(EPA/600/J-93/235)*
PB93-205177/REB 93-04 PC **A02**/MF **A01**

Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
*(EPA/600/J-93/236)*
PB93-205185/REB 93-04 PC **A02**/MF **A01**

**ILLINOIS UNIV. AT URBANA-CHAMPAIGN.**

Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
*(EPA/600/A-92/291)*
PB93-141166/REB 93-01 PC **A02**/MF **A01**

**ILLINOIS UNIV. AT URBANA-CHAMPAIGN. DEPT. OF CIVIL ENGINEERING.**

Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
*(EPA/600/J-92/379)*
PB93-107241/REB 93-01 PC **A02**/MF **A01**

Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
*(EPA/600/A-92/261)*
PB93-131555/REB 93-01 PC **A03**/MF **A01**

**ILLINOIS UNIV. AT URBANA-CHAMPAIGN. DEPT. OF FORESTRY.**

Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
*(EPA/600/J-92/453)*
PB93-141521/REB 93-01 PC **A02**/MF **A01**

**ILLINOIS UNIV. AT URBANA-CHAMPAIGN. DEPT. OF MECHANICAL AND INDUSTRIAL ENGINEERING.**

Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
*(EPA/600/A-92/213)*
PB93-106821/REB 93-01 PC **A03**/MF **A01**

**ILLINOIS UNIV. AT URBANA-CHAMPAIGN. DEPT. OF VETERINARY PATHOBIOLOGY.**

Genus- and Group-Specific Hybridization Probes for Determinative and Environmental Studies of Sulfate-Reducing Bacteria.
*(EPA/600/J-93/064)*
PB93-168987/REB 93-01 PC **A02**/MF **A01**

**INDUSTRIAL ECONOMICS, INC., CAMBRIDGE, MA.**

Protecting Coastal and Wetlands Resources: A Guide for Local Governments.
*(EPA/842/R-92/002)*
PB93-105567/REB 93-01 PC **A09**/MF **A03**

State Clean Water Strategies: Meeting the Challenges of the Future.
PB93-217628/REB 93-04 PC **A03**/MF **A01**

Benefits and Feasibility of Effluent Trading between Point Sources: An Analysis in Support of Clean Water Act Reauthorization.
PB93-217636/REB 93-04 PC A04/MF A01

**INFORM, INC., NEW YORK.**
Slowing the Waste Behemoth: Source Reduction is Overshadowed by Recycling's Success.
*(EPA/600/J-93/187)*
PB93-194546/REB 93-01 PC A02/MF A01

**INSTITUTE FOR CANCER RESEARCH, PHILADELPHIA, PA.**
Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
*(HEI/RR-92/51)*
PB93-179950/REB 93-01 PC A03/MF A01

**IOWA UNIV., IOWA CITY.**
Oxidation of Biphenyl by a Multicomponent Enzyme System from 'Pseudomonas' sp. Strain LB400.
*(EPA/600/J-93/328)*
PB93-229466/REB 93-04 PC A02/MF A01

Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
*(EPA/600/J-93/329)*
PB93-229474/REB 93-04 PC A02/MF A01

**IOWA UNIV., IOWA CITY. DEPT. OF CIVIL AND ENVIRONMENTAL ENGINEERING.**
Kinetics of Chemical Weathering in B Horizon Spodosol Fraction.
*(EPA/600/J-92/454)*
PB93-141539/REB 93-01 PC A02/MF A01

Reactions That Modify Chemistry in Lakes of the National Surface Water Survey.
*(EPA/600/J-93/349)*
PB93-229672/REB 93-04 PC A02/MF A01

Longterm Response of Lakes to Acidic Deposition.
*(EPA/600/A-93/207)*
PB93-229722/REB 93-04 PC A02/MF A01

**IT CORP., CINCINNATI, OH.**
Demonstration of a Trial Excavation at the McColl Superfund Site.
*(EPA/540/AR-92/015)*
PB93-100121/REB 93-01 PC A04/MF A01

Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
*(EPA/600/J-92/395)*
PB93-131761/REB 93-01 PC A02/MF A01

EPA Bibliography on Surface Contamination.
*(EPA/600/J-93/056)*
PB93-168904/REB 93-01 PC A02/MF A01

Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
*(EPA/600/A-93/084)*
PB93-180966/REB 93-01 PC A03/MF A01

Comparison of the Efficiency of Polycarbonate and Mixed Cellulose Ester Filters for Use in the Filtration of Water Samples.
*(EPA/600/J-93/168)*
PB93-194363/REB 93-01 PC A02/MF A01

Asbestos Release during Building Demolition Activities.
*(EPA/600/J-93/194)*
PB93-199537/REB 93-01 PC A02/MF A01

Technology Evaluation Report: Pilot-Scale Demonstration of a Slurry-Phase Biological Reactor for Creosote-Contaminated Soil. Volume 1.
*(EPA/540/5-91/009)*
PB93-205532/REB 93-04 PC A09/MF A02

Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.
*(EPA/600/A-93/160)*
PB93-212601/REB 93-04 PC A03/MF A01

**IT ENVIRONMENTAL PROGRAMS, INC., CINCINNATI, OH.**
On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
*(EPA/600/R-93/066)*
PB93-178259/REB 93-01 PC A09/MF A02

**IZAAK WALTON LEAGUE OF AMERICA, DECORAH, IA.**
Proceedings of the National Citizens' Volunteer Water Monitoring Conference (3rd). Held in Annapolis, Maryland on March 29-April 2, 1992. Building Partnerships in the Year of Clean Water.
*(EPA/841/R-92/004)*
PB93-207108/REB 93-04 PC A09/MF A02

**JACA CORP., FORT WASHINGTON, PA.**
Procedures for Identifying Reasonably Available Control Technology for Stationary Sources of PM-10.
*(EPA/452/R-93/001)*
PB93-175776/REB 93-01 PC A08/MF A02

**JACKSON STATE UNIV., MS. DEPT. OF BIOLOGY.**
Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
*(EPA/600/J-93/281)*
PB93-222396/REB 93-04 PC A02/MF A01

**JACOBS ENGINEERING GROUP, INC., PASADENA, CA. ENVIRONMENTAL DIV.**
Treatability Studies for the Inorganic Chemicals Manufacturing Point Source Category.
*(EPA/440/1-80/103)*
PB93-206480/REB 93-04 PC A11/MF A03

**JEFFERSON PARISH DEPT. OF PUBLIC WORKS, LA.**
Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.
*(EPA/600/R-93/136)*
PB93-222214/REB 93-04 PC A10/MF A03

**JORDAN (E.C.) CO., FARMINGTON HILLS, MI.**
Preliminary Data Summary for the Pulp, Paper and Paperboard Point Source Category.
*(EPA/440/1-89/025)*
PB93-202935/REB 93-01 PC A04/MF A01

**KANSAS UNIV., LAWRENCE. DIV. OF CONTINUING EDUCATION.**
General Public Notification for Public Water Systems.
*(EPA/570/9-89/002)*
PB93-167096/REB 93-01 PC A05/MF A01

**KENTUCKY UNIV., LEXINGTON.**
Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
*(EPA/600/J-93/364)*
PB93-228906/REB 93-04 PC A01/MF A01

Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
*(EPA/600/J-93/337)*
PB93-229557/REB 93-04 PC A02/MF A01

Short Communication: Improved Thin-Layer Chromatographic Separation of 32P-Postlabeled DNA Adducts.
*(EPA/600/J-93/343)*
PB93-229615/REB 93-04 PC A02/MF A01

**KING ENGINEERING ASSOCIATES, INC., TAMPA, FL.**
Review of Tampa Bay Information for Interim Nutrient Budgets and Historical Loadings of Bay Segments.
*(TBNEP-03-92)*
PB93-191187/REB 93-01 PC A03/MF A01

**LABAT-ANDERSON, INC., ARLINGTON, VA.**
Great Lakes Water Quality Guidance Docket Index.
PB93-207769/REB 93-04 PC A05/MF A01

**LAWRENCE BERKELEY LAB., CA. ENERGY AND ENVIRONMENT DIV.**
Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
*(EPA/600/R-93/009)*
PB93-146991/REB 93-01 PC A03/MF A01

**LAWRENCE LIVERMORE NATIONAL LAB., CA. BIOMEDICAL SCIENCES DIV.**
Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence In situ Hybridization.
*(EPA/600/J-93/172, OHEA-R-475)*
PB93-194405/REB 93-01 PC A03/MF A01

**LITTLE (ARTHUR D.), INC., CAMBRIDGE, MA.**
Methods for Assessing Exposure to Chemical Substances. Volume 11. Methodology for Estimating the Migration of Additives and Impurities from Polymeric Materials.
*(EPA/560/5-85/015)*
PB93-134096/REB 93-01 PC A09/MF A02

Estimation of the Cost of Using Chemical Protective Clothing.
*(EPA/600/A-93/052)*
PB93-168805/REB 93-01 PC A03/MF A01

**LOCKHEED ENGINEERING AND SCIENCES CO., INC., LAS VEGAS, NV. ENVIRONMENTAL PROGRAMS OFFICE.**
Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
*(EPA/600/4-91/018)*
PB93-100139/REB 93-01 PC A13/MF A03

**LOCKHEED ENVIRONMENTAL SYSTEMS AND TECHNOLOGIES CO., LAS VEGAS, NV.**
X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.
*(EPA/600/R-93/073)*
PB93-203156/REB 93-04 PC A03/MF A01

**LOUISIANA STATE UNIV., BATON ROUGE. DEPT. OF OCEANOGRAPHY AND COASTAL SCIENCES.**
Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
*(EPA/620/R-92/002)*
PB93-141067/REB 93-01 PC A11/MF A03

**LOUISIANA STATE UNIV., BATON ROUGE. WETLAND BIOGEOCHEMISTRY INST.**
Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
*(EPA/600/J-93/269)*
PB93-222800/REB 93-04 PC A02/MF A01

Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
*(EPA/600/J-93/290)*
PB93-222816/REB 93-04 PC A02/MF A01

**LOUISVILLE UNIV., KY. DEPT. OF BIOLOGY.**
Recovery of DNA from Soils and Sediments.
*(EPA/600/J-93/292)*
PB93-222834/REB 93-04 PC A02/MF A01

**LOUISVILLE UNIV., KY. DEPT. OF CHEMICAL ENGINEERING.**
Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
*(EPA/600/S-92/032)*
PB93-123032/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
*(EPA/600/S-92/026)*
PB93-123073/REB 93-01 PC A02/MF A01

**LOVELACE BIOMEDICAL AND ENVIRONMENTAL RESEARCH INST., ALBUQUERQUE, NM. INHALATION TOXICOLOGY RESEARCH INST.**
Role of Ozone in Tracheal Cell Transformation.
*(HEI/RR-92/50)*
PB93-179935/REB 93-01 PC A03/MF A01

**LUND UNIV. (SWEDEN). DEPT. OF ECOLOGY.**
Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport.
*(EPA/600/J-92/452)*
PB93-141497/REB 93-01 PC A02/MF A01

**LYNDON B. JOHNSON SCHOOL OF PUBLIC AFFAIRS, AUSTIN, TX.**
Risk Communication About Chemicals in Your Community. Facilitator's Manual and Guide.
*(EPA/230/09-89/067)*
PB93-200541/REB 93-01 PC A05/MF A02

**M.D. ANDERSON CANCER CENTER, HOUSTON, TX.**
Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
*(EPA/600/J-93/096)*
PB93-175651/REB 93-01 PC A03/MF A01

Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
*(EPA/600/J-93/342)*
PB93-229607/REB 93-04 PC A02/MF A01

**MAGEE (TERESA K), CORVALLIS, OR.**
Research Plan and Methods Manual for the Oregon Wetlands Study.
*(EPA/600/R-93/072)*
PB93-212058/REB 93-04 PC A09/MF A02

**MAINE UNIV. AT ORONO.**
Characterization of Eastern U.S. Spruce-Fir Soils.
*(EPA/600/A-92/288)*
PB93-141133/REB 93-01 PC A03/MF A01

Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
*(EPA/600/J-93/254)*
PB93-212603/REB 93-04 PC A02/MF A01

**MAINE UNIV., ORONO. DEPT. OF GEOLOGICAL SCIENCES.**
EPA/600/J-92/400
MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC A02/MF A01

**MANCHESTER ENVIRONMENTAL LAB., PORT ORCHARD, WA.**
EPA/910/9-92/029
Consensus Method for Determining Groundwaters under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA).
PB93-180818/REB 93-01 PC A04/MF A01

**MANHATTAN COLL., BRONX, NY.**
Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
*(EPA/600/J-93/272, ERLN-1173)*
PB93-222107/REB 93-04 PC A02/MF A01

**MANTECH ENVIRONMENTAL TECHNOLOGY, INC., ADA, OK.**
Inhibition of Alkylbenzene Biodegradation under Denitrifying Conditions by Using Acetylene Block Technique.
*(EPA/600/J-92/393)*
PB93-121242/REB 93-01 PC A02/MF A01

Passive Sampling of Groundwater Monitoring Wells without Purging: Multilevel Well Chemistry and Tracer Disappearance.
*(EPA/600/J-93/129)*
PB93-181170/REB 93-01 PC A03/MF A01

Determination of Carboxylic Acids by Ion-Exclusion Chromatography with Non-Suppressed Conductivity and Optical Detectors.
*(EPA/600/J-93/133)*
PB93-181212/REB 93-01 PC A02/MF A01

Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.
*(EPA/600/J-93/279)*
PB93-222370/REB 93-04 PC A02/MF A01

Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
*(EPA/600/J-93/351)*
PB93-228575/REB 93-04 PC A03/MF A01

Molecular Size Exclusion by Soil Organic Materials Estimated from Their Swelling in Organic Solvents.
*(EPA/600/J-93/352)*
PB93-228583/REB 93-04 PC A02/MF A01

**MANTECH ENVIRONMENTAL TECHNOLOGY, INC., CORVALLIS, OR.**
EPA/600/J-92/458
Characterizing the Distribution of Observed Precipitation and Runoff over the Continental United States.
PB93-141570/REB 93-01 PC A03/MF A01

Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC A12/MF A03

Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
*(EPA/600/J-92/398)*
PB93-121275/REB 93-01 PC **A02**/MF **A01**

Quality Assurance Field Operations Report for the Pilot Study Evaluating the Habitat Value of Wetland Treatment Systems.
*(EPA/600/R-92/230)*
PB93-134682/REB 93-01 PC **A04**/MF **A01**

Habitat Quality Assessment of Two Wetland Treatment Systems in Mississippi: A Pilot Study.
*(EPA/600/R-92/229)*
PB93-135614/REB 93-01 PC **A06**/MF **A02**

Rice Field Inventory Using AVHRR Data.
*(EPA/600/A-92/283)*
PB93-135697/REB 93-01 PC **A03**/MF **A01**

Influence of Elevated CO2 and Temperature on Wetland Rice Root Dynamics.
*(EPA/600/A-92/289)*
PB93-141141/REB 93-01 PC **A02**/MF **A01**

Process for Regional Assessment of Wetland Risk.
*(EPA/600/R-92/249)*
PB93-146793/REB 93-01 PC **A09**/MF **A02**

Precollege Education: A Vital Component if Sustainable Agriculture is to Take Root.
*(EPA/600/J-93/053)*
PB93-168870/REB 93-01 PC **A03**/MF **A01**

Irrigated Wetlands of the Colorado Plateau: Information Synthesis and Habitat Evaluation Method.
*(EPA/600/R-93/071)*
PB93-186260/REB 93-01 PC **A05**/MF **A02**

Sampling and Assessment Issues in Using Fish as Indicators of Ecological Condition in Lakes: A Workshop Report. (3rd Draft Report).
*(EPA/620/R-93/005)*
PB93-186278/REB 93-01 PC **A03**/MF **A01**

Methane Emissions from Wetland Rice Areas of Asia.
*(EPA/600/J-93/149)*
PB93-191468/REB 93-01 PC **A03**/MF **A01**

Integrating Sustainable Agriculture, Ecology, and Environmental Policy. Conference Proceedings.
*(EPA/600/J-93/152)*
PB93-191492/REB 93-01 PC **A02**/MF **A01**

Conservation Tillage Impacts on National Soil and Atmospheric Carbon Levels.
*(EPA/600/J-93/153)*
PB93-191500/REB 93-01 PC **A03**/MF **A01**

Future Context of Sustainable Agriculture: Planning for Uncertainty.
*(EPA/600/J-93/154)*
PB93-191518/REB 93-01 PC **A03**/MF **A01**

Impacts of Climate Change on Rice Yield: A Comparison of Four Model Performances.
*(EPA/600/J-93/155)*
PB93-191526/REB 93-01 PC **A03**/MF **A01**

Statistical Evaluation of the EMAP-Wetlands Classification.
*(EPA/600/A-93/121)*
PB93-199446/REB 93-01 PC **A03**/MF **A01**

Bacillus thuringiensis var. kurstaki Affects a Beneficial Insect, the Cinnabar Moth (Lepidoptera: Arctidae).
*(EPA/600/J-93/206)*
PB93-199651/REB 93-01 PC **A02**/MF **A01**

Information Management Guidelines for the Wetlands Research Program.
*(EPA/600/R-93/106)*
PB93-202844/REB 93-01 PC **A04**/MF **A01**

Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
*(EPA/620/R-93/008)*
PB93-202851/REB 93-04 PC **A06**/MF **A02**

Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
*(EPA/600/J-93/239)*
PB93-212462/REB 93-04 PC **A03**/MF **A01**

Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
*(EPA/600/J-93/259)*
PB93-212652/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
*(EPA/600/J-93/260)*
PB93-212660/REB 93-04 PC **A02**/MF **A01**

Climate Change Impacts on Net Primary Production in China.
*(EPA/600/A-93/195)*
PB93-222271/REB 93-04 PC **A03**/MF **A01**

Habitat Quality Assessment of Two Wetland Treatment Systems in the Arid West: A Pilot Study.
*(EPA/600/R-93/117)*
PB93-222305/REB 93-04 PC **A06**/MF **A02**

Global Climates: Past, Present, and Future. Activities for Integrated Science Education.
*(EPA/600/R-93/126)*
PB93-222313/REB 93-04 PC **A06**/MF **A02**

Stream Indicator and Design Workshop.
*(EPA/600/R-93/138)*
PB93-222321/REB 93-04 PC **A05**/MF **A01**

Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
*(EPA/600/R-93/074)*
PB93-229136/REB 93-04 PC **A07**/MF **A02**

Testing for Trends When There Are Changes in Methods.
*(EPA/600/J-93/405)*
PB93-236420/REB 93-04 PC **A03**/MF **A01**

Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.
*(EPA/600/J-93/406)*
PB93-236438/REB 93-04 PC **A03**/MF **A01**

Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.
*(EPA/600/J-93/407)*
PB93-236446/REB 93-04 PC **A03**/MF **A01**

Inter-Regional Comparison of Patterns and Trends in Surface Water Acidification Across the United States.
*(EPA/600/J-93/408)*
PB93-236453/REB 93-04 PC **A03**/MF **A01**

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
*(EPA/600/J-93/412)*
PB93-236495/REB 93-04 PC **A03**/MF **A01**

Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
*(EPA/600/R-93/178)*
PB93-237907/REB 93-04 PC **A08**/MF **A02**

**MANTECH ENVIRONMENTAL TECHNOLOGY, INC., RESEARCH TRIANGLE PARK, NC.**

Evaluation of a Sorbent-Based Preconcentrated for Analysis of VOCs in Air Using Gas Chromatography-Atomic Emission Detection.
*(EPA/600/A-92/251)*
PB93-121077/REB 93-01 PC **A02**/MF **A01**

Direct Effects of Ethane Dimethanesulphonate on Epididymal Function in Adult Rats. An In vitro Demonstration.
*(EPA/600/J-92/429)*
PB93-141281/REB 93-01 PC **A03**/MF **A01**

Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
*(EPA/600/J-92/436)*
PB93-141356/REB 93-01 PC **A03**/MF **A01**

International Validation of a Neurobehavioral Screening Battery: The IPCS/WHO Collaborative Study.
*(EPA/600/J-93/090)*
PB93-175594/REB 93-01 PC **A02**

Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
*(EPA/600/J-93/100)*
PB93-175693/REB 93-01 PC **A02**/MF **A01**

Electrophoresis Gel Buffer Recirculator for under Twenty Dollars.
*(EPA/600/J-93/112)*
PB93-181014/REB 93-01 PC **A01**/MF **A01**

Association of Personal and Workplace Characteristics with Reported Health Symptoms of 6771 Government Employees in Washington, DC.
*(EPA/600/A-93/137)*
PB93-212264/REB 93-04 PC **A02**/MF **A01**

Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
*(EPA/600/A-93/214)*
PB93-228534/REB 93-04 PC **A02**/MF **A01**

Rapid Efficient Production of Baculovirus Expression Vectors.
*(EPA/600/J-93/363)*
PB93-228898/REB 93-04 PC **A03**/MF **A01**

Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

Dithicarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.
*(EPA/600/J-93/372)*
PB93-228989/REB 93-04 PC **A02**/MF **A01**

Ammonia Abatement System for Whole-Body Small Animal Inhalation Exposures to Acid Aerosols.
*(EPA/600/J-93/333)*
PB93-229516/REB 93-04 PC **A03**/MF **A01**

Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
*(EPA/600/J-93/341)*
PB93-229599/REB 93-04 PC **A03**/MF **A01**

Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
*(EPA/600/J-93/395)*
PB93-236321/REB 93-04 PC **A03**/MF **A01**

Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.
*(EPA/600/J-93/397)*
PB93-236347/REB 93-04 PC **A02**/MF **A01**

**MANTECH ENVIRONMENTAL TECHNOLOGY INTERNATIONAL, INC., CORVALLIS, OR.**

Use of Ecoregions in Biological Monitoring.
*(EPA/600/A-92/204)*
PB93-106730/REB 93-01 PC **A03**/MF **A01**

Who Will Speak for Biodiversity.
*(EPA/600/J-92/419)*
PB93-135762/REB 93-01 PC **A01**/MF **A01**

Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.
*(EPA/600/A-93/158)*
PB93-212785/REB 93-04 PC **A03**/MF **A01**

**MARINE BIOLOGICAL LAB., WOODS HOLE, MA. ECOSYSTEMS CENTER.**

Biological Sinks for Nitrogen Additions to a Forested Catchment.
*(EPA/600/A-92/292)*
PB93-141174/REB 93-01 PC **A02**/MF **A01**

Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
*(EPA/600/J-93/286)*
PB93-222776/REB 93-04 PC **A02**/MF **A01**

**MARYLAND BIOTECHNOLOGY INST., BALTIMORE.**

Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
*(EPA/600/J-93/224)*
PB93-205078/REB 93-04 PC **A02**/MF **A01**

**MARYLAND STATE HIGHWAY ADMINISTRATION, BALTIMORE.**

Evaluation of Mitigation for Acid Aluminum Leachate from a Highway Fill in Garrett County, Maryland.
*(FHWA/MD-89/14)*
PB93-180321/REB 93-01 PC **A04**/MF **A01**

**MARYLAND UNIV., COLLEGE PARK. DEPT. OF MECHANICAL ENGINEERING.**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
*(EPA/600/A-92/274)*
PB93-131688/REB 93-01 PC **A03**/MF **A01**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
*(EPA/600/J-93/079)*
PB93-173664/REB 93-01 PC **A02**/MF **A01**

**MASSACHUSETTS UNIV., AMHERST.**

Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
*(EPA/600/J-93/132)*
PB93-181204/REB 93-01 PC **A03**/MF **A01**

**MASSACHUSETTS UNIV., AMHERST. DEPT. OF CIVIL ENGINEERING.**

Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
*(EPA/600/J-93/131)*
PB93-181196/REB 93-01 PC **A03**/MF **A01**

**MASSACHUSETTS UNIV., AMHERST. ENVIRONMENTAL ENGINEERING PROGRAM.**

LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
*(EPA/600/R-92/247)*
PB93-157550/REB 93-01 PC **A07**/MF **A02**

**MEDICAL RESEARCH COUNCIL, CHILTON (ENGLAND). RADIOBIOLOGY UNIT.**

Radiation- and Chemically-Induced Chromosome Aberrations in Mouse Oocytes: A Comparison with Effects in Males.
*(EPA/600/J-93/179, OHEA-R-482)*
PB93-194462/REB 93-01 PC **A02**/MF **A01**

**META SYSTEMS, INC., CAMBRIDGE, MA.**

Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Plastics Molding and Forming Industry.
*(EPA/440/2-84/001)*
PB93-167773/REB 93-01 PC **A05**/MF **A01**

**MICHIGAN STATE UNIV., EAST LANSING.**

Isolation and Purification of Bacterial DNA from Soil.
*(EPA/600/A-93/013)*
PB93-149276/REB 93-01 PC **A04**/MF **A01**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium'.
*(EPA/600/A-93/099)*
PB93-191351/REB 93-01 PC **A02**/MF **A01**

**MICHIGAN STATE UNIV., EAST LANSING. DEPT. OF BIOCHEMISTRY.**

Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
*(EPA/600/J-93/160)*
PB93-191575/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium': Involvement of the Lignin Degrading System.
*(EPA/600/J-93/161)*
PB93-191583/REB 93-01 PC **A02**/MF **A01**

Biodegradation of DDT (1,1,1-Trichloro-2,2-Bis(4-Chlorophenyl)Ethane) by the White Rot Fungus 'Phanerochaete chrysosporium'.
*(EPA/600/J-93/164)*
PB93-191617/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Chlorinated Organic Compounds by 'Phanerochaete chrysosporium', a Wood-Rotting Fungus.
*(EPA/600/A-93/133)*
PB93-204147/REB 93-01 PC **A03**/MF **A01**

Mineralization of Recalcitrant Environmental Pollutants by a White Rot Fungus. Proceedings of the National Conference on Hazardous Wastes and Hazardous Materials. Held in Washington, DC. on March 16-18, 1987.
*(EPA/600/A-93/134)*
PB93-204154/REB 93-01 PC **A02**/MF **A01**

**MICHIGAN UNIV., ANN ARBOR. AIR QUALITY LAB.**
Atmopheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
*(EPA/600/A-92/244)*
PB93-121002/REB 93-01 PC **A02**/MF **A01**

Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
*(EPA/600/A-92/250)*
PB93-121069/REB 93-01 PC **A02**/MF **A01**

**MICHIGAN UNIV., ANN ARBOR. NATIONAL POLLUTION PREVENTION CENTER.**
Life Cycle Design Guidance Manual. Environmental Requirements and the Product System.
*(EPA/600/R-92/226)*
PB93-164507/REB 93-04 PC **A09**/MF **A03**

**MICHIGAN UNIV., ANN ARBOR. SCHOOL OF PUBLIC HEALTH.**
Development and Evaluation of a Transportable Fast Gas Chromatograph for the Monitoring of Organic Vapors in Air.
*(EPA/600/A-93/213)*
PB93-228526/REB 93-04 PC **A02**/MF **A01**

**MIDWEST RESEARCH INST., CARY, NC.**
Alternative Control Techniques Document. NOx Emissions from Stationary Gas Turbines.
*(EPA/453/R-93/007)*
PB93-156586/REB 93-01 PC **A11**/MF **A03**

Alternative Control Techniques Document-NOx Emissions from Process Heaters.
*(EPA/453/R-93/015)*
PB93-186211/REB 93-01 PC **A10**/MF **A03**

**MIDWEST RESEARCH INST., KANSAS CITY, MO.**
Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures.
*(EPA/450/2-92/004)*
PB93-122273/REB 93-01 PC **A09**/MF **A03**

Volatile Organic Sampling Train Soot Interference Report.
*(EPA/600/R-92/208)*
PB93-144145/REB 93-01 PC **A04**/MF **A01**

Characterization of PM-10 Emissions from Antiskid Materials Applied to Ice- and Snow-Covered Roadways.
*(EPA/600/R-93/019)*
PB93-150209/REB 93-01 PC **A05**/MF **A01**

Summary of Factors Affecting Compliance by Ferrous Foundaries. Volume 1. Text.
*(EPA/340/1-90/020)*
PB93-199347/REB 93-01 PC **A05**/MF **A02**

**MILLER (WADE) ASSOCIATES, INC., ARLINGTON, VA.**
Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
*(EPA/811/R-92/008)*
PB93-134344/REB 93-01 PC **A07**/MF **A02**

Occurrence Assessment for Disinfectants and Disinfection By-Products (Phase 6a) in Public Drinking Water.
*(EPA/811/R-92/003)*
PB93-134377/REB 93-01 PC **A04**/MF **A01**

**MINNESOTA UNIV.-DULUTH. DEPT. OF BIOLOGY.**
Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
*(EPA/600/J-92/386)*
PB93-121184/REB 93-01 PC **A02**/MF **A01**

**MINNESOTA UNIV.-DULUTH. ST. ANTHONY FALLS HYDRAULIC LAB.**
Vertical Diffusion in Small Stratified Lake: Data and Error Analysis.
*(EPA/600/A-93/003)*
PB93-149185/REB 93-01 PC **A03**/MF **A01**

**MINNESOTA UNIV., MINNEAPOLIS. ST. ANTHONY FALLS HYDRAULIC LAB.**
Water Temperature Characteristics of Lakes Subjected to Climate Change.
*(EPA/600/R-92/244)*
PB93-135648/REB 93-01 PC **A09**/MF **A02**

Relationship between Water Temperatures and Air Temperatures for Central U.S. Streams.
*(EPA/600/R-92/243)*
PB93-135655/REB 93-01 PC **A07**/MF **A02**

**MINNESOTA UNIV., ST. PAUL. DEPT. OF GENETICS AND CELL BIOLOGY.**
Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium 'Nitrosomonas europaea'.
*(EPA/600/J-93/073)*
PB93-169076/REB 93-01 PC **A02**/MF **A01**

**MINNESOTA UNIV., ST. PAUL. WATER RESOURCES RESEARCH CENTER.**
Introduction to Nonpoint Source Pollution and Wetland Mitigation.
*(EPA/600/J-92/348)*
PB93-106953/REB 93-01 PC **A03**/MF **A01**

Recent Sulfur Enrichment in the Sediments of Little Rock Lake, Wisconsin.
*(EPA/600/J-92/415)*
PB93-135721/REB 93-01 PC **A03**/MF **A01**

**MISSOURI DEPT. OF HEALTH, JEFFERSON CITY.**
Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
*(ATSDR/HS-93/21)*
PB93-148252/REB 93-01 PC **A08**/MF **A02**

**MONROE COUNTY SOIL AND WATER CONSERVATION DISTRICT, MI.**
GLNPO-08/91
Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
*(EPA/905/9-91/007)*
PB93-128114/REB 93-01 PC **A04**/MF **A01**

**MUNICIPALITY OF METROPOLITAN SEATTLE-METRO, WA. WATER POLLUTION CONTROL DIV.**
Maritime Industrial Waste Project Reduction of Toxicant Pollution from the Maritime Industry in Puget Sound.
*(EPA/910/9-92/008)*
PB93-119568/REB 93-01 PC **A08**/MF **A02**

**NATIONAL ADVISORY COUNCIL FOR ENVIRONMENTAL POLICY AND TECHNOLOGY, WASHINGTON, DC. TRADE AND ENVIRONMENT COMMITTEE.**
ISBN-0-16-041702-3
Greening of World Trade: A Report to EPA from the Trade and Environment Committee of the National Advisory Council for Environmental Policy and Technology.
*(EPA/100/R-93/002)*
PB93-176980/REB 93-01 PC **A11**/MF **A03**

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, HAMPTON, VA. LANGLEY RESEARCH CENTER.**
Optical Remote Measurement of Toxic Gases.
*(EPA/600/J-93/319)*
PB93-229409/REB 93-04 PC **A03**/MF **A01**

**NATIONAL AGRICULTURAL LIBRARY, BELTSVILLE, MD.**
USDA/BLA-118
Protection of Pome Fruits, March 1985-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149904/REB 93-01 PC **A13**/MF **A03**

USDA/BLA-120
Methylbromide and Its Alternatives as Fumigants, 1979-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149912/REB 93-01 PC **A09**/MF **A03**

**NATIONAL AIR AND RADIATION ENVIRONMENTAL LAB., MONTGOMERY, AL.**
EPA-400R-92-009
Measurements of electric and magnetic fields in the Waianae, Hawaii area.
DE92019891/REB 93-01 PC **A03**/MF **A01**

**NATIONAL BOARD OF WATERS AND THE ENVIRONMENT, HELSINKI (FINLAND).**
Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
*(EPA/600/J-93/411)*
PB93-236487/REB 93-04 PC **A03**/MF **A01**

**NATIONAL CENTER FOR ATMOSPHERIC RESEARCH, BOULDER, CO. ENVIRONMENTAL AND SOCIETAL IMPACTS GROUP.**
Methods for Analyzing Extreme Events Under Climate Change.
*(EPA/600/R-93/014)*
PB93-146827/REB 93-01 PC **A03**/MF **A01**

**NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH, JEFFERSON, AR.**
In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
*(EPA/600/J-93/340)*
PB93-229581/REB 93-04 PC **A02**/MF **A01**

**NATIONAL COUNCIL OF THE PAPER INDUSTRY FOR AIR AND STREAM IMPROVEMENT, INC., MEDFORD, MA.**
Expanding Global Forest Management: An 'Easy First' Proposal.
PB93-199669/REB 93-01 PC **A02**/MF **A01**

**NATIONAL ENVIRONMENTAL HEALTH ASSOCIATION, DENVER, CO.**
Learning Guide for State/Local Drinking Water Agreements.
PB93-185601/REB 93-01 PC **A07**/MF **A02**

**NATIONAL ENVIRONMENTAL PROTECTION AGENCY, SOLNA (SWEDEN).**
SNV-3906
Phasing out of CFCs in the electronics and engineering industries in Sweden.
DE93711212/REB 93-01 PC **A03**/MF **A01**

SNV-3931
Bladder-wrack (Fucus vesiculosus L) as an indicator for radionuclides in the environment of Swedish nuclear power plants.
DE93603681/REB 93-01 PC **A03**/MF **A01**

SNV-3944
Measurements of total ozone.
DE92563059/REB 93-01 PC **A04**/MF **A01**

SNV-3945
Air monitoring in the Arctic: 1980-90.
DE92563060/REB 93-01 PC **A03**/MF **A01**

SNV-3949
Radioecology in Nordic limnic systems - present knowledge and future prospects.
DE92643948/REB 93-01 PC **A04**/MF **A01**

SNV-3963
Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC **A03**/MF **A01**

SNV-3968
Impact of fuels on diesel exhaust emissions. A chemical and biological characterization.
DE92563058/REB 93-01 PC **A08**/MF **A02**

SNV-3990
Metal concentrations of the mor layer.
DE92563061/REB 93-01 PC **A05**/MF **A01**

SNV-3999
Sanering av Jaernsjoen i Emaan. Huvudstudie. (Remediation of lake Jaernsjoen in the Emaan river. Main report).
DE93711213/REB 93-01 PC **A04**/MF **A01**

SNV-4018
Risk assessment, Health-Environment. A research programme during the period 1992/93-1994/95.
DE93711214/REB 93-01 PC **A03**/MF **A01**

SNV-4033
New technology for refrigeration and heating plants.
DE93721673/REB 93-01 PC **A03**/MF **A01**

SNV-4045
Greenhouse gases. Emissions and countermeasures in an international perspective.
DE93721674/REB 93-01 PC **A07**/MF **A02**

**NATIONAL ENVIRONMENTAL RESEARCH INST., ROSKILDE (DENMARK). DEPT. OF MARINE ECOLOGY AND MICROBIOLOGY.**
Microbial Trophic Interactions in Aquatic Microcosms Designed for Testing Genetically Engineered Microorganisms: A Field Comparison.
*(EPA/600/J-93/385)*
PB93-236248/REB 93-04 PC **A03**/MF **A01**

**NATIONAL GEOPHYSICAL DATA CENTER, BOULDER, CO.**
Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. User's Guide. Volume 1. NGDC Key to Geophysical Records Documentation No. 26.
*(EPA/600/R-92/194A)*
PB93-146082/REB 93-01 PC **A07**/MF **A02**

Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. Documentation Manual, DISC-A. Volume 1. NGDC Key to Geophysical Records Documentation No. 27.
*(EPA/600/R-92/194B)*
PB93-146090/REB 93-01 PC **A11**/MF **A03**

**NATIONAL INST. OF STANDARDS AND TECHNOLOGY (BFRL), GAITHERSBURG, MD.**
NISTIR-4979
Building and HVAC Characterization for Commercial Building Indoor Air Quality Investigations.
PB93-198844/REB 93-01 PC **A07**/MF **A02**

**NATIONAL INST. OF STANDARDS AND TECHNOLOGY (BFRL), GAITHERSBURG, MD. BUILDING ENVIRONMENT DIV.**
Simplified Cycle Simulation Model for the Performance Rating of Refrigerants and Refrigerant Mixtures.
PB93-130383 93-01 Not available NTIS

**NATIONAL INST. OF STANDARDS AND TECHNOLOGY, GAITHERSBURG, MD.**
Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
*(EPA/600/A-93/222)*
PB93-236511/REB 93-04 PC **A03**/MF **A01**

**NATIONAL OCEAN SERVICE, ROCKVILLE, MD. STRATEGIC ASSESSMENT BRANCH.**
Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, BOULDER, CO. ENVIRONMENTAL RESEARCH LABS.**
Statistical Analyses of COADS Wind Data in Coastal Regions of the United States.
*(EPA/600/A-93/157)*
PB93-212777/REB 93-04 PC **A03**/MF **A01**

**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, RESEARCH TRIANGLE PARK, NC. ATMOSPHERIC SCIENCES MODELING DIV.**
EPA/600/A-93/161
Downwash of Plumes in the Vicinity of Buildings: A Wind-Tunnel Study.
PB93-212819/REB 93-04 PC **A03**/MF **A01**

Stagnation Diffusion Observed in a Deeply Pooling Valley during STAGMAP.
*(EPA/600/A-92/233)*
PB93-120897/REB 93-01 PC **A02**/MF **A01**

Atmospheric Deposition of Toxic Metals to Lake Michigan: Preliminary Annual Model Calculations.
*(EPA/600/A-92/239)*
PB93-120954/REB 93-01 PC **E02**/MF **A01**

Geographical Distribution and Source Type Analysis of Toxic Metal Emissions.
*(EPA/600/A-92/247)*
PB93-121036/REB 93-01 PC **A02**/MF **A01**

Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.
*(EPA/600/J-93/262)*
PB93-212686/REB 93-04 PC **A03**/MF **A01**

Interpretive Analysis of Observed and Modeled Mesoscale Ozone Photochemistry in Areas with Numerous Point Sources.
*(EPA/600/J-93/264)*
PB93-212702/REB 93-04 PC **A03**/MF **A01**

Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
*(EPA/600/J-93/265)*
PB93-212710/REB 93-04 PC **A03**/MF **A01**

Final Results of the Condors Convective Diffusion Experiment.
*(EPA/600/J-93/266)*
PB93-212728/REB 93-04 PC **A03**/MF **A01**

Exposure Modeling of Acid Aerosols.
*(EPA/600/A-93/216)*
PB93-228559/REB 93-04 PC **A02**/MF **A01**

**NATIONAL PARK SERVICE COOPERATIVE PARK STUDIES UNIT, KNOXVILLE, TN.**
Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
*(EPA/600/J-92/399)*
PB93-121283/REB 93-01 PC **A02**/MF **A01**

**NATIONAL PARK SERVICE, WASHINGTON, DC. WILDLIFE AND VEGETATION DIV.**
NPS-D-752
Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04**/MF **A01**

NPS/NRWV/NRTR-92/10
Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04**/MF **A01**

**NATIONAL RESEARCH COUNCIL, WASHINGTON, DC.**
ISBN-0-309-0:4844-3
Protecting Visibility in National Parks and Wilderness Areas.
PB93-186393/REB 93-01 PC **A20**/MF **A04**

ISBN-0-309-03741-7
Drinking Water and Health: Disinfectants and Disinfectant By-Products. Volume 7.
PB93-112290/REB 93-01 PC **A06**/MF **A02**

ISBN-0-309-04749-8
Sustainable Agriculture and the Environment in the Humid Tropics.
PB93-173920/REB 93-01 PC **A99**/MF **A06**

**NATIONAL RESEARCH COUNCIL, WASHINGTON, DC. BOARD ON ENVIRONMENTAL STUDIES AND TOXICOLOGY.**
ISBN-0-309-04078-7
Biologic Markers of Air-Pollution Stress and Damage in Forests.
PB93-110187/REB 93-01 PC **A17**/MF **A03**

ISBN-0-309-04736-6
Multiple Chemical Sensitivities. Addendum to Biologic Markers in Immunotoxicology.
PB93-222990/REB 93-04 PC **A09**/MF **A03**

Structure and Performance of the Health Effects Institute.
PB93-200335/REB 93-01 PC **A08**/MF **A02**

**NATIONAL RESEARCH COUNCIL, WASHINGTON, DC. COMMISSION ON LIFE SCIENCES.**
ISBN-0-309-03937-7
Biologic Markers in Reproductive Toxicology.
PB93-100980/REB 93-01 PC **A18**/MF **A04**

**NATIONAL RESEARCH COUNCIL, WASHINGTON, DC. COMMITTEE ON TOXICOLOGY.**
Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances.
PB93-206449/REB 93-04 PC **A06**/MF **A02**

**NATIONAL RESEARCH COUNCIL, WASHINGTON, DC. WATER SCIENCE AND TECHNOLOGY BOARD.**
Review of EPA's Environmental Monitoring and Assessment Program (EMAP). Interim Report.
PB93-146348/REB 93-01 PC **A03**/MF **A01**

**NATIONAL RESPONSE TEAM, WASHINGTON, DC.**
NRT-1A
Criteria for Review of Hazardous Materials Emergency Plans.
PB93-207348/REB 93-04 PC **A03**/MF **A01**

**NATIONAL TRANSPORTATION SAFETY BOARD, WASHINGTON, DC.**
NTSB/HAR-93/02
National Transportation Safety Board Highway Accident Report: Charter Bus Loss of Control, Overturn, and Fire, Vernon, New Jersey, July 26, 1992.
PB93-916202/REB 93-04 PC **A05**/MF **A01**

**NATO COMMITTEE ON THE CHALLENGES OF MODERN SOCIETY, BRUSSELS (BELGIUM).**
CCMS-190-VOL-1
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
*(EPA/600/R-93/012A)*
PB93-218238/REB 93-04 PC **A07**/MF **A02**

CCMS-190-VOL-2-PT-1
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 1: Pages 1 through 662.
*(EPA/600/R-93/012B)*
PB93-218246/REB 93-04 PC **A99**/MF **A06**

CCMS-190-VOL-2-PT-2
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 2: Pages 663 through 1389.
*(EPA/600/R-93/012C)*
PB93-218253/REB 93-04 PC **A99**/MF **A06**

**NEBRASKA UNIV.-LINCOLN. DEPT. OF AGRONOMY.**
Practical Simulation of Composting in the Laboratory.
*(EPA/600/J-93/271)*
PB93-222099/REB 93-04 PC **A03**/MF **A01**

**NESBIT (WILLIAM) AND ASSOCIATES, SANTA ROSA, CA.**
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991.
PB93-212835/REB 93-04 PC **E99**/MF **E99**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 1. Sessions 1-3.
*(EPA/600/R-92/093A)*
PB93-212843/REB 93-04 PC **A15**/MF **A03**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 2. Sessions 4 and 5.
*(EPA/600/R-92/093B)*
PB93-212850/REB 93-04 PC **A20**/MF **A04**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 3. Sessions 6-8.
*(EPA/600/R-92/093C)*
PB93-212868/REB 93-04 PC **A19**/MF **A04**

**NEVADA UNIV., LAS VEGAS. DEPT. OF CHEMISTRY.**
Empirical Model of Vehicle Emissions.
*(EPA/600/J-93/201)*
PB93-199602/REB 93-01 PC **A02**/MF **A01**

**NEVADA UNIV., LAS VEGAS. ENVIRONMENTAL RESEARCH CENTER.**
Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies.
*(EPA/600/R-92/128)*
PB92-220532/REB 93-04 PC **A08**/MF **A02**

**NEVADA UNIV. SYSTEM, RENO. DESERT RESEARCH INST.**
Soil-Mediated Effects of Atmospheric Deposition on Eastern U.S. Spruce-Fir Forests.
*(EPA/600/A-92/287)*
PB93-141125/REB 93-01 PC **A03**/MF **A01**

**NEW HAMPSHIRE UNIV., DURHAM.**
LSU-HEPA-93-7
Search for Radiative Neutrino Decay from Supernovae.
*(NASA-CR-193118)*
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

NAS 1.26:193118
Search for Radiative Neutrino Decay from Supernovae.
*(NASA-CR-193118)*
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

**NEW JERSEY INST. OF TECH., NEWARK.**
Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
*(EPA/600/S-92/039)*
PB93-123115/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
*(EPA/600/S-92/040)*
PB93-123123/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
*(EPA/600/S-92/041)*
PB93-123131/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
*(EPA/600/S-92/042)*
PB93-123149/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for an Autobody Repair Facility.
*(EPA/600/S-92/043)*
PB93-123156/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
*(EPA/600/S-92/044)*
PB93-123164/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Artists Supply Paints.
*(EPA/600/S-92/045)*
PB93-123172/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Wire Stock Used for Production of Metal Items.
*(EPA/600/S-92/046)*
PB93-123180/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
*(EPA/600/S-92/047)*
PB93-123198/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
*(EPA/600/S-92/048)*
PB93-123206/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
*(EPA/600/S-92/049)*
PB93-123214/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
*(EPA/600/S-92/050)*
PB93-123222/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
*(EPA/600/S-92/051)*
PB93-123230/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
*(EPA/600/S-92/052)*
PB93-123248/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Orthopedic Implants.
*(EPA/600/S-92/064)*
PB93-126217/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Dry Cleaning Equipment.
*(EPA/600/S-92/062)*
PB93-126225/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Fossil Fuel Fired Electrical Generating Station.
*(EPA/600/S-92/061)*
PB93-126233/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Plastic Containers by Injection Molding.
*(EPA/600/S-92/060)*
PB93-126241/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplating Chemical Products.
*(EPA/600/S-92/059)*
PB93-126258/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Scrap Metal Recovery Facility.
*(EPA/600/S-92/058)*
PB93-126266/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Hardened Steel Gears.
*(EPA/600/S-92/057)*
PB93-126282/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
*(EPA/600/S-92/056)*
PB93-126290/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fine Chemicals Using Batch Processes.
*(EPA/600/S-92/055)*
PB93-126308/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of General Purpose Paints and Painting Supplies.
*(EPA/600/S-92/054)*
PB93-126316/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Printing Plate Preparation Section of a Newspaper.
*(EPA/600/S-92/053)*
PB93-126563/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for an Electrical Utility Transmission System Monitoring and Maintenance Facility.
*(EPA/600/S-92/063)*
PB93-126639/REB 93-01 PC **A02**/MF **A01**

**NEW JERSEY INST. OF TECH., NEWARK. DEPT. OF CHEMICAL ENGINEERING.**
Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
*(EPA/600/A-93/125)*
PB93-204063/REB 93-01 PC **A02**/MF **A01**

**NEW YORK STATE COLL. OF AGRICULTURE AND LIFE SCIENCES, ITHACA. DEPT. OF AGRICULTURAL AND BIOLOGICAL ENGINEERING.**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
*(EPA/905/9-91/006C, GL-06C/91)*
PB93-128031/REB 93-01 PC **A06**/MF **A02**

**NEW YORK STATE DEPT. OF ENVIRONMENTAL CONSERVATION, ALBANY. DIV. OF WATER.**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
*(EPA/905/9-91/006A, GL-06A/91)*
PB93-128015/REB 93-01 PC **A04**/MF **A01**

**NEW YORK UNIV. MEDICAL CENTER, NY.**
Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
*(EPA/600/J-93/287)*
PB93-222784/REB 93-04 PC **A02**/MF **A01**

**NORTH AMERICAN LAKE MANAGEMENT SOCIETY, MERRIFIELD, VA.**
EPA/440/4-90/006
Lake and Reservoir Restoration Guidance Manual: Second Edition.
PB93-207926/REB 93-04 PC **A15**/MF **A03**

**NORTH AMERICAN LAKE MANAGEMENT SOCIETY, WASHINGTON, DC.**
Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
*(EPA/440/4-90/007)*
PB93-203982/REB 93-01 PC A08/MF A02

**NORTH CAROLINA CENTRAL UNIV., DURHAM. DEPT. OF BIOLOGY.**
Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
*(EPA/600/J-92/447)*
PB93-141483/REB 93-01 PC A02/MF A01

**NORTH CAROLINA STATE UNIV. AT RALEIGH.**
Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
*(EPA/600/4-91/013)*
PB93-100071/REB 93-04 PC A12/MF A03

Study of the Effects of Acidic Pollutants on Automotive Finishes.
*(EPA/600/A-92/237)*
PB93-120939/REB 93-01 PC A02/MF A01

Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
*(EPA/600/A-92/240)*
PB93-120962/REB 93-01 PC A02/MF A01

Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
*(EPA/600/A-92/243)*
PB93-120996/REB 93-01 PC A02/MF A01

**NORTH CAROLINA STATE UNIV. AT RALEIGH. DEPT. OF CHEMISTRY.**
Extraction of Phenol and Its Metabolites from Aqueous Solution.
*(EPA/600/J-93/334)*
PB93-229524/REB 93-04 PC A02/MF A01

**NORTH CAROLINA STATE UNIV. AT RALEIGH. DEPT. OF MARINE, EARTH AND ATMOSPHERIC SCIENCES.**
Laboratory Simulation of Turbulent Convection Over an Urban Heat Island.
*(EPA/600/A-92/31)*
PB93-120871/REB 93-01 PC A02/MF A01

Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
*(EPA/600/J-93/267)*
PB93-212736/REB 93-04 PC A03/MF A01

**NORTH CAROLINA STATE UNIV. AT RALEIGH. SEA GRANT COLL. PROGRAM.**
UNC/SG-92/12
Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC A03/MF A01

**NORTH CAROLINA UNIV. AT CHAPEL HILL.**
Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
*(EPA/600/J-93/414)*
PB93-236577/REB 93-04 PC A03/MF A01

**NORTH CAROLINA UNIV. AT CHAPEL HILL. CENTER FOR ENVIRONMENTAL MEDICINE AND LUNG BIOLOGY.**
Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
*(EPA/600/J-93/118)*
PB93-181063/REB 93-01 PC A03/MF A01

Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
*(EPA/600/J-93/360)*
PB93-226864/REB 93-04 PC A02/MF A01

**NORTH CAROLINA UNIV. AT CHAPEL HILL. DEPT. OF ENVIRONMENTAL SCIENCES AND ENGINEERING.**
Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
*(EPA/600/J-92/360)*
PB93-107068/REB 93-01 PC A03/MF A01

**NORTH CAROLINA UNIV. AT CHAPEL HILL. DEPT. OF PSYCHOLOGY.**
Mechanisms Underlying Somatosensory Cortical Dynamics: 1. In vivo Studies.
*(EPA/600/J-92/377)*
PB93-107217/REB 93-01 PC A03/MF A01

Mechanisms Underlying Somatosensory Cortical Dynamics: 2. In vitro Studies.
*(EPA/600/J-92/376)*
PB93-107225/REB 93-01 PC A03/MF A01

**NORTH CAROLINA UNIV. AT CHAPEL HILL. SCHOOL OF MEDICINE.**
Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Induction of c-fos-Like Immunoreactivity.
*(EPA/600/J-92/375)*
PB93-107209/REB 93-01 PC A03/MF A01

**NORTH PENN WATER AUTHORITY, LANSDALE, PA.**
Use of Expert System in a Water Utility.
*(EPA/600/R-92/218)*
PB93-123081/REB 93-01 PC A04/MF A01

**NORTHEASTERN FOREST EXPERIMENT STATION, PARSONS, WV. TIMBER AND WATERSHED LAB.**
Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
*(EPA/600/A-92/281)*
PB93-135671/REB 93-01 PC A01/MF A01

**NORTHEASTERN ILLINOIS PLANNING COMMISSION, CHICAGO.**
Volunteer Lake Monitoring Program, 1991. Volume 3. Northeastern Illinois Region.
*(IEPA/WPC-92-110C)*
PB93-113538/REB 93-01 PC A07/MF A02

**NORTHEASTERN UNIV., BOSTON, MA. BARNETT INST. OF CHEMICAL ANALYSIS AND MATERIALS SCIENCE.**
PUB-509
Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
*(EPA/600/J-93/314, ERLN-1416)*
PB93-229367/REB 93-04 PC A02/MF A01

**NSI TECHNOLOGY SERVICES CORP., CORVALLIS, OR.**
Effect of Aerosolization on Subsequent Bacterial Survival.
*(EPA/600/J-92/343)*
PB93-106904/REB 93-01 PC A02/MF A01

Surface Waters Component of the Environmental Monitoring and Assessment Program (EMAP): An Overview.
*(EPA/600/J-92/397)*
PB93-121267/REB 93-01 PC A02/MF A01

**NSI TECHNOLOGY SERVICES CORP., RESEARCH TRIANGLE PARK, NC.**
Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
*(EPA/600/J-92/421)*
PB93-141208/REB 93-01 PC A03/MF A01

**OAK RIDGE NATIONAL LAB., TN.**
EPA-600/R-92-203
Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.
DE93014387/REB 93-04 PC A03/MF A01

ORNL/M-2426
Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.
DE93014387/REB 93-04 PC A03/MF A01

Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
*(EPA/600/J-93/130)*
PB93-181188/REB 93-01 PC A02/MF A01

**OAK RIDGE NATIONAL LAB., TN. BIOLOGY DIV.**
Frequency and Nature of Specific-Locus Mutations Induced in Female Mice by Radiations and Chemicals: A Review.
*(EPA/600/J-93/177, OHEA-R-480)*
PB93-194447/REB 93-01 PC A03/MF A01

Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
*(EPA/600/J-93/180, OHEA-R-483)*
PB93-194470/REB 93-01 PC A03/MF A01

**OAK RIDGE NATIONAL LAB., TN. ENVIRONMENTAL SCIENCES DIV.**
ORNL/PUB-2972
Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
*(EPA/503/3-88/001)*
PB93-207561/REB 93-04 PC A03/MF A01

**OAK RIDGE NATIONAL LAB., TN. HEALTH AND SAFETY RESEARCH DIV.**
Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
*(EPA/600/J-92/396)*
PB93-121259/REB 93-01 PC A02/MF A01

**OFFICE OF RADIATION PROGRAMS, WASHINGTON, DC.**
EPA/520/1-87/012-1
Low-Level and NARM Radioactive Wastes. Draft Environmental Impact Statement for Proposed Rules. Volume 1. Background Information Document.
PB93-200673/REB 93-01 PC A99/MF A06

**OHIO STATE UNIV., COLUMBUS. DEPT. OF AGRONOMY.**
Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
*(EPA/905/9-91/013, GL-014/91)*
PB93-128049/REB 93-01 PC A05/MF A01

**OLD DOMINION UNIV., NORFOLK, VA. DEPT. OF CHEMISTRY AND BIOCHEMISTRY.**
Reactions of Potential Organic Water Contaminants with Aqueous Chlorine and Monochloramine.
*(EPA/700/R-92/006)*
PB93-175040/REB 93-01 PC A04/MF A01

**OMNI ENVIRONMENTAL SERVICES, INC., BEAVERTON, OR.**
Evaluation of Emissions from Masonry Heaters and Masonry Fireplaces in Homes.
*(EPA/600/A-93/059)*
PB93-173078/REB 93-01 PC A03/MF A01

**OREGON GRADUATE INST. OF SCIENCE AND TECHNOLOGY, BEAVERTON.**
Rapid Phase Indentification of Mixed Crystalline Solids.
*(EPA/600/A-93/146)*
PB93-212355/REB 93-04 PC A03/MF A01

**OREGON GRADUATE INST. OF SCIENCE AND TECHNOLOGY, BEAVERTON. DEPT. OF ENVIRONMENTAL SCIENCE AND ENGINEERING.**
Experimental Examination of Integrated Soil Vapor Extraction Techniques.
*(EPA/600/J-92/280)*
PB93-131738/REB 93-01 PC A03/MF A01

**OREGON STATE UNIV., CORVALLIS.**
Digital Topographic Approach to Modeling: The Distribution of Precipitation in Mountainous Terrain.
*(EPA/600/A-92/195)*
PB93-106649/REB 93-01 PC A03/MF A01

Design and Construction of Demonstration/Research Wetlands for Treatment of Dairy Farm Wastewater.
*(EPA/600/R-93/105)*
PB93-202836/REB 93-01 PC A03/MF A01

Comparing Sampling Designs for Monitoring Ecological Status and Trends: Impact of Temporal Patterns (Chapter 3).
*(EPA/600/A-93/196)*
PB93-222289/REB 93-04 PC A03/MF A01

**OREGON STATE UNIV., CORVALLIS. COLL. OF VETERINARY MEDICINE.**
Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
*(EPA/600/J-93/205)*
PB93-199644/REB 93-01 PC A03/MF A01

**OREGON STATE UNIV., CORVALLIS. DEPT. OF CIVIL ENGINEERING.**
Equilibrium Analysis of Carbon Pools and Fluxes of Forest Biomes in the Former Soviet Union.
*(EPA/600/J-93/151)*
PB93-191484/REB 93-01 PC A02/MF A01

Proceedings of the International Workshop on Carbon Cycling in Boreal Forest and Sub-Arctic Ecosystems: Biospheric Responses and Feedbacks to Global Climate Change.
*(EPA/600/R-93/084)*
PB93-205540/REB 93-04 PC A13/MF A03

Plume Definition in Regions of Strong Bending.
*(EPA/600/A-93/166, CONTRIB-ERL-N-191)*
PB93-221844/REB 93-04 PC A02/MF A01

**OREGON STATE UNIV., CORVALLIS. DEPT. OF FISHERIES AND WILDLIFE.**
Trace Organic Contaminants in Anthropogenically Acidified Surface Waters.
*(EPA/600/A-92/282)*
PB93-135689/REB 93-01 PC A03/MF A01

**OREGON STATE UNIV., CORVALLIS. DEPT. OF GEOSCIENCES.**
Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
*(EPA/910/9-92/012)*
PB93-143709/REB 93-01 PC A08/MF A02

**OREGON STATE UNIV., CORVALLIS. DEPT. OF SOIL SCIENCE.**
Mathematical Model of Plant Uptake and Translocation of Organic Chemicals: Development of the Model.
*(EPA/600/J-92/346)*
PB93-106938/REB 93-01 PC A02/MF A01

Mathematical Model of Plant Uptake and Translocations of Organic Chemicals: Application to Experiments.
*(EPA/600/J-92/347)*
PB93-106946/REB 93-01 PC A03/MF A01

Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
*(EPA/600/J-92/456)*
PB93-141554/REB 93-01 PC A02/MF A01

**OREGON STATE UNIV., NEWPORT. HATFIELD MARINE SCIENCE CENTER.**
Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
*(EPA/600/J-93/140, ERLN-N126)*
PB93-185874/REB 93-01 PC A03/MF A01

**ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, PARIS (FRANCE).**
OECD-51
Guiding Principles for Chemical Accident Prevention, Preparedness and Response.
PB93-217560/REB 93-04 PC A07/MF A02

**PACIFIC ENVIRONMENTAL SERVICES, INC., DURHAM, NC.**
Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
*(EPA-450/2-92/003)*
PB93-122265/REB 93-01 PC A15/MF A03

**PACIFIC ENVIRONMENTAL SERVICES, INC., HERNDON, VA.**
Assessing Potential Indoor Air Impacts for Superfund Sites. Air/Superfund National Technical Guidance Study Series.
*(EPA/451/R-92/002)*
PB93-122257/REB 93-01 PC A09/MF A03

Air/Superfund National Technical Guidance Study Series. Air Emissions from Area Sources: Estimating Soil and Soil-Gas Sample Number Requirements.
*(EPA/451/R-93/002)*
PB93-173995/REB 93-01 PC A04/MF A01

**PACIFIC ENVIRONMENTAL SERVICES, INC., RESEARCH TRIANGLE PARK, NC.**

Workbook of Screening Techniques for Assessing Impacts of Toxic Air Pollutants (Revised).
*(EPA/454/R-92/024)*
PB93-210367/REB 93-04 PC **A14**/MF **A03**

SCREEN2 Model User's Guide.
*(EPA/450/4-92/006)*
PB93-216885/REB 93-04 PC **A04**/MF **A01**

Comparison of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model and Wind Tunnel Data.
*(EPA/454/R-92/014)*
PB93-226751/REB 93-04 PC **A08**/MF **A02**

Sensitivity Analysis of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model.
*(EPA/454/R-92/015)*
PB93-226769/REB 93-04 PC **A05**/MF **A01**

Development and Evaluation of a Revised Area Source Algorithm for the Industrial Source Complex Long Term Model.
*(EPA/454/R-92/016)*
PB93-226777/REB 93-04 PC **A06**/MF **A02**

**PACIFIC NORTHWEST FOREST AND RANGE EXPERIMENT STATION, CORVALLIS, OR. FORESTRY SCIENCES LAB.**

Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
*(EPA/600/A-92/256)*
PB93-131522/REB 93-01 PC **A03**/MF **A01**

**PECHAN (E.H.) AND ASSOCIATES, INC., DURHAM, NC.**

Development of Size-Specific Data from Particulate Control Technology Research Reports.
*(EPA/600/R-92/214)*
PB93-131456/REB 93-01 PC **A03**/MF **A01**

Feasibility of Including Fugitive PM-10 Emissions Estimates in the EPA Emissions Trends Report.
*(EPA/450/4-91/005B)*
PB93-169084/REB 93-01 PC **A03**/MF **A01**

EPA's Information Management System for Tracking Reasonable Further Progress.
*(EPA/600/A-93/149)*
PB93-212389/REB 93-04 PC **A03**/MF **A01**

Regional Interim Emission Inventories (1987-1991). Volume 1. Development Methodologies.
*(EPA/454/R-93/021A)*
PB93-236107/REB 93-04 PC **A07**/MF **A02**

Regional Interim Emission Inventories (1987-1991). Volume 2. Emission Summaries.
*(EPA/454/R-93/021B)*
PB93-236115/REB 93-04 PC **A06**/MF **A02**

**PECHAN (E.H.) AND ASSOCIATES, INC., SPRINGFIELD, VA.**

Guidance on the Adjusted Base Year Emissions Inventory and the 1996 Target for the 15 Percent Rate of Progress Plans.
*(EPA/452/R-92/005)*
PB93-122356/REB 93-01 PC **A04**/MF **A01**

Guidance for Growth Factors, Projections, and Control Strategies for the 15 Percent Rate-of-Progress Plans.
*(EPA/452/R-93/002)*
PB93-186476/REB 93-01 PC **A09**/MF **A03**

Guidance on the Relationship between the 15 Percent Rate-of-Progress Plans and Other Provisions of the Clean Air Act.
*(EPA/452/R-93/007)*
PB93-200525/REB 93-01 PC **A04**/MF **A01**

**PEER CONSULTANTS, INC., DAYTON, OH.**

User's Guide: Strategic Waste Minimization Initiative (SWAMI) Version 2.0: A Software Tool to Aid in Process Analysis for Pollution Prevention.
*(EPA/625/11-91/004)*
PB93-116291/REB 93-01 PC **A05**/MF **A01**

**PEI ASSOCIATES, INC., ARLINGTON, TX.**

Guideline for Graphic Arts Calculations.
*(EPA/340/1-88/004)*
PB93-199370/REB 93-01 PC **A05**/MF **A01**

**PEI ASSOCIATES, INC., CINCINNATI, OH.**

Standards of Performance for New Stationary Sources. Volume 1. Introduction, Summary and Standards: A Compilation as of December 31, 1985.
*(EPA/340/1-86/005A)*
PB93-199297/REB 93-01 PC **A08**/MF **A02**

**PENNSYLVANIA STATE UNIV., UNIVERSITY PARK. DEPT. OF CIVIL ENGINEERING.**

Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
*(EPA/600/J-92/409)*
PB93-131845/REB 93-01 PC **A03**/MF **A01**

**PENNSYLVANIA STATE UNIV., UNIVERSITY PARK. ENVIRONMENTAL RESOURCES RESEARCH INST.**

Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
*(EPA/600/R-93/023)*
PB93-149755/REB 93-01 PC **A04**/MF **A01**

**PIRNIE (MALCOLM), INC., PARAMUS, NJ.**

Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources. March 1991 Edition.
PB93-222933/REB 93-04 PC **A24**/MF **A04**

**PIRNIE (MALCOLM), INC., WHITE PLAINS, NY.**

Technologies and Costs for Control of Disinfection By-Products: Executive Summary.
*(EPA/811/S-92/002)*
PB93-134922/REB 93-01 PC **A03**/MF **A01**

Water Treatment Plant Simulation Program, Version 1.21, User's Manual.
*(EPA/811/B-92/001)*
PB93-134948/REB 93-01 PC **A06**/MF **A02**

**PITTSBURGH UNIV., PA. DEPT. OF CIVIL ENGINEERING.**

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
*(EPA/600/R-93/137A)*
PB93-222198/REB 93-04 PC **A10**/MF **A03**

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
*(EPA/600/R-93/137B)*
PB93-222206/REB 93-04 PC **A15**/MF **A03**

Use of Alternative Materials for Daily Cover at Municipal Solid Waste Landfills.
*(EPA/600/R-93/172)*
PB93-227197/REB 93-04 PC **A08**/MF **A02**

**POLICY PLANNING AND EVALUATION, INC., VIENNA, VA.**

Economic Impact Analysis of Effluent Limitations and Standards for the Nonferrous Metals Smelting and Refining Industry. Phase 2.
*(EPA/440/2-85/030)*
PB93-167781/REB 93-01 PC **A09**/MF **A03**

**PRC ENVIRONMENTAL MANAGEMENT, INC., CINCINNATI, OH.**

Carver-Greenfield Process (Trade Name) Dehydro-Tech Corporation. Applications Analysis Report.
*(EPA/540/AR-92/002)*
PB93-101152/REB 93-01 PC **A03**/MF **A01**

**PRC ENVIRONMENTAL MANAGEMENT, INC., MCLEAN, VA.**

Applications Analysis Report: Silicate Technology Corporation's Solidification/Stabilization Technology for Organic and Inorganic Contaminants in Soils.
*(EPA/540/AR-92/010)*
PB93-172948/REB 93-01 PC **A07**/MF **A02**

**PRC ENVIRONMENTAL MANAGEMENT, INC., SEATTLE, WA.**

Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
*(EPA/910/9-92/019)*
PB93-145662/REB 93-01 PC **A04**/MF **A01**

**PRINCETON UNIV., NJ. CENTER FOR ENERGY AND ENVIRONMENTAL STUDIES.**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
*(EPA/600/R-92/191A)*
PB93-100907/REB 93-01 PC **A07**/MF **A02**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
*(EPA/600/R-92/191B)*
PB93-100915/REB 93-01 PC **A04**/MF **A01**

**PROCESS APPLICATIONS, INC., FORT COLLINS, CO.**

Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
*(EPA/625/6-91/027)*
PB93-116267/REB 93-01 PC **A10**/MF **A03**

**PUGET SOUND WATER QUALITY AUTHORITY, OLYMPIA, WA.**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound.
*(EPA/910/9-91/027)*
PB93-122208/REB 93-01 PC **A09**/MF **A02**

Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound, Appendices.
*(EPA/910/9-91/027-APP)*
PB93-122216/REB 93-01 PC **A16**/MF **A03**

**PURDUE UNIV., LAFAYETTE, IN.**

Use of the Black Creek Database to Analyze Techniques for Estimating Nonpoint Source Loadings from Small Watersheds (May 1988).
*(EPA/905/9-91/011, GL-012-91)*
PB93-128072/REB 93-01 PC **A03**/MF **A01**

**PURDUE UNIV., LAFAYETTE, IN. DEPT. OF AGRICULTURAL ECONOMICS.**

Cost Effective Corn and Soybean Production Without Tillage: Fact or Fiction (May 1988).
*(EPA/905/9-91/010, GL-011/91)*
PB93-157568/REB 93-01 PC **A03**/MF **A01**

**PURUS, INC., SAN JOSE, CA.**

Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.
*(EPA/540/R-93/516)*
PB93-205383/REB 93-04 PC **A03**/MF **A01**

**RADIAN CORP., AUSTIN, TX.**

DCN-91-293-052-03
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Measurements of Hydrocarbon Emissions and Ambient Air Concentrations at the Amoco Yorktown Refinery. Air Quality Data. Volume 1.
PB92-228592/REB 93-01 PC **A12**/MF **A03**

RCN-293-052-06-03
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Measurements of Hydrocarbon Emissions and Ambient Air Concentrations at the Amoco Yorktown Refinery. Air Quality Data. Volume 1.
PB92-228592/REB 93-01 PC **A12**/MF **A03**

Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
*(EPA/600/A-92/277)*
PB93-131704/REB 93-01 PC **A03**/MF **A01**

Air/Superfund National Technical Guidance Study Series: Applicability of Open Path Monitors for Superfund.
*(EPA/451/R-92/001)*
PB93-138154/REB 93-01 PC **A07**/MF **A02**

Air/Superfund National Technical Guidance Study Series. Volume 1. Overview of Air Pathway Assessments for Superfund Sites (Revised).
*(EPA/450/1-89/001A)*
PB93-173987/REB 93-01 PC **A05**/MF **A01**

Air/Superfund National Technical Guidance Study Series. Models for Estimating Air Emission Rates from Superfund Remedial Actions.
*(EPA/451/R-93/001)*
PB93-186807/REB 93-01 PC **A08**/MF **A02**

Air/Superfund National Technical Guidance Study Series. Volume 4. Guidance for Ambient Air Monitoring at Superfund Sites (Revised).
*(EPA/451/R-93/007)*
PB93-199214/REB 93-01 PC **A08**/MF **A02**

Air/Superfund National Technical Guidance Study Series: Compilation of Information on Real-Time Air Monitoring for Use at Superfund Sites.
*(EPA/451/R-93/008)*
PB93-199222/REB 93-04 PC **A05**/MF **A02**

Air/Superfund National Technical Guidance Study Series: Evaluation of Short-Term Air Action Levels for Superfund Sites.
*(EPA/451/R-93/009)*
PB93-200913/REB 93-01 PC **A14**/MF **A03**

National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Index, 1992.
*(EPA/453/B-92/007)*
PB93-206571/REB 93-04 PC **A99**/MF **A06**

Guidance on the Application of Refined Dispersion Models for Hazardous/Toxic Air Releases.
*(EPA/454/R-93/002)*
PB93-210359/REB 93-04 PC **A20**/MF **A04**

Methane Emissions from the Natural Gas Industry.
*(EPA/600/A-93/153)*
PB93-212421/REB 93-04 PC **A03**/MF **A01**

EVAP3.0 CRC Evaporative Emission Model: User's Manual.
PB93-213916/REB 93-04 PC **A03**/MF **A01**

Control of Air Emissions from Superfund Sites.
*(EPA/625/R-92/012)*
PB93-215614/REB 93-04 PC **A08**/MF **A02**

Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
*(EPA/451/R-93/006)*
PB93-215622/REB 93-04 PC **A04**/MF **A01**

Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
*(EPA/451/R-93/005)*
PB93-215630/REB 93-04 PC **A04**/MF **A01**

Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.
*(EPA/451/R-93/004)*
PB93-215648/REB 93-04 PC **A03**/MF **A01**

Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
*(EPA/451/R-93/003)*
PB93-215655/REB 93-04 PC **A04**/MF **A01**

Investigation of Possible Uses of Surplus CFC/Halon Chemicals.
*(EPA/600/R-93/158)*
PB93-229771/REB 93-04 PC **A07**/MF **A02**

**RADIAN CORP., MCLEAN, VA.**

Clean Water and the American Economy. Proceedings: Surface Water. Volume 1. Held on October 19-21, 1992.
*(EPA/800/R-93/001A)*
PB93-202612/REB 93-01 PC **A14**/MF **A03**

Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
*(EPA/800/R-93/001B)*
PB93-202620/REB 93-01 PC **A07**/MF **A02**

**RADIAN CORP., MORRISVILLE, NC.**

DCN-92-239-026-12-07
Evaluation of Two Methods for the Measurement of Mercury Emissions in Exhaust Gases from a Municipal Waste Combustor.
*(EPA/450/4-92/013)*
PB93-105542/REB 93-01 PC **A05**/MF **A01**

**RADIAN CORP., RESEARCH TRIANGLE PARK, NC.**
DCN-92-203-164-04-09
National Air Toxics Information Clearinghouse: NATICH Data Base Report of Federal, State, Local and EPA Air Toxics Activities.
*(EPA/453/R-92/008)*
PB93-206589/REB 93-04 PC **A99**/MF **E08**

DCN-92-239-022-02-06
Evaluation of Nitrogen Oxide Emissions Data from TVA Coal-Fired Boilers.
*(EPA/600/R-92/242)*
PB93-138865/REB 93-01 PC **A06**/MF **A02**

DCN-93-239-026-85-02
Protocol for Equipment Leak Emission Estimates.
*(EPA/453/R-93/026)*
PB93-229219/REB 93-04 PC **A12**/MF **A03**

RAD-87-231-020-35-07
Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
*(EPA/450/3-87/020)*
PB93-199354/REB 93-01 PC **A07**/MF **A02**

Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
*(EPA/600/R-92/192)*
PB93-105518/REB 93-01 PC **A06**/MF **A02**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
*(EPA/600/A-92/252)*
PB93-121065/REB 93-01 PC **A02**/MF **A01**

Technical Information Document for Residential Wood Combustion Best Available Control Measures.
*(EPA/450/2-92/002)*
PB93-122224/REB 93-01 PC **A05**/MF **A01**

Survey of Portable Analyzers for the Measurement of Gaseous Fugitive Emissions.
*(EPA/600/R-92/219)*
PB93-126589/REB 93-01 PC **A05**/MF **A01**

Inventory of Methane Losses from the Natural Gas Industry.
*(EPA/600/A-92/279)*
PB93-131720/REB 93-01 PC **A03**/MF **A01**

OAQS Control Cost Manual (Fourth Edition), Supplement 2.
*(EPA/450/3-90/006B)*
PB93-138147/REB 93-01 PC **A04**/MF **A01**

Highlights of the EPA Innovative Regulatory Strategies Workshop: Market-Based Incentives and other Innovations for Air Pollution Control. Summary of Workshop Discussion Sessions. Held in Washington, DC. on January 15-17, 1992.
*(EPA/452/S-92/001)*
PB93-150290/REB 93-01 PC **A05**/MF **A01**

Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
*(EPA/600/A-93/076)*
PB93-180891/REB 93-01 PC **A03**/MF **A01**

Using Method 301 to Validate Sampling and Analytical Methods for Selected CAAA Compounds.
*(EPA/600/A-93/106)*
PB93-191419/REB 93-01 PC **A03**/MF **A01**

National Air Toxics Information Clearinghouse: Ongoing Research and Regulatory Development Projects, July 1992.
*(EPA/453/R-92/005)*
PB93-206563/REB 93-04 PC **A14**/MF **A03**

Locating and Estimating Air Emissions from Sources of Styrene.
*(EPA/454/R-93/011)*
PB93-207520/REB 93-04 PC **A08**/MF **A02**

Locating and Estimating Air Emissions from Sources of Methylene Chloride.
*(EPA/454/R-93/006)*
PB93-207579/REB 93-04 PC **A10**/MF **A03**

National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Volume 6. Citations, 1992.
*(EPA/453/B-92/006)*
PB93-207652/REB 93-04 PC **A10**/MF **A03**

Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
*(EPA/600/R-93/108A)*
PB93-212041/REB 93-04 PC **A13**/MF **A03**

Field Test of a Generic Method for Halogenated Hydrocarbons.
*(EPA/600/R-93/101)*
PB93-212181/REB 93-04 PC **A13**/MF **A03**

Comparison of Methods for Estimating Global Methane Emissions from Landfills.
*(EPA/600/J-93/250)*
PB93-212561/REB 93-04 PC **A03**/MF **A01**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
*(EPA/600/R-93/115)*
PB93-214419/REB 93-04 PC **A05**/MF **A01**

Simultaneous Control of PM-10 and Hazardous Air Pollutants: Rationale for Selection of Hazardous Air Pollutants as Potential Particulate Matter or Associated with Particulate Matter at Source Conditions.
*(EPA/452/R-93/013)*
PB93-216380/REB 93-04 PC **A05**/MF **A01**

Replacement of Charcoal Sorbent in the VOST.
*(EPA/600/A-93/171)*
PB93-221893/REB 93-04 PC **A03**/MF **A01**

EPA's Indoor Air/Pollution Prevention Workshop.
*(EPA/600/A-93/188)*
PB93-222065/REB 93-04 PC **A03**/MF **A01**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
*(EPA/600/R-93/123A)*
PB93-227163/REB 93-04 PC **A11**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
*(EPA/600/R-93/123B)*
PB93-227171/REB 93-04 PC **A12**/MF **A03**

**RADIAN CORP., SACRAMENTO, CA.**
DCN-89-245-076-02-02
Analysis of Original Equipment and Aftermarket Manufacturer Oxygen Sensor Constructional, Functional, and Price Differences.
*(EPA/460/3-89/002)*
PB93-208007/REB 93-04 PC **A18**/MF **A04**

**RAND CORP., SANTA MONICA, CA.**
RAND/N-3140-1-EPA/JMO/RC
Subjective-Probability-Based Scenarios for Uncertain Input Parameters: Stratospheric Ozone Depletion, December 1990.
PB93-143741/REB 93-01 PC **A03**/MF **A01**

**RCG/HAGLER, BAILLY AND CO., INC., BOULDER, CO.**
Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC **A09**/MF **A02**

Economic Benefits of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
*(EPA/821/R-93/001)*
PB93-168797/REB 93-01 PC **A08**/MF **A02**

Regulatory Impact Analysis of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
*(EPA/821/R-93/002)*
PB93-174613/REB 93-01 PC **A06**/MF **A02**

**RENSEL ASSOCIATES, SEATTLE, WA.**
Nutrients and Phytoplankton in Puget Sound.
*(EPA/910/9-91/002)*
PB93-119576/REB 93-01 PC **A08**/MF **A02**

**RESEARCH TRIANGLE INST., RESEARCH TRIANGLE PARK, NC.**
RTI/5960/132-01D
Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.
*(EPA/454/R-93/007)*
PB93-210383/REB 93-04 PC **A07**/MF **A02**

Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
*(EPA/600/R-92/159)*
PB93-101160/REB 93-01 PC **A06**/MF **A02**

Modeling of Indoor Air Quality for a Personal Computer.
*(EPA/600/A-92/208)*
PB93-106771/REB 93-01 PC **A03**/MF **A01**

Use of Surface-Coating-Free Materials for Reduction of Volatile Organic Compound Emissions from Coating Operations.
*(EPA/600/A-92/214)*
PB93-106839/REB 93-01 PC **A03**/MF **A01**

Survey of Protocols for Conducting Indoor Air Quality Investigations in Large Buildings.
*(EPA/600/A-92/226)*
PB93-119865/REB 93-01 PC **A03**/MF **A01**

Pilot Study to Evaluate Methods for the Assessment of Exposure of Small Children to Pesticides in the Residential Environment.
*(EPA/600/A-92/229)*
PB93-119899/REB 93-01 PC **A03**/MF **A01**

Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
*(EPA/600/A-92/230)*
PB93-119907/REB 93-01 PC **A03**/MF **A01**

Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
*(EPA/600/A-92/245)*
PB93-121010/REB 93-01 PC **A03**/MF **A01**

Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
*(EPA/600/R-92/201)*
PB93-122307/REB 93-01 PC **A03**/MF **A01**

Guidelines for Mercury Measurements from Stationary Sources: Quality Assurance Handbook. Section 3.19. Volume 3.
*(EPA/600/R-92/234)*
PB93-131209/REB 93-01 PC **A06**/MF **A02**

Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
*(EPA/600/A-92/265)*
PB93-131597/REB 93-01 PC **A03**/MF **A01**

Development of a Field Test Method for the Determination of Lead in Paint and Paint-Contaminated Dust and Soil.
*(EPA/600/A-93/064)*
PB93-173128/REB 93-01 PC **A03**/MF **A01**

ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
*(EPA/600/J-93/178, OHEA-R-481)*
PB93-194454/REB 93-01 PC **A02**/MF **A01**

Guide to the Asbestos NESHAP as Revised November 1990.
*(EPA/340/1-90/015)*
PB93-199362/REB 93-01 PC **A04**/MF **A01**

Radon/Radon Progeny Measurement Proficiency Program: Cumulative Proficiency Report (Revised September 1987).
*(EPA/520/1-87/015)*
PB93-203909/REB 93-04 PC **A03**/MF **A01**

Recent Advances in Measuring Exhaled Breath and Estimating Exposure and Body Burden for Volatile Organic Compounds (VOCS).
*(EPA/600/A-93/142)*
PB93-212314/REB 93-04 PC **A03**/MF **A01**

Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
*(EPA/600/A-93/144)*
PB93-212330/REB 93-04 PC **A02**/MF **A01**

IAQPC: An Indoor Air Quality Simulator.
*(EPA/600/A-93/150)*
PB93-212397/REB 93-04 PC **A03**/MF **A01**

Relating Air Cleaner Efficiency to Indoor Air Quality.
*(EPA/600/A-93/151)*
PB93-212405/REB 93-04 PC **A03**/MF **A01**

Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
*(EPA/600/J-93/263)*
PB93-212694/REB 93-04 PC **A01**/MF **A01**

Outreach to Manufacturers of Lead Test Kits.
*(EPA/600/R-93/119)*
PB93-216570/REB 93-04 PC **A03**/MF **A01**

Method for the Determination of Asbestos in Bulk Building Materials. (Test Method).
*(EPA/600/R-93/116)*
PB93-218576/REB 93-04 PC **A05**/MF **A02**

Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.
*(EPA/600/R-93/085)*
PB93-221653/REB 93-04 PC **A07**/MF **A02**

Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
*(EPA/600/A-93/184)*
PB93-222024/REB 93-04 PC **A02**/MF **A01**

Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
*(EPA/600/A-93/191)*
PB93-222230/REB 93-04 PC **A02**/MF **A01**

Weatherability of Enhanced-Degradable Plastics.
*(EPA/600/R-93/162)*
PB93-229789/REB 93-04 PC **A14**/MF **A03**

Fractional Aerosol Filtration Efficiency of Air Cleaners.
*(EPA/600/A-93/234)*
PB93-236636/REB 93-04 PC **A02**/MF **A01**

**RESEARCH TRIANGLE INST., RESEARCH TRIANGLE PARK, NC. CENTER FOR AEROSOL TECHNOLOGY.**
Airborne Particle Sizes and Sources Found in Indoor Air.
*(EPA/600/J-92/355)*
PB93-107019/REB 93-01 PC **A03**/MF **A01**

Evaluation of Ventilation Performance for Indoor Space.
*(EPA/600/A-93/155)*
PB93-212751/REB 93-04 PC **A02**/MF **A01**

Particle-Size-Dependent Efficiency of Air Cleaners.
*(EPA/600/A-93/179)*
PB93-221976/REB 93-04 PC **A01**/MF **A01**

**RESEARCH TRIANGLE INST., RESEARCH TRIANGLE PARK, NC. CENTER FOR ENVIRONMENTAL MEASUREMENTS AND QUALITY ASSURANCE.**
Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.
*(EPA/600/R-93/129)*
PB93-216604/REB 93-04 PC **A06**/MF **A02**

Workshop Report: Identification of Performance Parameters for Portable X-ray Fluorescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.
*(EPA/600/R-93/130)*
PB93-216612/REB 93-04 PC **A05**/MF **A02**

**RESOURCES FOR THE FUTURE, INC., WASHINGTON, DC. CENTER FOR RISK MANAGEMENT.**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Project Peer Review. Report of the Peer Review Committee of the Amoco/EPA Pollution Prevention Project at the Yorktown, Virginia Refinery.
PB92-228618/REB 93-01 PC **A10**/MF **A03**

**RHODE ISLAND UNIV., KINGSTON. DEPT. OF ZOOLOGY.**
Effects of Food Density on Growth and on Patterns of Prey Depletion by Larval Silverside Fish, 'Menidia beryllina' (Cope): A Laboratory Investigation with Image Analysis.
*(EPA/600/J-93/252)*
PB93-212587/REB 93-04 PC **A03**/MF **A01**

Characterization of Reference Artemia III for Marine Toxicological Studies.
*(EPA/600/J-93/253)*
PB93-212595/REB 93-04 PC **A03**/MF **A01**

**RHODE ISLAND UNIV., NARRAGANSETT. GRADUATE SCHOOL OF OCEANOGRAPHY.**
Physical and Chemical Parameters of Sediment Extraction and Fractionation That Influence Toxicity, as Evaluated by Microtox (Trade Name).
*(EPA/600/J-93/141, ERLN-1447)*
PB93-185882/REB 93-01 PC **A03**/MF **A01**

**RHODE ISLAND UNIV., NARRAGANSETT. SEA GRANT PROGRAM.**
National Directory of Citizen Volunteer Environmental Monitoring Programs (Third Edition).
*(EPA/503/9-90/004)*
PB93-207496/REB 93-04 PC **A03**/MF **A01**

**RICE UNIV., HOUSTON, TX. DEPT. OF ENVIRONMENTAL SCIENCE AND ENGINEERING.**
Cell Density and Non-Equilibrium Sorption Effects on Bacterial Dispersal in Groundwater Microcosms.
*(EPA/600/J-92/451)*
PB93-141505/REB 93-01 PC **A03**/MF **A01**

**ROBERT S. KERR ENVIRONMENTAL RESEARCH LAB., ADA, OK.**
EPA/540/S-92/016
Basic Concepts of Contaminant Sorption.
PB93-146835/REB 93-01 PC **A01**/MF **A01**

EPA/540/S-92/017
In-situ Bioremediation of Ground Water.
PB93-146850/REB 93-01 PC **A01**/MF **A01**

EPA/600/A-92/224
Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/004
Bioremediation.
PB93-149193/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/005
Comparison of Ground-Water Sampling Devices Based on Equilibration of Water Quality Indicator Parameters.
PB93-149201/REB 93-01 PC **A03**/MF **A01**

EPA/600/A-93/072
Laboratory Studies on the Stability and Transport of Inorganic Colloids Through Natural Aquifer Material (Chapter 49).
PB93-175537/REB 93-01 PC **A02**/MF **A01**

EPA/600/A-93/073
Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC **A02**/MF **A01**

EPA/600/A-93/147
Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.
PB93-212363/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-93/148
Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/172
Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/173
Retrospective Performance Evaluation on In situ Bioremediation: Site Characterization.
PB93-221919/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/174
Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC **A03**/MF **A01**

EPA/600/A-93/175
Bioremediation of Chlorinated Solvents in the Vadose Zone.
PB93-221935/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-93/176
Performance of Pilot Scale Bioventing at an Aviation Gasoline Spill Site.
PB93-221943/REB 93-04 PC **A02**/MF **A01**

EPA/600/A-93/177
Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.
PB93-221950/REB 93-04 PC **A01**/MF **A01**

EPA/600/A-93/178
Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.
PB93-221968/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-92/391
Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-92/450
Applied Geologic, Microbiological, and Engineering Constraints of In-situ BTEX Bioremediation.
PB93-141513/REB 93-01 PC **A03**/MF **A01**

EPA/600/J-93/005
Surfactants and Subsurface Remediation.
PB93-149854/REB 93-01 PC **A02**/MF **A01**

EPA/600/J-93/294
Mechanical Integrity Testing and Training Facility, Ada, Oklahoma.
PB93-222859/REB 93-04 PC **A02**/MF **A01**

EPA/600/J-93/344
Biotransformation and Mineralization of Alkylbenzenes under Denitrifying Conditions.
PB93-229623/REB 93-04 PC **A03**/MF **A01**

**ROCHE INST. OF MOLECULAR BIOLOGY, NUTLEY, NJ. DEPT. OF CELL AND DEVELOPMENTAL BIOLOGY.**
Gene Expression during Oogenesis in Mice.
*(EPA/600/J-93/170, OHEA-R-473)*
PB93-194389/REB 93-01 PC **A03**/MF **A01**

**RUTGERS - THE STATE UNIV., PISCATAWAY, NJ. DEPT. OF CHEMICAL AND BIOCHEMICAL ENGINEERING.**
Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.
*(EPA/600/R-93/167)*
PB93-229870/REB 93-04 PC **A25**/MF **A06**

**SAINT LOUIS UNIV., MO. SCHOOL OF MEDICINE.**
Carbon Monoxide Exposure of Subjects with Documented Cardiac Arrhythmias.
*(HEI/RR-92/52)*
PB93-179943/REB 93-01 PC **A03**/MF **A01**

**SAINT MARY'S COLL. OF MARYLAND, ST. MARY'S CITY.**
Long-Term Survival and Plasmid Maintenance of 'Escherichia coli' in Marine Microcosms.
*(EPA/600/J-93/384)*
PB93-236230/REB 93-04 PC **A02**/MF **A01**

**SC AND A, INC., MCLEAN, VA.**
Laboratory Testing of Commercially Available Power Frequency Magnetic Field Survey Meters.
*(EPA/400/R-92/010)*
PB93-131506/REB 93-01 PC **A15**/MF **A03**

**SCHILLINGER, SALERNI AND BOYD, INC., ALBANY, NY.**
Town of Edinburg Landfill Reclamation Demonstration Project.
*(NYSERDA-92/04)*
PB93-198976/REB 93-01 PC **A12**/MF **A03**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., BUFFALO, NY.**
Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
*(EPA/540/R-93/517)*
PB93-216067/REB 93-04 PC **A07**/MF **A02**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., CINCINNATI, OH.**
Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Quick Reference Fact Sheet.
*(EPA/540/R-92/074B)*
PB93-121325/REB 93-01 PC **A02**/MF **A01**

Superfund Engineering Issue: Considerations for Evaluating the Impact of Metals Partitioning during the Incineration of Contaminated Soils from Superfund Sites.
*(EPA/540/S-92/014)*
PB93-121341/REB 93-01 PC **A03**/MF **A01**

Babcock and Wilcox Cyclone Furnace Vitrification Technology: Applications Analysis Report.
*(EPA/540/AR-92/017)*
PB93-122315/REB 93-01 PC **A03**/MF **A01**

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Remedy Selection. Interim Guidance.
*(EPA/540/R-92/074A)*
PB93-126597/REB 93-01 PC **A03**/MF **A01**

Pollution Prevention Opportunity Assessment: USDA Beltsville Agricultural Research Center.
*(EPA/600/R-93/008)*
PB93-146843/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention Opportunity Assessment: Manufacturing and Fabrication Repair Laboratory at Sandia National Laboratories.
*(EPA/600/R-93/015A)*
PB93-146868/REB 93-01 PC **A03**/MF **A01**

Pollution Prevention Opportunity Assessment: Geochemistry Laboratory, Sandia National Laboratories.
*(EPA/600/R-93/015B)*
PB93-146900/REB 93-01 PC **A03**/MF **A01**

Risk Reduction Engineering Laboratory Site Remediation Technical Support Program: FY92 Annual Report.
*(EPA/600/R-93/133)*
PB93-217651/REB 93-04 PC **A03**/MF **A01**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., DURHAM, NC.**
Global Inventory of Volatile Organic Compound Emissions from Anthropogenic Sources.
*(EPA/600/J-92/354)*
PB93-107001/REB 93-01 PC **A03**/MF **A01**

Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
*(EPA/600/R-93/063)*
PB93-181592/REB 93-01 PC **A06**/MF **A02**

Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
*(EPA/600/J-93/248)*
PB93-212546/REB 93-04 PC **A03**/MF **A01**

Estimate of Global Methane Emissions from Coal Mines.
*(EPA/600/J-93/249)*
PB93-212553/REB 93-04 PC **A03**/MF **A01**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., FALLS CHURCH, VA.**
Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Guidance.
PB93-154730/REB 93-01 PC **A10**/MF **A03**

Petitions to Delist Hazardous Wastes: A Guidance Manual. Second Edition.
*(EPA/530/R-93/007)*
PB93-169365/REB 93-01 PC **A08**/MF **A02**

Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.
PB93-205508/REB 93-04 PC **A99**/MF **A06**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., FORT WASHINGTON, PA.**
Small Community Water and Wastewater Treatment.
*(EPA/625/R-92/010)*
PB93-215606/REB 93-04 PC **A05**/MF **A01**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., HACKENSACK, NJ.**
Technology Evaluation Report: Site Program Demonstration Test. Accutech Pneumatic Fracturing Extraction and Hot Gas Injection, Phase 1. Volume 1.
*(EPA/540/R-93/509)*
PB93-216596/REB 93-04 PC **A08**/MF **A02**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., MCLEAN, VA.**
Evaluation of Laboratory Tests to Determine the Effectiveness of Chemical Surface Washing Agents.
*(EPA/600/A-93/114)*
PB93-194215/REB 93-01 PC **A02**/MF **A01**

Supplemental Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation.
*(EPA/21W-4002)*
PB93-209872/REB 93-04 PC **A06**/MF **A02**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana.
PB93-227114/REB 93-04 PC **E99**/MF **E99**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 1.
*(EPA/540/R-92/079A)*
PB93-227122/REB 93-04 PC **A08**/MF **A02**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 1.
*(EPA/540/R-92/079B)*
PB93-227130/REB 93-04 PC **A24**/MF **A04**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grant Calumet River, Gary, Indiana. Volume 2. Part 2.
*(EPA/540/R-92/079C)*
PB93-227148/REB 93-04 PC **A99**/MF **A06**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 3.
*(EPA/540/R-92/079D)*
PB93-227155/REB 93-04 PC **A11**/MF **A03**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., NARRAGANSETT, RI.**
Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
*(EPA/600/J-93/136, ERLN-1374)*
PB93-185833/REB 93-01 PC **A03**/MF **A01**

Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
*(EPA/600/J-93/211, ERLN-1277)*
PB93-204949/REB 93-04 PC **A02**/MF **A01**

Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
*(EPA/600/J-93/213, ERLN-1413)*
PB93-204964/REB 93-04 PC **A02**/MF **A01**

Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
*(EPA/600/A-93/212, CONTRIB-1326)*
PB93-228518/REB 93-04 PC **A02**/MF **A01**

Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
*(EPA/600/J-93/311, ERLN-1191)*
PB93-229334/REB 93-04 PC **A03**/MF **A01**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., NEWPORT, RI.**
Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
*(EPA/600/A-93/205, ERLN-1421)*
PB93-229706/REB 93-04 PC **A02**/MF **A01**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., OLYMPIA, WA.**
Model Pollution Prevention Plan for the Kraft Segment of the Pulp and Paper Industry.
*(EPA/910/9-92/030)*
PB93-145605/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention for the Kraft Pulp and Paper Industry.
*(EPA/910/9-92/031)*
PB93-145613/REB 93-01 PC **A04**/MF **A01**

Pollution Prevention Opportunity Assessment and Implementation Plan. For Simpson Tacoma Kraft Company, Tacoma, Washington.
*(EPA/910/9-92/027)*
PB93-145670/REB 93-01 PC **A05**/MF **A01**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., RESTON, VA.**
Contingency Analysis Modeling for Superfund Sites and Other Sources.
*(EPA/454/R-93/001)*
PB93-169126/REB 93-01 PC **A13**/MF **A03**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., SAN DIEGO, CA.**
Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 1.
*(EPA/540/5-91/007A)*
PB93-115160/REB 93-01 PC **A09**/MF **A02**

Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 2.
*(EPA/540/5-91/007B)*
PB93-115178/REB 93-01 PC **A15**/MF **A03**

Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
*(EPA/600/R-93/113A)*
PB93-203693/REB 93-04 PC **A07**/MF **A02**

Chemical Shoreline Cleaning Agents for Oil Spills: Update State-of-the-Art on Mechanisms of Action and Factors Influencing Performance.
*(EPA/600/R-93/113B)*
PB93-203701/REB 93-04 PC **A04**/MF **A01**

Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.
*(EPA/600/A-93/228)*
PB93-236578/REB 93-04 PC **A04**/MF **A01**

**SCIENCE APPLICATIONS INTERNATIONAL CORP., SANTA ANA, CA.**
Watts Nickel and Rinse Water Recovery via an Advanced Reverse Osmosis System.
*(EPA/600/R-93/150)*
PB93-229011/REB 93-04 PC **A05**/MF **A01**

**SCOTT (ARTHUR) AND ASSOCIATES, MISSISSAUGA (ONTARIO).**
Measurement of the Surface Permeability of Basement Concretes.
*(EPA/600/R-93/169)*
PB93-232114/REB 93-04 PC **A03**/MF **A01**

**SHERBROOKE UNIV. (QUEBEC). DEPT. DE BIOLOGIE.**
Evaluating Point Count versus Territory Mapping in Cropland Birds.
*(EPA/600/A-93/019)*
PB93-156057/REB 93-01 PC **A03**/MF **A01**

**SIERRA RESEARCH, INC., SACRAMENTO, CA.**
SR93-03-02
Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
*(EPA/420/R-93/003)*
PB93-180675/REB 93-01 PC **A06**/MF **A02**

**SIGMA RESEARCH CORP., CONCORD, MA.**
Evaluation of CO Intersection Modeling Techniques Using a New York City Database.
*(EPA/454/R-92/004)*
PB93-105559/REB 93-01 PC **A10**/MF **A03**

User's Manual for the Plume Visibility Model PLUVUE II (Revised).
*(EPA/454/B-92/008)*
PB93-188233/REB 93-01 PC **A06**/MF **A02**

Guideline for Modeling Carbon Monoxide from Roadway Intersections.
*(EPA/454/R-92/005)*
PB93-210391/REB 93-04 PC **A04**/MF **A01**

Development and Testing of Dry Deposition Algorithms.
*(EPA/454/R-92/017)*
PB93-215663/REB 93-04 PC **A06**/MF **A02**

Workbook for Plume Visual Impact Screening and Analysis (Revised).
*(EPA/454/R-92/023)*
PB93-223592/REB 93-04 PC **A06**/MF **A02**

**SMC MARTIN, INC., VALLEY FORGE, PA.**
Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
*(EPA/570/9-87/003)*
PB93-115806/REB 93-01 PC **A05**/MF **A01**

Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells.
*(EPA/570/9-87/002)*
PB93-115897/REB 93-01 PC **A04**/MF **A01**

**SOIL CONSERVATION SERVICE, FORT WORTH, TX.**
Proceedings: Interagency Symposium (2nd) on Stabilization of Soils and Other Materials. Held in Metairie, Louisiana on November 2-5, 1992.
PB93-131977/REB 93-01 PC **A17**/MF **A04**

**SONOTECH, ATLANTA, GA.**
Applications of Pulse Combustion in Industrial and Incineration Processes.
*(EPA/600/A-92/269)*
PB93-131639/REB 93-01 PC **A03**/MF **A01**

Analysis of IAQ Control Options and the Effects of Sources and Sinks.
*(EPA/600/A-92/270)*
PB93-131647/REB 93-01 PC **A02**/MF **A01**

**SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT AUTHORITY, LONG BEACH.**
Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
*(EPA/600/J-93/135, ERLN-X188)*
PB93-185825/REB 93-01 PC **A03**/MF **A01**

**SOUTHERN RESEARCH INST., BIRMINGHAM, AL.**
SRI-ENV-90-785-6411
Recommended Performance Standard of the Florida Radon Research Program.
*(EPA/600/R-92/198)*
PB93-122281/REB 93-01 PC **A03**/MF **A01**

SRI-ENV-91-44-6411-070
Radon Mitigation Studies: South Central Florida Demonstration.
*(EPA/600/R-92/207)*
PB93-122299/REB 93-01 PC **A07**/MF **A02**

SRI-ENV-91-89-6790
Effects of E-SOx Technology on ESP Performance.
*(EPA/600/R-92/196)*
PB93-107258/REB 93-01 PC **A04**/MF **A01**

Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
*(EPA/625/6-91/029)*
PB93-116234/REB 93-01 PC **A04**/MF **A01**

Evaluation of POHC and PIC Screening Methods.
*(EPA/600/R-93/004)*
PB93-144137/REB 93-01 PC **A04**/MF **A01**

Alternate Performance Standard Project: Interpreting the Post-Construction Test.
*(EPA/600/A-93/071)*
PB93-175529/REB 93-01 PC **A03**/MF **A01**

**SOUTHWEST RESEARCH INST., SAN ANTONIO, TX.**
Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
*(EPA/600/A-93/199)*
PB93-229151/REB 93-04 PC **A03**/MF **A01**

**SOUTHWESTERN ILLINOIS METROPOLITAN AND REGIONAL PLANNING COMMISSION, COLLINSVILLE.**
Volunteer Lake Monitoring Program, 1992. Volume 6. Southwestern Illinois Region.
*(IEPA/WPC-93/061F)*
PB93-234126/REB 93-04 PC **A03**/MF **A01**

**SRI INTERNATIONAL, MENLO PARK, CA. NEUROSCIENC DEPT.**
Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
*(EPA/600/J-93/339)*
PB93-229573/REB 93-04 PC **A03**/MF **A01**

**STANFORD UNIV., CA.**
Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
*(EPA/600/A-93/220)*
PB93-234508/REB 93-04 PC **A03**/MF **A01**

**STANFORD UNIV., CA. DEPT. OF CIVIL ENGINEERING.**
Transformation of Carbon Tetrachloride in the Presence of Sulfide, Biotite, and Vermiculite.
*(EPA/600/J-92/414)*
PB93-135713/REB 93-01 PC **A02**/MF **A01**

Microcosm and In situ Field Studies of Enhanced Biotransformation of Trichloroethylene by Phenol-Utilizing Microorganisms.
*(EPA/600/J-93/295)*
PB93-222867/REB 93-04 PC **A02**/MF **A01**

**STATE UNIV. OF NEW YORK AT ALBANY. COLL. OF ENVIRONMENTAL SCIENCE AND FORESTRY.**
Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
*(EPA/600/J-93/193)*
PB93-199529/REB 93-01 PC **A02**/MF **A01**

**STATE UNIV. OF NEW YORK COLL. AT BROCKPORT. DEPT. OF BIOLOGICAL SCIENCES.**
Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
*(EPA/905/3-90/003, GLNPO-01/91)*
PB93-128080/REB 93-01 PC **A12**/MF **A03**

**STATE UNIV. OF NEW YORK COLL. OF ENVIRONMENTAL SCIENCE AND FORESTRY, SYRACUSE.**
Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
*(EPA/600/J-92/457)*
PB93-141562/REB 93-01 PC **A02**/MF **A01**

Comparison of Systematic and Random Sampling for Estimating the Accuracy of Maps Generated from Remotely Sensed Data.
*(EPA/600/J-93/147)*
PB93-191443/REB 93-01 PC **A02**/MF **A01**

Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
*(EPA/600/A-93/115)*
PB93-194223/REB 93-01 PC **A03**/MF **A01**

**STATE UNIV. OF NEW YORK COLL. OF ENVIRONMENTAL SCIENCE AND FORESTRY, SYRACUSE. DEPT. OF CHEMISTRY.**
Ring Fission of Anthracene by a Eukaryota.
*(EPA/600/J-93/191)*
PB93-199503/REB 93-01 PC **A02**/MF **A01**

**SUFFOLK COUNTY DEPT. OF HEALTH SERVICES, HAUPPAUGE, NY.**
Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
*(EPA/600/A-92/263)*
PB93-131571/REB 93-01 PC **A03**/MF **A01**

**SWEDISH ENVIRONMENTAL PROTECTION AGENCY, SOLNA.**
NUTEK-AVF-93-1
Foerbraenning av sorterat industriavfall. Huvudrapport. (Incineration of sorted industrial wastes. Main report).
*(RVF-92-17)*
DE93500869/REB 93-04 PC **A03**/MF **A01**

NUTEK-AVF-93-1
Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
*(RVF-92-17-1, MKS-92-74)*
DE93500872/REB 93-04 PC **A03**/MF **A01**

NUTEK-AVF-93-1
Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
*(RVF-92-17-2, MKS-93-83)*
DE93500877/REB 93-04 PC **A04**/MF **A01**

SNV-4007
Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC **A04**/MF **A01**

SNV-4076
Release of PCB and mercury from fibre sediments.
DE93778469/REB 93-01 PC **A05**/MF **A01**

SNV-4077
Trace elements in agricultural soils. Fluxes, balances and background values.
DE93778470/REB 93-01 PC **A03**/MF **A01**

SNV-4078
Critical concentrations of heavy metals in the mor horizon of Swedish forests.
DE93778471/REB 93-01 PC **A03**/MF **A01**

SNV-4079
Heavy metal concentrations in agricultural soils critical to microorganisms.
DE93778472/REB 93-01 PC **A03**/MF **A01**

SNV-4087
Air pollutants in urban areas. A bibliography 1985-1991.
DE93769990/REB 93-01 PC **A04**/MF **A01**

SNV-4099
Long-term forest fertilization experiments in Finland and Sweden - their use for vitality and nutrient balance studies.
DE93778473/REB 93-01 PC **A07**/MF **A02**

SNV-4111
Freshwater environmental monitoring in Sweden. Proposals from a working group.
DE93778474/REB 93-01 PC **A08**/MF **A02**

SNV-4120
Aatgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC **A14**/MF **A03**

SNV-4146
Recovery of CFCs from refrigeration equipment. Current processes.
DE93778476/REB 93-01 PC **A04**/MF **A01**

SNV-4160
Foerbraenning av sorterat industriavfall. Huvudrapport. (Incineration of sorted industrial wastes. Main report).
*(RVF-92-17)*
DE93500869/REB 93-04 PC **A03**/MF **A01**

SNV-4161
Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
*(RVF-92-17-1, MKS-92-74)*
DE93500872/REB 93-04 PC **A03**/MF **A01**

SNV-4162
Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
*(RVF-92-17-2, MKS-93-83)*
DE93500877/REB 93-04 PC **A04**/MF **A01**

**SYRACUSE RESEARCH CORP., NY.**
Evaluation of the Potential Carcinogenicity of Acetamide, N-Fluoren-2-yl (53-96-3).
*(EPA/600/8-91/057, OHEA-C-073-001)*
PB93-181626/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Acrylonitrile (107-13-1).
*(EPA/600/8-91/058, OHEA-C-073-002)*
PB93-181634/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Aldrin (309-00-2).
*(EPA/600/8-91/059, OHEA-C-073-003)*
PB93-161642/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Amitrole (61-82-5).
*(EPA/600/8-91/060, OHEA-C-073-004)*
PB93-181659/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Arsenic and Inorganic Arsenic Compounds.
*(EPA/600/8-91/061, OHEA-C-073-005)*
PB93-181667/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Cacodylic Acid (75-60-5).
*(EPA/600/8-91/062, OHEA-C-073-012)*
PB93-184851/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dichlorophenylarsine (696-28-6).
*(EPA/600/8-91/063)*
PB93-184869/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diethylarsine (692-42-2).
*(EPA/600/8-91/064, OHEA-C-073-017)*
PB93-184877/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Asbestos (1332-21-4).
*(EPA/600/8-91/065, OHEA-C-073-023)*
PB93-184885/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Auramine (492-80-8).
*(EPA/600/8-91/066)*
PB93-184893/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Azaserine (115-02-6).
*(EPA/600/8-91/067, OHEA-C-073-025)*
PB93-184901/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Aziridine (151-56-4).
*(EPA/600/8-91/068)*
PB93-184919/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benz(c)acridine (225-51-4).
*(EPA/600/8-91/069, OHEA-C-073-027)*
PB93-184927/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benz(a)anthracene (00056-55-3).
*(EPA/600/8-91/070, OHEA-C-073-028)*
PB93-184935/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzene (71-43-2).
*(EPA/600/8-91/071, OHEA-C-073-029)*
PB93-184943/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzidine and its Salt (92-87-5).
*(EPA/600/8-91/072, OHEA-C-073-030)*
PB93-184976/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzo(b)fluoranthene (00205-99-2).
*(EPA/600/8-91/073, OHEA-C-073-031)*
PB93-184984/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzo(k)fluoranthene (207-08-9).
*(EPA/600/8-91/074, OHEA-C-073-032)*
PB93-184992/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzo(a)Pyrene (50-32-8).
*(EPA/600/8-91/075, OHEA-C-073-033)*
PB93-185007/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzotrichloride (97-07-7).
*(EPA/600/8-91/076, OHEA-C-073-034)*
PB93-185015/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Benzyl Chloride (100-44-7).
*(EPA/600/8-91/077, OHEA-C-073-035)*
PB93-185023/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
*(EPA/600/8-91/078, OHEA-C-073-036)*
PB93-185031/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Alpha-Hexachlorocyclohexane (319-84-6).
*(EPA/600/8-91/079, OHEA-C-073-040)*
PB93-185049/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Beta-Hexachlorocyclohexane (319-85-7).
*(EPA/600/8-91/080, OHEA-C-073-041)*
PB93-185056/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Gamma-Hexachlorocyclohexane (Lindane) (58-89-9).
*(EPA/600/8-91/081, OHEA-C-073-042)*
PB93-185064/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(2-Chloroethyl)Ether (111-44-4).
*(EPA/600/8-91/082, OHEA-C-073-043)*
PB93-185072/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(Chloromethyl)Ether (542-88-1).
*(EPA/600/8-91/083, OHEA-C-073-044)*
PB93-185080/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Bis(2-Ethylhexyl)Phthalate (117-81-7).
*(EPA/600/8-91/084, OHEA-C-073-045)*
PB93-185098/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Cadmium (7740-43-9), Cadium Acetate (543-90-8), Cadmium Bromide (7789-42-6), Cadmium Chloride (10108-64-2).
*(EPA/600/8-91/085, OHEA-C-073-046)*
PB93-185106/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Carbon Tetrachloride (56-23-5).
*(EPA/600/8-91/086, OHEA-C-073-050)*
PB93-185114/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chloromethyl Methyl Ether (Technical Grade) (107-30-2).
*(EPA/600/8-91/091, OHEA-C-073-055)*
PB93-185122/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 4-Chloro-o-Toluidine Hydrochloride (3165-93-3).
*(EPA/600/8-91/092, OHEA-C-073-056)*
PB93-185130/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chromium and Hexavalent Chromium Compounds.
*(EPA/600/8-91/093, OHEA-C-073-057)*
PB93-185148/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chrysene (218-01-9).
*(EPA/600/8-91/094, OHEA-C-073-068)*
PB93-185155/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Coke Oven Emissions.
*(EPA/600/8-91/095, OHEA-C-073-069)*
PB93-185163/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Creosote (8001-58-9).
*(EPA/600/8-91/096, OHEA-C-073-070)*
PB93-185171/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Cyclophosphamide (50-18-0).
*(EPA/600/8-91/097)*
PB93-185189/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Daunomycin (20830-81-3).
*(EPA/600/8-91/098, OHEA-C-073-072)*
PB93-185197/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDD (72-54-8).
*(EPA/600/8-91/099, OHEA-C-073-073)*
PB93-185205/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlorambucil (305-03-3).
*(EPA/600/8-91/087, OHEA-C-073-051)*
PB93-185213/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlordane (57-74-9).
*(EPA/600/8-91/088, OHEA-C-073-052)*
PB93-185221/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chlornaphazine (494-03-1).
*(EPA/600/8-91/089, OHEA-C-073-053)*
PB93-185239/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDE (72-55-9).
*(EPA/600/8-91/100, OHEA-C-073-074)*
PB93-185247/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of DDT (50-29-3).
*(EPA/600/8-91/101, OHEA-C-073-075)*
PB93-185254/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diallate (2303-16-4).
*(EPA/600/8-91/102, OHEA-C-073-076)*
PB93-185262/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diaminotoluene (Mixed) (95-80-7).
*(EPA/600/8-91/103, OHEA-C-073-077)*
PB93-185270/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dibenz(a,h)Anthracene (53-70-3).
*(EPA/600/8-91/104, OHEA-C-073-078)*
PB93-185288/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2:7,8-Dibenzopyrene (189-55-9).
*(EPA/600/8-91/105, OHEA-C-073-079)*
PB93-185296/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dibromo-3-Chloropropane (96-12-8).
*(EPA/600/8-91/106, OHEA-C-073-080)*
PB93-185304/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dihydrosafrole (94-58-6).
*(EPA/600/8-91/113, OHEA-C-073-088)*
PB93-185312/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachloroethane (76-01-7).
*(EPA/600/8-91/170, OHEA-C-073-158)*
PB93-185320/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethylaminoazobenzene (60-11-7).
*(EPA/600/8-91/116, OHEA-C-073-091)*
PB93-185338/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 7,12-Dimethylbenz(a)anthracene (57-97-6).
*(EPA/600/8-91/117, OHEA-C-073-092)*
PB93-185346/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3,3'-Dimethylbenzidine (119-93-7).
*(EPA/600/8-91/118, OHEA-C-073-093)*
PB93-185353/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethylcarbamoyl Chlo.
*(EPA/600/8-91/119, OHEA-C-073-094)*
PB93-185361/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,1 Dimethylhydrazine (57-14-7).
*(EPA/600/8-91/120, OHEA-C-073-095)*
PB93-185379/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dimethylhydrazine (540-73-8).
*(EPA/600/8-91/121, OHEA-C-073-096)*
PB93-185387/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dinitrotoluene (Mixture) (25321-14-6).
*(EPA/600/8-91/122, OHEA-C-073-097)*
PB93-185395/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,4-Dinitrotoluene (121-14-2).
*(EPA/600/8-91/123, OHEA-C-073-098)*
PB93-185403/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2,6-Dinitrotoluene (606-20-2).
*(EPA/600/8-91/124, OHEA-C-073-099)*
PB93-185411/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,4-Dioxane (123-91-1).
*(EPA/600/8-91/125, OHEA-C-073-100)*
PB93-185429/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Heptachlor (76-44-8).
*(EPA/600/8-91/136, OHEA-C-073-111)*
PB93-190478/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Heptachlor Epoxide (1024-57-3).
*(EPA/600/8-91/137, OHEA-C-073-112)*
PB93-190486/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachlorobenzene (118-74-1).
*(EPA/600/8-91/138, OHEA-C-073-113)*
PB93-190494/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachlorobutadiene (87-68-3).
*(EPA/600/8-91/139, OHEA-C-073-114)*
PB93-190502/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hexachloroethane (67-72-1).
*(EPA/600/8-91/140, OHEA-C-073-115)*
PB93-190510/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Hydrazine (302-01-2).
*(EPA/600/8-91/141, OHEA-C-073-116)*
PB93-190528/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Indeno(1,2,3-CD)Pyrene (193-39-5).
*(EPA/600/8-91/142, OHEA-C-073-117)*
PB93-190536/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Isosafrole (120-58-1).
*(EPA/600/8-91/143, OHEA-C-073-118)*
PB93-190544/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Kepone Chlordecone (143-50-0).
*(EPA/600/8-91/144, OHEA-C-073-119)*
PB93-190569/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Lasiocarpine (303-34-4).
*(EPA/600/8-91/145, OHEA-C-073-120)*
PB93-190577/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Diphenylhydrazine (122-66-7).
*(EPA/600/8-91/126, OHEA-C-073-101)*
PB93-192326/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Epichlorohydrin (106-89-8).
*(EPA/600/8-91/127, OHEA-C-073-102)*
PB93-192334/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl Carbamate (Urethane) (51-79-6).
*(EPA/600/8-91/128, OHEA-C-073-103)*
PB93-192342/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl 4,4'-Dichlorobenzilate (510-15-6).
*(EPA/600/8-91/129, OHEA-C-073-104)*
PB93-192359/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylene Dibromide (106-93-4).
*(EPA/600/8-91/130, OHEA-C-073-105)*
PB93-192367/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylene Oxide (75-21-8).
*(EPA/600/8-91/131, OHEA-C-073-106)*
PB93-192375/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethylenethiourea (96-45-7).
*(EPA/600/8-91/132, OHEA-C-073-107)*
PB93-193589/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Ethyl Methanesulfonate (62-50-0).
*(EPA/600/8-91/133, OHEA-C-073-108)*
PB93-193597/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Formaldehyde (50-00-0).
*(EPA/600/8-91/134, OHEA-C-073-109)*
PB93-193605/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Glycidylaldehyde (765-34-4).
*(EPA/600/8-91/135, OHEA-C-073-110)*
PB93-193613/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Chloroform (67-66-3).
*(EPA/600/8-91/090, OHEA-C-073-054)*
PB93-194249/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3,3'-Dichlorobenzidine (91-94-1).
*(EPA/600/8-91/107, OHEA-C-073-081)*
PB93-194256/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Dichloroethane (107-06-2).
*(EPA/600/8-91/108, OHEA-C-073-082)*
PB93-194264/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dieldrin (60-57-1).
*(EPA/600/8-91/109, OHEA-C-073-084)*
PB93-194272/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2:3,4-Diepoxybutane (1464-53-5).
*(EPA/600/8-91/110, OHEA-C-073-085)*
PB93-194280/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Diethylhydrazine (1615-80-1).
*(EPA/600/8-91/111, OHEA-C-073-086)*
PB93-194298/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Diethylstilbestrol (56-53-1).
*(EPA/600/8-91/112, OHEA-C-073-087)*
PB93-194306/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3,3'-Dimethoxybenzidine (119-90-4).
*(EPA/600/8-91/114, OHEA-C-073-089)*
PB93-194314/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Dimethyl Sulfate (77-78-1).
*(EPA/600/8-91/115, OHEA-C-073-090)*
PB93-194322/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Melphalan (148-82-3).
*(EPA/600/8-91/146, OHEA-C-073-121)*
PB93-196301/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methyl Chloride (74-87-3).
*(EPA/600/8-91/147, OHEA-C-073-128)*
PB93-196319/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 3-Methylcholanthrene (59-49-5).
*(EPA/600/8-91/148, OHEA-C-073-129)*
PB93-196327/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 4,4'-Methylenebis (1-Chloroaniline) (101-14-4).
*(EPA/600/8-91/149, OHEA-C-073-130)*
PB93-196335/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methyl Iodide (74-88-4).
*(EPA/600/8-91/150, OHEA-C-073-131)*
PB93-196343/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Methyl-N'-Nitro-N-Nitrosoguanidine (70-25-7).
*(EPA/600/8-91/151, OHEA-C-073-132)*
PB93-196350/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Methylthiouracil (56-04-2).
*(EPA/600/8-91/152, OHEA-C-073-133)*
PB93-196368/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Mitomycin C (50-07-7).
*(EPA/600/8-91/153, OHEA-C-073-134)*
PB93-196376/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1-Naphthylamine (134-32-7).
*(EPA/600/8-91/154, OHEA-C-073-135)*
PB93-196384/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2-Naphthylamine (91-59-8).
*(EPA/600/8-91/155, OHEA-C-073-136)*
PB93-196392/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Nickel (7740-02-0).
*(EPA/600/8-91/156, OHEA-C-073-137)*
PB93-196400/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 2-Nitropropane (79-46-9).
*(EPA/600/8-91/157, OHEA-C-073-145)*
PB93-196418/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Butylamine (924-16-3).
*(EPA/600/8-91/158, OHEA-C-073-146)*
PB93-196426/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodiethanolamine (1116-54-7).
*(EPA/600/8-91/159, OHEA-C-073-147)*
PB93-196434/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodiethylamine (55-18-5).
*(EPA/600/8-91/160, OHEA-C-073-148)*
PB93-196442/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodimethylamine (62-75-9).
*(EPA/600/8-91/161, OHEA-C-073-149)*
PB93-196459/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Propylamine (621-64-7).
*(EPA/600/8-91/162, OHEA-C-073-150)*
PB93-196467/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Ethylurea (759-73-9).
*(EPA/600/8-91/163, OHEA-C-073-151)*
PB93-196475/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurea (684-93-5).
*(EPA/600/8-91/164, OHEA-C-073-152)*
PB93-196483/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurethane (165-53-2).
*(EPA/600/8-91/165, OHEA-C-073-153)*
PB93-196491/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosomethylvinylamine (4549-40-0).
*(EPA/600/8-91/166, OHEA-C-073-154)*
PB93-196509/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosopiperidine (100-75-4).
*(EPA/600/8-91/167, OHEA-C-073-155)*
PB93-196517/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of N-Nitrosopyrrolidine.
*(EPA/600/8-91/168, OHEA-C-073-156)*
PB93-196525/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 5-Nitro-O-Toluidine (99-55-8).
*(EPA/600/8-91/169, OHEA-C-073-157)*
PB93-196533/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachloronitrobenzene (82-68-8).
*(EPA/600/8-91/171, OHEA-C-073-159)*
PB93-196541/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Pentachlorophenol (87-86-5).
*(EPA/600/8-91/172, OHEA-C-073-160)*
PB93-196558/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Phenacetin (62-44-2).
*(EPA/600/8-91/173, OHEA-C-073-161)*
PB93-196566/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of Polychlorinated Biphenyls (1336-36-3) Including Specific Aroclors.
*(EPA/600/8-91/174, OHEA-C-073-162)*
PB93-196574/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,3-Propane Sultone (1120-71-4).
*(EPA/600/8-91/175, OHEA-C-073-170)*
PB93-196582/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity of 1,2-Propylenimine (75-55-8).
*(EPA/600/8-91/176, OHEA-C-073-171)*
PB93-196590/REB 93-01 PC **A03**/MF **A01**

Evaluation of the Potential Carcinogenicity Saccharin (81-07-2).
*(EPA/600/8-91/177, OHEA-C-073-172)*
PB93-196608/REB 93-01 PC **A03**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. (Chapters 1 through 8).
PB93-222644/REB 93-04 PC **E99**/MF **E99**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 1. Disposition and Pharmacokinetics.
*(EPA/600/AP-92/001A, OHEA-I-486-VOL-1)*
PB93-222651/REB 93-04 PC **A07**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 2. Mechanisms of Toxic Actions.
*(EPA/600/AP-92/001B, OHEA-I-486-VOL-2)*
PB93-222669/REB 93-04 PC **A03**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 3. Acute, Subchronic, and Chronic Toxicity.
*(EPA/600/AP-92/001C, OHEA-I-486-VOL-3)*
PB93-222677/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 4. Immunotoxic Effects.
*(EPA/600/AP-92/001D, OHEA-I-486-VOL-4)*
PB93-222685/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.
*(EPA/600/AP-92/001E, OHEA-I-486-VOL-5)*
PB93-222693/REB 93-04 PC **A06**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 6. Carcinogenicity of TCDD in Animals.
*(EPA/600/AP-92/001F, OHEA-I-486-VOL-6)*
PB93-222701/REB 93-04 PC **A04**/MF **A01**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 7. Epidemiology/Human Data.
*(EPA/600/AP-92/001G, OHEA-I-486-VOL-7)*
PB93-222719/REB 93-04 PC **A07**/MF **A02**

Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 8. Dose-Response Relationships.
*(EPA/600/AP-92/001H, OHEA-I-486-VOL-8)*
PB93-222727/REB 93-04 PC **A11**/MF **A03**

**SYSTEMS APPLICATIONS INTERNATIONAL, RESEARCH TRIANGLE PARK, NC.**

Issues and Approaches to Improving Transportation Modeling for Air Quality Analysis.
*(EPA/452/R-93/003)*
PB93-194066/REB 93-01 PC **A05**/MF **A02**

**SYSTEMS APPLICATIONS INTERNATIONAL, SAN RAFAEL, CA.**

User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
*(EPA/450/4-90/007D)*
PB93-122380/REB 93-01 PC **A99**/MF **A06**

Application of a Data-Assimilating Prognostic Meteorological Model to Two Urban Areas.
*(EPA/600/R-92/221)*
PB93-126571/REB 93-01 PC **A05**/MF **A01**

Reactive Plume Model IV (RPM-IV) User's Guide.
*(EPA/454/B-93/012)*
PB93-217412/REB 93-04 PC **A23**/MF **A04**

Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone. Volume 2. Emission Inventory Requirements for Photochemical Air Quality Simulation Models (Revised).
*(EPA/454/R-92/026)*
PB93-234375/REB 93-04 PC **A11**/MF **A03**

**TAMPA BAY REGIONAL PLANNING COUNCIL, ST. PETERSBURG, FL.**

Framework for Characterization. (Revised Final Report March 1992).
*(TBNEP-01-92)*
PB93-191237/REB 93-01 PC **A04**/MF **A01**

**TECHNICAL RESOURCES, INC., GULF BREEZE, FL.**

Selection of a 'Pseudomonas cepacia' Strain Constitutive for the Degradation of Trichloroethylene.
*(EPA/600/J-93/068, CONTRIB-790)*
PB93-169027/REB 93-01 PC **A02**/MF **A01**

**TECHNION - ISRAEL INST. OF TECH., HAIFA.**

Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.
*(EPA/600/A-93/201)*
PB93-229177/REB 93-04 PC **A03**/MF **A01**

**TENNESSEE UNIV., KNOXVILLE. DEPT. OF CHEMISTRY.**

Fluorinated Ethers: A New Series of CFC Substitutes.
*(EPA/600/A-92/211)*
PB93-106805/REB 93-01 PC **A03**/MF **A01**

Fluroinated Ethers: A New Family of Halons.
*(EPA/600/A-92/212)*
PB93-106813/REB 93-01 PC **A03**/MF **A01**

Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
*(EPA/600/J-93/276)*
PB93-222735/REB 93-04 PC **A02**/MF **A01**

**TENNESSEE UNIV., KNOXVILLE. DEPT. OF ENGINEERING SCIENCE AND MECHANICS.**

Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
*(EPA/600/S-92/034)*
PB93-123024/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Penny Blanks and Zinc Products.
*(EPA/600/S-92/037)*
PB93-123107/REB 93-01 PC **A02**/MF **A01**

**TERRENE INST., INC., WASHINGTON, DC.**

Fish and Fisheries Management in Lakes and Reservoirs. Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
*(EPA/841/R-93/002)*
PB93-210375/REB 93-04 PC **A15**/MF **A03**

**TETRA TECH, INC., BELLEVUE, WA.**

TETRAT-TC-3218-10
Commencement Bay Nearshore/Tideflats Feasibility Study. Executive Summary.
*(EPA/910/9-89/031A)*
PB93-181220/REB 93-01 PC **A06**/MF **A02**

TETRAT-TC-3218-VOL-1
Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
*(EPA/910/9-89/031B)*
PB93-181238/REB 93-01 PC **A25**/MF **A06**

TETRAT-TC-3218-VOL-2
Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 2. Appendices.
*(EPA/910/9-89/031C)*
PB93-181246/REB 93-01 PC **A18**/MF **A04**

Commencement Bay Nearshore/Tideflats Feasibility Study. Development of Sediment Cleanup Goals.
*(EPA/910/9-89/032)*
PB93-181253/REB 93-01 PC **A05**/MF **A01**

**TEXAS A AND M UNIV., COLLEGE STATION. DEPT. OF ENTOMOLOGY.**
Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
*(EPA/600/J-93/060)*
PB93-168946/REB 93-01 PC **A02**

**TEXAS A AND M UNIV., COLLEGE STATION. DEPT. OF OCEANOGRAPHY.**
Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.
*(EPA/600/A-93/221)*
PB93-234490/REB 93-04 PC **A03**/MF **A01**

**TEXAS UNIV. AT AUSTIN. BUREAU OF ECONOMIC GEOLOGY.**
Wellhead Protection Strategies for Confined-Aquifer Settings.
*(EPA/570/9-91/008)*
PB93-115913/REB 93-01 PC **A05**/MF **A01**

Why do Wellhead Protection. Issues and Answers in Protecting Public Drinking Water Supply Systems.
*(EPA/570/9-91/014)*
PB93-115921/REB 93-01 PC **A03**/MF **A01**

**TEXAS UNIV. MEDICAL BRANCH AT GALVESTON. MARINE BIOMEDICAL INST.**
Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
*(EPA/600/J-93/057, CONTRIB-769)*
PB93-168912/REB 93-01 PC **A02**/MF **A01**

**TEXAS UNIV. SOUTHWESTERN MEDICAL CENTER AT DALLAS. DEPT. OF PEDIATRICS.**
Mutational Risks in Females: Genomic Imprinting and Maternal Molecules.
*(EPA/600/J-93/181, OHEA-R-484)*
PB93-194488/REB 93-01 PC **A03**/MF **A01**

**TEXAS UNIV. SOUTHWESTERN MEDICAL CENTER AT DALLAS. DEPT. OF RADIOLOGY.**
Maternal Age Effect: The Enigma of Down Syndrome and Other Trisomic Conditions.
*(EPA/600/J-93/175, OHEA-R-478)*
PB93-194421/REB 93-01 PC **A03**/MF **A01**

**TRAVERSE GROUP, INC., TRAVERSE CITY, MI.**
Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
*(EPA/600/A-92/220)*
PB93-119816/REB 93-01 PC **A02**/MF **A01**

**TRC ENVIRONMENTAL CONSULTANTS, INC., EAST HARTFORD, CT.**
Compliance Data System Quality Assurance Manual, June 1984.
*(EPA/340/1-84/011)*
PB93-199339/REB 93-01 PC **A10**/MF **A03**

**TRC ENVIRONMENTAL CORP., CHAPEL HILL, NC.**
CH-93-27
Initial Assessment of Emissions from Heat Setting Carpet Yarn.
*(EPA/600/R-93/161)*
PB93-229862/REB 93-04 PC **A04**/MF **A01**

Carbon Disulfide Emission Control Options.
*(EPA/450/3-91/023)*
PB93-124667/REB 93-01 PC **A03**/MF **A01**

Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
*(EPA/600/R-92/224)*
PB93-127801/REB 93-01 PC **A06**/MF **A02**

Guidelines for Estimating and Applying Rule Effectiveness for Ozone CO State Implementation Plan Base Year Inventories.
*(EPA/452/R-92/010)*
PB93-131498/REB 93-01 PC **A05**/MF **A01**

Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
*(EPA/600/R-92/239)*
PB93-135663/REB 93-01 PC **A07**/MF **A02**

Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
*(EPA/600/J-93/098)*
PB93-175677/REB 93-01 PC **A02**/MF **A01**

Development of Residential Wood Consumption Estimation Models.
*(EPA/600/R-93/096)*
PB93-199248/REB 93-01 PC **A04**/MF **A01**

**TUFTS UNIV., BOSTON, MA. DEPT. OF ANATOMY AND CELLULAR BIOLOGY.**
Cytoplasmic Microtubular Dynamics and Chromatin Organization during Mammalian Oogenesis and Oocyte Maturation.
*(EPA/600/J-93/174, OHEA-R-477)*
PB93-194413/REB 93-01 PC **A03**/MF **A01**

**UNITED STATES MAN AND THE BIOSPHERE PROGRAM, WASHINGTON, DC.**
Maya Forest: Key Issues and Recommendations for Action: A Workshop Report. Held in Flores, Guatemala on February 8-9, 1993.
PB93-183713/REB 93-04 PC **A03**/MF **A01**

**UNIVERSITY OF CENTRAL FLORIDA, ORLANDO.**
Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
*(EPA/600/A-93/069)*
PB93-175503/REB 93-01 PC **A03**/MF **A01**

**UNIVERSITY OF EAST ANGLIA, NORWICH (ENGLAND). SCHOOL OF ENVIRONMENTAL SCIENCES.**
Comparison of Episodic Acidification in Canada, Europe and the United States.
*(EPA/600/J-92/418)*
PB93-135754/REB 93-01 PC **A03**/MF **A01**

**UTAH AGRICULTURAL EXPERIMENT STATION, LOGAN.**
PAPER-3994
Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
*(EPA/600/J-93/220)*
PB93-205037/REB 93-04 PC **A02**/MF **A01**

PAPER-4148
Influence of Root Colonizing Bacteria on the Defense Responses of Bean.
*(EPA/600/J-93/221)*
PB93-205045/REB 93-04 PC **A03**/MF **A01**

PAPER-4152
Genetic Analysis of the aggA Locus Involved in Agglutination and Adherence of 'Pseudomonas putida', a Beneficial Fluorescent Pseudomonad.
*(EPA/600/J-93/219)*
PB93-205029/REB 93-04 PC **A03**/MF **A01**

PAPER-4175
Characterization of Catalase Activities in a Root-Colonizing Isolate of 'Pseudomonas putida' (Revised).
*(EPA/600/J-93/222)*
PB93-205052/REB 93-04 PC **A02**/MF **A01**

**UTAH STATE UNIV., LOGAN.**
Biodegradation of 2,4,5-Trichlorophenoxyacetic Acid in Liquid Culture and in Soil by the White Rot Fungus 'Phanerochaete chrysosporium'.
*(EPA/600/J-93/157)*
PB93-191542/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
*(EPA/600/J-93/158)*
PB93-191559/REB 93-01 PC **A02**/MF **A01**

Effects of Culture Parameters on DDT (1,1,1-Trichloro-2,2-BIS(4-Chlorophenyl)Ethane) Biodegradation by 'Phanerochaete chrysosporium'.
*(EPA/600/J-93/159)*
PB93-191567/REB 93-01 PC **A03**/MF **A01**

Biodegradation of Polycyclic Aromatic Hydrocarbons by 'Phanerochaete chrysosporium'.
*(EPA/600/J-93/162)*
PB93-191591/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Crystal Violet by the White Rot Fungus 'Phanerochaete chrysosporium'.
*(EPA/600/J-93/163)*
PB93-191609/REB 93-01 PC **A02**/MF **A01**

In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
*(EPA/540/S-93/501)*
PB93-234565/REB 93-04 PC **A03**/MF **A01**

**UTAH STATE UNIV., LOGAN. BIOTECHNOLOGY CENTER.**
Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
*(EPA/600/A-93/100)*
PB93-191369/REB 93-01 PC **A02**/MF **A01**

**UTAH WATER RESEARCH LAB., LOGAN.**
Behavior of Metals in Soils.
*(EPA/540/S-92/018)*
PB93-131480/REB 93-01 PC **A03**/MF **A01**

**VEBEL SOCIETY, INC., GAITHERSBURG, MD.**
Federal Policies and Technological Problem-Solving.
PB93-142107/REB 93-01 PC **A03**/MF **A01**

**VERSAR, INC., COLUMBIA, MD.**
Design of a Basinwide Monitoring Program for the Tampa Bay Estuary.
*(TBNEP-09-92)*
PB93-194694/REB 93-01 PC **A05**/MF **A01**

**VERSAR, INC., COLUMBIA, MD. ESM OPERATIONS.**
Synthesis of Basic Life Histories of Tampa Bay Species.
*(TBNEP-10-92)*
PB93-196012/REB 93-01 PC **A12**/MF **A03**

**VERSAR, INC., SPRINGFIELD, VA.**
Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
*(EPA/747/R-92/003)*
PB93-105534/REB 93-01 PC **A04**/MF **A01**

**VIGYAN, INC., FALLS CHURCH, VA.**
User's Manual for the BLIS BBS.
*(EPA/453/B-92/012)*
PB93-122422/REB 93-01 PC **A07**/MF **A02**

Manual of Federal Geographic Data Products.
PB93-236503/REB 93-04 PC **A17**/MF **A03**

**VIRGINIA INST. OF MARINE SCIENCE, GLOUCESTER POINT.**
Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and Chincoteague Bay, 1991.
PB93-191120/REB 93-01 PC **A13**/MF **A03**

Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
*(CBP/TRS-83/92)*
PB93-196665/REB 93-01 PC **A12**/MF **A03**

**VIRGINIA POLYTECHNIC INST. AND STATE UNIV., BLACKSBURG. DEPT. OF BIOLOGY.**
Fate of 'Bacillus sphaericus' and 'Bacillus thuringiensis' Serovar 'Israelensis' in the Aquatic Environment.
*(EPA/600/J-92/382)*
PB93-121143/REB 93-01 PC **A02**/MF **A01**

**VIRGINIA UNIV., CHARLOTTESVILLE. DEPT. OF ENVIRONMENTAL SCIENCES.**
Modelling Episodic Acidification of Surface Waters: The State of Science.
*(EPA/600/J-92/345)*
PB93-106920/REB 93-01 PC **A03**/MF **A01**

**VOLVO OF AMERICA CORP., ROCKLEIGH, NJ.**
Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEB, Engine: B5254S EGR.
PB93-233815/REB 93-04 PC **A13**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEB, Engine: B230FT.
PB93-233823/REB 93-04 PC **A10**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEA, Engine: B230F.
PB93-233831/REB 93-04 PC **A09**/MF **A02**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAFA, Engine: B230FS4.
PB93-233849/REB 93-04 PC **A11**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEA, Engine: B6304S EGR.
PB93-233856/REB 93-04 PC **A13**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEA, Engine: B5254S.
PB93-233864/REB 93-04 PC **A09**/MF **A02**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3VHGFEK, Engine: B5234T.
PB93-233872/REB 93-04 PC **A17**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGFEA, Engine: B5254S AIR.
PB93-233880/REB 93-04 PC **A15**/MF **A03**

Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEB, Engine: B6304S.
PB93-233898/REB 93-04 PC **A11**/MF **A03**

Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GEEA, Engine: B230FT4.
PB93-233906/REB 93-04 PC **A13**/MF **A03**

**WASHINGTON UNIV., SEATTLE.**
Emerging Technology Report: Metals Treatment at Superfund Sites by Absorptive Filtration.
*(EPA/540/R-93/515)*
PB93-231165/REB 93-04 PC **A04**/MF **A01**

**WASHINGTON UNIV., SEATTLE. SCHOOL OF MEDICINE.**
Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
*(EPA/600/J-93/182, OHEA-R-485)*
PB93-194496/REB 93-01 PC **A03**/MF **A01**

**WASTE WATCH CENTER, ANDOVER, MA.**
Proceedings of the National United States Environmental Protection Agency Conference on Household Hazardous Waste Management (7th). Held in Minneapolis, Minnesota on December 8-12, 1992.
*(EPA/530/R-93/008)*
PB93-170116/REB 93-01 PC **A99**/MF **A06**

**WESTERN GOVERNORS' ASSOCIATION, DENVER, CO.**
Technology Needs and Emerging Technologies (Joint Environmental Restoration and Waste Management Activities).
PB93-111052/REB 93-01 PC **A10**/MF **A03**

**WESTERN ILLINOIS UNIV., MACOMB. DEPT. OF BIOLOGICAL SCIENCES.**
Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
*(EPA/600/J-92/426)*
PB93-141257/REB 93-01 PC **A02**/MF **A01**

**WHITE (J.D.) CO., VANCOUVER, WA.**
Quality Assurance Plan for 1991 Pilot Study of the Ecological Condition of Municipal Wastewater Constructed Wetland Treatment Systems.
*(EPA/600/R-92/231)*
PB93-134674/REB 93-01 PC **A05**/MF **A01**

**WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY, MADISON.**
Delineation of Wellhead Protection Areas in Fractured Rocks.
*(EPA/570/9-91/009)*
PB93-115822/REB 93-01 PC **A08**/MF **A02**

**WISCONSIN UNIV.-SUPERIOR.**
Ambient Aquatic Life Water Quality Criteria for Di-2-Ethylhexyl Phthalate.
*(EPA/440/5-87/013)*
PB93-202752/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Antimony (III).
*(EPA/440/5-88/093)*
PB93-202778/REB 93-01 PC **A03**/MF **A01**

**WOODS HOLE OCEANOGRAPHIC INSTITUTION, MA.**
WHOI-89-1
Molecular Regulation of the Induction of Cytochrome P-450E in the Estuarine Fish Fundulus Heteroclitus.
AD-A258 623/8/REB 93-01 PC **A11**/MF **A03**

**WOODS HOLE RESEARCH CENTER, MA.**
Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.
*(EPA/600/J-93/350)*
PB93-229680/REB 93-04 PC **A03**/MF **A01**

**WOODWARD-CLYDE CONSULTANTS, OAKLAND, CA.**
MULTIMED: The Multimedia Exposure Assessment Model for Evaluating the Land Disposal of Wastes-Model Theory.
*(EPA/600/R-93/061)*
PB93-186252/REB 93-01 PC **A07**/MF **A02**

**WOODWARD-CLYDE CONSULTANTS, WALNUT CREEK, CA.**
Methodology for Analysis of Detention Basins for Control of Urban Runoff Quality.
PB93-223576/REB 93-04 PC **A04**/MF **A01**

**WYOMING UNIV., LARAMIE.**
Mineral Dissolution Rates: A Comparison of Laboratory and Field Studies.
*(EPA/600/A-92/293)*
PB93-141182/REB 93-01 PC **A01**/MF **A01**

Role of Soil Organic Acids in Mineral Weathering Processes (Chapter 6).
*(EPA/600/A-93/012)*
PB93-149268/REB 93-01 PC **A04**/MF **A01**

Dissolved Organic Carbon and Sulfate Sorption by Spodosol Mineral Horizons.
*(EPA/600/J-93/345)*
PB93-229631/REB 93-04 PC **A02**/MF **A01**

# PERSONAL AUTHOR INDEX

This index is arranged by personal author's last name, report title, and NTIS order number. As many as five authors may be included for each report; all are listed in this index.

## SAMPLE ENTRY

| | |
|---|---|
| **Author Name** | **NEILSON, R. P., KING G. A., DeVELICE R. L., LENIHAN, J., and MARKS, D.** |
| Title | Sensitivity of Ecological Landscapes and Regions to Global Climatic Change |
| NTIS Order Number/Media Code Price Codes | PB90-120072/HSU PC A09/MF A01 |

# PERSONAL AUTHOR INDEX


**ABBOTT, B. D.**
Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC **A01**/MF **A01**

Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

**ABBOTT, J. H.**
Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC **A02**/MF **A01**

**ABBRUZZESE, B.**
Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC **A07**/MF **A02**

**ABELE, A. R.**
Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.
PB93-228468/REB 93-04 PC **A02**/MF **A01**

**ABER, J. D.**
Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC **A02**/MF **A01**

**ABOU-DONIA, M. B.**
Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC **A02**/MF **A01**

**ABRAMOWICZ, D. A.**
Anaerobic Dehalogenation and Its Environmental Implications. Abstracts of 1992 American Society for Microbiology Conference. Held in Athens, Georgia on August 30-September 4, 1992.
PB93-217792/REB 93-04 PC **A04**/MF **A01**

**ADAMS, M.**
Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
PB93-135671/REB 93-01 PC **A01**/MF **A01**

**ADAMS, R. E.**
Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC **A04**/MF **A01**

**ADAMS, T.**
User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

**ADAMS, W. J.**
Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

**ADAMUS, P. R.**
Irrigated Wetlands of the Colorado Plateau: Information Synthesis and Habitat Evaluation Method.
PB93-186260/REB 93-01 PC **A05**/MF **A02**

Process for Regional Assessment of Wetland Risk.
PB93-146793/REB 93-01 PC **A09**/MF **A02**

Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC **A07**/MF **A02**

**ADCOCK, J. L.**
Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03**/MF **A01**

Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03**/MF **A01**

Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

**ADEWUMNI, J.**
Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

**ADRIAN, D. D.**
Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC **A05**/MF **A02**

**AGARWAL, S.**
Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

**AGARWALL, S. A.**
Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC **A02**/MF **A01**

**AGRAWAL, S. R.**
Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
PB93-229151/REB 93-04 PC **A03**/MF **A01**

**AHAKRABARTY, A. M.**
Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC **A03**/MF **A01**

**AHLBORG, U. G.**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 3. Acute, Subchronic, and Chronic Toxicity.
PB93-222677/REB 93-04 PC **A04**/MF **A01**

**AHMADZAI, H.**
Phasing out of CFCs in the electronics and engineering industries in Sweden.
DE93711212/REB 93-01 PC **A03**/MF **A01**

**AILERU, A. A.**
Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC **A03**/MF **A01**

**AINLEY, D. G.**
Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

**AKLAND, G.**
NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC **A02**/MF **A01**

**AKLAND, G. G.**
Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.
PB93-212306/REB 93-04 PC **A02**/MF **A01**

**ALBERT, C.**
Air/Superfund National Technical Guidance Study Series. Models for Estimating Air Emission Rates from Superfund Remedial Actions.
PB93-186807/REB 93-01 PC **A08**/MF **A02**

Control of Air Emissions from Superfund Sites.
PB93-215614/REB 93-04 PC **A08**/MF **A02**

**ALBERTINI, D. F.**
Cytoplasmic Microtubular Dynamics and Chromatin Organization during Mammalian Oogenesis and Oocyte Maturation.
PB93-194413/REB 93-01 PC **A03**/MF **A01**

**ALDRICH, J. A.**
Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC **A02**/MF **A01**

**ALDRICH, T. L.**
Molecular Basis of Biodegradation of Chloroaromatic Compounds.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

**ALEXANDER, C.**
Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

**ALFORD-STEVENS, A.**
Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

**ALI, S. F.**
Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC **A02**/MF **A01**

**ALLEN, A. R.**
Bitertanol, a Triazole Fungicide, Increases Operant Responding but Not Motor Activity.
PB93-236370/REB 93-04 PC **A02**/MF **A01**

**ALLEN, J. W.**
Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03**/MF **A01**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: A Field Test in Snuff Users.
PB93-141448/REB 93-01 PC **A03**/MF **A01**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC **A03**/MF **A01**

**ALLEN, M. J.**
Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC **A01**/MF **A01**

**ALLEN, S.**
Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08**/MF **A02**

**ALLIS, J. W.**
Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02**/MF **A01**

Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC **A03**/MF **A01**

**ALLISON, J. C.**
Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03**/MF **A01**

**ALLISON, T.**
Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
PB93-185536/REB 93-01 PC **A11**/MF **A03**

**ALLISON, T. L.**
Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC **A04**/MF **A01**

MULTIMED: The Multimedia Exposure Assessment Model for Evaluating the Land Disposal of Wastes-Model Theory.
PB93-186252/REB 93-01 PC **A07**/MF **A02**

**AMANN, R. I.**
Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
PB93-121184/REB 93-01 PC **A02**/MF **A01**

**AMBROSE, R. B.**
Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03**/MF **A01**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

**AMMERMAN, D.**
Guidelines for Water Use.
PB93-222180/REB 93-04 PC **A12**/MF **A03**

**ANANYEVA, N. D.**
Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC **A03**/MF **A01**

**ANDELMAN, J. B.**
Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
PB93-229565/REB 93-04 PC **A02**/MF **A01**

**ANDERSEN, C. P.**
Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC **A03**/MF **A01**

**ANDERSEN, M. E.**
Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03**/MF **A01**

**ANDERSON, A. J.**
Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
PB93-205037/REB 93-04 PC **A02**/MF **A01**

Characterization of Catalase Activities in a Root-Colonizing Isolate of 'Pseudomonas putida' (Revised).
PB93-205052/REB 93-04 PC **A02**/MF **A01**

Genetic Analysis of the aggA Locus Involved in Agglutination and Adherence of 'Pseudomonas putida', a Beneficial Fluorescent Pseudomonad.
PB93-205029/REB 93-04 PC **A03**/MF **A01**

Influence of Root Colonizing Bacteria on the Defense Responses of Bean.
PB93-205045/REB 93-04 PC **A03**/MF **A01**

**ANDERSON, B. S.**
Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC **A03**/MF **A01**

**ANDERSON, G. F.**
Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and Chincoteague Bay, 1991.
PB93-191120/REB 93-01 PC **A13**/MF **A03**

**ANDERSON, J. K.**
Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC **A02**/MF **A01**

**ANDERSON, J. W.**
Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.
PB93-221950/REB 93-04 PC **A01**/MF **A01**

**ANDERSON, S.**
Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02**/MF **A01**

Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03**/MF **A01**

**ANDERSON, Y. B.**
Maturational Changes in Dermal Absorption of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Fischer 344 Rats.
PB93-229490/REB 93-04 PC **A02**/MF **A01**

**ANDERSSON, A.**
Metal concentrations of the mor layer.
DE92563061/REB 93-01 PC **A05**/MF **A01**

Trace elements in agricultural soils. Fluxes, balances and background values.
DE93778470/REB 93-01 PC **A03**/MF **A01**

# PERSONAL AUTHOR INDEX


**ANDERSSON, R.**
Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC **A03/MF A01**

**ANDRADY, A. L.**
Weatherability of Enhanced-Degradable Plastics.
PB93-229789/REB 93-04 PC **A14/MF A03**

**ANDREOLI, A.**
Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC **A03/MF A01**

**ANDREWS, J.**
Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.
PB93-236347/REB 93-04 PC **A02/MF A01**

**ANDREWS, J. E.**
Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02/MF A01**

**ANIKIS, M. S.**
Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC **A01/MF A01**

**ANKLEY, G. T.**
Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202828/REB 93-01 PC **A08/MF A02**

Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.
PB93-222362/REB 93-04 PC **A03/MF A01**

**ANTOLICK, L. L.**
Repeated Maternal Separation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC **A03/MF A01**

**APPLEGATE, M.**
*In vitro Mammalian Mutagenesis as a Model for Genetic Lesions in Human Cancer.*
PB93-141471/REB 93-01 PC **A02/MF A01**

**ARASTEH, D.**
Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC **A03/MF A01**

**ARDEN, M. E.**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 1.
PB93-174761/REB 93-01 PC **A24/MF A04**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 2.
PB93-174779/REB 93-01 PC **A25/MF A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
PB93-174787/REB 93-01 PC **A99/MF A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 2.
PB93-174795/REB 93-01 PC **A99/MF A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 1.
PB93-174803/REB 93-01 PC **A99/MF A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 2.
PB93-174811/REB 93-01 PC **A99/MF A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 4.
PB93-174829/REB 93-01 PC **A13/MF A03**

**ARENT, L. J.**
Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).
PB93-222586/REB 93-04 PC **A01/MF A01**

Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-228500/REB 93-04 PC **A02/MF A01**

**ARKIN, E. B.**
Toxic and Hazardous Chemicals, Title III and Communities: An Outreach Manual for Community Groups.
PB93-200606/REB 93-01 PC **A08/MF A02**

**ARMSTRONG, J. L.**
*Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. aeschynomene' Transformants with Benomyl Resistance.*
PB93-212629/REB 93-04 PC **A02/MF A01**

Simple Mini-Method to Extract DNA Directly from Soil for Use with Polymerase Chain Reaction Amplification.
PB93-222792/REB 93-04 PC **A02/MF A01**

**ARMSTRONG, N. E.**
Ambient Water and Sediment Quality of Galveston Bay: Present Status and Historical Trends. Volume 1.
PB93-205789/REB 93-04 PC **A09/MF A03**

**ARMSTRONG, R. B.**
Distribution of Cardiac Output during Diurnal Changes of Activity in Rats.
PB93-180982/REB 93-01 PC **A02/MF A01**

**ARONSON, M.**
Genetic Damage In vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04/MF A01**

**ARYA, S. P.**
Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03/MF A01**

**ARYA, S. P. S.**
Laboratory Simulation of Turbulent Convection Over an Urban Heat Island.
PB93-120871/REB 93-01 PC **A02/MF A01**

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119873/REB 93-01 PC **A02/MF A01**

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-229185/REB 93-04 PC **A02/MF A01**

Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119881/REB 93-01 PC **A03/MF A01**

**ASHBAUGH, W.**
Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC **A02/MF A01**

**ASHBY, J.**
Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.
PB93-236362/REB 93-04 PC **A04/MF A01**

**ASOLEKAR, S. R.**
Kinetics of Chemical Weathering in B Horizon Spodosol Fraction.
PB93-141539/REB 93-01 PC **A02/MF A01**

**ASPELIN, A. L.**
Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC **A03/MF A01**

**ATHERHOLT, T.**
Genetic Damage In vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04/MF A01**

**ATLAS, R. M.**
Recovery of DNA from Soils and Sediments.
PB93-222834/REB 93-04 PC **A02/MF A01**

**AUBREY, D. G.**
Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC **A03/MF A01**

**AUST, S. D.**
Biodegradation of Chlorinated Organic Compounds by 'Phanerochaete chrysosporium', a Wood-Rotting Fungus.
PB93-204147/REB 93-01 PC **A03/MF A01**

Biodegradation of DDT (1,1,1-Trichloro-2,2-Bis(4-Chlorophenyl)Ethane) by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191617/REB 93-01 PC **A02/MF A01**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191351/REB 93-01 PC **A02/MF A01**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium': Involvement of the Lignin Degrading System.
PB93-191583/REB 93-01 PC **A02/MF A01**

Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191559/REB 93-01 PC **A02/MF A01**

Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC **A02/MF A01**

Effects of Culture Parameters on DDT (1,1,1-Trichloro-2,2-BIS(4-Chlorophenyl)Ethane) Biodegradation by 'Phanerochaete chrysosporium'.
PB93-191567/REB 93-01 PC **A03/MF A01**

Mineralization of Recalcitrant Environmental Pollutants by a White Rot Fungus. Proceedings of the National Conference on Hazardous Wastes and Hazardous Materials. Held in Washington, DC. on March 16-18, 1987.
PB93-204154/REB 93-01 PC **A02/MF A01**

Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
PB93-191575/REB 93-01 PC **A02/MF A01**

**BACHELET, D.**
Climate Change Impacts on Net Primary Production in China.
PB93-222271/REB 93-04 PC **A03/MF A01**

Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC **A05/MF A01**

Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216586/REB 93-04 PC **A07/MF A02**

Impacts of Climate Change on Rice Yield: A Comparison of Four Model Performances.
PB93-191526/REB 93-01 PC **A03/MF A01**

Influence of Elevated CO2 and Temperature on Wetland Rice Root Dynamics.
PB93-141141/REB 93-01 PC **A02/MF A01**

Methane Emissions from Wetland Rice Areas of Asia.
PB93-191468/REB 93-01 PC **A03/MF A01**

Rice Field Inventory Using AVHRR Data.
PB93-135697/REB 93-01 PC **A03/MF A01**

**BAGBY, W.**
Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC **A03/MF A01**

**BAGSHAW, J. W.**
Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03/MF A01**

**BAHAM, J.**
Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
PB93-141554/REB 93-01 PC **A02/MF A01**

**BAIER, J. H.**
Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC **A03/MF A01**

**BAILEY, G. W.**
Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02/MF A01**

**BAKER, J.**
Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13/MF A03**

**BAKER, L. A.**
Introduction to Nonpoint Source Pollution and Wetland Mitigation.
PB93-106953/REB 93-01 PC **A03/MF A01**

Recent Sulfur Enrichment in the Sediments of Little Rock Lake, Wisconsin.
PB93-135721/REB 93-01 PC **A03/MF A01**

**BAKSHI, K. S.**
Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC **A02/MF A01**

**BALES, B. V.**
Risk Communication About Chemicals in Your Community. Facilitator's Manual and Guide.
PB93-200541/REB 93-01 PC **A05/MF A02**

**BALLOU, J.**
Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03/MF A01**

**BALOO, S.**
Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown Refinery. Refinery Release Inventory.
PB92-228550/REB 93-01 PC **A12/MF A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Surface Water Data.
PB92-228584/REB 93-01 PC **A08/MF A02**

**BARBE, D.**
Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC **A05/MF A02**

**BARBEE, B. D.**
Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC **A03/MF A01**

**BARBOUR, W.**
OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC **A04/MF A01**

**BARCELONA, M. J.**
Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC **A08/MF A02**

Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC **A07/MF A02**

**BARCHET, W. R.**
Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03/MF A01**

**BARE, J. C.**
Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
PB93-173664/REB 93-01 PC **A02/MF A01**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131686/REB 93-01 PC **A03/MF A01**

Simulation of Performance of Chlorine-Free Fluorinated Ethers and Fluorinated Hydrocarbons to Replace CFC-11 and CFC-114 in Chillers.
PB93-175511/REB 93-01 PC **A03**/MF **A01**

**BARFELD, E.**
Clean Water Act (Section 319): An Evaluation of Program Implementation in Region 10.
PB93-145654/REB 93-01 PC **A05**/MF **A01**

**BARKAY, T.**
Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02**/MF **A01**

**BARKER, J. R.**
Forest Sector Carbon Budget of the United States: Carbon Pools and Flux under Alternative Policy Options.
PB93-196996/REB 93-01 PC **A10**/MF **A03**

Formaldehyde-Contaminated Fog Effects on Plant Growth.
PB93-121101/REB 93-01 PC **A02**/MF **A01**

**BARKLEY, N. P.**
Alternating Current Electrocoagulation for Superfund Site Remediation.
PB93-205144/REB 93-04 PC **A02**/MF **A01**

Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC **A03**/MF **A01**

**BARNARD, W.**
Feasibility of Including Fugitive PM-10 Emissions Estimates in the EPA Emissions Trends Report.
PB93-169084/REB 93-01 PC **A03**/MF **A01**

**BARNARD, W. F.**
UV Monitoring Program at US EPA.
PB93-212272/REB 93-04 PC **A03**/MF **A01**

**BARNARD, W. R.**
Development of Size-Specific Data from Particulate Control Technology Research Reports.
PB93-131456/REB 93-01 PC **A03**/MF **A01**

EPA's Information Management System for Tracking Reasonable Further Progress.
PB93-212389/REB 93-04 PC **A03**/MF **A01**

**BARNES, D. M.**
Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02**/MF **A01**

**BARNETT, L. B.**
ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC **A02**/MF **A01**

**BARNETT, S. G.**
Evaluation of Emissions from Masonry Heaters and Masonry Fireplaces in Homes.
PB93-173078/REB 93-01 PC **A03**/MF **A01**

**BARON, P. A.**
Aerosol Measurement: Principles, Techniques, and Applications.
PB93-212827/REB 93-04 PC **A03**/MF **A01**

**BARRETT, R.**
Guidance Manual for POTW Pretreatment Program Development.
PB93-186112/REB 93-01 PC **A14**/MF **A03**

**BARTENFELDER, D.**
RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC **A05**/MF **A01**

**BARTON, R. G.**
Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

**BATES, E.**
Applications Analysis Report: Silicate Technology Corporation's Solidification/Stabilization Technology for Organic and Inorganic Contaminants in Soils.
PB93-172948/REB 93-01 PC **A07**/MF **A02**

**BATES, E. R.**
Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC **A02**/MF **A01**

**BATIUK, R. A.**
Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC **A12**/MF **A03**

**BAUD-GRASSET, F.**
Evaluation of the Bioremediation of a Contaminated Soil with Phytotoxicity Tests.
PB93-191625/REB 93-01 PC **A03**/MF **A01**

**BAUD-GRASSET, S.**
Evaluation of the Bioremediation of a Contaminated Soil with Phytotoxicity Tests.
PB93-191625/REB 93-01 PC **A03**/MF **A01**

**BAUGH, J. D.**
Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
PB93-228534/REB 93-04 PC **A02**/MF **A01**

**BAUMAN, D.**
Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
PB93-175503/REB 93-01 PC **A03**/MF **A01**

**BAUMANN, P. C.**
Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04**/MF **A01**

**BAUMGARDNER, R.**
Design of the Clean Air Act Deposition Monitoring Network.
PB93-120947/REB 93-01 PC **A03**/MF **A01**

**BAUMGARTNER, D. J.**
Plume Definition in Regions of Strong Bending.
PB93-221844/REB 93-04 PC **A02**/MF **A01**

**BAY, S.**
Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

**BAYARD, S. P.**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 8. Dose-Response Relationships.
PB93-222727/REB 93-04 PC **A11**/MF **A03**

**BAYLISS, D.**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 7. Epidemiology/Human Data.
PB93-222719/REB 93-04 PC **A07**/MF **A02**

**BEACH, A. C.**
Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC **A02**/MF **A01**

Short Communication: Improved Thin-Layer Chromatographic Separation of 32P-Postlabeled DNA Adducts.
PB93-229615/REB 93-04 PC **A02**/MF **A01**

**BEACH, L. O.**
Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC **A02**/MF **A01**

**BEAK, D.**
Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

**BEBEE, C. N.**
Methylbromide and Its Alternatives as Fumigants, 1979-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149912/REB 93-01 PC **A09**/MF **A03**

Protection of Pome Fruits, March 1985-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149904/REB 93-01 PC **A13**/MF **A03**

**BECHTOLD, W. E.**
Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC **A02**/MF **A01**

**BECK, E. A.**
Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC **A02**/MF **A01**

**BECK, L. L.**
Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.
PB93-212579/REB 93-04 PC **A02**/MF **A01**

**BECK, M. A.**
Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02**/MF **A01**

**BECKER, S.**
Cytokine (Tumor Necrosis Factor, IL-6, and IL-8) Production by Respiratory Syncytial Virus-Infected Human Alveolar Macrophages.
PB93-181006/REB 93-01 PC **A02**/MF **A01**

Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
PB93-175677/REB 93-01 PC **A02**/MF **A01**

Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC **A02**/MF **A01**

**BECKING, G. C.**
Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.
PB93-228948/REB 93-04 PC **A03**/MF **A01**

**BECKMAN, S. W.**
SITE Program Demonstration of the SBP Technologies, Inc., Membrane Filtration System on Creosote-Contaminated Water.
PB93-228567/REB 93-04 PC **A02**/MF **A01**

**BEDARD, D. L.**
Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC **A03**/MF **A01**

**BEDIENT, P. B.**
Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1. Technical Report.
PB93-205722/REB 93-04 PC **A11**/MF **A03**

**BEHRENDELD, M.**
Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
PB93-212454/REB 93-04 PC **A03**/MF **A01**

**BEHRENFELD, M. J.**
Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC **A02**/MF **A01**

**BEJ, A. K.**
Recovery of DNA from Soils and Sediments.
PB93-222834/REB 93-04 PC **A02**/MF **A01**

**BELZER, F. E.**
Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04**/MF **A01**

Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

**BENANE, S. G.**
Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.
PB93-236305/REB 93-04 PC **A03**/MF **A01**

Evidence for Direct Effect of Magnetic Fields on Neurite Outgrowth.
PB93-236669/REB 93-04 PC **A02**/MF **A01**

**BENDER, J. H.**
Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC **A10**/MF **A03**

**BENFIELD, E. F.**
Fate of 'Bacillus sphaericus' and 'Bacillus thuringiensis' Serovar 'Israelensis' in the Aquatic Environment.
PB93-121143/REB 93-01 PC **A02**/MF **A01**

Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC **A02**/MF **A01**

**BENGTSON, D.**
Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC **A03**/MF **A01**

**BENGTSON, D. A.**
Characterization of Reference Artemia III for Marine Toxicological Studies.
PB93-212595/REB 93-04 PC **A03**/MF **A01**

Effects of Food Density on Growth and on Patterns of Prey Depletion by Larval Silverside Fish, 'Menidia beryllina' (Cope): A Laboratory Investigation with Image Analysis.
PB93-212587/REB 93-04 PC **A03**/MF **A01**

**BENIGNUS, V. A.**
Importance of Experimenter-Blind Procedure in Neurotoxicology (Mini-Review).
PB93-175628/REB 93-01 PC **A02**/MF **A01**

Olfactory Evoked Responses to Odorous Stimuli of Different Intensities.
PB93-141315/REB 93-01 PC **A02**/MF **A01**

**BENJAMIN, M. M.**
Emerging Technology Report: Metals Treatment at Superfund Sites by Absorptive Filtration.
PB93-231165/REB 93-04 PC **A04**/MF **A01**

**BENJEY, W. G.**
Agricultural Pesticide Emissions Associated with Common Crops in the United States.
PB93-173136/REB 93-01 PC **A03**/MF **A01**

Geographical Distribution and Source Type Analysis of Toxic Metal Emissions.
PB93-121036/REB 93-01 PC **A02**/MF **A01**

**BENNETT, R. S.**
Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC **A02**/MF **A01**

**BENNETT, W. D.**
Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC **A02**/MF **A01**

Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-228864/REB 93-04 PC **A02**/MF **A01**

**BENOIT, D. A.**
Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.
PB93-222362/REB 93-04 PC **A03**/MF **A01**

**BENSON, D. L.**
Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
PB93-207561/REB 93-04 PC **A03**/MF **A01**

**BENTLEY, R.**
Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC **A02**/MF **A01**

# PERSONAL AUTHOR INDEX


**BENZ, M. A.**
Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
PB93-185759/REB 93-01 PC **A03**/MF **A01**

**BERGEN, B. J.**
Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02**/MF **A01**

**BERGGREN, H.**
Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC **A03**/MF **A01**

**BERGIN, J.**
Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

**BERGSTROEM, J.**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
DE93500877/REB 93-04 PC **A04**/MF **A01**

**BERKLEY, R.**
Evaluation of Commercially-Available Portable Gas Chromatographs.
PB93-121051/REB 93-01 PC **A02**/MF **A01**

**BERKLEY, R. E.**
Development and Evaluation of a Transportable Fast Gas Chromatograph for the Monitoring of Organic Vapors in Air.
PB93-228526/REB 93-04 PC **A02**/MF **A01**

Evaluation of Portable Gas Chromatographs.
PB93-168813/REB 93-01 PC **A03**/MF **A01**

Field-Deployable Monitors for Volatile Organic Compounds in Air. (Essential Capabilities of a Portable Gas Chromatograph).
PB93-185700/REB 93-01 PC **A03**/MF **A01**

**BERMAN, D.**
Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC **A03**/MF **A01**

**BERMAN, E.**
Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02**/MF **A01**

Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC **A03**/MF **A01**

Steroidogenic Assessment Using Ovary Culture in Cycling Rats: Effects of Bis(2-Diethylhexyl) Phthalate on Ovarian Steroid Production.
PB93-181022/REB 93-01 PC **A03**/MF **A01**

**BERNARD, D.**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

**BERNDTSON, W. E.**
Developing Improved Strategies to Determine Male Reproductive Risk from Environmental Toxins.
PB93-167286/REB 93-01 PC **A03**/MF **A01**

**BERNERGAARD, L.**
Aatgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC **A14**/MF **A03**

**BERRY, J. C.**
Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC **A02**/MF **A01**

**BERTRAM, P. E.**
Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1965. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

**BEYER, C. R.**
Analysis of Original Equipment and Aftermarket Manufacturer Oxygen Sensor Constructional, Functional, and Price Differences.
PB93-208007/REB 93-04 PC **A18**/MF **A04**

**BEYER, L.**
Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

**BEYER, P. E.**
In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with In vivo Data.
PB93-107167/REB 93-01 PC **A03**/MF **A01**

**BEYERLEIN, A.**
Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
PB93-173102/REB 93-01 PC **A03**/MF **A01**

**BICKERS, C. A.**
Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

**BICKHAM, J.**
DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03**/MF **A01**

**BIERMAN, V. J.**
Transport of Low-Level Radioactive Soil at Deep-Ocean Disposal Site.
PB93-199487/REB 93-01 PC **A03**/MF **A01**

**BIGGS, R. K.**
Cost of Remedial Actions (CORA) Model: Overview and Applications.
PB93-963318/REB 93-04 PC **A03**/MF **A01**

**BINKOWSKI, F. S.**
Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03**/MF **A01**

Tagged Species Engineering Model (TSEM).
PB93-229417/REB 93-04 PC **A03**/MF **A01**

**BIRKES, D. S.**
Comparing Sampling Designs for Monitoring Ecological Status and Trends: Impact of Temporal Patterns (Chapter 3).
PB93-222289/REB 93-04 PC **A03**/MF **A01**

**BIRNBAUM, L. S.**
Age-Related Changes in Disposition and Metabolism of Benzene in Male C57BL/6N Mice.
PB93-107191/REB 93-01 PC **A02**/MF **A01**

Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC **A02**/MF **A01**

EPA's Reassessment of Dioxin Risk: Directed Health Research.
PB93-228922/REB 93-04 PC **A02**/MF **A01**

Maturational Changes in Dermal Absorption of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Fischer 344 Rats.
PB93-229490/REB 93-04 PC **A02**/MF **A01**

Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03**/MF **A01**

**BISHOP, J. B.**
Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03**/MF **A01**

**BISSONETTE, E. M.**
Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC **A10**/MF **A03**

**BISWAS, P.**
Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
PB93-121127/REB 93-01 PC **A03**/MF **A01**

**BLACKLEY, C.**
Locating and Estimating Air Emissions from Sources of Methylene Chloride.
PB93-207579/REB 93-04 PC **A10**/MF **A03**

**BLACKLEY, C. R.**
Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC **A13**/MF **A03**

**BLACKMAN, C. F.**
Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.
PB93-236305/REB 93-04 PC **A03**/MF **A01**

Evidence for Direct Effect of Magnetic Fields on Neurite Outgrowth.
PB93-236669/REB 93-04 PC **A02**/MF **A01**

**BLAHA, F. A.**
Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.
PB93-221968/REB 93-04 PC **A02**/MF **A01**

**BLANCATO, J. N.**
Decision Model for Biomarkers of Exposure.
PB93-106995/REB 93-01 PC **A03**/MF **A01**

**BLANEY, B. L.**
Program for Providing Engineering Technical Assistance to Site Remediation Managers.
PB93-185809/REB 93-01 PC **A02**/MF **A01**

**BLEDSOE, B. E.**
Behavior of Metals in Soils.
PB93-131480/REB 93-01 PC **A03**/MF **A01**

**BLEWITT, D. N.**
Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Air Quality Data. Volume 2.
PB92-228600/REB 93-04 PC **A16**/MF **A03**

**BLICK, D. J.**
Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03**/MF **A01**

**BOCKOL, G.**
Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC **A07**/MF **A02**

**BOERSMA, L.**
Mathematical Model of Plant Uptake and Translocation of Organic Chemicals: Development of the Model.
PB93-106938/REB 93-01 PC **A02**/MF **A01**

Mathematical Model of Plant Uptake and Translocations of Organic Chemicals: Application to Experiments.
PB93-106946/REB 93-01 PC **A03**/MF **A01**

**BOGUSKI, T. L.**
Life-Cycle Assessment: Inventory Guidelines and Principles.
PB93-139681/REB 93-01 PC **A07**/MF **A02**

**BOKUNIEWICZ, H.**
Measurement of Sediment Resuspension Rates in Long Island Sound.
PB93-222115/REB 93-04 PC **A01**/MF **A01**

**BONAPARTE, R.**
LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC **A05**/MF **A01**

**BOND, A.**
NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC **A02**/MF **A01**

**BOND, A. E.**
Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.
PB93-212306/REB 93-04 PC **A02**/MF **A01**

**BONFIL, D.**
Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
PB93-179950/REB 93-01 PC **A03**/MF **A01**

**BONNER, J. S.**
Transport of Low-Level Radioactive Soil at Deep-Ocean Disposal Site.
PB93-199487/REB 93-01 PC **A03**/MF **A01**

**BONOMELLI, S.**
Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC **A03**/MF **A01**

Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02**/MF **A01**

**BOPP, L. H.**
Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC **A03**/MF **A01**

Genetic and Cell-Free Studies of PCB Biodegradation in 'Pseudomonas putida' LB400.
PB93-229748/REB 93-04 PC **A03**/MF **A01**

**BORCHERS, H.**
Use of Expert System in a Water Utility.
PB93-123081/REB 93-01 PC **A04**/MF **A01**

**BORGWARDT, R. H.**
Coprocessing of Fossil Fuels and Biomass for CO2 Emission Reduction in the Transportation Sector.
PB93-194165/REB 93-01 PC **A02**/MF **A01**

Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.
PB93-229144/REB 93-04 PC **A03**/MF **A01**

Technology for Reduction of CO2 Emissions from the Transportation Sector.
PB93-106987/REB 93-01 PC **A02**/MF **A01**

**BORIO, R.**
Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC **A03**/MF **A01**

**BORTONE, S. A.**
Effects of Kraft Mill Effluent on the Sexuality of Fishes: An Environmental Early Warning.
PB93-168847/REB 93-01 PC **A03**/MF **A01**

**BOSTIAN, H. E.**
Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC **A03**/MF **A01**

Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC **A03**/MF **A01**

What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC **A03**/MF **A01**

**BOULDING, R.**
Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC **A08**/MF **A02**

Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC **A07**/MF **A02**

**BOUSQUET, R.**
Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

**BOWEN, R. D.**
Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02**/MF **A01**

**BOWERS, R.**
Compliance Data System Quality Assurance Manual, June 1984.
PB93-199339/REB 93-01 PC **A10**/MF **A03**

**BOWLES, F. P.**
Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
PB93-222776/REB 93-04 PC **A02**/MF **A01**

**BOWMAN, D.**
Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC **A05**/MF **A01**

Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
PB93-135663/REB 93-01 PC **A07**/MF **A02**

**BOYES, W. K.**
Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC **A03**/MF **A01**

Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.
PB93-228948/REB 93-04 PC **A03**/MF **A01**

Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC **A03**/MF **A01**

**BOYNTON, W.**
Framework for Characterization. (Revised Final Report March 1992).
PB93-191237/REB 93-01 PC **A04**/MF **A01**

**BOZEK, J. W.**
Formation and Control of Combustion Pollutants from Gasoline-Fueled Spark-Ignition Motor Vehicle Engines. (Revised November 1992).
PB93-141042/REB 93-01 PC **A04**/MF **A01**

**BRAAKENHIELM, S.**
Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC **A04**/MF **A01**

**BRACKETT, K. A.**
Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.
PB93-218501/REB 93-04 PC **A07**/MF **A02**

Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC **A02**/MF **A01**

Comparison of the Efficiency of Polycarbonate and Mixed Cellulose Ester Filters for Use in the Filtration of Water Samples.
PB93-194363/REB 93-01 PC **A02**/MF **A01**

EPA Bibliography on Surface Contamination.
PB93-168904/REB 93-01 PC **A02**/MF **A01**

Evaluation of Three Cleaning Methods for Removing Asbestos from Carpet: Determination of Airborne Asbestos Concentrations Associated with Each Method.
PB93-218568/REB 93-04 PC **A05**/MF **A01**

Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC **A02**/MF **A01**

Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
PB93-131761/REB 93-01 PC **A02**/MF **A01**

**BRADBU, K. R.**
Delineation of Wellhead Protection Areas in Fractured Rocks.
PB93-115822/REB 93-01 PC **A08**/MF **A02**

**BRADBURY, S.**
Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC **A04**/MF **A01**

**BRADBURY, S. P.**
Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202828/REB 93-01 PC **A08**/MF **A02**

**BRAND, J. M.**
Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
PB93-229474/REB 93-04 PC **A02**/MF **A01**

**BRANDE, R.**
EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02**/MF **A01**

**BRANDES, R.**
Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.
PB93-184620/REB 93-01 PC **A03**/MF **A01**

**BRANDRIFF, B. F.**
Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence In situ Hybridization.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

**BRANDT, J.**
Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC **A12**/MF **A03**

**BRAUNAGEL, S. C.**
Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
PB93-168946/REB 93-01 PC **A02**

**BRECKENRIDGE, B.**
Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13**/MF **A03**

**BRECKENRIDGE, R. P.**
Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC **A12**/MF **A03**

**BRENNAN, M. J.**
Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC **A03**/MF **A01**

**BRENNER, R. C.**
In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03**/MF **A01**

**BREZONIK, P. L.**
Recent Sulfur Enrichment in the Sediments of Little Rock Lake, Wisconsin.
PB93-135721/REB 93-01 PC **A03**/MF **A01**

**BRIDGES, C.**
Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC **A02**/MF **A01**

**BRIDGES, J. S.**
Planning and Progress of EPA's Pollution Prevention Research Program.
PB93-185767/REB 93-01 PC **A02**/MF **A01**

**BRIGGS, G. A.**
Final Results of the Condors Convective Diffusion Experiment.
PB93-212728/REB 93-04 PC **A03**/MF **A01**

Stagnation Diffusion Observed in a Deeply Pooling Valley during STAGMAP.
PB93-120897/REB 93-01 PC **A02**/MF **A01**

**BRIMIJOIN, S.**
Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

**BRIMIJOIN, W. S.**
Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02**/MF **A01**

**BRNA, T. G.**
Dry Flue Gas Cleaning Processes for Achieving Air Pollutant Emissions Requirements.
PB93-131605/REB 93-01 PC **A03**/MF **A01**

Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC **A02**/MF **A01**

**BROCK, B.**
Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC **A02**/MF **A01**

**BROCK, B. J.**
Biodegradation of Crystal Violet by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191609/REB 93-01 PC **A02**/MF **A01**

**BROCKAMP, D. W.**
Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

**BRODOWICZ, P.**
Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC **A24**/MF **A04**

**BROMBERG, P. A.**
Predictors of Individual Differences in Acute Response to Ozone Exposure.
PB93-228849/REB 93-04 PC **A02**/MF **A01**

**BROOKS, G.**
Locating and Estimating Air Emissions from Sources of Methylene Chloride.
PB93-207579/REB 93-04 PC **A10**/MF **A03**

**BROOKS, J. M.**
Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16**/MF **A03**

**BROOKS, L. T.**
Ambient Aquatic Life Water Quality Criteria for Di-2-Ethylhexyl Phthalate.
PB93-202752/REB 93-01 PC **A03**/MF **A01**

**BROOME, S. W.**
Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC **A03**/MF **A01**

**BROWER, M. E.**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

**BROWN, B. G.**
Methods for Analyzing Extreme Events Under Climate Change.
PB93-146827/REB 93-01 PC **A03**/MF **A01**

**BROWN, D. S.**
Constructed Wetland Design: the First Generation.
PB93-131753/REB 93-01 PC **A02**/MF **A01**

**BROWN, E. J.**
UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

**BROWN, E. L.**
Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
PB93-229607/REB 93-04 PC **A02**/MF **A01**

**BROWN, M. J.**
Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03**/MF **A01**

**BROWN, P. M.**
Foam Scrubbing (Chapter 9).
PB93-236560/REB 93-04 PC **A03**/MF **A01**

**BROWN, R.**
In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC **A12**/MF **A03**

**BROWNING, R.**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC **A08**/MF **A02**

**BROWNLEE, J. A.**
Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
PB93-227551/REB 93-04 PC **A06**/MF **A02**

Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.
PB93-218501/REB 93-04 PC **A07**/MF **A02**

Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC **A03**/MF **A01**

**BRUCE, K. R.**
Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC **A02**/MF **A01**

**BRUCKNER, J. V.**
Distribution of Cardiac Output during Diurnal Changes of Activity in Rats.
PB93-180982/REB 93-01 PC **A02**/MF **A01**

Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-180990/REB 93-01 PC **A03**/MF **A01**

**BRUETSCH, R. I.**
Cold Starting an Alcohol-Fueled Engine with Ultrasonic Fuel Atomization.
PB93-206597/REB 93-04 PC **A03**/MF **A01**

Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.
PB93-216869/REB 93-04 PC **A03**/MF **A01**

**BRUGGER, J. E.**
Foam Scrubbing (Chapter 9).
PB93-236560/REB 93-04 PC **A03**/MF **A01**

**BRUSICK, D.**
Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC **A02**/MF **A01**

**BRUSICK, D. J.**
Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.
PB93-236362/REB 93-04 PC **A04**/MF **A01**

**BRYANT, M. F.**
Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03**/MF **A01**

**BUCHANAN, J. B.**
Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC **A06**/MF **A02**

**BUCKALEW, A. R.**
Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC **A01**/MF **A01**

**BUCKHOLZ, P. S.**
Pathogenicity of 'Salmonella pullorum' in Northern Bobwhite Quail and Mallard Ducks.
PB93-135739/REB 93-01 PC **A03**/MF **A01**

# PERSONAL AUTHOR INDEX


**BUCKLEY, T. J.**
Assessing Potential Exposures from Routine Use of VOC-Contaminated Groundwater.
PB93-173060/REB 93-01 PC **A02**/MF **A01**

Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02**/MF **A01**

Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC **A02**/MF **A01**

**BUDD, W. T.**
Chemical Contaminants in House Dust: Occurrences and Sources.
PB93-228542/REB 93-04 PC **A02**/MF **A01**

**BUDDE, W. L.**
Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

**BUELL, C. R.**
Genetic Analysis of the aggA Locus Involved in Agglutination and Adherence of 'Pseudomonas putida', a Beneficial Fluorescent Pseudomonad.
PB93-205029/REB 93-04 PC **A03**/MF **A01**

**BUFALINI, J. J.**
Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC **A03**/MF **A01**

**BULL, R. J.**
Decision Model for Biomarkers of Exposure.
PB93-106995/REB 93-01 PC **A03**/MF **A01**

Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
PB93-229565/REB 93-04 PC **A02**/MF **A01**

Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-226930/REB 93-04 PC **A02**/MF **A01**

**BUMPUS, J. A.**
Biodegradation of Chlorinated Organic Compounds by 'Phanerochaete chrysosporium', a Wood-Rotting Fungus.
PB93-204147/REB 93-01 PC **A03**/MF **A01**

Biodegradation of Crystal Violet by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191609/REB 93-01 PC **A02**/MF **A01**

Biodegradation of DDT (1,1,1-Trichloro-2,2-Bis(4-Chlorophenyl)Ethane) by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191617/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191351/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium': Involvement of the Lignin Degrading System.
PB93-191583/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191559/REB 93-01 PC **A02**/MF **A01**

Biodegradation of Polycyclic Aromatic Hydrocarbons by 'Phanerochaete chrysosporium'.
PB93-191591/REB 93-01 PC **A02**/MF **A01**

Biodegradation of 2,4,5-Trichlorophenoxyacetic Acid in Liquid Culture and in Soil by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191542/REB 93-01 PC **A02**/MF **A01**

Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC **A02**/MF **A01**

Effects of Culture Parameters on DDT (1,1,1-Trichloro-2,2-BIS(4-Chlorophenyl)Ethane) Biodegradation by 'Phanerochaete chrysosporium'.
PB93-191567/REB 93-01 PC **A03**/MF **A01**

Mineralization of Recalcitrant Environmental Pollutants by a White Rot Fungus. Proceedings of the National Conference on Hazardous Wastes and Hazardous Materials. Held in Washington, DC. on March 16-18, 1987.
PB93-204154/REB 93-01 PC **A02**/MF **A01**

Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
PB93-191575/REB 93-01 PC **A02**/MF **A01**

**BUNDICK, C. M.**
Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC **A03**/MF **A01**

**BURGESON, C.**
Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC **A06**/MF **A02**

**BURGESS, C. B.**
Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC **A03**/MF **A01**

**BURGESS, R.**
Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

**BURGESS, R. M.**
Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03**/MF **A01**

Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).
PB93-221836/REB 93-04 PC **A03**/MF **A01**

Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC **A03**/MF **A01**

**BURKE, R. A.**
Global Flux of Methane from Shallow Submarine Sediments.
PB93-222388/REB 93-04 PC **A03**/MF **A01**

Possible Influence of Hydrogen Concentration on Microbial Methane Stable Hydrogen Isotopic Composition.
PB93-205128/REB 93-04 PC **A03**/MF **A01**

**BURKLIN, C. E.**
Inventory of Methane Losses from the Natural Gas Industry.
PB93-131720/REB 93-01 PC **A03**/MF **A01**

**BURLEY, S. M. A.**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 1.
PB93-174761/REB 93-01 PC **A24**/MF **A04**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 2.
PB93-174779/REB 93-01 PC **A25**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
PB93-174787/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 2.
PB93-174795/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 1.
PB93-174803/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 2.
PB93-174811/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 4.
PB93-174829/REB 93-01 PC **A13**/MF **A03**

**BURNETTE, L.**
V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

**BURNS, A. J.**
Lake Water Quality Assessment Program: Southern Illinois Lakes.
PB93-215929/REB 93-04 PC **A03**/MF **A01**

Volunteer Lake Monitoring Program, 1991. Volume 5. East-Central Illinois Region.
PB93-102234/REB 93-01 PC **A04**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 1: Statewide Summary.
PB93-216927/REB 93-04 PC **A06**/MF **A02**

Volunteer Lake Monitoring Program, 1992. Volume 2: Northwestern Illinois Region.
PB93-217214/REB 93-04 PC **A04**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 4. West Central Illinois Region.
PB93-219111/REB 93-04 PC **A04**/MF **A01**

Volunteer Lake Monitoring Program, 1992. Volume 5. East-Central Illinois Region.
PB93-223162/REB 93-04 PC **A05**/MF **A01**

**BURNS, D. J.**
CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 2. Performance Characteristics.
PB93-107084/REB 93-01 PC **A03**/MF **A01**

**BURNS, L. A.**
Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC **A03**/MF **A01**

**BURSEY, J. T.**
Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC **A03**/MF **A01**

Field Test of a Generic Method for Halogenated Hydrocarbons.
PB93-212181/REB 93-04 PC **A13**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
PB93-227163/REB 93-04 PC **A11**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
PB93-227171/REB 93-04 PC **A12**/MF **A03**

Replacement of Charcoal Sorbent in the VOST.
PB93-221893/REB 93-04 PC **A03**/MF **A01**

Using Method 301 to Validate Sampling and Analytical Methods for Selected CAAA Compounds.
PB93-191419/REB 93-01 PC **A03**/MF **A01**

**BURTON, R.**
Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03**/MF **A01**

**BURTON, R. M.**
Comparison of Aerosol Acidity in Urban and Semi-Rural Environments.
PB93-131712/REB 93-01 PC **A03**/MF **A01**

**BUSCHBOM, R.**
Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03**/MF **A01**

**BUSH, D.**
Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC **A03**/MF **A01**

**BUSHNELL, P. J.**
Effects of Dopaminergic Drugs on Working and Reference Memory in Rats.
PB93-236412/REB 93-04 PC **A03**/MF **A01**

**BUZUN, J.**
Locating and Estimating Air Emissions from Sources of Methylene Chloride.
PB93-207579/REB 93-04 PC **A10**/MF **A03**

**BYERS, G. E.**
Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC **A12**/MF **A03**

**BYERS, S.**
Carbon Monoxide Exposure of Subjects with Documented Cardiac Arrhythmias.
PB93-179843/REB 93-01 PC **A03**/MF **A01**

**BYLSTONE, P. G.**
Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.
PB93-205383/REB 93-04 PC **A03**/MF **A01**

**BYRD, J. J.**
Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
PB93-121176/REB 93-01 PC **A02**/MF **A01**

Long-Term Survival and Plasmid Maintenance of 'Escherichia coli' in Marine Microcosms.
PB93-236230/REB 93-04 PC **A02**/MF **A01**

**BYUN, D. W.**
Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03**/MF **A01**

**CABASSO, I.**
Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC **A02**/MF **A01**

**CAIN, K. T.**
Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03**/MF **A01**

**CAIRNS, M. A.**
Biodiversity and Management of Natural Resources: The Issues.
PB93-106912/REB 93-01 PC **A01**/MF **A01**

**CAIRNS, S.**
Data Management Strategy for the Tampa Bay National Estuary Program: Recommendations and Implementation Plan.
PB93-191633/REB 93-01 PC **A09**/MF **A03**

Database of Benthic Sampling Locations in Tampa Bay.
PB93-191211/REB 93-01 PC **A05**/MF **A01**

Distribution of Selected Fish Species in Tampa Bay.
PB93-191229/REB 93-01 PC **A04**/MF **A01**

**CALAMBOKIDIS, J.**
Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC **A06**/MF **A02**

**CALLAHAN, P. J.**
Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02**/MF **A01**

**CAMANN, D. E.**
Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
PB93-229151/REB 93-04 PC **A03**/MF **A01**

Pilot Study to Evaluate Methods for the Assessment of Exposure of Small Children to Pesticides in the Residential Environment.
PB93-119899/REB 93-01 PC **A03**/MF **A01**

**CAMERON, A. M.**
Repeated Maternal Separation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC **A03**/MF **A01**

**CAMPBELL, C. L.**
Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC **A12**/MF **A03**

**CAMPBELL, D.**
Locating and Estimating Air Emissions from Sources of Styrene.
PB93-207520/REB 93-04 PC **A08**/MF **A02**

**CAMPBELL, J. A.**
Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03**/MF **A01**

**CAMPBELL, L. M.**
Inventory of Methane Losses from the Natural Gas Industry.
PB93-131720/REB 93-01 PC **A03**/MF **A01**

Methane Emissions from the Natural Gas Industry.
PB93-212421/REB 93-04 PC **A03**/MF **A01**

**CAMPBELL, M. V.**
Inventory of Methane Losses from the Natural Gas Industry.
PB93-131720/REB 93-01 PC **A03**/MF **A01**

**CAMPBELL, R. P.**
Use of a Novel Plasmid to Monitor the Fate of a Genetically Engineered 'Pseudomonas putida' Strain.
PB93-169001/REB 93-01 PC **A02**/MF **A01**

**CANO, B. T.**
Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC **A04**/MF **A01**

**CANZIANI, G. A.**
Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.
PB93-222404/REB 93-04 PC **A02**/MF **A01**

**CAO, S.**
Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC **A03**/MF **A01**

Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.
PB93-231835/REB 93-04 PC **A02**/MF **A01**

**CAPONE, R. L.**
Using a Neural Network to Estimate Solvent Consumption.
PB93-173110/REB 93-01 PC **A02**/MF **A01**

**CAPONE, V.**
Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02**/MF **A01**

**CARDON, M. C.**
Rapid Efficient Production of Baculovirus Expression Vectors.
PB93-228898/REB 93-04 PC **A03**/MF **A01**

**CAREY, D. A.**
Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
PB93-229706/REB 93-04 PC **A02**/MF **A01**

**CAREY, P.**
Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC **A24**/MF **A04**

**CARLINE, R. F.**
Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC **A04**/MF **A01**

**CARLSON, A. R.**
Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

**CARLSON, G. M.**
Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93-148252/REB 93-01 PC **A08**/MF **A02**

**CARLSON, P.**
Feasibility of Including Fugitive PM-10 Emissions Estimates in the EPA Emissions Trends Report.
PB93-169084/REB 93-01 PC **A03**/MF **A01**

**CARR, R. S.**
Ambient Aquatic Life Water Quality Criteria for Antimony (III).
PB93-202778/REB 93-01 PC **A03**/MF **A01**

Ambient Aquatic Life Water Quality Criteria for Di-2-Ethylhexyl Phthalate.
PB93-202752/REB 93-01 PC **A03**/MF **A01**

**CARROLL, G. J.**
Pilot-Scale Evlauation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02**/MF **A01**

**CARROLL, L. W.**
Carbon Monoxide Exposure of Subjects with Documented Cardiac Arrhythmias.
PB93-179943/REB 93-01 PC **A03**/MF **A01**

**CARSEL, R. F.**
PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
PB93-174027/REB 93-01 PC **A17**/MF **A04**

**CARSON, D. A.**
Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC **A03**/MF **A01**

**CARTER, C.**
Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
PB93-105534/REB 93-01 PC **A04**/MF **A01**

**CARTER, W. P. L.**
Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

**CARTWRIGHT, K.**
Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC **A02**/MF **A01**

**CARVITTI, J.**
Clinton, New Jersey, Radon Mitigation Follow-Up and Long-Term Monitoring. Project Summary.
PB93-222594/REB 93-04 PC **A02**/MF **A01**

**CASEY, D. A.**
Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02**/MF **A01**

**CASTALDINI, C.**
Evaluation and Costing of NOx Controls for Existing Utility Boilers in the NESCAUM Region.
PB93-142016/REB 93-01 PC **A18**/MF **A04**

**CAUSLEY, M.**
User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC **A99**/MF **A06**

**CAVALLO, A.**
Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

**CELESTIAL, D. M.**
Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02**/MF **A01**

**CELIA, M. A.**
Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3, Hydraulic Conductivity Variability and Calculated Macrodispersivities.
PB93-107050/REB 93-01 PC **A03**/MF **A01**

**CENTIFONTI, G. J.**
Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
PB93-227551/REB 93-04 PC **A06**/MF **A02**

**CHADHA, A.**
Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC **A03**/MF **A01**

**CHADWICK, R. W.**
Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03**/MF **A01**

**CHAI, P.**
Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC **A20**/MF **A04**

**CHAITMAN, B. R.**
Carbon Monoxide Exposure of Subjects with Documented Cardiac Arrhythmias.
PB93-179943/REB 93-01 PC **A03**/MF **A01**

**CHAKRABARTY, A. M.**
Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
PB93-204972/REB 93-04 PC **A03**/MF **A01**

Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC **A02**/MF **A01**

Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC **A03**/MF **A01**

Repeated Sequences Including RS1100 'Pseudomonas cepacia' AC1100 Function as IS Elements.
PB93-205177/REB 93-04 PC **A02**/MF **A01**

**CHALOUD, D. J.**
Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-228500/REB 93-04 PC **A02**/MF **A01**

**CHAMP, M. A.**
Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC **A02**/MF **A01**

**CHANG, J.**
Evaluation of Commercially-Available Portable Gas Chromatographs.
PB93-121051/REB 93-01 PC **A02**/MF **A01**

**CHANG, J. C.**
Evaluation of Portable Gas Chromatographs.
PB93-168813/REB 93-01 PC **A03**/MF **A01**

**CHANG, J. C. S.**
Characterization of Organic Emission from a Wood Finishing Product-Wood Stain.
PB93-150100/REB 93-01 PC **A02**/MF **A01**

Evaluation of FGD Dry Injection Sorbents and Additives. Volume 1. Development of High Reactivity Sorbents. Project Summary.
PB93-228484/REB 93-04 PC **A02**/MF **A01**

Evaluation of Para-Dichlorobenzene Emissions from Solid Moth Repellant as a Source of Indoor Air Pollution.
PB93-107035/REB 93-01 PC **A02**/MF **A01**

Modeling of the Fast Organic Emissions from a Wood-Finishing Product: Floor Wax.
PB93-107027/REB 93-01 PC **A02**/MF **A01**

Sorption and Reemission of Formaldehyde by Gypsum Wallboard.
PB93-180917/REB 93-01 PC **A03**/MF **A01**

**CHANG, J. R.**
Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
PB93-131845/REB 93-01 PC **A03**/MF **A01**

**CHANG, J. S.**
Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.
PB93-212686/REB 93-04 PC **A03**/MF **A01**

Tagged Species Engineering Model (TSEM).
PB93-229417/REB 93-04 PC **A03**/MF **A01**

**CHANG, L. W.**
Analysis of DNA Strand Breaks Induced in Rodent Liver In vivo, Hepatocytes in Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC **A03**/MF **A01**

Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03**/MF **A01**

**CHAPMAN, G. A.**
Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-196988/REB 93-01 PC **A03**/MF **A01**

**CHAPMAN, P. J.**
Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC **A03**/MF **A01**

**CHAPMAN, W. F.**
Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-228864/REB 93-04 PC **A02**/MF **A01**

**CHAPPELL, P. J.**
Using a Neural Network to Estimate Solvent Consumption.
PB93-173110/REB 93-01 PC **A02**/MF **A01**

**CHASKI, H. C.**
Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93-148252/REB 93-01 PC **A08**/MF **A02**

**CHAU, N.**
Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203693/REB 93-04 PC **A07**/MF **A02**

**CHEHASKE, J. T.**
Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC **A03**/MF **A01**

**CHEN, A. S. C.**
Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC **A04**/MF **A01**

**CHEN, C.**
Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC **A03**/MF **A01**

Isolation of the Alkane Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis'.
PB93-229284/REB 93-04 PC **A02**/MF **A01**

Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC **A02**/MF **A01**

Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
PB93-229441/REB 93-04 PC **A03**/MF **A01**

Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.
PB93-222081/REB 93-04 PC **A03**/MF **A01**

**CHEN, C. T.**
Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC **A03**/MF **A01**

**CHEN, C. W.**
Armitage-Doll Two-Stage Model: Implications and Extension.
PB93-222842/REB 93-04 PC A02/MF A01

**CHEN, T. D.**
Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
PB93-141257/REB 93-01 PC A02/MF A01

**CHEN, Y. D.**
Role and Design of Water Quality Monitoring on Forested Watersheds.
PB93-222248/REB 93-04 PC A02/MF A01

**CHEN, Y. L.**
Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC A03/MF A01

**CHERNOFF, N.**
Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC A03/MF A01

Review of the Literature on Potential Reproductive and Developmental Toxicity of Electric and Magnetic Fields.
PB93-141307/REB 93-01 PC A03/MF A01

Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC A03/MF A01

**CHING, J. K. S.**
Interpretive Analysis of Observed and Modeled Mesoscale Ozone Photochemistry in Areas with Numerous Point Sources.
PB93-212702/REB 93-04 PC A03/MF A01

**CHISHOLM, S. W.**
What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.
PB93-211985/REB 93-04 PC A21/MF A04

**CHO, J. S.**
Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC A02/MF A01

**CHRISTENSEN, D.**
Contingency Analysis Modeling for Superfund Sites and Other Sources.
PB93-169126/REB 93-01 PC A13/MF A03

**CHUANG, J.**
Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC A03/MF A01

Chemical Contaminants in House Dust: Occurrences and Sources.
PB93-228542/REB 93-04 PC A02/MF A01

**CHUANG, J. C.**
Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.
PB93-231835/REB 93-04 PC A02/MF A01

Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC A02/MF A01

Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC A02/MF A01

**CHURCH, M. R.**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC A14/MF A03

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC A14/MF A03

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC A16/MF A04

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC A14/MF A03

**CHUYKO, G. M.**
Cholinesterases of Aquatic Animals.
PB93-236222/REB 93-04 PC A03/MF A01

**CIBULSKIS, R.**
Field Applications of Robotic Systems in Hazardous Environments, p1-29 1993. See also PB86-176344 and PB92-166743.
PB93-229755/REB 93-04 PC A03/MF A01

**CIFUENTES, L. A.**
Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.
PB93-234490/REB 93-04 PC A03/MF A01

**CIMORELLI, A.**
Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC A06/MF A02

**CINALLI, C.**
Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
PB93-105534/REB 93-01 PC A04/MF A01

**CLARK, A.**
Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
PB93-105534/REB 93-01 PC A04/MF A01

**CLARK, D. A.**
Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-228575/REB 93-04 PC A03/MF A01

**CLARK, P.**
Framework for Characterization. (Revised Final Report March 1992).
PB93-191237/REB 93-01 PC A04/MF A01

**CLARK, P. J.**
Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC A02/MF A01

Comparison of the Efficiency of Polycarbonate and Mixed Cellulose Ester Filters for Use in the Filtration of Water Samples.
PB93-194363/REB 93-01 PC A02/MF A01

EPA Bibliography on Surface Contamination.
PB93-168904/REB 93-01 PC A02/MF A01

Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC A02/MF A01

Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC A02/MF A01

Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
PB93-131761/REB 93-01 PC A02/MF A01

**CLARK, R. M.**
Comparing the Accuracy of Equation Formats for Modeling Microbial Population Decay Rates.
PB93-131548/REB 93-01 PC A03/MF A01

Effect of the Distribution System on Drinking-Water Quality.
PB93-173722/REB 93-01 PC A03/MF A01

Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222683/REB 93-04 PC A01/MF A01

Modeling Contaminant Propagation in Drinking-Water Distribution Systems.
PB93-205136/REB 93-04 PC A03/MF A01

**CLARK, T. L.**
Atmospheric Deposition of Toxic Metals to Lake Michigan: Preliminary Annual Model Calculations.
PB93-120954/REB 93-01 PC E02/MF A01

Model Calculations of the Annual Atmospheric Deposition of Toxic Metals to Lake Michigan.
PB93-120905/REB 93-01 PC A03/MF A01

**CLARKE, J. F.**
Dry Deposition Flux Calculations for the National Dry Deposition Network.
PB93-178242/REB 93-01 PC A05/MF A02

**CLAXTON, L. D.**
Competition Potentials of Environmentally Applied Bacteria with Human Fecal Microbiota.
PB93-181147/REB 93-01 PC A02/MF A01

Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC A03/MF A01

Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141206/REB 93-01 PC A03/MF A01

Genotoxicity of 2,4,5-Trichlorophenoxyacetic Acid Biodegradation Products in the 'Salmonella' Reversion and Lambda Prophage-Induction Bioassays.
PB93-107175/REB 93-01 PC A02/MF A01

Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC A02/MF A01

**CLAYTON, J. B.**
Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203683/REB 93-04 PC A07/MF A02

**CLAYTON, J. R.**
Chemical Shoreline Cleaning Agents for Oil Spills: Update State-of-the-Art on Mechanisms of Action and Factors Influencing Performance.
PB93-203701/REB 93-04 PC A04/MF A01

Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.
PB93-236578/REB 93-04 PC A04/MF A01

**CLEGG, E. D.**
Developing Improved Strategies to Determine Male Reproductive Risk from Environmental Toxins.
PB93-167286/REB 93-01 PC A03/MF A01

**CLIFTON, R. A.**
Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.
PB93-222628/REB 93-04 PC A01/MF A01

**CLOTHIER, J. M.**
NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC A02/MF A01

**COATS, C. J.**
Stochastic Methodology for Regional Wind-Field Modeling.
PB93-229391/REB 93-04 PC A03/MF A01

**COBB, J. S.**
Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC A03/MF A01

**COCO, W. M.**
Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC A03/MF A01

Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC A03/MF A01

**COFER, W. R.**
Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC A03/MF A01

**COFFEY, D.**
Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC A08/MF A02

**COFFIN, R. B.**
Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.
PB93-234490/REB 93-04 PC A03/MF A01

Microbial Trophic Interactions in Aquatic Microcosms Designed for Testing Genetically Engineered Microorganisms: A Field Comparison.
PB93-236248/REB 93-04 PC A03/MF A01

**COGLIANO, V. J.**
Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC A04/MF A01

**COHEN, R. M.**
DNAPL Site Evaluation.
PB93-150217/REB 93-01 PC A16/MF A03

**COKER, G.**
Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells.
PB93-115697/REB 93-01 PC A04/MF A01

**COKER, R. N.**
Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC A04/MF A01

Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC A07/MF A02

**COLE, C. A.**
Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC A04/MF A01

**COLE, E.**
Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
PB93-222024/REB 93-04 PC A02/MF A01

Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC A03/MF A01

**COLE, F. A.**
Taxonomic Level Sufficient for Assessing a Moderate Impact on Macrobenthic Communities in Puget Sound, Washington, USA.
PB93-185858/REB 93-01 PC A02/MF A01

Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC A03/MF A01

**COLE, W. H.**
X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.
PB93-203156/REB 93-04 PC A03/MF A01

**COLEMAN, M.**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 1.
PB93-174761/REB 93-01 PC A24/MF A04

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 2.
PB93-174779/REB 93-01 PC A25/MF A06

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
PB93-174787/REB 93-01 PC A99/MF A06

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 2.
PB93-174795/REB 93-01 PC A99/MF A06

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 1.
PB93-174803/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 2.
PB93-174811/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 4.
PB93-174829/REB 93-01 PC **A13**/MF **A03**

**COLEMAN, R.**
Development of Size-Specific Data from Particulate Control Technology Research Reports.
PB93-131456/REB 93-01 PC **A03**/MF **A01**

**COLLI, A.**
Background Information Document to Support NESHAPS Rulemaking on Nuclear Power Reactors.
PB93-199321/REB 93-01 PC **A14**/MF **A03**

**COLLINS, B. W.**
Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03**/MF **A01**

**COLLINS, D. J.**
Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC **A02**/MF **A01**

**COLLINS, G. A.**
Characterization of Reference Artemia III for Marine Toxicological Studies.
PB93-212595/REB 93-04 PC **A03**/MF **A01**

**COLLINS, J. F.**
Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03**/MF **A01**

**COLOMBO, A.**
International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.
PB93-222073/REB 93-04 PC **A02**/MF **A01**

**COLVIN, R. J.**
Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02**/MF **A01**

**COLWELL, R. R.**
Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC **A01**/MF **A01**

Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
PB93-121176/REB 93-01 PC **A02**/MF **A01**

Isolation and Diversity of Actinomycetes in the Chesapeake Bay.
PB93-205060/REB 93-01 PC **A02**/MF **A01**

Long-Term Survival and Plasmid Maintenance of 'Escherichia coli' in Marine Microcosms.
PB93-236230/REB 93-04 PC **A02**/MF **A01**

Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
PB93-205078/REB 93-04 PC **A02**/MF **A01**

**COMELEO, R.**
Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC **A03**/MF **A01**

**COMFORT, S. D.**
Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
PB93-141554/REB 93-01 PC **A02**/MF **A01**

**COMPTON, H.**
RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC **A05**/MF **A01**

**CONFER, S. R.**
Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).
PB93-212470/REB 93-04 PC **A03**/MF **A01**

**CONGALTON, R. G.**
Exploring the Effects of Vector to Raster and Raster to Vector Conversion.
PB93-122166/REB 93-01 PC **A04**/MF **A01**

**CONIS, J. M.**
Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04**/MF **A01**

**CONKLIN, C.**
Background Information Document to Support NESHAPS Rulemaking on Nuclear Power Reactors.
PB93-199321/REB 93-01 PC **A14**/MF **A03**

**CONNER, T. L.**
Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03**/MF **A01**

Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC **A03**/MF **A01**

**CONOLLY, R. B.**
Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
PB93-229565/REB 93-04 PC **A02**/MF **A01**

Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC **A02**/MF **A01**

**CONQUEST, L. L.**
Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC **A10**/MF **A03**

**CONRAD, D. J.**
Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC **A05**/MF **A01**

**CONVENTRY, D. H.**
Geographical Distribution and Source Type Analysis of Toxic Metal Emissions.
PB93-121036/REB 93-01 PC **A02**/MF **A01**

**COOK, G. S.**
Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02**/MF **A01**

**COOK, M.**
Drinking Water Information Guide.
PB93-222958/REB 93-04 PC **A06**/MF **A02**

**COOK, M. L.**
Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC **A03**/MF **A01**

Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.
PB93-222370/REB 93-04 PC **A02**/MF **A01**

**COOK, P. M.**
Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202828/REB 93-01 PC **A08**/MF **A02**

**COOK, R.**
Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC **A24**/MF **A04**

**COOPER, C. D.**
Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
PB93-175503/REB 93-01 PC **A03**/MF **A01**

**COOPER, R. L.**
Dithicarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.
PB93-228989/REB 93-04 PC **A02**/MF **A01**

**COOTER, E. J.**
General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC **A04**/MF **A01**

**COPELAND, F.**
In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with In vivo Data.
PB93-107167/REB 93-01 PC **A03**/MF **A01**

**COPELAND, M. F.**
Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC **A02**/MF **A01**

**COPPEDGE, E. A.**
Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

**CORBIN, R. C.**
Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.
PB93-222628/REB 93-04 PC **A01**/MF **A01**

**CORNABY, B. W.**
Life-Cycle Assessment: Inventory Guidelines and Principles.
PB93-139681/REB 93-01 PC **A07**/MF **A02**

**CORNWELL, K. L.**
Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC **A02**/MF **A01**

**COSBY, B. J.**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

**COSBY, R. L.**
Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC **A03**/MF **A01**

**COSTA, D. L.**
Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC **A02**/MF **A01**

**COUCH, J. A.**
Observations on the State of Marine Disease Studies (Chapter 18).
PB93-204170/REB 93-01 PC **A03**/MF **A01**

Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC **A23**/MF **A04**

**COUTANT, C. C.**
Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
PB93-207561/REB 93-04 PC **A03**/MF **A01**

**COUZENS-ROBERTS, C.**
Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown Refinery. Refinery Release Inventory.
PB92-228550/REB 93-01 PC **A12**/MF **A03**

**COVERT, T. C.**
Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC **A03**/MF **A01**

Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC **A01**/MF **A01**

**COWGILL, R. M.**
Methane Emissions from the Natural Gas Industry.
PB93-212421/REB 93-04 PC **A03**/MF **A01**

**COWHERD, C.**
Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures.
PB93-122273/REB 93-01 PC **A09**/MF **A03**

**COX, L. H.**
Discussion: Response to Internal Reviews of My Paper, 1993 Census Bureau Annual Research Conference.
PB93-191385/REB 93-01 PC **A02**/MF **A01**

Protecting Confidentiality in Establishment Surveys.
PB93-180958/REB 93-01 PC **A03**/MF **A01**

Setting an Agenda for Research in the Federal Statistical System: Needs for Statistical Disclosure Limitation Procedures.
PB93-204097/REB 93-04 PC **A03**/MF **A01**

Statistical Problems Arising from Environmental Issues.
PB93-185718/REB 93-01 PC **A01**/MF **A01**

**COX, W. M.**
Protocol for Determining the Best Performing Model.
PB93-226082/REB 93-04 PC **A03**/MF **A01**

**COZENS-ROBERTS, C.**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Groundwater and Soil Data.
PB92-228576/REB 93-01 PC **A12**/MF **A03**

**CRAIG, A. B.**
Design of New Schools and Other Large Buildings Which Are Radon Resistant and Easy to Mitigate.
PB93-131662/REB 93-01 PC **A03**/MF **A01**

**CRANE, C.**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC **A08**/MF **A02**

**CRAWFORD, R. R.**
Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
PB93-106821/REB 93-01 PC **A03**/MF **A01**

**CREASON, J. P.**
Competition Potentials of Environmentally Applied Bacteria with Human Fecal Microbiota.
PB93-181147/REB 93-01 PC **A02**/MF **A01**

**CRENCA, J.**
Cost of Remedial Actions (CORA) Model: Overview and Applications.
PB93-963318/REB 93-04 PC **A03**/MF **A01**

**CRESCENTI, G. H.**
Gasoline and Methanol Exposures from Automobiles within Residences and Attached Garages.
PB93-222222/REB 93-04 PC **A02**/MF **A01**

Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02**/MF **A01**

**CREWS, W.**
Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC **A03**/MF **A01**

**CRIPE, G. M.**
Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows ('Cyprinodon variegatus').
PB93-204998/REB 93-04 PC **A03**/MF **A01**

**CRISP, T. M.**
Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC **A03**/MF **A01**

**CRIST, H. L.**
Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

**CRIWELL, H. E.**
Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Industion of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC **A03**/MF **A01**

**CROFTON, K. M.**
Behavioral Development Following Daily Episodes of Mother-Infant Separation in the Rat.
PB93-141406/REB 93-01 PC A01/MF A01

Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC A02/MF A01

Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.
PB93-228872/REB 93-04 PC A03/MF A01

**CROMWELL, J.**
Simulation of Raw Water and Treatment Parameters in Support of the Disinfection By-Products Regulatory Impact Analysis.
PB93-134401/REB 93-01 PC A03/MF A01

**CROMWELL, J. E.**
Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC A07/MF A02

Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC A05/MF A01

**CROOK, J.**
Guidelines for Water Use.
PB93-222180/REB 93-04 PC A12/MF A03

**CROOKS, R. B.**
Evaluation of Emissions from Masonry Heaters and Masonry Fireplaces in Homes.
PB93-173078/REB 93-01 PC A03/MF A01

**CROSS, W. H.**
Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC A10/MF A03

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC A15/MF A03

**CRUDEN, D. L.**
Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
PB93-229474/REB 93-04 PC A02/MF A01

**CRUMPLER, E. P.**
Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC A03/MF A01

Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC A03/MF A01

What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC A03/MF A01

**CUFF, J. M.**
Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC A03/MF A01

Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC A03/MF A01

**CUMMINGS, A. M.**
Effect of Methoxychlor on Ovarian Steroidogenesis: Role in Early Pregnancy Loss.
PB93-181030/REB 93-01 PC A02/MF A01

Evaluation of the Effects of Methanol during Early Pregnancy in the Rat.
PB93-231850/REB 93-04 PC A03/MF A01

**CUMMINGS, C. A.**
Greening of World Trade: A Report to EPA from the Trade and Environment Committee of the National Advisory Council for Environmental Policy and Technology.
PB93-176980/REB 93-01 PC A11/MF A03

**CUPITT, L. T.**
UV Monitoring Program at US EPA.
PB93-212272/REB 93-04 PC A03/MF A01

**CURRAN, L.**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC A08/MF A02

**CURRAN, M. A.**
Broad-Based Environmental Life Cycle Assessment.
PB93-199495/REB 93-01 PC A02/MF A01

EPA's Life Cycle Methodology: Guidelines for Use in Development of Packaging.
PB93-194199/REB 93-01 PC A03/MF A01

EPA's Research in LCA Methodology.
PB93-212439/REB 93-04 PC A03/MF A01

Life Cycle Analysis (Video Conference Paper).
PB93-194207/REB 93-01 PC A02/MF A01

**CURRAN, T.**
National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC A07/MF A02

**CURRIE, L. A.**
Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC A03/MF A01

**CURTIS, L.**
Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC A08/MF A02

**CUSKEY, S. M.**
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC A03/MF A01

**CYR, A.**
Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC A03/MF A01

**DAHL, T. O.**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC A07/MF A02

**DAHMS, T. E.**
Carbon Monoxide Exposure of Subjects with Documented Cardiac Arrhythmias.
PB93-179943/REB 93-01 PC A03/MF A01

**DALEY, P. F.**
Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.
PB93-205383/REB 93-04 PC A03/MF A01

**DALLAS, C. E.**
Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-180990/REB 93-01 PC A03/MF A01

**DALTON, S. M.**
Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107043/REB 93-01 PC A02/MF A01

**DALY, C.**
Digital Topographic Approach to Modeling: The Distribution of Precipitation in Mountainous Terrain.
PB93-106649/REB 93-01 PC A03/MF A01

**DAMICO, W.**
Development of Conversion Factors for Heavy-Duty Bus Engines G/BHP-HR to G/Mile.
PB93-232932/REB 93-04 PC A03/MF A01

**DAMSTRA, T.**
Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.
PB93-228948/REB 93-04 PC A03/MF A01

**DANIEL, B. R.**
Applications of Pulse Combustion in Industrial and Incineration Processes.
PB93-131639/REB 93-01 PC A03/MF A01

**DANIEL, D. E.**
Hydraulic Conductivity of Three Geosynthetic Clay Liners.
PB93-131746/REB 93-01 PC A02/MF A01

**DANIEL, F. B.**
Analysis of DNA Strand Breaks Induced in Rodent Liver In vivo, Hepatocytes In Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC A03/MF A01

Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC A03/MF A01

Macromolecular Adduction by Trichloroacetonitrile in the Fischer 344 Rat Following Oral Gavage.
PB93-107134/REB 93-01 PC A03/MF A01

Ninety-Day Toxicity Study of Chloral Hydrate in the Sprague-Dawley Rat.
PB93-107118/REB 93-01 PC A03/MF A01

Ninety-Day Toxicity Study of Sodium Monochloroacetate in Sprague-Dawley Rats.
PB93-107100/REB 93-01 PC A03/MF A01

**DANIEL, K. D.**
Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
PB93-168948/REB 93-01 PC A02

**DANIELS, M. J.**
Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomegalovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC A03/MF A01

**DANN, T. F.**
Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC A03/MF A01

**DARBY, D. A.**
Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.
PB93-228492/REB 93-04 PC A02/MF A01

**DAS, B. R.**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Tetranitromethane (TNM).
PB93-116994/REB 93-01 PC A03/MF A01

Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC A05/MF A01

**DAUGHERTY, M. L.**
Drinking Water Toxicity Profiles.
PB93-122406/REB 93-01 PC A09/MF A02

**DAUGHTREY, E. H.**
Evaluation of a Sorbent-Based Preconcentrated for Analysis of VOCs in Air Using Gas Chromatography-Atomic Emission Detection.
PB93-121077/REB 93-01 PC A02/MF A01

**DAVID, M. B.**
Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC A03/MF A01

Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC A02/MF A01

Dissolved Organic Carbon and Sulfate Sorption by Spodosol Mineral Horizons.
PB93-229631/REB 93-04 PC A02/MF A01

Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC A02/MF A01

**DAVIES, D. W.**
Ammonia Abatement System for Whole-Body Small Animal Inhalation Exposures to Acid Aerosols.
PB93-229516/REB 93-04 PC A03/MF A01

**DAVIES-HILLIARD, L.**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC A10/MF A03

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC A08/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC A08/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC A08/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC A99/MF E11

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC A21/MF A04

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC A07/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC A20/MF A04

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC A06/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC A24/MF A04

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC A05/MF A01

**DAVIES, T. D.**
Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC A03/MF A01

Modelling Epicodic Acidification of Surface Waters: The State of Science.
PB93-106920/REB 93-01 PC A03/MF A01

**DAVIS, J. A.**
Electrophoresis Gel Buffer Recirculator for under Twenty Dollars.
PB93-181014/REB 93-01 PC A01/MF A01

**DAVIS, S.**
Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC A03/MF A01

**DAVIS, W.**
Measurement of Sediment Resuspension Rates in Long Island Sound.
PB93-222115/REB 93-04 PC A01/MF A01

**DAVIS, W. P.**
Effects of Kraft Mill Effluent on the Sexuality of Fishes: An Environmental Early Warning.
PB93-168847/REB 93-01 PC A03/MF A01

Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC **A02**/MF **A01**

Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03**/MF **A01**

**DAVIS, W. S.**
Proceedings of the Midwest Pollution Control Biologists Meeting, 1991. Environmental Indicators: Measurement and Assessment Endpoints. Held in Lincolnwood, Illinois on March 19-22, 1991.
PB93-145712/REB 93-01 PC **A06**/MF **A02**

Proceedings of the 1989 Midwest Pollution Control Biologists Meeting. Held in Chicago, Illinois on February 14-17, 1989.
PB93-143691/REB 93-01 PC **A08**/MF **A02**

**DAWE, S. C.**
Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03**/MF **A01**

**DAYTON, D. P.**
Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
PB93-131704/REB 93-01 PC **A03**/MF **A01**

**DE BORTOLI, M.**
International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.
PB93-222073/REB 93-04 PC **A02**/MF **A01**

**DE SERRES, F. J.**
Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.
PB93-236362/REB 93-04 PC **A04**/MF **A01**

**DE VITO, M. J.**
Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC **A02**/MF **A01**

**DEAN, J. H.**
Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomegalovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC **A03**/MF **A01**

**DEAN, P.**
Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC **A02**/MF **A01**

**DEAN, T. A.**
Development of Size-Specific Data from Particulate Control Technology Research Reports.
PB93-131456/REB 93-01 PC **A03**/MF **A01**

EPA's Information Management System for Tracking Reasonable Further Progress.
PB93-212389/REB 93-04 PC **A03**/MF **A01**

**DEANGELES, A. J.**
Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

**DEANGELO,**
Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC **A01**/MF **A01**

**DEANGELO, A. B.**
Analysis of DNA Strand Breaks Induced in Rodent Liver In vivo, Hepatocytes in Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC **A03**/MF **A01**

Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03**/MF **A01**

**DEARDORFF, M. B.**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Diethylene Glycol Dinitrate (DEGDN).
PB93-117000/REB 93-01 PC **A03**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC **A05**/MF **A01**

Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

**DEBRUIN, D. L.**
Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
PB93-229714/REB 93-04 PC **A02**/MF **A01**

**DEHDASHTI, B.**
Performance of an Aquatic Multispecies System in Evaluating the Effects of a Model Microbial Pest Control Agent on Nontarget Organisms.
PB93-131803/REB 93-01 PC **A03**/MF **A01**

**DELACA, T.**
Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC **A02**/MF **A01**

**DELANEY, W.**
Control of Air Emissions from Superfund Sites.
PB93-215614/REB 93-04 PC **A08**/MF **A02**

**DELAUNE, R. D.**
Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC **A02**/MF **A01**

Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02**/MF **A01**

**DELLARCO, V. L.**
Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC **A01**/MF **A01**

Quantification of Germ-Cell Risk Associated with the Induction of Heritable Translocations.
PB93-199677/REB 93-01 PC **A03**/MF **A01**

**DELLINGER, B.**
Pilot-Scale Evlauation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02**/MF **A01**

Thermal Degradation Characteristics of Environmentally Sensitive Pesticide Products.
PB93-201127/REB 93-01 PC **A04**/MF **A01**

**DELP, M. D.**
Distribution of Cardiac Output during Diurnal Changes of Activity in Rats.
PB93-180982/REB 93-01 PC **A02**/MF **A01**

**DEMARCO, J.**
Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC **A03**/MF **A01**

**DEMARINI, D. M.**
Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02**/MF **A01**

Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC **A02**/MF **A01**

**DEMPSEY, C. R.**
Incineration of Hazardous Waste: A Critical Review Update.
PB93-185916/REB 93-01 PC **A03**/MF **A01**

**DENNICUTT, M. C.**
Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16**/MF **A03**

**DENNIS, R. L.**
Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03**/MF **A01**

Tagged Species Engineering Model (TSEM).
PB93-229417/REB 93-04 PC **A03**/MF **A01**

**DENNISON, W. C.**
Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC **A12**/MF **A03**

**DESAI, S.**
Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC **A02**/MF **A01**

**DESMARTEAU, D.**
Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
PB93-173102/REB 93-01 PC **A03**/MF **A01**

**DETTMANN, E.**
Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
PB93-229714/REB 93-04 PC **A02**/MF **A01**

**DEVEREUX, R.**
Genus- and Group-Specific Hybridization Probes for Determinative and Environmental Studies of Sulfate-Reducing Bacteria.
PB93-168987/REB 93-01 PC **A02**/MF **A01**

**DEVLIN, R. B.**
Human Upper Respiratory Tract Responses to Inhaled Pollutants with Emphasis on Nasal Lavage.
PB93-181089/REB 93-01 PC **A02**/MF **A01**

Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC **A02**/MF **A01**

**DEWALLE, D. R.**
Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC **A04**/MF **A01**

**DEWEES, B.**
Guidelines for Mercury Measurements from Stationary Sources: Quality Assurance Handbook. Section 3.19. Volume 3.
PB93-131209/REB 93-01 PC **A08**/MF **A02**

**DEWEES, W. G.**
Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC **A03**/MF **A01**

What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC **A03**/MF **A01**

**DEWITT, C.**
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 1. Sessions 1-3.
PB93-212843/REB 93-04 PC **A15**/MF **A03**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 2. Sessions 4 and 5.
PB93-212850/REB 93-04 PC **A20**/MF **A04**

Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 3. Sessions 6-8.
PB93-212868/REB 93-04 PC **A19**/MF **A04**

**DEWITT, P. J.**
Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC **A02**/MF **A01**

Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-228815/REB 93-04 PC **A02**/MF **A01**

**DEWITT, T. H.**
Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03**/MF **A01**

Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11**/MF **A03**

Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC **A03**/MF **A01**

**DEXTER, S. C.**
On-Board Corrosion Analysis of a Recovered Nuclear Waste Container.
PB93-202927/REB 93-01 PC **A03**/MF **A01**

**DEY, C. R.**
Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC **A03**/MF **A01**

Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
PB93-229482/REB 93-04 PC **A03**/MF **A01**

Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
PB93-229243/REB 93-04 PC **A03**/MF **A01**

**DHESI, J. S.**
Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
PB93-141463/REB 93-01 PC **A02**/MF **A01**

**DI TORO, D. M.**
Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

**DIAMOND, B. M.**
Determination of Imminent and Substantial Endangerment for Removal Actions.
PB93-963416/REB 93-04 PC **A01**/MF **A01**

**DIANA, J. N.**
Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-228906/REB 93-04 PC **A01**/MF **A01**

**DICK, R. P.**
Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
PB93-141554/REB 93-01 PC **A02**/MF **A01**

**DICKINSON, R. E.**
Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC **A02**/MF **A01**

**DICRISTOFARO, D. C.**
Guideline for Modeling Carbon Monoxide from Roadway Intersections.
PB93-210391/REB 93-04 PC **A04**/MF **A01**

**DIETZ, J.**
Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
PB93-233914/REB 93-04 PC **A12**/MF **A03**

**DIETZ, J. D.**
Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
PB93-175503/REB 93-01 PC **A03**/MF **A01**

**DIGIULIO, D. C.**
Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC **A02**/MF **A01**

**DILIBERTO, J. J.**
Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC **A02**/MF **A01**

Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

**DILKS, D. W.**
Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

**DIXON, A.**
Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC **A09**/MF **A02**

**DIXON, D.**
Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
PB93-105534/REB 93-01 PC **A04**/MF **A01**

**DIXON, R. K.**
Conservation and Sequestration of Carbon: The Potential of Forest and Agroforest Management Practices.
PB93-229656/REB 93-04 PC **A03**/MF **A01**

Expanding Global Forest Management: An 'Easy First' Proposal.
PB93-199669/REB 93-01 PC **A02**/MF **A01**

Forest Fires in Russia: Carbon Dioxide Emissions to the Atmosphere.
PB93-229664/REB 93-04 PC **A02**/MF **A01**

Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.
PB93-212637/REB 93-04 PC **A03**/MF **A01**

Forest Management in Russia: Challenges and Opportunities in the Era of Perestroika.
PB93-106961/REB 93-01 PC **A02**/MF **A01**

Synthesis of Ectomycorrhizae on Northern Red Oak Seedlings in a Michigan Nursery.
PB93-212678/REB 93-04 PC **A02**/MF **A01**

**DIZON, V. V.**
Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175651/REB 93-01 PC **A03**/MF **A01**

**DOBBS, R. A.**
Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC **A02**/MF **A01**

**DOERFLER, D.**
Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC **A03**/MF **A01**

**DOERFLER, D. L.**
Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC **A03**/MF **A01**

Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
PB93-236321/REB 93-04 PC **A03**/MF **A01**

Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC **A02**/MF **A01**

**DOERGER, J. U.**
Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC **A02**/MF **A01**

**DOHERTY, J.**
Proceedings of the National Citizens' Volunteer Water Monitoring Conference (3rd). Held in Annapolis, Maryland on March 29-April 2, 1992. Building Partnerships in the Year of Clean Water.
PB93-207108/REB 93-04 PC **A09**/MF **A02**

**DOLPH, J.**
Characterizing the Distribution of Observed Precipitation and Runoff over the Continental United States.
PB93-141570/REB 93-01 PC **A03**/MF **A01**

**DOMANSKI, P. A.**
Simplified Cycle Simulation Model for the Performance Rating of Refrigerants and Refrigerant Mixtures.
PB93-130383 93-01 Not available NTIS

**DONG, Y.**
Coprocessing of Fossil Fuels and Biomass for CO2 Emission Reduction in the Transportation Sector.
PB93-194165/REB 93-01 PC **A02**/MF **A01**

Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.
PB93-229144/REB 93-04 PC **A03**/MF **A01**

**DONIGIAN, A. S.**
Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC **A04**/MF **A01**

STREAM: An Exposure Assessment Methodology for Agricultural Pesticide Runoff.
PB93-106888/REB 93-01 PC **A03**/MF **A01**

**DONOHUE, J. M.**
Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

**DONSANI, M.**
Technology Evaluation Report: Pilot-Scale Demonstration of a Slurry-Phase Biological Reactor for Creosote-Contaminated Soil. Volume 1.
PB93-205532/REB 93-04 PC **A09**/MF **A02**

**DOORLAG, M.**
Heavy-Duty Engine Testing Report Cummins/EPA/Taiwan Correlation Test Results, 1993.
PB93-236172/REB 93-04 PC **A03**/MF **A01**

Heavy-Duty Engine Testing Report Non-Road Engine Configurations Injection Timing Effects Test Results, 1992.
PB93-236164/REB 93-04 PC **A05**/MF **A01**

**DOORN, M. R. J.**
Development of Size-Specific Data from Particulate Control Technology Research Reports.
PB93-131456/REB 93-01 PC **A03**/MF **A01**

**DORSEY, J. A.**
Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC **A02**/MF **A01**

**DOSANI, M.**
On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC **A09**/MF **A02**

**DOUCET, L. G.**
Seminar Publication. Medical and Institutional Waste Incineration: Regulations, Management, Technology, Emissions, and Operations.
PB93-116283/REB 93-01 PC **A03**/MF **A01**

**DOUGLAS, N. S.**
Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC **A07**/MF **A02**

**DOUGLAS, S. G.**
Application of a Data-Assimilating Prognostic Meteorological Model to Two Urban Areas.
PB93-126571/REB 93-01 PC **A05**/MF **A01**

**DOW, C. L.**
Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC **A04**/MF **A01**

**DOWD, S. M.**
Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC **A03**/MF **A01**

**DOWNEY, D. C.**
Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC **A05**/MF **A01**

**DOWNHAM, D. A.**
Rapid Phase Indentification of Mixed Crystalline Solids.
PB93-212355/REB 93-04 PC **A03**/MF **A01**

**DOWNS, M. R.**
Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC **A02**/MF **A01**

**DRAVES, J.**
Air/Superfund National Technical Guidance Study Series: Applicability of Open Path Monitors for Superfund.
PB93-138154/REB 93-01 PC **A07**/MF **A02**

**DRAVES, J. A.**
Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
PB93-131704/REB 93-01 PC **A03**/MF **A01**

**DRESSMAN, R. C.**
Determination of Nine Haloacetic Acids in Finished Drinking Water.
PB93-204121/REB 93-01 PC **A03**/MF **A01**

**DREVER, J. I.**
Mineral Dissolution Rates: A Comparison of Laboratory and Field Studies.
PB93-141182/REB 93-01 PC **A01**/MF **A01**

Role of Soil Organic Acids in Mineral Weathering Processes (Chapter 6).
PB93-149268/REB 93-01 PC **A04**/MF **A01**

**DRISCOLL, C. T.**
Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC **A02**/MF **A01**

**DRUMMOND, C. J.**
Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107043/REB 93-01 PC **A02**/MF **A01**

**DUDNEY, C. S.**
Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
PB93-121259/REB 93-01 PC **A02**/MF **A01**

**DUES, N. R.**
Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC **A02**/MF **A01**

Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC **A02**/MF **A01**

**DUFNER, K.**
Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC **A06**/MF **A02**

**DULANEY, P.**
Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
PB93-222024/REB 93-04 PC **A02**/MF **A01**

**DULANEY, W.**
Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215655/REB 93-04 PC **A04**/MF **A01**

Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215630/REB 93-04 PC **A04**/MF **A01**

**DULCHINOS, V. F.**
Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC **A02**/MF **A01**

**DULLA, R. G.**
Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
PB93-180875/REB 93-01 PC **A06**/MF **A02**

**DUNKINS, R.**
Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures.
PB93-122273/REB 93-01 PC **A09**/MF **A03**

**DUNNING, J. B.**
Adding a Landscape Ecology Perspective to Conservation and Management Planning.
PB93-234516/REB 93-04 PC **A03**/MF **A01**

Glossary for Avian Conservation Biology.
PB93-106656/REB 93-01 PC **A03**/MF **A01**

**DUPONT, R. R.**
In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC **A03**/MF **A01**

**DUPUY, A. E.**
Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.
PB93-229193/REB 93-04 PC **A02**/MF **A01**

**DUXBURY, J.**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC **A04**/MF **A01**

**DYER, R. S.**
Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC **A03**/MF **A01**

**DYESS, T. M.**
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

**EARY, L. E.**
Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC **A03**/MF **A01**

**EATON, R. W.**
Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

**EBRON-MCCOY, M.**
Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02**/MF **A01**

**EBRON-MCCOY, M. T.**
In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with In vivo Data.
PB93-107167/REB 93-01 PC **A03**/MF **A01**

**ECKERT, D. J.**
Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

**ECKERT, E. G.**
Location of Leaks in Pressurized Petroleum Pipelines by Means of Passive-Acoustic Sensing Methods.
PB93-185783/REB 93-01 PC **A03**/MF **A01**

**EDER, B. K.**
*General Circulation Model Output for Forest Climate Change Research and Applications.*
PB93-124626/REB 93-01 PC **A04**/MF **A01**

Spatiotemporal Variability of Non-Urban Ozone Concentrations Over the Eastern United States and Its Potential Replication by Satellite Data.
PB93-191328/REB 93-01 PC **A03**/MF **A01**

**EDGERTON, E.**
Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC **A03**/MF **A01**

***EDGERTON, E. S.***
Dry Deposition Flux Calculations for the National Dry Deposition Network.
PB93-178242/REB 93-01 PC **A05**/MF **A02**

**EDNEY, E. O.**
Atmospheric Chemistry and Physical Fate of HCFCs and HFCs and Their Degradation Products.
PB93-131449/REB 93-01 PC **A03**/MF **A01**

**EDWARDS, B. C.**
Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in *Volatile Vehicle.*
PB93-141356/REB 93-01 PC **A03**/MF **A01**

**EDWARDS, H. W.**
Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
PB93-123016/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer Producing Printed Circuit Boards.
PB93-126621/REB 93-01 PC **A02**/MF **A01**

**EDWARDS, K. R.**
Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-228880/REB 93-04 PC **A03**/MF **A01**

**EDWARDS, P.**
Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
PB93-135671/REB 93-01 PC **A01**/MF **A01**

**EDWARDS, R.**
Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC **A14**/MF **A03**

**EGEBAECK, K. E.**
Impact of fuels on diesel exhaust emissions. A chemical and biological characterization.
DE92563058/REB 93-01 PC **A08**/MF **A02**

**EGGINK, R.**
Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
PB93-199368/REB 93-01 PC **A03**/MF **A01**

**EHRENREICH, L. C.**
Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
PB93-216067/REB 93-04 PC **A07**/MF **A02**

**EHRICH, M.**
Using Neuroblastoma Cell Lines to Examine Organophosphate Neurotoxicity.
PB93-229508/REB 93-04 PC **A02**/MF **A01**

**EICHELBERGER, J. W.**
Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

**EKLUND, B.**
Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.
PB93-215648/REB 93-04 PC **A03**/MF **A01**

Air/Superfund National Technical Guidance Study Series. Models for Estimating Air Emission Rates from Superfund Remedial Actions.
PB93-186807/REB 93-01 PC **A08**/MF **A02**

Air/Superfund National Technical Guidance Study Series. Volume 1. Overview of Air Pathway Assessments for Superfund Sites (Revised).
PB93-173987/REB 93-01 PC **A05**/MF **A01**

Control of Air Emissions from Superfund Sites.
PB93-215614/REB 93-04 PC **A08**/MF **A02**

*Estimation of Air Impacts for Bioventing Systems Used at* Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215655/REB 93-04 PC **A04**/MF **A01**

Estimation of Air Impacts for Solidification and Stabilization *Processes Used at Superfund Sites. Air/Superfund National* Technical Guidance Study Series.
PB93-215622/REB 93-04 PC **A04**/MF **A01**

Estimation of Air Impacts for Thermal Desorption Units *Used at* Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215630/REB 93-04 PC **A04**/MF **A01**

**ELDER, J. F.**
Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC **A02**/MF **A01**

**ELERT, M.**
Release of PCB and mercury from fibre sediments.
DE93778469/REB 93-01 PC **A05**/MF **A01**

***ELKINS, J. B.***
National Performance Audit Program (NPAP).
PB93-212322/REB 93-04 PC **A02**/MF **A01**

**ELLEFSON, R.**
Procedures for Identifying Reasonably Available Control Technology for Stationary Sources of PM-10.
PB93-175776/REB 93-01 PC **A08**/MF **A02**

**ELLESTAD, T. G.**
Acid Aerosol Measurement Methods: A Summary of U.S. EPA Intercomparisons.
PB93-221885/REB 93-04 PC **A02**/MF **A01**

**ELLIS, C. R.**
Vertical Diffusion in Small Stratified Lake: Data and Error Analysis.
PB93-149185/REB 93-01 PC **A03**/MF **A01**

**ELLIS, J.**
Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03**/MF **A01**

**ELNAWAWY, O. A.**
Compilation of Ground-Water Models.
PB93-209401/REB 93-04 PC **A13**/MF **A03**

Quality Assurance and Quality Control in the Development and Application of Ground-Water Models.
PB93-178226/REB 93-01 PC **A08**/MF **A02**

**ELSTEIN, K. H.**
Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC **A03**/MF **A01**

**ELVIDGE, C.**
Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13**/MF **A03**

**EMMEL, T. E.**
Volatile Organic Compound Model Quality Assurance and Sensitivity Testing (Version 1.8).
PB93-223022/REB 93-04 PC **A01**/MF **A01**

**ENDO, O.**
Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

**ENFIELD, C. G.**
Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport.
PB93-141497/REB 93-01 PC **A02**/MF **A01**

Cell Density and Non-Equilibrium Sorption Effects on Bacte*rial Dispersal in Groundwater Microcosms.*
PB93-141505/REB 93-01 PC **A03**/MF **A01**

Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC **A03**/MF **A01**

**ENGELS, J. L.**
Wet Deposition and Snowpack Monitoring. Final Project *Report. Project Summary.*
PB93-228500/REB 93-04 PC **A02**/MF **A01**

**ENGESTROM, D. R.**
Recent Sulfur Enrichment in the Sediments of Little Rock Lake, Wisconsin.
PB93-135721/REB 93-01 PC **A03**/MF **A01**

**ENGLE, V. D.**
*Evaluation of Sampling Strategies to Characterize Dis*solved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03**/MF **A01**

**ENGLUND, E.**
Geostatistical Environmental Assessment Software: User's Guide. GEO-EAS 1.2.1.
PB93-163236/REB 93-01 PC **A07**/MF **A02**

**ENGLUND, E. J.**
Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC **A02**/MF **A01**

**ENSOR, D.**
Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
PB93-222024/REB 93-04 PC **A02**/MF **A01**

Modeling of Indoor Air Quality for a Personal Computer.
PB93-106771/REB 93-01 PC **A03**/MF **A01**

**ENSOR, D. S.**
Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC **A02**/MF **A01**

Airborne Particle Sizes and Sources Found in Indoor Air.
PB93-107019/REB 93-01 PC **A03**/MF **A01**

Evaluation of Ventilation Performance for Indoor Space.
PB93-212751/REB 93-04 PC **A02**/MF **A01**

Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC **A02**/MF **A01**

IAQPC: An Indoor Air Quality Simulator.
PB93-212397/REB 93-04 PC **A03**/MF **A01**

Particle-Size-Dependent Efficiency of Air Cleaners.
PB93-221976/REB 93-04 PC **A01**/MF **A01**

*Relating Air Cleaner Efficiency to Indoor Air Quality.*
PB93-212405/REB 93-04 PC **A03**/MF **A01**

**EPNER, E.**
Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC **A07**/MF **A02**

***EPPERSON, D. L.***
Comparison of Methods for Estimating Global Methane Emissions from Landfills.
PB93-212561/REB 93-04 PC **A03**/MF **A01**

**EREXSON, G. L.**
DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

**ERICKSON, B. D.**
Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
PB93-222909/REB 93-04 PC **A03**/MF **A01**

**ERICKSON, H.**
Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC **A04**/MF **A01**

**ERICKSON, P. M.**
Technical Issues on Long-Term Performance of Solidified/Stabilized Waste Forms.
PB93-106680/REB 93-01 PC **A03**/MF **A01**

**ERICKSON, R. J.**
Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life *and Associated Wildlife.*
PB93-202828/REB 93-01 PC **A08**/MF **A02**

**ERNST, T. L.**
Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
PB93-202851/REB 93-04 PC **A06**/MF **A02**

Statistical Evaluation of the EMAP-Wetlands Classification.
PB93-199446/REB 93-01 PC **A03**/MF **A01**

**ESHLEMAN, K. N.**
Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC **A03**/MF **A01**

Modelling Epicodic Acidification of Surface Waters: The State of Science.
PB93-106920/REB 93-01 PC **A03**/MF **A01**

**ESPOSITO, C. R.**
Field Applications of Robotic Systems in Hazardous Environments, p1-29 1993. See also PB86-176344 and PB92-166743.
PB93-229755/REB 93-04 PC **A03**/MF **A01**

**ESTES, E. D.**
Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC **A03**/MF **A01**

Workshop Report: Identification of Performance Parameters for Portable X-ray Fluorescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.
PB93-216612/REB 93-04 PC **A05**/MF **A02**

Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.
PB93-216604/REB 93-04 PC **A06**/MF **A02**

**ESTORNELL, P.**
Hydraulic Conductivity of Three Geosynthetic Clay Liners.
PB93-131746/REB 93-01 PC **A02**/MF **A01**

**ETHRIDGE, B. J.**
Research and Information Needs Related to Nonpoint *Source Pollution and Wetlands in the Watershed: An EPA* Perspective.
PB93-168862/REB 93-01 PC **A02**/MF **A01**

**EVANS, F. E.**
In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02**/MF **A01**

**EVANS, G.**
Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
PB93-121069/REB 93-01 PC **A02**/MF **A01**

**EVANS, G. F.**
Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC A02/MF A01

**EVANS, J.**
Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
PB93-216067/REB 93-04 PC A07/MF A02

**EVANS, R.**
Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
PB93-229607/REB 93-04 PC A02/MF A01

**EVANS, P. G.**
Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93-148252/REB 93-01 PC A06/MF A02

**EVENSON, J. R.**
Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC A06/MF A02

**EVERSON, R. B.**
Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-228831/REB 93-04 PC A03/MF A01

**EYRAUD, P.**
Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
PB93-123115/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
PB93-123123/REB 93-01 PC A02/MF A01

Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
PB93-123131/REB 93-01 PC A02/MF A01

**FAHRIG, L.**
Landscape-Scale Effects of Toxic Events for Ecological Risk Assessment.
PB93-236628/REB 93-04 PC A03/MF A01

**FAIRBROTHER, A.**
Ecotoxicological Principles for Avian Field Studies Using Radiotelemetry or Remote Sensing.
PB93-212793/REB 93-04 PC A02/MF A01

Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC A03/MF A01

Pathogenicity of 'Salmonella pullorum' in Northern Bobwhite Quail and Mallard Ducks.
PB93-135739/REB 93-01 PC A03/MF A01

**FALKOWSKI, P. G.**
Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC A03/MF A01

Physiological Limitations on Phytoplankton Productivity in the Ocean.
PB93-204923/REB 93-01 PC A02/MF A01

**FAN, C. Y.**
Column Vapor Extraction Experiments on Gasoline Contaminated Soil.
PB93-131514/REB 93-01 PC A03/MF A01

*Proceedings of the Symposium on Soil Venting.* Held in Houston, Texas on April 29-May 1, 1991.
PB93-122323/REB 93-01 PC A15/MF A03

Screening Methodology for Assessing Leaking UST Sites and Clean Up Technologies.
PB93-199404/REB 93-01 PC A03/MF A01

**FAORO, R.**
National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC A07/MF A02

**FARLOW, J.**
Evaluation of Three Oil Spill Laboratory Dispersant Effectiveness Tests.
PB93-191377/REB 93-01 PC A02/MF A01

Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC A03/MF A01

**FARLOW, J. S.**
Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.
PB93-236578/REB 93-04 PC A04/MF A01

**FARRELL, C. W.**
Alternating Current Electrocoagulation for Superfund Site Remediation.
PB93-205144/REB 93-04 PC A02/MF A01

**FAULKNER, M. G.**
Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC A04/MF A01

**FAUST, R. A.**
Drinking Water Toxicity Profiles.
PB93-122406/REB 93-01 PC A09/MF A02

**FAY, R. R.**
Shoreline Survey for Unpermitted Discharges to Galveston Bay.
PB93-205706/REB 93-04 PC A03/MF A01

**FEILER, H.**
Fate of Priority Pollutants in Publicly Owned Treatment Works. Pilot Study.
PB93-203974/REB 93-04 PC A03/MF A01

**FEKETE, A.**
Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC A03/MF A01

**FENNER, K.**
Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Guidance.
PB93-154730/REB 93-01 PC A10/MF A03

Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.
PB93-205508/REB 93-04 PC A99/MF A06

**FERNANDEZ, I. J.**
Characterization of Eastern U.S. Spruce-Fir Soils.
PB93-141133/REB 93-01 PC A03/MF A01

Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC A02/MF A01

Soil-Mediated Effects of Atmospheric Deposition on Eastern U.S. Spruce-Fir Forests.
PB93-141125/REB 93-01 PC A03/MF A01

**FERNANDO, T.**
Effects of Culture Parameters on DDT (1,1,1-Trichloro-2,2-BIS(4-Chlorophenyl)Ethane) Biodegradation by 'Phanerochaete chrysosporium'.
PB93-191567/REB 93-01 PC A03/MF A01

**FERRARO, S. P.**
Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC A02/MF A01

Taxonomic Level Sufficient for Assessing a Moderate Impact on Macrobenthic Communities in Puget Sound, Washington, USA.
PB93-185858/REB 93-01 PC A02/MF A01

Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC A03/MF A01

**FIEDLER, L.**
Innovative Treatment Technologies: Semi-Annual Status Report (Fourth Edition).
PB93-133387/REB 93-01 PC A05/MF A01

**FIELAND, V. P.**
Effect of Aerosolization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC A02/MF A01

**FIELD, M. S.**
Program to Analyze Aquifer Test Data and Check for Validity with the Jacob Method.
PB93-181154/REB 93-01 PC A02/MF A01

**FIELD, R.**
Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC A05/MF A02

Reclamation of Urban Stormwater.
PB93-185791/REB 93-01 PC A03/MF A01

Storm and Combined Sewer Overflow: An Overview of EPA's Research Program.
PB93-185957/REB 93-01 PC A03/MF A01

**FILKINS, J. C.**
Sampling, Characterizing and Mapping Contaminated Sediments in River Harbors.
PB93-135705/REB 93-01 PC A02/MF A01

**FINE, D. D.**
Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.
PB93-221950/REB 93-04 PC A01/MF A01

**FINKNER, A. L.**
Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC A12/MF A03

**FISCHER, K.**
Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC A07/MF A02

**FISCHHOFF, D. A.**
Engineered Plants in the Environment.
PB93-234532/REB 93-04 PC A03/MF A01

**FISHBEIN, B.**
Slowing the Waste Behemoth: Source Reduction is Overshadowed by Recycling's Success.
PB93-194546/REB 93-01 PC A02/MF A01

**FISHER, H. L.**
Dermal Penetration of ((14)C)Captan in Young and Adult Rats.
PB93-107142/REB 93-01 PC A03/MF A01

**FISHER, K.**
Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC A05/MF A01

**FISHER, R.**
Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC A06/MF A02

**FISHER, W. S.**
Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC A02/MF A01

Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC A03/MF A01

**FITZ-SIMONS, T.**
National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC A07/MF A02

**FITZPATRICK, M. J.**
Procedures for Identifying Reasonably Available Control Technology for Stationary Sources of PM-10.
PB93-175776/REB 93-01 PC A08/MF A02

**FIX, M.**
Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC A03/MF A01

**FLATMAN, G. T.**
Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC A02/MF A01

**FLEER, A. W.**
Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC A07/MF A02

**FLEISCHMAN, M.**
Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC A02/MF A01

**FLEMER, D. A.**
Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC A03/MF A01

Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC A02/MF A01

**FLEMING, F.**
Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC A14/MF A03

**FLETCHER, J. J.**
Cost Effective Corn and Soybean Production Without Tillage: Fact or Fiction (May 1988).
PB93-157568/REB 93-01 PC A03/MF A01

**FLETCHER, M.**
Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
PB93-205011/REB 93-04 PC A02/MF A01

Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC A03/MF A01

**FLOCK, G.**
Lake and Reservoir Restoration Guidance Manual: Second Edition.
PB93-207926/REB 93-04 PC A15/MF A03

**FLORENCE, L. Z.**
Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC A05/MF A01

**FLYNN, D.**
Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-228880/REB 93-04 PC A03/MF A01

**FOARDE, K.**
Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
PB93-222024/REB 93-04 PC A02/MF A01

Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC A03/MF A01

**FOERST, M. B.**
Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.
PB93-212801/REB 93-04 PC A03/MF A01

**FOGELSON, L.**
Relationship between Serum Cholinesterase Activity and the Change in Body Temperature and Motor Activity in the Rat: A Dose-Response Study of Diisopropyl Fluorophosphate.
PB93-175644/REB 93-01 PC A02/MF A01

**FOLINSBEE, L. J.**
Human Health Effects of Air Pollution.
PB93-231843/REB 93-04 PC A03/MF A01

**FOLMAR, L. C.**
Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC A03/MF A01

Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC A02/MF A01

Effects of Chemical Contaminants on Blood Chemistry of Teleost Fish: A Bibliography and Synopsis of Selected Effects.
PB93-168961/REB 93-01 PC **A03**/MF **A01**

Physiological and Nonspecific Biomarkers.
PB93-119832/REB 93-01 PC **A05**/MF **A01**

**FOLSOM, B. A.**
Biomass Combustion in Gas-Turbine-Based Systems.
PB93-185742/REB 93-01 PC **A02**/MF **A01**

**FOLSON, B. A.**
Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.
PB93-228468/REB 93-04 PC **A02**/MF **A01**

**FORD, J.**
Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08**/MF **A02**

Collection and Chemical Analysis of Lichens for Biomonitoring.
PB93-149862/REB 93-01 PC **A03**/MF **A01**

Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

Trace Organic Contaminants in Anthropogenically Acidified Surface Waters.
PB93-135689/REB 93-01 PC **A03**/MF **A01**

**FORNES, R.**
Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC **A02**/MF **A01**

Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC **A02**/MF **A01**

**FORNES, R. E.**
Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC **A02**/MF **A01**

**FORRESTER, J.**
*Locating and Estimating Air Emissions from Sources of* Methylene Chloride.
PB93-207579/REB 93-04 PC **A10**/MF **A03**

**FORTMANN, R. C.**
Pilot Study to Evaluate Methods for the Assessment of Exposure of Small Children to Pesticides in the Residential Environment.
PB93-119899/REB 93-01 PC **A03**/MF **A01**

Survey of Protocols for Conducting Indoor Air Quality Investigations in Large Buildings.
PB93-119865/REB 93-01 PC **A03**/MF **A01**

**FORTUNE, C.**
Evaluation of Commercially-Available Portable Gas Chromatographs.
PB93-121051/REB 93-01 PC **A02**/MF **A01**

Evaluation of Portable Gas Chromatographs.
PB93-168813/REB 93-01 PC **A03**/MF **A01**

**FORTUNE, C. R.**
Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC **A03**/MF **A01**

**FOSTER, A. L.**
Replacement of Charcoal Sorbent in the VOST.
PB93-221893/REB 93-04 PC **A03**/MF **A01**

**FOSTER, S. C.**
Development and Validation of a Source Test Method for 2,4-Toluene Diisocyanate.
PB93-204055/REB 93-01 PC **A03**/MF **A01**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC **A02**/MF **A01**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-214419/REB 93-04 PC **A05**/MF **A01**

**FOURNIE, J. W.**
Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02**/MF **A01**

Importance of Fish Diseases: An Overview.
PB93-204113/REB 93-01 PC **A03**/MF **A01**

Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC **A23**/MF **A04**

Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03**/MF **A01**

**FOWLE, J. R.**
EPA Priorities for Biologic Markers Research in Environmental Health.
PB93-181113/REB 93-01 PC **A02**/MF **A01**

Health Effects of Arsenic in Drinking Water: Research Needs.
PB93-141331/REB 93-01 PC **A02**/MF **A01**

**FOWLER, C. S.**
Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04**/MF **A01**

Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

**FOWLES, J. R.**
Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC **A03**/MF **A01**

**FOX, C. A.**
Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13**/MF **A03**

**FOX, C. G.**
Plume Definition in Regions of Strong Bending.
PB93-221844/REB 93-04 PC **A02**/MF **A01**

**FOX, D. L.**
Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03**/MF **A01**

**FRANCIS, A. A.**
Drinking Water Toxicity Profiles.
PB93-122406/REB 93-01 PC **A09**/MF **A02**

**FRANCIS, C. W.**
Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02**/MF **A01**

**FRANDT, R.**
Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC **A05**/MF **A01**

**FRANK, N. H.**
Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or Inhalable Particulate Data (Draft).
PB93-200640/REB 93-01 PC **A04**/MF **A01**

**FRANK, U.**
Field Applications of Robotic Systems in Hazardous Environments, p1-29 1993. See also PB86-176344 and PB92-166743.
PB93-229755/REB 93-04 PC **A03**/MF **A01**

**FRANK, V.**
Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203693/REB 93-04 PC **A07**/MF **A02**

**FRANKE, D.**
Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC **A03**/MF **A01**

**FRANSON, S. E.**
Environmental Monitoring and Assessment Program: EMAP-Arid Colorado Plateau Pilot Study, 1992. Implementation Plan.
PB93-181618/REB 93-01 PC **A08**/MF **A02**

**FRASER, W. R.**
Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

**FRAZIER, J. M.**
Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC **A02**/MF **A01**

**FREAS, W.**
National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC **A07**/MF **A02**

**FREBIS, C. P.**
Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03**/MF **A01**

**FREEDMAN, P. L.**
Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

**FREEMAN, E. B.**
Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC **A02**/MF **A01**

**FREEMAN, H. M.**
Pollution Prevention Research Ongoing: EPA's Risk Reduction Engineering Laboratory.
PB93-212447/REB 93-04 PC **A02**/MF **A01**

**FREEMARK, K.**
Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC **A03**/MF **A01**

Landscape-Scale Effects of Toxic Events for Ecological Risk Assessment.
PB93-236628/REB 93-04 PC **A03**/MF **A01**

Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC **A03**/MF **A01**

**FREEMARK, K. E.**
Adding a Landscape Ecology Perspective to Conservation and Management Planning.
PB93-234516/REB 93-04 PC **A03**/MF **A01**

**FREESTONE, F.**
Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC **A03**/MF **A01**

**FRENKEL, R. E.**
Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
PB93-143709/REB 93-01 PC **A08**/MF **A02**

**FREYBERG, D. W.**
Evaluation of Three Cleaning Methods for Removing Asbestos from Carpet: Determination of Airborne Asbestos Concentrations Associated with Each Method.
PB93-218568/REB 93-04 PC **A05**/MF **A01**

**FREYBERG, R. W.**
Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
PB93-227551/REB 93-04 PC **A06**/MF **A02**

Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.
PB93-218501/REB 93-04 PC **A07**/MF **A02**

Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC **A03**/MF **A01**

**FRICK, W. E.**
Plume Definition in Regions of Strong Bending.
PB93-221844/REB 93-04 PC **A02**/MF **A01**

**FRIEDMAN, D.**
Environmental Monitoring Issues: Results of Workshops Held in July 1992 as Part of EPA's Eighth Annual Waste Testing and Quality Assurance Symposium.
PB93-216075/REB 93-04 PC **A12**/MF **A03**

**FRITHSEN, J. B.**
*Design of a Basinwide Monitoring Program for the Tampa* Bay Estuary.
PB93-194694/REB 93-01 PC **A05**/MF **A01**

**FRY, B.**
Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC **A02**/MF **A01**

**FU, P. P.**
In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02**/MF **A01**

**FUERST, R. C.**
Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC **A03**/MF **A01**

**FUERST, R. G.**
Replacement of Charcoal Sorbent in the VOST.
PB93-221893/REB 93-04 PC **A03**/MF **A01**

**FULTS, K.**
Use of Analytically Defined Estimates of Aerosol Respirable Fraction to Predict Lung Deposition Patterns.
PB93-175743/REB 93-01 PC **A02**/MF **A01**

**FURLONG, D.**
Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

**FUSCOE, J. C.**
Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC **A03**/MF **A01**

Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02**/MF **A01**

V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

**FYRAUD, P.**
Waste Reduction Activities and Options for a Manufacturer of Fine Chemicals Using Batch Processes.
PB93-126308/REB 93-01 PC **A02**/MF **A01**

**GABELE, P.**
Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC **A03**/MF **A01**

**GABLE, F. J.**
Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC **A03**/MF **A01**

**GADSBY, K. J.**
Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
PB93-100907/REB 93-01 PC **A07**/MF **A02**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

**GAGE, C. L.**
Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
PB93-173664/REB 93-01 PC **A02**/MF **A01**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131686/REB 93-01 PC **A03/MF A01**

**GAI, W. Z.**
Oxidative Degradation of Phenanthrene by the Ligninolytic Fungus 'Phanerochaete chrysosposium'.
PB93-199511/REB 93-01 PC **A02/MF A01**

Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC **A02/MF A01**

**GAIRE, R.**
Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
PB93-121333/REB 93-01 PC **A03/MF A01**

**GAIROLA, C. G.**
Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-228906/REB 93-04 PC **A01/MF A01**

**GAKH, A.**
Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02/MF A01**

**GALLAGH, J.**
Citizen's Guide to Ground-Water Protection.
PB93-115814/REB 93-01 PC **A03/MF A01**

**GALLAGHER, J.**
Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02/MF A01**

**GALLO, J. M.**
Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-160990/REB 93-01 PC **A03/MF A01**

**GALLUP, J.**
Guidance Manual for POTW Pretreatment Program Development.
PB93-186112/REB 93-01 PC **A14/MF A03**

**GAMMAGE, R. B.**
Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
PB93-121259/REB 93-01 PC **A02/MF A01**

**GAMROTH, M. J.**
Design and Construction of Demonstration/Research Wetlands for Treatment of Dairy Farm Wastewater.
PB93-202836/REB 93-01 PC **A03/MF A01**

**GAN, H.**
Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02/MF A01**

**GANIO, L. M.**
Effect of Aerosolization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC **A02/MF A01**

Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC **A02/MF A01**

**GANS, M.**
Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03/MF A01**

**GAO, D.**
Relationships between Ozone Precursor Levels and Response to Emissions Reductions: Analysis of Regional Oxidant Model Results for the Northeastern United States.
PB93-186294/REB 93-01 PC **A07/MF A02**

**GARDNER-CLAYSON, T. W.**
Alternating Current Electrocoagulation for Superfund Site Remediation.
PB93-205144/REB 93-04 PC **A02/MF A01**

**GARDNER, G. R.**
Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02/MF A01**

Chemically Induced Histopathology in Aquatic Invertebrates (Chapter 14).
PB93-222263/REB 93-04 PC **A03/MF A01**

Field and Laboratory Studies of Chemical Contamination and Environmentally Related Diseases in Fish and Molluscs of New England.
PB93-199438/REB 93-01 PC **A02/MF A01**

Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04/MF A01**

**GARDNER, L.**
Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone. Volume 2. Emission Inventory Requirements for Photochemical Air Quality Simulation Models (Revised).
PB93-234375/REB 93-04 PC **A11/MF A03**

**GARDNER, L. A.**
User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC **A99/MF A06**

**GARGAS, M. L.**
Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03/MF A01**

**GARGES, P. L.**
Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02/MF A01**

**GARRISON, P. J.**
Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC **A08/MF A02**

**GASHLIN, K.**
Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
PB93-123164/REB 93-01 PC **A02/MF A01**

Waste Reduction Activities and Options for a Fossil Fuel Fired Electrical Generating Station.
PB93-126233/REB 93-01 PC **A02/MF A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
PB93-123198/REB 93-01 PC **A02/MF A01**

Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
PB93-123230/REB 93-01 PC **A02/MF A01**

Waste Reduction Activities and Options for an Autobody Repair Facility.
PB93-123156/REB 93-01 PC **A01/MF A01**

Waste Reduction Activities and Options for an Electrical Utility Transmission System Monitoring and Maintenance Facility.
PB93-126639/REB 93-01 PC **A02/MF A01**

**GAULDEN, M. E.**
Maternal Age Effect: The Enigma of Down Syndrome and Other Trisomic Conditions.
PB93-194421/REB 93-01 PC **A03/MF A01**

**GAUTHIER, J. D.**
Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC **A02/MF A01**

**GAVASKAR, A. R.**
Mobile On-Site Recycling of Metalworking Fluids.
PB93-216562/REB 93-04 PC **A04/MF A01**

On-Site Waste Ink Recycling: Technology Evaluation Report.
PB93-141026/REB 93-01 PC **A04/MF A01**

**GAY, B. W.**
Measurement of Biogenic Emissions from Corn.
PB93-180883/REB 93-01 PC **A02/MF A01**

Proceedings of the EPA/A and WMA International Symposium (1992), Measurement of Toxic and Related Air Pollutants. Held in Durham, North Carolina on May 4-9, 1992.
PB93-121093/REB 93-01 PC **A01/MF A01**

Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 1.
PB93-122331/REB 93-01 PC **A99/MF A06**

**GAY, C. A.**
Impacts of Climate Change on Rice Yield: A Comparison of Four Model Performances.
PB93-191526/REB 93-01 PC **A03/MF A01**

**GAZETAS, E.**
Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
PB93-199388/REB 93-01 PC **A03/MF A01**

**GEIDER, R. J.**
Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03/MF A01**

Physiological Limitations on Phytoplankton Productivity in the Ocean.
PB93-204923/REB 93-01 PC **A02/MF A01**

**GELBWACHS, J. A.**
Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.
PB93-222628/REB 93-04 PC **A01/MF A01**

**GELDERLOOS, A. B.**
Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC **A05/MF A01**

Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03/MF A01**

**GENEROSO, W. M.**
Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03/MF A01**

Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC **A02/MF A01**

Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03/MF A01**

**GENIKHOVICH, E. L.**
New Mathematical Model of Pollutant Dispersion Near a Building.
PB93-236529/REB 93-04 PC **A03/MF A01**

**GENTER, M. B.**
Olfactory Toxicity of Beta,Beta'-Iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC **A02/MF A01**

**GENTHNER, F. J.**
Effects of 'Beauveria bassiana' on Embryos of the Inland Silverside Fish ('Menidia beryllina').
PB93-131811/REB 93-01 PC **A02/MF A01**

Fate of 'Bacillus sphaericus' and 'Bacillus thuringiensis' Serovar 'Israelensis' in the Aquatic Environment.
PB93-121143/REB 93-01 PC **A02/MF A01**

Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC **A02/MF A01**

Use of a Novel Plasmid to Monitor the Fate of a Genetically Engineered 'Pseudomonas putida' Strain.
PB93-169001/REB 93-01 PC **A02/MF A01**

**GENTILE, J. H.**
Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC **A03/MF A01**

**GEORGAKAKOS, K. P.**
Longterm Response of Lakes to Acidic Deposition.
PB93-229722/REB 93-04 PC **A02/MF A01**

**GEORGE, M.**
Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02/MF A01**

**GEORGE, S. E.**
Competition Potentials of Environmentally Applied Bacteria with Human Fecal Microbiota.
PB93-181147/REB 93-01 PC **A02/MF A01**

Genotoxicity of 2,4,5-Trichlorophenoxyacetic Acid Biodegradation Products in the 'Salmonella' Reversion and Lambda Prophage-Induction Bioassays.
PB93-107175/REB 93-01 PC **A02/MF A01**

Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03/MF A01**

**GERBER, D. R.**
Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
PB93-227551/REB 93-04 PC **A06/MF A02**

Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC **A03/MF A01**

**GERDE, P.**
Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC **A02/MF A01**

**GERRITY, T. R.**
Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC **A02/MF A01**

Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-228864/REB 93-04 PC **A02/MF A01**

**GETTINGS, S. T.**
Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC **A02/MF A01**

**GIBSON, D. T.**
Aromatic Hydrocarbon Degradation: A Molecular Approach.
PB93-229433/REB 93-04 PC **A03/MF A01**

Oxidation of Biphenyl by a Multicomponent Enzyme System from 'Pseudomonas' sp. Strain LB400.
PB93-229466/REB 93-04 PC **A02/MF A01**

Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
PB93-229474/REB 93-04 PC **A02/MF A01**

**GIBSON, J.**
Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC **A03/MF A01**

Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02/MF A01**

**GIBSON, J. F.**
Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.
PB93-229193/REB 93-04 PC **A02/MF A01**

**GIBSON, R. G.**
Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC **A09/MF A02**

**GIBSON, S. C.**
Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04/MF A01**

**GIFT, J. S.**
Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04**/MF **A01**

**GILBERT, R.**
Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC **A02**/MF **A01**

Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC **A02**/MF **A01**

**GILBERT, R. D.**
Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC **A02**/MF **A01**

**GILL, B. S.**
Application of the 'Tradescantia micronucleus' Assay for the Genetic Evaluation of Chemical Mixtures in Soil and Aqueous Media.
PB93-141380/REB 93-01 PC **A02**/MF **A01**

**GILLMAN, M.**
Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02**/MF **A01**

**GILMOUR, M. I.**
Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC **A03**/MF **A01**

Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC **A02**/MF **A01**

**GINSBERG, G.**
Genetic Damage In vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04**/MF **A01**

**GIPSON, G. L.**
Modeling Protocol for Applying MESOPUFF II to Long Range Transport Problems.
PB93-226106/REB 93-04 PC **A04**/MF **A01**

**GIRVIN, D. C.**
Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC **A03**/MF **A01**

**GLASER, J. A.**
Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC **A03**/MF **A01**

Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC **A02**/MF **A01**

Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC **A02**/MF **A01**

Nutrient Movement through Beach Media: Problems and Field Results Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191344/REB 93-01 PC **A03**/MF **A01**

**GLAZE, W. H.**
Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
PB93-229565/REB 93-04 PC **A02**/MF **A01**

**GLEN, G.**
Association of Personal and Workplace Characteristics with Reported Health Symptoms of 6771 Government Employees in Washington, DC.
PB93-212264/REB 93-04 PC **A02**/MF **A01**

**GLENNON, J. J.**
Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC **A02**/MF **A01**

**GODOWITCH, J. M.**
Development of an Improved Urban Airshed Modeling System.
PB93-120889/REB 93-01 PC **A03**/MF **A01**

**GODSHALL, F. A.**
Statistical Analyses of COADS Wind Data in Coastal Regions of the United States.
PB93-212777/REB 93-04 PC **A03**/MF **A01**

**GOKSOEYR, J.**
Recovery of DNA from Soils and Sediments.
PB93-222834/REB 93-04 PC **A02**/MF **A01**

**GOLDBERG, A. M.**
Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC **A02**/MF **A01**

**GOLDMAN, J. M.**
Dithicarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.
PB93-228989/REB 93-04 PC **A02**/MF **A01**

**GONZALES, D.**
X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.
PB93-203156/REB 93-04 PC **A03**/MF **A01**

**GONZALEZ, J. A.**
Development and Evaluation of a Transportable Fast Gas Chromatograph for the Monitoring of Organic Vapors in Air.
PB93-228526/REB 93-04 PC **A02**/MF **A01**

**GOOCH, J. P.**
Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

**GOODMAN, B.**
Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC **A04**/MF **A01**

**GOODRICH, J. A.**
Effect of the Distribution System on Drinking-Water Quality.
PB93-173722/REB 93-01 PC **A03**/MF **A01**

Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC **A02**/MF **A01**

**GOODWIN, J. H.**
Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
PB93-141356/REB 93-01 PC **A03**/MF **A01**

**GORDON, C. J.**
Acute and Delayed Effects of Diisopropyl Fluorophosphate on Body Temperature, Heart Rate and Motor Activity in the Awake, Unrestrained Rat.
PB93-228971/REB 93-04 PC **A03**/MF **A01**

Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02**/MF **A01**

Relationship between Serum Cholinesterase Activity and the Change in Body Temperature and Motor Activity in the Rat: A Dose-Response Study of Diisopropyl Fluorophosphate.
PB93-175644/REB 93-01 PC **A02**/MF **A01**

Strain Comparisons of DFP Neurotoxicity in Rats.
PB93-228609/REB 93-04 PC **A03**/MF **A01**

Twenty-Four Hour Rhythms of Selected Ambient Temperature in Rat and Hamster.
PB93-175727/REB 93-01 PC **A02**/MF **A01**

**GORDON, L.**
Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

**GORDON, L. A.**
Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence In situ Hybridization.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

**GORDON, S. M.**
Evaluation of Portable Multisorbent Air Samplers for Use with an Automated Multitube Analyzer.
PB93-172930/REB 93-01 PC **A05**/MF **A01**

Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02**/MF **A01**

**GOSSETT, R. W.**
Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03**/MF **A01**

**GOTO, S.**
Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

**GOULD, J. P.**
Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC **A10**/MF **A03**

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC **A15**/MF **A03**

**GOVIND, R.**
Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC **A02**/MF **A01**

**GOYDAN, R.**
Methods for Assessing Exposure to Chemical Substances. Volume 11. Methodology for Estimating the Migration of Additives and Impurities from Polymeric Materials.
PB93-134096/REB 93-01 PC **A09**/MF **A02**

**GOYETTE, E.**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC **A04**/MF **A01**

**GRACE, K.**
Interim Protocol for Testing the Effects of Microbial Pathogens on Subterranean Termites ('Isoptera: rhinotermitidae').
PB93-124634/REB 93-01 PC **A03**/MF **A01**

**GRACIE, J. W.**
Evaluation of Mitigation for Acid Aluminum Leachate from a Highway Fill in Garrett County, Maryland.
PB93-180321/REB 93-01 PC **A04**/MF **A01**

**GRAHAM, R.**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

**GRANADOS, R. R.**
Genetically Engineered Baculoviruses as Agents for Pest Control.
PB93-150175/REB 93-01 PC **A03**/MF **A01**

**GRANEY, R. L.**
Physiological and Nonspecific Biomarkers.
PB93-119832/REB 93-01 PC **A05**/MF **A01**

**GRANT, G. E.**
Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC **A03**/MF **A01**

**GRANT, W. B.**
Optical Remote Measurement of Toxic Gases.
PB93-229409/REB 93-04 PC **A03**/MF **A01**

**GRAVEN, J. T.**
Use of Alternative Materials for Daily Cover at Municipal Solid Waste Landfills.
PB93-227197/REB 93-04 PC **A08**/MF **A02**

**GRAY, L. E.**
Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Bensidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC **A02**/MF **A01**

Gonadal Effects of Fetal Exposure to the Azo Dye Congo Red in Mice: Infertility in Female but Not Male Offspring.
PB93-181071/REB 93-01 PC **A03**/MF **A01**

Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.
PB93-236347/REB 93-04 PC **A02**/MF **A01**

**GRAYMAN, W. M.**
Modeling Contaminant Propagation in Drinking-Water Distribution Systems.
PB93-205136/REB 93-04 PC **A03**/MF **A01**

Use of Expert System in a Water Utility.
PB93-123081/REB 93-01 PC **A04**/MF **A01**

**GREEN, A.**
Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC **A20**/MF **A04**

**GREEN, B.**
Oxidative Degradation of Phenanthrene by the Ligninolytic Fungus 'Phanerochaete chrysosposium'.
PB93-199511/REB 93-01 PC **A02**/MF **A01**

Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC **A02**/MF **A01**

**GREEN, D. A.**
Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
PB93-122307/REB 93-01 PC **A03**/MF **A01**

**GREENE, R. M.**
Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03**/MF **A01**

Physiological Limitations on Phytoplankton Productivity in the Ocean.
PB93-204923/REB 93-01 PC **A02**/MF **A01**

**GREENING, H.**
Oligohaline Areas in Tampa Bay Tributaries: Spatial Extent and Species Lists.
PB93-191179/REB 93-01 PC **A03**/MF **A01**

**GREGG, R. L.**
Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.
PB93-227205/REB 93-04 PC **A04**/MF **A01**

**GREGG, W. P.**
Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04**/MF **A01**

**GRIEST, W. H.**
Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02**/MF **A01**

**GRIEVES, C.**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC **A08**/MF **A02**

**GRIFFIN, C. J.**
Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC **A02**/MF **A01**

Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.
PB93-221968/REB 93-04 PC **A02**/MF **A01**

**GRIFFIS, W. L.**
Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC **A02**/MF **A01**

**GRIFFITH, B.**
Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC A03/MF A01

**GRIFFITH, W. C.**
Role of Ozone in Tracheal Cell Transformation.
PB93-179935/REB 93-01 PC A03/MF A01

**GROCCIA-ELLISON, M.**
Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-226880/REB 93-04 PC A03/MF A01

**GROFFMAN, P. M.**
Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC A03/MF A01

**GROHSE, P.**
Guidelines for Mercury Measurements from Stationary Sources: Quality Assurance Handbook. Section 3.19. Volume 3.
PB93-131209/REB 93-01 PC A08/MF A02

**GROHSE, P. M.**
Development of a Field Test Method for the Determination of Lead in Paint and Paint-Contaminated Dust and Soil.
PB93-173128/REB 93-01 PC A03/MF A01

**GROME, T.**
Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
PB93-202620/REB 93-01 PC A07/MF A02

Clean Water and the American Economy. Proceedings: Surface Water. Volume 1. Held on October 19-21, 1992.
PB93-202612/REB 93-01 PC A14/MF A03

**GROSE, E. C.**
Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
PB93-236321/REB 93-04 PC A03/MF A01

**GROSS, B. A.**
LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC A05/MF A01

**GROTE, R. A.**
Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC A02/MF A01

**GRUBBS, W. D.**
Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC A05/MF A01

Simulation of Microbial Occurrence, Exposure and Health Risks after Drinking Water Treatment Processes.
PB93-134393/REB 93-01 PC A05/MF A02

**GRUBE, A. H.**
Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC A03/MF A01

**GRUBE, W.**
RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC A05/MF A01

**GSCHWEND, P. M.**
Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC A03/MF A01

**GUARINO, L. A.**
Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
PB93-168946/REB 93-01 PC A02

**GUCINSKI, H.**
Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
PB93-212454/REB 93-04 PC A03/MF A01

**GULBRANSEN, T. C.**
Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC A03/MF A01

**GULETT, B. K.**
Reaction Kinetics of Ca-Based Sorbents with HCl.
PB93-131860/REB 93-01 PC A03/MF A01

**GULLETT, B. K.**
Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC A02/MF A01

Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107043/REB 93-01 PC A02/MF A01

**GUNTAKA,**
Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC A01/MF A01

**GUO, Z.**
Characterization of Organic Emission from a Wood Finishing Product-Wood Stain.
PB93-150100/REB 93-01 PC A02/MF A01

Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC A02/MF A01

Fundamental Mass Transfer Models for Indoor Air Pollution Sources.
PB93-221992/REB 93-04 PC A02/MF A01

Modeling of the Fast Organic Emissions from a Wood-Finishing Product: Floor Wax.
PB93-107027/REB 93-01 PC A02/MF A01

Validation of Source and Sink Models: Problems and Possible Solutions.
PB93-106789/REB 93-01 PC A03/MF A01

**GUPTA, R.**
Carbon Disulfide Emission Control Options.
PB93-124667/REB 93-01 PC A03/MF A01

**GUPTA, R. C.**
Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-228906/REB 93-04 PC A01/MF A01

Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC A02/MF A01

Short Communication: Improved Thin-Layer Chromatographic Separation of 32P-Postlabeled DNA Adducts.
PB93-229615/REB 93-04 PC A02/MF A01

**GUSEK, J.**
Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
PB93-233914/REB 93-04 PC A12/MF A03

**GUTKNECHT, W. F.**
Development of a Field Test Method for the Determination of Lead in Paint and Paint-Contaminated Dust and Soil.
PB93-173128/REB 93-01 PC A03/MF A01

Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.
PB93-221653/REB 93-04 PC A07/MF A02

Outreach to Manufacturers of Lead Test Kits.
PB93-216570/REB 93-04 PC A03/MF A01

Workshop Report: Identification of Performance Parameters for Portable X-ray Fluorescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.
PB93-216612/REB 93-04 PC A05/MF A02

Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.
PB93-216604/REB 93-04 PC A06/MF A02

**GUTNECHT, W. F.**
Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC A03/MF A01

**GWIN, S. E.**
Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC A09/MF A02

**HAAG, W.**
Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.
PB93-205383/REB 93-04 PC A03/MF A01

**HAAKANSSON, L.**
Metal concentrations of the mor layer.
DE92563061/REB 93-01 PC A05/MF A01

**HADDEN, S. G.**
Environmental Management Inventory of Galveston Bay.
PB93-205797/REB 93-04 PC A06/MF A02

Risk Communication About Chemicals in Your Community. Facilitator's Manual and Guide.
PB93-200541/REB 93-01 PC A05/MF A02

**HADDOCK, J. D.**
Oxidation of Biphenyl by a Multicomponent Enzyme System from 'Pseudomonas' sp. Strain LB400.
PB93-229466/REB 93-04 PC A02/MF A01

Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
PB93-229474/REB 93-04 PC A02/MF A01

**HAEBLER, R. J.**
Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC A03/MF A01

**HAEGGBLOM, M. M.**
Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC A02/MF A01

**HAGELE, J. C.**
Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC A03/MF A01

**HAHN, J. P.**
Spray Characteristics of Two Types of Fuel Injectors.
PB93-180859/REB 93-01 PC A03/MF A01

**HAILE, C. L.**
Guidelines for Stack Testing at Municipal Waste Combustion Facilities. Project Summary.
PB93-222610/REB 93-04 PC A02/MF A01

**HAINES, J. R.**
Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC A03/MF A01

Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC A02/MF A01

Nutrient Movement through Beach Media: Problems and Field Results Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191344/REB 93-01 PC A03/MF A01

**HAINES, T. A.**
Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC A02/MF A01

**HAIRSTON, A. J.**
Information Management Guidelines for the Wetlands Research Program.
PB93-202844/REB 93-01 PC A04/MF A01

**HAIST-GULDE, B.**
Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
PB93-185759/REB 93-01 PC A03/MF A01

**HALL, B. W.**
Advacate-Low-Cost Process for SO2 Control.
PB93-141117/REB 93-01 PC A02/MF A01

**HALL, L. L.**
Dermal Penetration of ((14)C)Captan in Young and Adult Rats.
PB93-107142/REB 93-01 PC A03/MF A01

**HALL, M. S.**
Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
PB93-175503/REB 93-01 PC A03/MF A01

**HALL, R.**
Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC A03/MF A01

**HALL, R. E.**
Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC A03/MF A01

**HALLAM, T. G.**
Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.
PB93-222404/REB 93-04 PC A02/MF A01

**HALLORAN, A.**
Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC A03/MF A01

**HAMADY, F. J.**
Cold Starting an Alcohol-Fueled Engine with Ultrasonic Fuel Atomization.
PB93-206597/REB 93-04 PC A03/MF A01

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel - Final Report.
PB93-197929/REB 93-01 PC A03/MF A01

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC A03/MF A01

Spray Characteristics of Two Types of Fuel Injectors.
PB93-180859/REB 93-01 PC A03/MF A01

**HAMBLIN, M.**
Ecologically Acceptable Strategy for the Use of Genetically Engineered Baculovirus Pesticides.
PB93-149243/REB 93-01 PC A02/MF A01

**HAMEL, L. E.**
Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC A02/MF A01

**HAMILTON, W. F.**
State Air Pollution Control Programs: A Profile Report.
PB93-122364/REB 93-01 PC A03/MF A01

**HAMMEL, K. E.**
Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC A02/MF A01

Oxidative Degradation of Phenanthrene by the Ligninolytic Fungus 'Phanerochaete chrysosposium'.
PB93-199511/REB 93-01 PC A02/MF A01

Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC A02/MF A01

Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
PB93-194223/REB 93-01 PC A03/MF A01

**HAMMITT, J. K.**
Subjective-Probability-Based Scenarios for Uncertain Input Parameters: Stratospheric Ozone Depletion, December 1990.
PB93-143741/REB 93-01 PC A03/MF A01

**HAMOND, P.**
Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC A03/MF A01

**HAMRICK, K. J.**
FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC **A02**/MF **A01**

**HANGEBRAUCK, R. P.**
Technological Considerations for Planning the Global Carbon Future.
PB93-222008/REB 93-04 PC **A03**/MF **A01**

**HANLEY, J. T.**
Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC **A02**/MF **A01**

Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC **A02**/MF **A01**

Particle-Size-Dependent Efficiency of Air Cleaners.
PB93-221976/REB 93-04 PC **A01**/MF **A01**

Relating Air Cleaner Efficiency to Indoor Air Quality.
PB93-212405/REB 93-04 PC **A03**/MF **A01**

**HANLON, D.**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC **A08**/MF **A02**

**HANMER, R.**
Guidance Manual for POTW Pretreatment Program Development.
PB93-186112/REB 93-01 PC **A14**/MF **A03**

**HANNAN, S. W.**
Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC **A02**/MF **A01**

**HANNEMAN, A.**
Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
PB93-212454/REB 93-04 PC **A03**/MF **A01**

**HANNON, P.**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC **A10**/MF **A03**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC **A08**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC **A08**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC **A99**/MF **E11**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC **A21**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC **A07**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC **A20**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC **A24**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC **A05**/MF **A01**

**HANSELL, D. W.**
Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

**HANSEN, D. J.**
Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows (*'Cyprinodon variegatus'*).
PB93-204998/REB 93-04 PC **A03**/MF **A01**

**HARDIN, C. M.**
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

**HARDING, H. J.**
Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
PB93-229151/REB 93-04 PC **A03**/MF **A01**

**HARDISON, D. L.**
Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC **A03**/MF **A01**

**HARDY, J.**
Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
PB93-212454/REB 93-04 PC **A03**/MF **A01**

**HARDY, J. T.**
Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC **A02**/MF **A01**

**HARETOS, C.**
Clean Water and the American Economy. Proceedings: *Ground Water. Volume 2. Held on* October 19-21, 1992.
PB93-202620/REB 93-01 PC **A07**/MF **A02**

Clean Water and the American Economy. Proceedings: *Surface Water. Volume 1. Held on* October 19-21, 1992.
PB93-202612/REB 93-01 PC **A14**/MF **A03**

**HARKEMA, J. R.**
*Role of Ozone in Tracheal Cell Transformation.*
PB93-179935/REB 93-01 PC **A03**/MF **A01**

**HARLESS, R. L.**
*Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.*
PB93-229193/REB 93-04 PC **A02**/MF **A01**

**HARLINE,**
Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC **A01**/MF **A01**

**HARRINGTON-BROCK, K.**
Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02**/MF **A01**

V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

**HARRINGTON, G. W.**
Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

**HARRIS, B.**
Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC **A03**/MF **A01**

**HARRIS, D.**
Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC **A03**/MF **A01**

**HARRIS, D. B.**
Design of New Schools and Other Large Buildings Which Are Radon Resistant and Easy to Mitigate.
PB93-131662/REB 93-01 PC **A03**/MF **A01**

**HARRIS, D. L.**
Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. *aeschynomene*' Transformants with Benomyl Resistance.
PB93-212629/REB 93-04 PC **A02**/MF **A01**

**HARRIS, J. C.**
Guidelines for Stack Testing at Municipal Waste Combustion Facilities. Project Summary.
PB93-222610/REB 93-04 PC **A02**/MF **A01**

**HARRIS, L.**
Carbon Disulfide Emission Control Options.
PB93-124667/REB 93-01 PC **A03**/MF **A01**

**HARRIS, R. K.**
Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03**/MF **A01**

**HARRIS, S.**
Consensus Method for Determining Groundwaters under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA).
PB93-180818/REB 93-01 PC **A04**/MF **A01**

**HARRIS, T.**
Information Technology Architecture.
PB93-122430/REB 93-01 PC **A03**/MF **A01**

**HARRISON, B.**
Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

**HARRISON, C. L.**
Life-Cycle Assessment: Inventory Guidelines and Principles.
PB93-139681/REB 93-01 PC **A07**/MF **A02**

**HARRISON, J.**
Measurement and Distribution of Radon and Radon Progeny: An Overview of Indoor Radon Risk Reduction in the United States.
PB93-107092/REB 93-01 PC **A02**/MF **A01**

Preliminary Diagnostic Procedures for Radon Control. Project Summary.
PB93-222545/REB 93-04 PC **A01**/MF **A01**

**HARRISON, M. R.**
Methane Emissions from the Natural Gas Industry.
PB93-212421/REB 93-04 PC **A03**/MF **A01**

**HARTIG, P. C.**
Electrophoresis Gel Buffer Recirculator for under Twenty Dollars.
PB93-181014/REB 93-01 PC **A01**/MF **A01**

Rapid Efficient Production of Baculovirus Expression Vectors.
PB93-228898/REB 93-04 PC **A03**/MF **A01**

**HARTMAN, D. J.**
Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC **A03**/MF **A01**

**HARVEY, B. W.**
Method for the Determination of Asbestos in Bulk Building Materials. (Test Method).
PB93-218576/REB 93-04 PC **A05**/MF **A02**

**HARVEY, R.**
Wellhead Protection Programs: Tools for Local Governments.
PB93-101111/REB 93-01 PC **A04**/MF **A01**

**HARWELL, J. H.**
Surfactants and Subsurface Remediation.
PB93-149854/REB 93-01 PC **A02**/MF **A01**

**HASS, T.**
Design of the Clean Air Act Deposition Monitoring Network.
PB93-120947/REB 93-01 PC **A03**/MF **A01**

**HASSEL, G. R.**
Experimental Investigation of PIC Formation in CFC-12 Incineration.
PB93-191294/REB 93-01 PC **A07**/MF **A02**

**HASSELL, G. R.**
Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

**HATCHER, G.**
Development and Validation of Methods for Real-Time *Measurement* of Pollutant Transport from an Urbanized Estuary.
PB93-228518/REB 93-04 PC **A02**/MF **A01**

**HAUGLAND, R. A.**
Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
PB93-204972/REB 93-04 PC **A03**/MF **A01**

Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC **A02**/MF **A01**

Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC **A03**/MF **A01**

Repeated Sequences Including RS1100 'Pseudomonas cepacia' AC1100 Function as IS Elements.
PB93-205177/REB 93-04 PC **A02**/MF **A01**

**HAUGLAND, T. L.**
Molecular Basis of Biodegradation of Chloroaromatic Compounds.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

**HAUSLE, K. J.**
Protocol for Equipment Leak Emission Estimates.
PB93-229219/REB 93-04 PC **A12**/MF **A03**

**HAWKINS, W. E.**
Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02**/MF **A01**

Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04**/MF **A01**

**HAWTHORNE, A. R.**
Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
PB93-121259/REB 93-01 PC **A02**/MF **A01**

**HAYKAL-COATES, N.**
Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC **A02**/MF **A01**

**HAYSLIP, G. A.**
*Region 10 In-Stream* Biological Monitoring Handbook: For Wadable Streams in the Pacific Northwest.
PB93-226611/REB 93-04 PC **A05**/MF **A01**

**HEAP, M. P.**
Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-228450/REB 93-04 PC **A02**/MF **A01**

**HEARD, C. S.**
Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02/MF A01**

**HEATH, A. G.**
Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03/MF A01**

**HEATH, R. C.**
Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC **A08/MF A02**

Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC **A07/MF A02**

**HEATH, R. H.**
Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC **A02/MF A01**

**HEAVENRICH, R. M.**
Light-Duty Automotive Technology and Fuel Economy Trends through 1993.
PB93-199255/REB 93-01 PC **A06/MF A02**

**HECK, W. W.**
Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC **A12/MF A03**

**HEGG, B. A.**
Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC **A10/MF A03**

**HEINTZENBERG, J.**
Air monitoring in the Arctic: 1980-90.
DE92563060/REB 93-01 PC **A03/MF A01**

**HEINZE, T.**
In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02/MF A01**

**HEIRIGS, P.**
Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
PB93-180675/REB 93-01 PC **A06/MF A02**

**HEISKARY, S. A.**
Use of Ecoregions in Biological Monitoring.
PB93-106730/REB 93-01 PC **A03/MF A01**

**HEJI, S. J.**
Adding a Landscape Ecology Perspective to Conservation and Management Planning.
PB93-234516/REB 93-04 PC **A03/MF A01**

**HELLMAN, K. H.**
Light-Duty Automotive Technology and Fuel Economy Trends through 1993.
PB93-199255/REB 93-01 PC **A06/MF A02**

Spray Characteristics of Two Types of Fuel Injectors.
PB93-180659/REB 93-01 PC **A03/MF A01**

**HELMISAARI, H.**
Long-term forest fertilization experiments in Finland and Sweden - their use for vitality and nutrient balance studies.
DE93778473/REB 93-01 PC **A07/MF A02**

**HELMISAARI, H. S.**
Long-term forest fertilization experiments in Finland and Sweden - their use for vitality and nutrient balance studies.
DE93778473/REB 93-01 PC **A07/MF A02**

**HENDERSON, F. W.**
Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02/MF A01**

**HENDERSON, G.**
Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC **A12/MF A03**

**HENDERSON, S.**
Global Climates: Past, Present, and Future. Activities for Integrated Science Education.
PB93-222313/REB 93-04 PC **A06/MF A02**

Precollege Education: A Vital Component if Sustainable Agriculture is to Take Root.
PB93-168870/REB 93-01 PC **A03/MF A01**

**HENDRICKS, C. W.**
Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02/MF A01**

**HENDRICKS, J. D.**
Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04/MF A01**

**HENDRICKS, M. S.**
Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02/MF A01**

**HENKE, D. C.**
Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
PB93-175677/REB 93-01 PC **A02/MF A01**

**HENRY, M. M.**
Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02/MF A01**

**HENRY, R. C.**
Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03/MF A01**

**HENSCHEL, D. B.**
Indoor Radon Reduction in Crawl-Space Houses: A Review of Alternative Approaches.
PB93-173177/REB 93-01 PC **A03/MF A01**

**HENSEL, B. R.**
Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC **A02/MF A01**

**HENSEN, C.**
Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC **A02/MF A01**

**HEONG, K. L.**
Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC **A05/MF A01**

Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC **A07/MF A02**

**HEREDIA, D. J.**
Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03/MF A01**

Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03/MF A01**

**HERNDON, C.**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Measurements of Hydrocarbon Emissions and Ambient Air Concentrations at the Amoco Yorktown Refinery. Air Quality Data. Volume 1.
PB92-228592/REB 93-01 PC **A12/MF A03**

**HEROT, F. C.**
Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC **A07/MF A02**

**HERRENO-SAENZ, D.**
In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02/MF A01**

**HERRMANN, J.**
Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC **A03/MF A01**

**HERTZ, B.**
Use of Expert System in a Water Utility.
PB93-123081/REB 93-01 PC **A04/MF A01**

**HERTZ, C. D.**
Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
PB93-229565/REB 93-04 PC **A02/MF A01**

**HERZOG, B. L.**
Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC **A02/MF A01**

**HESS, A. F.**
Modeling Contaminant Propagation in Drinking-Water Distribution Systems.
PB93-205136/REB 93-04 PC **A03/MF A01**

**HESS, B. C.**
Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-228500/REB 93-04 PC **A02/MF A01**

**HESS, K. M.**
Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3, Hydraulic Conductivity Variability and Calculated Macrodispersivities.
PB93-107050/REB 93-01 PC **A03/MF A01**

**HESSLING, J.**
On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC **A09/MF A02**

**HESTER, J.**
Deposition of Sulfate Acid Aerosols in the Developing Human Lung.
PB93-236388/REB 93-04 PC **A03/MF A01**

**HETZLER, B. E.**
Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC **A03/MF A01**

**HEUN, M. C.**
Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
PB93-106821/REB 93-01 PC **A03/MF A01**

**HEYNER, S.**
Gene Expression in Pre-Implantation Mammalian Embryos.
PB93-194397/REB 93-01 PC **A03/MF A01**

**HICHEE, R. E.**
In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC **A12/MF A03**

**HICKEY, A. J.**
Use of Analytically Defined Estimates of Aerosol Respirable Fraction to Predict Lung Deposition Patterns.
PB93-175743/REB 93-01 PC **A02/MF A01**

**HICKS, B.**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03/MF A01**

**HICKS, R. E.**
Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
PB93-121184/REB 93-01 PC **A02/MF A01**

**HIGHSMITH, V. R.**
Assessing Potential Exposures from Routine Use of VOC-Contaminated Groundwater.
PB93-173060/REB 93-01 PC **A02/MF A01**

Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02/MF A01**

Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC **A02/MF A01**

**HIGUCHI, M. A.**
Ammonia Abatement System for Whole-Body Small Animal Inhalation Exposures to Acid Aerosols.
PB93-229516/REB 93-04 PC **A03/MF A01**

**HILDEMANN, L.**
Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
PB93-234508/REB 93-04 PC **A03/MF A01**

**HILL, D.**
Identification of Cost Factors for the Ocean Disposal Alternative for Low-Level Radioactive Waste.
PB93-203917/REB 93-04 PC **A03/MF A01**

**HILL, K.**
Determination of Carboxylic Acids by Ion-Exclusion Chromatography with Non-Suppressed Conductivity and Optical Detectors.
PB93-181212/REB 93-01 PC **A02/MF A01**

**HILL, R. N.**
Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC **A02/MF A01**

**HILL, R. T.**
Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC **A01/MF A01**

Isolation and Diversity of Actinomycetes in the Chesapeake Bay.
PB93-205060/REB 93-01 PC **A02/MF A01**

**HILLGER, R. W.**
Characteristics of Non-Petroleum Underground Storage Tanks.
PB93-185775/REB 93-01 PC **A03/MF A01**

Location of Leaks in Pressurized Petroleum Pipelines by Means of Passive-Acoustic Sensing Methods.
PB93-185783/REB 93-01 PC **A03/MF A01**

**HILLMAN, J.**
Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells.
PB93-115897/REB 93-01 PC **A04/MF A01**

**HINCHEE, R. E.**
In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03/MF A01**

Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC **A05/MF A01**

**HINES, A. P.**
Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03/MF A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit.
PB93-168839/REB 93-01 PC **A02/MF A01**

Analysis of Protocol Gases: An On-Going Quality Assurance Audit (May 1993).
PB93-221869/REB 93-04 PC **A03/MF A01**

EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02/MF A01**

**HINLEIN, E. S.**
LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07/MF A02**

**HINSENVELD, M.**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC **A07/MF A02**

**HINSHAW, G.**
Volatile Organic Sampling Train Soot Interference Report.
PB93-144145/REB 93-01 PC **A04/MF A01**

**HINTENLANG, D. E.**
Proceedings of the Indoor Radon Modeling Workshop, Florida Radon Research Program. Held in Tampa, Florida on April 16-17, 1991.
PB93-172922/REB 93-01 PC **A09/MF A02**

**HINTON, D. E.**
Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04**/MF **A01**

**HITE, R. L.**
Biological and Water Quality Survey of Sugar Creek and Tributaries Crawford County, Illinois, August and September 1992.
PB93-217180/REB 93-04 PC **A04**/MF **A01**

Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

**HJORT, R. C.**
Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03**/MF **A01**

**HO, K. T. Y.**
Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02**/MF **A01**

Physical and Chemical Parameters of Sediment Extraction and Fractionation That Influence Toxicity, as Evaluated by Microtox (Trade Name).
PB93-185882/REB 93-01 PC **A03**/MF **A01**

**HOCHBERG, R. J.**
Design of a Basinwide Monitoring Program for the Tampa Bay Estuary.
PB93-194694/REB 93-01 PC **A05**/MF **A01**

Synthesis of Basic Life Histories of Tampa Bay Species.
PB93-196012/REB 93-01 PC **A12**/MF **A03**

**HOCKMAN, E. L.**
Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown Refinery. Refinery Release Inventory.
PB92-228550/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Groundwater and Soil Data.
PB92-228576/REB 93-01 PC **A12**/MF **A03**

**HODGE, V. F.**
Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.
PB93-228492/REB 93-04 PC **A02**/MF **A01**

**HODSON, L. L.**
Development of a Field Test Method for the Determination of Lead in Paint and Paint-Contaminated Dust and Soil.
PB93-173128/REB 93-01 PC **A03**/MF **A01**

Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.
PB93-221653/REB 93-04 PC **A07**/MF **A02**

Outreach to Manufacturers of Lead Test Kits.
PB93-216570/REB 93-04 PC **A03**/MF **A01**

**HODSON, R. E.**
Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC **A02**/MF **A01**

**HOEGLUND, L. O.**
Release of PCB and mercury from fibre sediments.
DE93778469/REB 93-01 PC **A05**/MF **A01**

**HOFFMAN, A.**
Atmopheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

**HOFFMAN, A. J.**
Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
PB93-228534/REB 93-04 PC **A02**/MF **A01**

Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC **A02**/MF **A01**

**HOFFMEYER, D.**
Background Information Document to Support NESHAPS Rulemaking on Nuclear Power Reactors.
PB93-199321/REB 93-01 PC **A14**/MF **A03**

**HOGAN, T.**
Baseline Emissions Forecasts for Industrial Non-Boiler Sources. Project Summary.
PB93-222560/REB 93-04 PC **A01**/MF **A01**

Projections of Regional Fuel Oil and Natural Gas Prices. Project Summary.
PB93-222552/REB 93-04 PC **A01**/MF **A01**

**HOGSETT, W. E.**
Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.
PB93-212785/REB 93-04 PC **A03**/MF **A01**

Potential Bias from Non-Continuous Monitoring of Ambient Ozone Concentrations for Characterizing Hourly and Daily 7- and 12-Hour Average Concentrations.
PB93-191534/REB 93-01 PC **A02**/MF **A01**

**HOHEISEL, C.**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC **A10**/MF **A03**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC **A08**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC **A08**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC **A99**/MF **E11**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC **A21**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC **A07**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC **A20**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC **A06**/MF **A02**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC **A24**/MF **A04**

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC **A05**/MF **A01**

**HOLBEN, W. E.**
Isolation and Purification of Bacterial DNA from Soil.
PB93-149276/REB 93-01 PC **A04**/MF **A01**

**HOLDEN, K. L.**
DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

DNA Isolation from Small Tissue Samples Using Salt and Spermine.
PB93-181048/REB 93-01 PC **A01**/MF **A01**

**HOLDREN, G. R.**
Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC **A07**/MF **A02**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

**HOLLAND, A. F.**
Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03**/MF **A01**

**HOLLAND, C. C.**
Impacts of Section 404 Permits Requiring Compensatory Mitigation on Wetlands in California (USA).
PB93-212512/REB 93-04 PC **A03**/MF **A01**

Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC **A09**/MF **A02**

**HOLLAND, D. M.**
Design of the Clean Air Act Deposition Monitoring Network.
PB93-120947/REB 93-01 PC **A03**/MF **A01**

**HOLLETT, B. A.**
Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC **A02**/MF **A01**

**HOLMAN, S.**
Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC **A07**/MF **A02**

**HOLMAN, S. R.**
Global Climates: Past, Present, and Future. Activities for Integrated Science Education.
PB93-222313/REB 93-04 PC **A06**/MF **A02**

Influence of Elevated CO2 and Temperature on Wetland Rice Root Dynamics.
PB93-141141/REB 93-01 PC **A02**/MF **A01**

**HOLMANN, S.**
Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC **A05**/MF **A01**

**HOLMEN, K.**
Air monitoring in the Arctic: 1980-90.
DE92563060/REB 93-01 PC **A03**/MF **A01**

**HOLST, L. L.**
Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC **A07**/MF **A02**

**HONDZO, M.**
Vertical Diffusion in Small Stratified Lake: Data and Error Analysis.
PB93-149185/REB 93-01 PC **A03**/MF **A01**

Water Temperature Characteristics of Lakes Subjected to Climate Change.
PB93-135648/REB 93-01 PC **A09**/MF **A02**

**HONEA, J.**
Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC **A09**/MF **A02**

**HONG, T.**
Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
PB93-168946/REB 93-01 PC **A02**

**HOOPER, A. B.**
Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium 'Nitrosomonas europaea'.
PB93-169076/REB 93-01 PC **A02**/MF **A01**

**HOPKINS, D.**
Tagged Species Engineering Model (TSEM).
PB93-229417/REB 93-04 PC **A03**/MF **A01**

**HOPKINS, G. D.**
Microcosm and In situ Field Studies of Enhanced Biotransformation of Trichloroethylene by Phenol-Utilizing Microorganisms.
PB93-222867/REB 93-04 PC **A02**/MF **A01**

**HOUGHTON, R. A.**
Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.
PB93-229680/REB 93-04 PC **A03**/MF **A01**

**HOUK, V. S.**
Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02**/MF **A01**

**HOUSE, D. E.**
Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.
PB93-236305/REB 93-04 PC **A03**/MF **A01**

Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02**/MF **A01**

Evidence for Direct Effect of Magnetic Fields on Neurite Outgrowth.
PB93-236669/REB 93-04 PC **A02**/MF **A01**

Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC **A03**/MF **A01**

Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-228815/REB 93-04 PC **A02**/MF **A01**

**HOUSTON, C. A.**
Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC **A07**/MF **A02**

**HOVLAND, M.**
Global Flux of Methane from Shallow Submarine Sediments.
PB93-222388/REB 93-04 PC **A03**/MF **A01**

**HOWLE, R.**
Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC **A07**/MF **A02**

**HOYER, M.**
Atmopheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

**HOYT, J. A.**
*Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.*
PB93-212611/REB 93-04 PC **A02**/MF **A01**

**HOZIER, J.**
In vitro Mammalian Mutagenesis as a Model for Genetic *Lesions in Human Cancer.*
PB93-141471/REB 93-01 PC **A02**/MF **A01**

**HSUAN, Y. G.**
Stress Cracking Behavior of HDPE Geomembranes and Its Prevention.
PB93-196616/REB 93-01 PC **A06**/MF **A02**

**HU, H. L.**
Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC A02/MF A01

**HUANG, H. Q.**
Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC A03/MF A01

Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC A03/MF A01

**HUBER, A. H.**
Gasoline and Methanol Exposures from Automobiles within Residences and Attached Garages.
PB93-222222/REB 93-04 PC A02/MF A01

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119673/REB 93-01 PC A02/MF A01

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-229185/REB 93-04 PC A02/MF A01

Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC A02/MF A01

Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119681/REB 93-01 PC A03/MF A01

**HUBER, W. C.**
Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC A02/MF A01

**HUDGENS, E. E.**
Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC A03/MF A01

Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC A03/MF A01

**HUDSON, H. L.**
Volunteer Lake Monitoring Program, 1991. Volume 3. Northeastern Illinois Region.
PB93-113538/REB 93-01 PC A07/MF A02

**HUDSON, S.**
Greening of World Trade: A Report to EPA from the Trade and Environment Committee of the National Advisory Council for Environmental Policy and Technology.
PB93-176960/REB 93-01 PC A11/MF A03

**HUFF, L. C.**
Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC A13/MF A03

**HUGHES, L. E.**
Information Management Guidelines for the Wetlands Research Program.
PB93-202844/REB 93-01 PC A04/MF A01

Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC A07/MF A02

**HUGHES, M. F.**
Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
PB93-141356/REB 93-01 PC A03/MF A01

**HUGHES, P. R.**
Ecologically Acceptable Strategy for the Use of Genetically Engineered Baculovirus Pesticides.
PB93-149243/REB 93-01 PC A02/MF A01

**HUGHES, R. M.**
Stream Indicator and Design Workshop.
PB93-222321/REB 93-04 PC A05/MF A01

Use of Ecoregions in Biological Monitoring.
PB93-106730/REB 93-01 PC A03/MF A01

**HULKA, B.**
Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-228831/REB 93-04 PC A03/MF A01

**HULTENGREN, S.**
Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC A04/MF A01

**HUMENIK, F. J.**
Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC A04/MF A01

**HUMMEL, P.**
Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
PB93-185536/REB 93-01 PC A11/MF A03

**HUNIKE, E. T.**
National Performance Audit Program (NPAP).
PB93-212322/REB 93-04 PC A02/MF A01

**HUNSAKER, C.**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC A02/MF A01

**HUNT, C. D.**
Transport of Low-Level Radioactive Soil at Deep-Ocean Disposal Site.
PB93-199487/REB 93-01 PC A03/MF A01

**HURST, C. J.**
Comparing the Accuracy of Equation Formats for Modeling Microbial Population Decay Rates.
PB93-131548/REB 93-01 PC A03/MF A01

**HUTCHINS, S.**
Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC A02/MF A01

**HUTCHINS, S. R.**
Applied Geologic, Microbiological, and Engineering Constraints of In-situ BTEX Bioremediation.
PB93-141513/REB 93-01 PC A03/MF A01

Biotransformation and Mineralization of Alkylbenzenes under Denitrifying Conditions.
PB93-229623/REB 93-04 PC A03/MF A01

Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC A03/MF A01

Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC A03/MF A01

Inhibition of Alkylbenzene Biodegradation under Denitrifying Conditions by Using Acetylene Block Technique.
PB93-121242/REB 93-01 PC A02/MF A01

**HWANG, H. M.**
Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC A02/MF A01

**HWANG, S.**
Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
PB93-173102/REB 93-01 PC A03/MF A01

**INGHAM, E.**
Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC A12/MF A03

**INGHAM, E. R.**
Soil Biology and Ecology.
PB93-199453/REB 93-01 PC A03/MF A01

**INSAROV, G. E.**
Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC A04/MF A01

**INSAROVA, I. D.**
Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC A04/MF A01

**INYANG, H. I.**
Geotechnical Systems for Structures on Contaminated Sites: A Technical Guidance Document.
PB93-209419/REB 93-04 PC A08/MF A02

**IRELAND, J.**
Rapid Measurement of Aqueous Hydroxyl Radical Concentrations in Steady-State HO Flux Systems.
PB93-131779/REB 93-01 PC A03/MF A01

**IRELAND, J. C.**
Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC A01/MF A01

**IRISH, J. T.**
Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC A07/MF A02

**IRWIN, J.**
Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC A06/MF A02

**IRWIN, J. S.**
Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC A02/MF A01

**ISRAELACHVILI, J.**
Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC A03/MF A01

**ISRAELI, E.**
Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC A02/MF A01

**IVERY, A. M.**
PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
PB93-174027/REB 93-01 PC A17/MF A04

**JACKIM, E.**
Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC A02/MF A01

**JACKIM, G.**
DNA Alterations (Chapter 3).
PB93-221826/REB 93-04 PC A03/MF A01

**JACKSON, J. A.**
Maturational Changes in Dermal Absorption of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Fischer 344 Rats.
PB93-229490/REB 93-04 PC A02/MF A01

**JACKSON, L. L.**
Collection and Chemical Analysis of Lichens for Biomonitoring.
PB93-149862/REB 93-01 PC A03/MF A01

**JACKSON, M.**
Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC A02/MF A01

Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
PB93-204063/REB 93-01 PC A02/MF A01

**JACKSON, M. A.**
Genetic Toxicology of Putative Nongenotoxic Carcinogens.
PB93-175636/REB 93-01 PC A03/MF A01

**JACKSON, M. D.**
Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC A02/MF A01

Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC A03/MF A01

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
PB93-227163/REB 93-04 PC A11/MF A03

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
PB93-227171/REB 93-04 PC A12/MF A03

Using Method 301 to Validate Sampling and Analytical Methods for Selected CAAA Compounds.
PB93-191419/REB 93-01 PC A03/MF A01

**JAFFE, L. V.**
Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.
PB93-210383/REB 93-04 PC A07/MF A02

**JAMES, C.**
Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
PB93-228518/REB 93-04 PC A02/MF A01

**JAMES, R. H.**
Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC A04/MF A01

**JAMES, R. R.**
Bacillus thuringiensis var. kurstaki Affects a Beneficial Insect, the Cinnabar Moth (Lepidoptera: Arctidae).
PB93-199651/REB 93-01 PC A02/MF A01

**JAMES, S. C.**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC A07/MF A02

**JAMIESON, C. A.**
Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC A04/MF A01

**JANICKI, A. J.**
Compendium of Current Monitoring Programs in Tampa Bay and Its Watershed.
PB93-191666/REB 93-01 PC A05/MF A01

**JANSSEN, R.**
Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC A02/MF A01

Thermal Influences on Nervous System Function.
PB93-107159/REB 93-01 PC A03/MF A01

**JANSSON, M.**
Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC A03/MF A01

**JASKOT, R. H.**
Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
PB93-236321/REB 93-04 PC A03/MF A01

**JAWORSKI, N. A.**
Application of the Ecotone Concept in Defining Nutrient Management Requirements for the Upper Potomac River Basin.
PB93-199560/REB 93-01 PC A05/MF A01

Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC A03/MF A01

**JAWSON, M. D.**
Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC A03/MF A01

**JAYANTY, R. K. M.**
Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.
PB93-210383/REB 93-04 PC A07/MF A02

Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC A02/MF A01

Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 1.
PB93-122331/REB 93-01 PC A99/MF A06

**JEEVAN, A.**
Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
PB93-229607/REB 93-04 PC A02/MF A01

Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175651/REB 93-01 PC A03/MF A01

**JEFFERS, P. M.**
Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC A03/MF A01

**JEFFREY, W. H.**
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC A03/MF A01

**JENDRUCKO, R. J.**
Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
PB93-123024/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Penny Blanks and Zinc Products.
PB93-123107/REB 93-01 PC A02/MF A01

**JENKINS, P.**
Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC A02/MF A01

**JENNE, E. A.**
Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC A03/MF A01

**JENNINGS, M. S.**
Volatile Organic Compound Model Quality Assurance and Sensitivity Testing (Version 1.8).
PB93-223022/REB 93-04 PC A01/MF A01

**JENSEN, K. F.**
Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC A02/MF A01

Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Industion of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC A03/MF A01

**JENSEN, P.**
Characterization of Selected Public Health Issues in Galveston Bay.
PB93-205771/REB 93-04 PC A08/MF A02

**JEZZI, J. J.**
Location of Leaks in Pressurized Petroleum Pipelines by Means of Passive-Acoustic Sensing Methods.
PB93-185783/REB 93-01 PC A03/MF A01

**JIMENEZ, M.**
User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC A99/MF A06

**JIRKA, G. H.**
Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC A03/MF A01

**JOENSSON, U.**
New technology for refrigeration and heating plants.
DE93721673/REB 93-01 PC A03/MF A01

**JOHANSEN, A. M.**
Rapid Phase Indentification of Mixed Crystalline Solids.
PB93-212355/REB 93-04 PC A03/MF A01

**JOHN, J. F.**
Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Air Quality Data. Volume 2.
PB92-228600/REB 93-04 PC A16/MF A03

**JOHNSON, B.**
Empirical Model of Vehicle Emissions.
PB93-199602/REB 93-01 PC A02/MF A01

**JOHNSON, C. B.**
Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.
PB93-229649/REB 93-04 PC A03/MF A01

**JOHNSON, D. W.**
Soil-Mediated Effects of Atmospheric Deposition on Eastern U.S. Spruce-Fir Forests.
PB93-141125/REB 93-01 PC A03/MF A01

**JOHNSON, J.**
Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC A03/MF A01

**JOHNSON, K. B.**
Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Industion of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC A03/MF A01

**JOHNSON, K. L.**
Industrial Boiler Low NOx Combustion Retrofit Cost Algorithm Development. Project Summary.
PB93-222578/REB 93-04 PC A01/MF A01

**JOHNSON, L. D.**
Air Emissions Testing.
PB93-180933/REB 93-01 PC A02/MF A01

Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC A03/MF A01

Replacement of Charcoal Sorbent in the VOST.
PB93-221893/REB 93-04 PC A03/MF A01

Volatile Organic Sampling Train Soot Interference Report.
PB93-144145/REB 93-01 PC A04/MF A01

**JOHNSON, M.**
Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC A03/MF A01

**JOHNSON, M. D.**
Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.
PB93-205383/REB 93-04 PC A03/MF A01

**JOHNSON, M. G.**
Conservation Tillage Impacts on National Soil and Atmospheric Carbon Levels.
PB93-191500/REB 93-01 PC A03/MF A01

Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC A03/MF A01

**JOHNSON, P. S.**
Synthesis of Ectomycorrhizae on Northern Red Oak Seedlings in a Michigan Nursery.
PB93-212678/REB 93-04 PC A02/MF A01

**JOHNSON, R. A.**
Molecular Basis of Biodegradation of Chloroaromatic Compounds.
PB93-205169/REB 93-04 PC A03/MF A01

**JOHNSON, R. L.**
Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC A03/MF A01

**JOHNSON, S. A.**
Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC A03/MF A01

**JONES, A.**
On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC A09/MF A02

Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC A99/MF A06

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC A99/MF E11

**JONES, A. C.**
Seminar Publication. Medical and Institutional Waste Incineration: Regulations, Management, Technology, Emissions, and Operations.
PB93-116283/REB 93-01 PC A03/MF A01

**JONES, C. L.**
Report to Congress on Implementation of Section 112 of the Clean Air Act Amendments of 1990.
PB93-236008/REB 93-04 PC A05/MF A01

Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.
PB93-228492/REB 93-04 PC A02/MF A01

**JONES, D. L.**
Technical Information Document for Residential Wood Combustion Best Available Control Measures.
PB93-122224/REB 93-01 PC A05/MF A01

**JONES, J. A.**
Mobile On-Site Recycling of Metalworking Fluids.
PB93-216562/REB 93-04 PC A04/MF A01

On-Site Waste Ink Recycling: Technology Evaluation Report.
PB93-141026/REB 93-01 PC A04/MF A01

**JONES, J. W.**
Global Inventory of Volatile Organic Compound Emissions from Anthropogenic Sources.
PB93-107001/REB 93-01 PC A03/MF A01

**JONES, L. A.**
Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC A02/MF A01

**JONES, L. G.**
Advanced Utility Simulation Model. Project Summary.
PB93-222636/REB 93-04 PC A02/MF A01

**JOSEFSSON, W.**
Measurements of total ozone.
DE92563059/REB 93-01 PC A04/MF A01

**JOYNER, P.**
Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
PB93-173102/REB 93-01 PC A03/MF A01

**JOZEWICZ, W.**
Advacate-Low-Cost Process for SO2 Control.
PB93-141117/REB 93-01 PC A02/MF A01

Evaluation of FGD Dry Injection Sorbents and Additives. Volume 1. Development of High Reactivity Sorbents. Project Summary.
PB93-228484/REB 93-04 PC A02/MF A01

Reaction Kinetics of Ca-Based Sorbents with HCl.
PB93-131860/REB 93-01 PC A03/MF A01

**JUDD, A. G.**
Global Flux of Methane from Shallow Submarine Sediments.
PB93-222388/REB 93-04 PC A03/MF A01

**JUINIO, M. A. R.**
Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC A03/MF A01

**JUNG, D.**
Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
PB93-173664/REB 93-01 PC A02/MF A01

**JUNG, D. S.**
Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131688/REB 93-01 PC A03/MF A01

**JUREK, M. A.**
Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191559/REB 93-01 PC A02/MF A01

**KAGANN, R. H.**
Optical Remote Measurement of Toxic Gases.
PB93-229409/REB 93-04 PC A03/MF A01

**KAHL, J. S.**
Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC A02/MF A01

Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC A02/MF A01

MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC A02/MF A01

Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC A02/MF A01

Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC A02/MF A01

**KAISER, G. D.**
Contingency Analysis Modeling for Superfund Sites and Other Sources.
PB93-169126/REB 93-01 PC A13/MF A03

**KALB, V. F.**
Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
PB93-229482/REB 93-04 PC A03/MF A01

Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
PB93-229441/REB 93-04 PC A03/MF A01

Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
PB93-229243/REB 93-04 PC A03/MF A01

Proteins from Eight Eukaryotic Cytochrome P-450 Families Share a Segmented Region of Sequence Similarity.
PB93-229235/REB 93-04 PC A02/MF A01

**KAMENS, R. M.**
Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC A03/MF A01

**KAMPBELL, D. H.**
Bioremediation of Chlorinated Solvents in the Vadose Zone.
PB93-221935/REB 93-04 PC A02/MF A01

Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.
PB93-221950/REB 93-04 PC A01/MF A01

Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC A02/MF A01

Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC A03/MF A01

Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.
PB93-221968/REB 93-04 PC A02/MF A01

Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC A03/MF A01

Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC A02/MF A01

Performance of Pilot Scale Bioventing at an Aviation Gasoline Spill Site.
PB93-221943/REB 93-04 PC A02/MF A01

Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.
PB93-222370/REB 93-04 PC A02/MF A01

Retrospective Performance Evaluation on In situ Bioremediation: Site Characterization.
PB93-221919/REB 93-04 PC A03/MF A01

**KANDALA, J.**
Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC A01/MF A01

**KANE, M. D.**
Genus- and Group-Specific Hybridization Probes for Determinative and Environmental Studies of Sulfate-Reducing Bacteria.
PB93-168987/REB 93-01 PC A02/MF A01

**KAPLAN, M. F.**
Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
PB93-173979/REB 93-01 PC A22/MF A04

**KARLSSON, J.**
Astgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC A14/MF A03

**KARNS, S. A.**
Development of Sampling and Analytical Methods for the Measurement of Nitrous Oxide from Fossil Fuel Combustion Sources.
PB93-194330/REB 93-01 PC A07/MF A02

**KARRIE, J.**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC A10/MF A03

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC A06/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC A06/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC A06/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC A99/MF E11

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC A21/MF A04

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC A07/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC A20/MF A04

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC A24/MF A04

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC A05/MF A01

**KARRIER, J.**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC A06/MF A02

**KASHMANIAN, R.**
Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC A06/MF A02

**KASHMANIAN, R. M.**
Assessing the Environmental Consumer Market.
PB93-116028/REB 93-01 PC A03/MF A01

**KASLICK, C. A.**
Column Vapor Extraction Experiments on Gasoline Contaminated Soil.
PB93-131514/REB 93-01 PC A03/MF A01

**KASSAY, K. M.**
Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC A03/MF A01

**KATSUWON, J.**
Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
PB93-205037/REB 93-04 PC A02/MF A01

Characterization of Catalase Activities in a Root-Colonizing Isolate of 'Pseudomonas putida' (Revised).
PB93-205052/REB 93-04 PC A02/MF A01

**KATZ, I.**
Use of Analytically Defined Estimates of Aerosol Respirable Fraction to Predict Lung Deposition Patterns.
PB93-175743/REB 93-01 PC A02/MF A01

**KATZ, R. W.**
Methods for Analyzing Extreme Events Under Climate Change.
PB93-146827/REB 93-01 PC A03/MF A01

**KATZ, S.**
Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
PB93-120970/REB 93-01 PC A02/MF A01

**KAVET, R.**
Review of the Literature on Potential Reproductive and Developmental Toxicity of Electric and Magnetic Fields.
PB93-141307/REB 93-01 PC A03/MF A01

**KAVLOCK, R. J.**
Extraction of Phenol and its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC A02/MF A01

Gonadal Effects of Fetal Exposure to the Azo Dye Congo Red in Mice: Infertility in Female but Not Male Offspring.
PB93-181071/REB 93-01 PC A03/MF A01

**KEATING, J. W.**
Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Air Quality Data. Volume 2.
PB92-228600/REB 93-04 PC A16/MF A03

**KEATING, M. H.**
Report to Congress on Implementation of Section 112 of the Clean Air Act Amendments of 1990.
PB93-236006/REB 93-04 PC A05/MF A01

**KEDDERIS, L.**
Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC A03/MF A01

**KEELER, G.**
Atmospheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC A02/MF A01

Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
PB93-121069/REB 93-01 PC A02/MF A01

**KEELEY, J. W.**
Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC A03/MF A01

**KEELY, J.**
Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC A06/MF A02

**KEHRL, H.**
Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC A02/MF A01

**KEITH, D.**
Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
PB93-229706/REB 93-04 PC A02/MF A01

**KEITH, D. J.**
Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC A02/MF A01

Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
PB93-229714/REB 93-04 PC A02/MF A01

**KELLER, A. A.**
Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC A03/MF A01

**KELLOGG, J. H.**
Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.
PB93-236438/REB 93-04 PC A03/MF A01

**KELLOGG, R. B.**
Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC A03/MF A01

**KENNEDY, L. G.**
Applied Geologic, Microbiological, and Engineering Constraints of In-situ BTEX Bioremediation.
PB93-141513/REB 93-01 PC A03/MF A01

Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC A03/MF A01

**KENT, M. L.**
Importance of Fish Diseases: An Overview.
PB93-204113/REB 93-01 PC A03/MF A01

Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC A03/MF A01

**KENTULA, M. E.**
Establishing Quantitative Performance Criteria for Wetland Restoration.
PB93-236610/REB 93-04 PC A01/MF A01

Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
PB93-212462/REB 93-04 PC A03/MF A01

Impacts of Section 404 Permits Requiring Compensatory Mitigation on Wetlands in California (USA).
PB93-212512/REB 93-04 PC A03/MF A01

Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC A01/MF A01

**KEOLEIAN, G. A.**
Life Cycle Design Guidance Manual. Environmental Requirements and the Product System.
PB93-164507/REB 93-04 PC A09/MF A03

**KEPNER, W. G.**
Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC A13/MF A03

**KERKVLIET, N.**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 4. Immunotoxic Effects.
PB93-222685/REB 93-04 PC A04/MF A01

**KERKVLIET, N. I.**
Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC A03/MF A01

**KERN, E. C.**
EPA's Photovoltaic Demand-Side Management Cost-Shared Demonstrations.
PB93-212413/REB 93-04 PC A02/MF A01

**KERN, J. S.**
Conservation Tillage Impacts on National Soil and Atmospheric Carbon Levels.
PB93-191500/REB 93-01 PC A03/MF A01

Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC A03/MF A01

**KERSTETER, S. L.**
Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC A06/MF A02

**KESSEL, M.**
Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
PB93-205078/REB 93-04 PC A02/MF A01

**KHANNA, K. L.**
Drinking Water Toxicity Profiles.
PB93-122406/REB 93-01 PC A09/MF A02

**KIELTY, P.**
Summary of Factors Affecting Compliance by Ferrous Foundaries. Volume 1. Text.
PB93-199347/REB 93-01 PC A05/MF A02

**KIESLING, R. W.**
Proceedings: Galveston Bay Characterization Workshop. Held on February 21-23, 1991.
PB93-205672/REB 93-04 PC A11/MF A03

**KILEY, K. P.**
Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and Chincoteague Bay, 1991.
PB93-191120/REB 93-01 PC A13/MF A03

**KILGROE, J. D.**
Development of Good Combustion Practice for Municipal Waste Combustors.
PB93-131613/REB 93-01 PC A03/MF A01

Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC A02/MF A01

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 1. Sessions P, 0, 1A, 2A, 3A, 4A, 6A, 6B, 9C and 10B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124170/REB 93-01 PC A20/MF A04

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 2. Sessions 1B, 2B, 3B, 4B, 7A, 7B, 8A, 8B and 9B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124188/REB 93-01 PC A21/MF A04

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 3. Sessions 1C, 2C, 3C, 4C, 6C, 7C, 8C, 9A, and 10A/C. Held in Tampa, Florida on April 16-19, 1991.
PB93-124196/REB 93-01 PC A21/MF A04

**KILLAM, K. A.**
Synthesis of Basic Life Histories of Tampa Bay Species.
PB93-196012/REB 93-01 PC **A12**/MF **A03**

**KIM, T. W.**
Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
PB93-141257/REB 93-01 PC **A02**/MF **A01**

**KIMBELL, J. S.**
Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC **A02**/MF **A01**

**KIMMEL, C. A.**
Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC **A02**/MF **A01**

Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03**/MF **A01**

Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03**/MF **A01**

**KIMMEL, G. L.**
Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03**/MF **A01**

Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03**/MF **A01**

**KINEMAN, J. J.**
Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. User's Guide. Volume 1. NGDC Key to Geophysical Records Documentation No. 26.
PB93-146082/REB 93-01 PC **A07**/MF **A02**

Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. Documentation Manual, DISC-A. Volume 1. NGDC Key to Geophysical Records Documentation No. 27.
PB93-146090/REB 93-01 PC **A11**/MF **A03**

**KING, C.**
Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

**KING, M. M.**
Biological and Water Quality Survey of Sugar Creek and Tributaries Crawford County, Illinois, August and September 1992.
PB93-217180/REB 93-04 PC **A04**/MF **A01**

*Effects of Livestock Wastes on Small Illinois Streams:* Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

**KINLOCH, R. A.**
Gene Expression during Oogenesis in Mice.
PB93-194389/REB 93-01 PC **A03**/MF **A01**

**KINSEY, J. S.**
Characterization of PM-10 Emissions from Antiskid Materials Applied to Ice- and Snow-Covered Roadways.
PB93-150209/REB 93-01 PC **A05**/MF **A01**

**KIRCHGESSNER, D. A.**
Biomass Combustion in Gas-Turbine-Based Systems.
PB93-185742/REB 93-01 PC **A02**/MF **A01**

Estimate of Global Methane Emissions from Coal Mines.
PB93-212553/REB 93-04 PC **A03**/MF **A01**

Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC **A03**/MF **A01**

**KIRK, D. R.**
Technical Issues on Long-Term Performance of Solidified/Stabilized Waste Forms.
PB93-106680/REB 93-01 PC **A03**/MF **A01**

**KIRMAN, C.**
Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

**KIRSCH, F. W.**
Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC **A02**/MF **A01**

**KITCHEN, M.**
Development of Conversion Factors for Heavy-Duty Bus Engines G/BHP-HR to G/Mile.
PB93-232932/REB 93-04 PC **A03**/MF **A01**

**KITCHENS, B. E.**
FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC **A02**/MF **A01**

**KIZIER, G. J.**
Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown Refinery. Refinery Release Inventory.
PB92-228550/REB 93-01 PC **A12**/MF **A03**

**KIZIOR, G. J.**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Solid Waste Data.
PB92-228568/REB 93-01 PC **A05**/MF **A01**

**KLAUSMEIER, R. F.**
Analysis of Original Equipment and Aftermarket Manufacturer Oxygen Sensor Constructional, Functional, and Price Differences.
PB93-208007/REB 93-04 PC **A18**/MF **A04**

**KLAUSNER, S.**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC **A04**/MF **A01**

**KLEE, A. J.**
AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
PB93-100113/REB 93-01 PC **A10**/MF **A03**

New Approaches to Estimation of Solid-Waste Quantity and Composition.
PB93-185908/REB 93-01 PC **A02**/MF **A01**

**KLEE, H.**
Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown Refinery. Refinery Release Inventory.
PB92-228550/REB 93-01 PC **A12**/MF **A03**

Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Project Peer Review. Report of the Peer Review Committee of the Amoco/EPA Pollution Prevention Project at the Yorktown, Virginia Refinery.
PB92-228618/REB 93-01 PC **A10**/MF **A03**

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Project Summary.
PB92-228527/REB 93-01 PC **A08**/MF **A02**

**KLEIN, C. J.**
Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

**KLEIN-SZANTO, A. J. P.**
Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
PB93-179950/REB 93-01 PC **A03**/MF **A01**

**KLEINDIENST, T. E.**
Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC **A03**/MF **A01**

Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC **A03**/MF **A01**

**KLICH, E.**
Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC **A02**/MF **A01**

**KLIGERMAN, A. D.**
Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03**/MF **A01**

DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

**KLINEDINST, D. B.**
Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC **A02**/MF **A01**

**KLINEFELTER, G. L.**
Direct Effects of Ethane Dimethanesulphonate on Epididymal Function in Adult Rats. An In vitro Demonstration.
PB93-141281/REB 93-01 PC **A03**/MF **A01**

**KLINK, K.**
Cost of Remedial Actions (CORA) Model: Overview and Applications.
PB93-963318/REB 93-04 PC **A03**/MF **A01**

**KLOEPPER-SAMS, P. J.**
Molecular Regulation of the Induction of Cytochrome P-450E in the Estuarine Fish Fundulus Heteroclitus.
AD-A258 623/8/REB 93-01 PC **A11**/MF **A03**

**KLOSTERMANN, P.**
Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC **A01**/MF **A01**

**KLOUDA, G. A.**
Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC **A03**/MF **A01**

**KNAPP, K. T.**
Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC **A03**/MF **A01**

Dynamometer Testing of On-Road Vehicles from the Los Angeles in-Use Emissions Study.
PB93-222297/REB 93-04 PC **A03**/MF **A01**

**KNAUER, D. R.**
Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC **A08**/MF **A02**

**KNIGHT, I. T.**
Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC **A01**/MF **A01**

**KNOLL, J. E.**
Development and Validation of a Source Test Method for 2,4-Toluene Diisocyanate.
PB93-204055/REB 93-01 PC **A03**/MF **A01**

Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02**/MF **A01**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC **A02**/MF **A01**

Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC **A03**/MF **A01**

**KOCH, P. D.**
Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC **A03**/MF **A01**

**KOCHENDERFER, J.**
Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
PB93-135671/REB 93-01 PC **A01**/MF **A01**

**KOCHLING, M.**
Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
PB93-185759/REB 93-01 PC **A03**/MF **A01**

**KOERNER, R. M.**
Stress Cracking Behavior of HDPE Geomembranes and Its Prevention.
PB93-196616/REB 93-01 PC **A06**/MF **A02**

**KOERPER, G. J.**
Forest Sector Carbon Budget of the United States: Carbon Pools and Flux under Alternative Policy Options.
PB93-196996/REB 93-01 PC **A10**/MF **A03**

**KOFFSKEY, W.**
Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC **A03**/MF **A01**

**KOFFSKEY, W. E.**
Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.
PB93-222214/REB 93-04 PC **A10**/MF **A03**

Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC **A02**/MF **A01**

**KOFORD, R. R.**
Glossary for Avian Conservation Biology.
PB93-106656/REB 93-01 PC **A03**/MF **A01**

**KOHAN, M.**
Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02**/MF **A01**

**KOHAN, M. J.**
Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03**/MF **A01**

**KOLBER, Z.**
Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03**/MF **A01**

**KOLCHUGINA, T. P.**
Equilibrium Analysis of Carbon Pools and Fluxes of Forest Biomes in the Former Soviet Union.
PB93-191484/REB 93-01 PC **A02**/MF **A01**

Proceedings of the International Workshop on Carbon Cycling in Boreal Forest and Sub-Arctic Ecosystems: Biospheric Responses and Feedbacks to Global Climate Change.
PB93-205540/REB 93-04 PC **A13**/MF **A03**

**KOLLIG, H. P.**
Environmental Fate Constants for Organic Chemicals under Consideration for EPA's Hazardous Waste Identification Projects.
PB93-221646/REB 93-04 PC **A09**/MF **A02**

FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC **A02**/MF **A01**

**KOMINSKY, J. R.**
Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
PB93-227551/REB 93-04 PC **A06**/MF **A02**

Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.
PB93-218501/REB 93-04 PC **A07**/MF **A02**

Evaluation of Three Cleaning Methods for Removing Asbestos from Carpet: Determination of Airborne Asbestos Concentrations Associated with Each Method.
PB93-218568/REB 93-04 PC **A05**/MF **A01**

Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC **A03**/MF **A01**

**KOPPIKAR, A. M.**
Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04**/MF **A01**

**KOREN, H. S.**
Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

Human Upper Respiratory Tract Responses to Inhaled Pollutants with Emphasis on Nasal Lavage.
PB93-181089/REB 93-01 PC **A02**/MF **A01**

Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
PB93-175677/REB 93-01 PC **A02**/MF **A01**

Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC **A02**/MF **A01**

**KORMEL, A.**
Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02**/MF **A01**

**KORTELAINEN, P.**
Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC **A03**/MF **A01**

Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC **A02**/MF **A01**

**KOSSON, D. S.**
Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.
PB93-229670/REB 93-04 PC **A25**/MF **A06**

**KOSSON, T. T.**
Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.
PB93-229670/REB 93-04 PC **A25**/MF **A06**

**KOSTRZEWA, M.**
Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer Producing Printed Circuit Boards.
PB93-126621/REB 93-01 PC **A02**/MF **A01**

**KOSTRZEWA, M. F.**
Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
PB93-123016/REB 93-01 PC **A02**/MF **A01**

**KOSUSKO, M.**
Use of Surface-Coating-Free Materials for Reduction of Volatile Organic Compound Emissions from Coating Operations.
PB93-106839/REB 93-01 PC **A03**/MF **A01**

**KOTLER, V. R.**
Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC **A03**/MF **A01**

**KOU, J.**
Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03**/MF **A01**

**KOUTRAKIS, P.**
Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03**/MF **A01**

Comparison of Aerosol Acidity in Urban and Semi-Rural Environments.
PB93-131712/REB 93-01 PC **A03**/MF **A01**

Indoor Concentration Modeling of Aerosol Strong Acidity.
PB93-204071/REB 93-01 PC **A02**/MF **A01**

Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02**/MF **A01**

**KOZLOVSKAYA, V. I.**
Cholinesterases of Aquatic Animals.
PB93-236222/REB 93-04 PC **A03**/MF **A01**

**KOZUMBO, W. J.**
Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

**KRANKINA, O. N.**
Forest Fires in Russia: Carbon Dioxide Emissions to the Atmosphere.
PB93-229664/REB 93-04 PC **A02**/MF **A01**

Forest Management in Russia: Challenges and Opportunities in the Era of Perestroika.
PB93-106961/REB 93-01 PC **A02**/MF **A01**

**KRANZ, P. B.**
Replacement of Hazardous Material in Wide Web Flexographic Printing Process.
PB93-229128/REB 93-04 PC **A05**/MF **A01**

**KRAPAC, I. G.**
Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC **A02**/MF **A01**

**KREBS, K. A.**
Evaluation of Para-Dichlorobenzene Emissions from Solid Moth Repellant as a Source of Indoor Air Pollution.
PB93-107035/REB 93-01 PC **A02**/MF **A01**

**KREIS, R. G.**
Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC **A03**/MF **A01**

**KREITLER, C. W.**
Wellhead Protection Strategies for Confined-Aquifer Settings.
PB93-115913/REB 93-01 PC **A05**/MF **A01**

**KREITON, K. L.**
SITE Program Demonstration of the SBP Technologies, Inc., Membrane Filtration System on Creosote-Contaminated Water.
PB93-228567/REB 93-04 PC **A02**/MF **A01**

**KREMESEC, V. J.**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Groundwater and Soil Data.
PB92-228576/REB 93-01 PC **A12**/MF **A03**

**KRIEGMAN-KING, M. R.**
Transformation of Carbon Tetrachloride in the Presence of Sulfide, Biotite, and Vermiculite.
PB93-135713/REB 93-01 PC **A02**/MF **A01**

**KRIPKE, M. L.**
Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
PB93-229607/REB 93-04 PC **A02**/MF **A01**

Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175651/REB 93-01 PC **A03**/MF **A01**

**KRISHNAMURTHY, S.**
Extraction and Recovery of Lead Species from Soil.
PB93-150142/REB 93-01 PC **A02**/MF **A01**

**KROER, N.**
Microbial Trophic Interactions in Aquatic Microcosms Designed for Testing Genetically Engineered Microorganisms: A Field Comparison.
PB93-236248/REB 93-04 PC **A03**/MF **A01**

**KROUSE, H. R.**
Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC **A02**/MF **A01**

**KUEHL, D. W.**
Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.
PB93-222354/REB 93-04 PC **A03**/MF **A01**

**KUHARIC, C. A.**
X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.
PB93-203156/REB 93-04 PC **A03**/MF **A01**

**KUHN, A.**
Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC **A03**/MF **A01**

**LACKEY, R. T.**
Biodiversity and Management of Natural Resources: The Issues.
PB93-106912/REB 93-01 PC **A01**/MF **A01**

**LAFLESH, R.**
Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC **A03**/MF **A01**

**LAFLESH, R. C.**
Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC **A03**/MF **A01**

**LAI, H. H.**
Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
PB93-204063/REB 93-01 PC **A02**/MF **A01**

**LAKE, G.**
Northeast Indiana Conservation Tillage Demonstration Project. Final Report (1981-1985).
PB93-128056/REB 93-01 PC **A03**/MF **A01**

**LALOR, M.**
Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC **A05**/MF **A02**

**LAMBERSON, J. O.**
Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03**/MF **A01**

Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC **A03**/MF **A01**

Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03**/MF **A01**

**LAMBERT, G. R.**
Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC **A02**/MF **A01**

**LAMBORG, C.**
Atmopheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
PB93-121089/REB 93-01 PC **A02**/MF **A01**

**LAMMERS, D. A.**
Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC **A03**/MF **A01**

**LANDERS, D. H.**
Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08**/MF **A02**

Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC **A02**/MF **A01**

**LANDRETH, R. E.**
FLEX: An Expert System for Reviewing the Chemical Resistance of Flexible Membrane Liners for Waste Management.
PB93-106706/REB 93-01 PC **A03**/MF **A01**

Landfill Containment and Cover Systems.
PB93-106698/REB 93-01 PC **A03**/MF **A01**

Landfill Containment Systems Regulations.
PB93-106722/REB 93-01 PC **A03**/MF **A01**

Opportunities for the Use of Geosynthetics in Waste Management Facilities.
PB93-131670/REB 93-01 PC **A03**/MF **A01**

Resistance of Membranes in Cover Systems to Root Penetration by Grass and Trees.
PB93-106714/REB 93-01 PC **A02**/MF **A01**

Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC **A03**/MF **A01**

U.S. EPA's QA/QC Program for Waste Management Facilities. Proceedings of the GRI Seminar (6th), MQC/MQA and CQC/CQA of Geosynthetics. Held in Philadelphia, Pennsylvania on December 10-11, 1992.
PB93-149219/REB 93-01 PC **A02**/MF **A01**

**LANEGWIS, J.**
Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC **A01**/MF **A01**

**LANIER, W. S.**
Development of Good Combustion Practice for Municipal Waste Combustors.
PB93-131613/REB 93-01 PC **A03**/MF **A01**

Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

**LANSARI, A.**
Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC **A02**/MF **A01**

Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02**/MF **A01**

**LANTZ, S. E.**
Recent Developments in Cleanup Technologies.
PB93-236269/REB 93-04 PC **A03**/MF **A01**

Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02**/MF **A01**

Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC A02/MF A01

**LAPADULA, D. M.**
Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC A02/MF A01

**LARSEN, D. P.**
Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC A03/MF A01

Role of Ecological Sample Surveys in the Implementation of Biocriteria.
PB93-234524/REB 93-04 PC A03/MF A01

**LARSON, L. J.**
Ambient Aquatic Life Water Quality Criteria for Antimony (III).
PB93-202778/REB 93-01 PC A03/MF A01

**LARSON, T. H.**
Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC A02/MF A01

**LASKEY, J.**
Effect of Methoxychlor on Ovarian Steroidogenesis: Role in Early Pregnancy Loss.
PB93-181030/REB 93-01 PC A02/MF A01

**LASKEY, J. W.**
Steroidogenic Assessment Using Ovary Culture in Cycling Rats: Effects of Bis(2-Diethylhexyl) Phthalate on Ovarian Steroid Production.
PB93-181022/REB 93-01 PC A03/MF A01

**LASSITER, R. R.**
Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC A03/MF A01

Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.
PB93-222404/REB 93-04 PC A02/MF A01

**LAU, C.**
Behavioral Development Following Daily Episodes of Mother-Infant Separation in the Rat.
PB93-141406/REB 93-01 PC A01/MF A01

Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC A01/MF A01

Repeated Maternal Separation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC A03/MF A01

Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC A03/MF A01

**LAUGHLIN, T. F.**
Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC A02/MF A01

**LAWLESS, P. A.**
IAQPC: An Indoor Air Quality Simulator.
PB93-212397/REB 93-04 PC A03/MF A01

Relating Air Cleaner Efficiency to Indoor Air Quality.
PB93-212405/REB 93-04 PC A03/MF A01

**LAWRYK, N. J.**
Gasoline and Methanol Exposures from Automobiles within Residences and Attached Garages.
PB93-222222/REB 93-04 PC A02/MF A01

**LAWSON, R. E.**
Laboratory Simulation of Turbulent Convection Over an Urban Heat Island.
PB93-120871/REB 93-01 PC A02/MF A01

Wind-Tunnel Measurements of Flow Fields in the Vicinity of Buildings.
PB93-236594/REB 93-04 PC A03/MF A01

**LAY, J. C.**
Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-228864/REB 93-04 PC A02/MF A01

**LEAHY, J. G.**
Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
PB93-121176/REB 93-01 PC A02/MF A01

**LECKBAND, D.**
Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC A03/MF A01

**LEDUC, S. K.**
General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC A04/MF A01

Spatiotemporal Variability of Non-Urban Ozone Concentrations Over the Eastern United States and Its Potential Replication by Satellite Data.
PB93-191328/REB 93-01 PC A03/MF A01

**LEE, C. J.**
Mechanisms Underlying Somatosensory Cortical Dynamics: 1. In vivo Studies.
PB93-107217/REB 93-01 PC A03/MF A01

Mechanisms Underlying Somatosensory Cortical Dynamics: 2. In vitro Studies.
PB93-107225/REB 93-01 PC A03/MF A01

**LEE, E. H.**
Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.
PB93-212785/REB 93-04 PC A03/MF A01

**LEE, H.**
Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC A02/MF A01

Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
PB93-212454/REB 93-04 PC A03/MF A01

Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.
PB93-212769/REB 93-04 PC A03/MF A01

**LEE, J.**
Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC A04/MF A01

**LEE, J. J.**
Forest Sector Carbon Budget of the United States: Carbon Pools and Flux under Alternative Policy Options.
PB93-196996/REB 93-01 PC A10/MF A03

**LEE, J. M.**
Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC A11/MF A03

**LEE, J. W.**
Pilot-Scale Evlauation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC A02/MF A01

**LEE, S.**
Longterm Response of Lakes to Acidic Deposition.
PB93-229722/REB 93-04 PC A02/MF A01

Reactions That Modify Chemistry in Lakes of the National Surface Water Survey.
PB93-229672/REB 93-04 PC A02/MF A01

**LEE, X.**
DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC A02/MF A01

**LEES, S.**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC A10/MF A03

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC A08/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC A08/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC A06/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC A99/MF E11

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC A21/MF A04

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC A07/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC A20/MF A04

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC A08/MF A02

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC A24/MF A04

Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC A05/MF A01

**LEFEBVRE, P. A.**
Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.
PB93-229680/REB 93-04 PC A03/MF A01

**LEFOHN, A. S.**
Potential Bias from Non-Continuous Monitoring of Ambient Ozone Concentrations for Characterizing Hourly and Daily 7- and 12-Hour Average Concentrations.
PB93-191534/REB 93-01 PC A02/MF A01

**LEIBOWITZ, N.C.**
Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
PB93-202851/REB 93-04 PC A06/MF A02

Statistical Evaluation of the EMAP-Wetlands Classification.
PB93-199446/REB 93-01 PC A03/MF A01

**LEIBOWITZ, S.**
Process for Regional Assessment of Wetland Risk.
PB93-146793/REB 93-01 PC A09/MF A02

**LEIBOWITZ, S. G.**
Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC A07/MF A02

**LEIFER, A.**
Determination of Rates of Reaction in the Gas-Phase in the Troposphere. Theory and Practice. 5. Rate of Indirect Photoreaction.
PB93-149334/REB 93-01 PC A08/MF A02

**LEIKAUF, G. D.**
Mechanisms of Aldehyde-Induced Bronchial Reactivity: Role of Airway Epithelium.
PB93-179927/REB 93-01 PC A04/MF A01

**LEININGER, A. E.**
Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC A13/MF A03

**LEMIEUX, P. M.**
Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC A02/MF A01

Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC A03/MF A01

**LENNON, V. A.**
Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC A03/MF A01

**LEOVIC, K. W.**
Design of New Schools and Other Large Buildings Which Are Radon Resistant and Easy to Mitigate.
PB93-131662/REB 93-01 PC A03/MF A01

EPA's Indoor Air/Pollution Prevention Workshop.
PB93-222065/REB 93-04 PC A03/MF A01

**LEPAGE, D.**
Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC A03/MF A01

**LESTER, B.**
3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
PB93-217669/REB 93-04 PC A12/MF A03

**LETCHER, B. H.**
Effects of Food Density on Growth and on Patterns of Prey Depletion by Larval Silverside Fish, 'Menidia beryllina' (Cope): A Laboratory Investigation with Image Analysis.
PB93-212587/REB 93-04 PC A03/MF A01

**LEUKING, M.**
Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
PB93-212652/REB 93-04 PC A03/MF A01

**LEVIN, E. D.**
Effects of Dopaminergic Drugs on Working and Reference Memory in Rats.
PB93-236412/REB 93-04 PC A03/MF A01

**LEVINE, J. S.**
Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC A03/MF A01

**LEVINE, S. P.**
Development and Evaluation of a Transportable Fast Gas Chromatograph for the Monitoring of Organic Vapors in Air.
PB93-228526/REB 93-04 PC A02/MF A01

**LEVY, J.**
Delineation of Wellhead Protection Areas in Fractured Rocks.
PB93-115822/REB 93-01 PC A08/MF A02

**LEVY, S. J.**
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 1. Sessions P, 0, 1A, 2A, 3A, 4A, 6A, 6B, 9C and 10B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124170/REB 93-01 PC A20/MF A04

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 2. Sessions 1B, 2B, 3B, 4B, 7A, 7B, 8A, 8B and 9B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124188/REB 93-01 PC A21/MF A04

Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 3. Sessions 1C, 2C, 3C, 4C, 6C, 7C, 8C, 9A, and 10A/C. Held in Tampa, Florida on April 16-19, 1991.
PB93-124196/REB 93-01 PC A21/MF A04

# PERSONAL AUTHOR INDEX


**LEWIS, C. W.**
Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
PB93-228534/REB 93-04 PC **A02**/MF **A01**

Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03**/MF **A01**

Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC **A02**/MF **A01**

**LEWIS, D. L.**
Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC **A02**/MF **A01**

Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC **A03**/MF **A01**

**LEWIS, F. M.**
Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC **A03**/MF **A01**

What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC **A03**/MF **A01**

**LEWIS, M. A.**
Periphyton Photosynthesis as an Indicator of Effluent Toxicity: Relationship to Effects on Animal Test Species.
PB93-131829/REB 93-01 PC **A02**/MF **A01**

**LEWIS, N.**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC **A07**/MF **A02**

**LEWIS, N. M.**
Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC **A03**/MF **A01**

**LEWIS, R.**
Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC **A03**/MF **A01**

**LEWIS, R. D.**
Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC **A03**/MF **A01**

**LEWIS, R. G.**
Chemical Contaminants in House Dust: Occurrences and Sources.
PB93-228542/REB 93-04 PC **A02**/MF **A01**

Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
PB93-229151/REB 93-04 PC **A03**/MF **A01**

Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.
PB93-229193/REB 93-04 PC **A02**/MF **A01**

Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02**/MF **A01**

Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.
PB93-212306/REB 93-04 PC **A02**/MF **A01**

Pilot Study to Evaluate Methods for the Assessment of Exposure of Small Children to Pesticides in the Residential Environment.
PB93-119899/REB 93-01 PC **A03**/MF **A01**

**LEWIS, S. E.**
ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC **A02**/MF **A01**

**LEWIS, T.**
Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

**LEWTAS, J.**
Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-228831/REB 93-04 PC **A03**/MF **A01**

Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC **A02**/MF **A01**

In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02**/MF **A01**

Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03**/MF **A01**

**LIEBERT, C.**
Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02**/MF **A01**

**LIEM, A. J.**
Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC **A05**/MF **A01**

**LIEN, B. K.**
Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC **A03**/MF **A01**

**LIGHTHART, B.**
Bacillus thuringiensis var. kurstaki Affects a Beneficial Insect, the Cinnabar Moth (Lepidoptera: Arctidae).
PB93-199651/REB 93-01 PC **A02**/MF **A01**

Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC **A02**/MF **A01**

**LIGHTNER, D. V.**
Performance of an Aquatic Multispecies System in Evaluating the Effects of a Model Microbial Pest Control Agent on Nontarget Organisms.
PB93-131803/REB 93-01 PC **A03**/MF **A01**

**LIN, E. L. C.**
Macromolecular Adduction by Trichloroacetonitrile in the Fischer 344 Rat Following Oral Gavage.
PB93-107134/REB 93-01 PC **A03**/MF **A01**

**LIN, J.**
Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC **A20**/MF **A04**

**LIN, J. E.**
Recent Developments in Cleanup Technologies.
PB93-236289/REB 93-04 PC **A03**/MF **A01**

**LIN, W. Y.**
Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
PB93-121127/REB 93-01 PC **A03**/MF **A01**

**LINAK, W. P.**
Evaluation of Carbon Black Slurries as Clean Burning Fuels.
PB93-222057/REB 93-04 PC **A03**/MF **A01**

On-Line Measurement of Nitrous Oxide from Combustion Sources by Automated Gas Chromatography.
PB93-106847/REB 93-01 PC **A03**/MF **A01**

Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

**LINDAU, C. W.**
Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC **A02**/MF **A01**

**LINDER, G.**
Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC **A12**/MF **A03**

**LINDER, R. E.**
Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC **A03**/MF **A01**

**LINDGREN, M.**
Release of PCB and mercury from fibre sediments.
DE93778469/REB 93-01 PC **A05**/MF **A01**

**LINDOW, S. E.**
Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.
PB93-212645/REB 93-04 PC **A02**/MF **A01**

Relationship of Total Viable and Culturable Cells in Epiphytic Populations of 'Pseudomonas syringae'.
PB93-222826/REB 93-04 PC **A02**/MF **A01**

**LINDQVIST, R.**
Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport.
PB93-141497/REB 93-01 PC **A02**/MF **A01**

Cell Density and Non-Equilibrium Sorption Effects on Bacterial Dispersal in Groundwater Microcosms.
PB93-141505/REB 93-01 PC **A03**/MF **A01**

**LINDSEY, T. C.**
Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
PB93-221638/REB 93-04 PC **A04**/MF **A01**

Recycling Nickel Electroplating Rinse Waters by Low Temperature Evaporation and Reverse Osmosis.
PB93-218865/REB 93-04 PC **A04**/MF **A01**

**LINDSTROM, A.**
Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC **A02**/MF **A01**

**LINDSTROM, A. B.**
Assessing Potential Exposures from Routine Use of VOC-Contaminated Groundwater.
PB93-173060/REB 93-01 PC **A02**/MF **A01**

Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02**/MF **A01**

Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02**/MF **A01**

Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC **A02**/MF **A01**

**LINDSTROM, F. T.**
Mathematical Model of Plant Uptake and Translocation of Organic Chemicals: Development of the Model.
PB93-106938/REB 93-01 PC **A02**/MF **A01**

Mathematical Model of Plant Uptake and Translocations of Organic Chemicals: Application to Experiments.
PB93-106946/REB 93-01 PC **A03**/MF **A01**

**LINDSTROM, J.**
UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

**LINQUITI, P.**
Wellhead Protection Programs: Tools for Local Governments.
PB93-101111/REB 93-01 PC **A04**/MF **A01**

**LIOY, P. J.**
Source Apportionment of Air Pollution in China: Extending the Usefulness of Receptor Modeling by Combining Multivariate and Chemical Mass Balance Models.
PB93-185726/REB 93-01 PC **A03**/MF **A01**

**LIPFERT, F. W.**
Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
PB93-120970/REB 93-01 PC **A02**/MF **A01**

**LIPSCOMB, T. P.**
Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03**/MF **A01**

**LITWIN, S.**
Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
PB93-179950/REB 93-01 PC **A03**/MF **A01**

**LIU, L. J. S.**
Comparison of Aerosol Acidity in Urban and Semi-Rural Environments.
PB93-131712/REB 93-01 PC **A03**/MF **A01**

**LIU, P. K. T.**
Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.
PB93-227205/REB 93-04 PC **A04**/MF **A01**

**LIVOLSI, J. A.**
Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02**/MF **A01**

**LLORENS, J.**
Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC **A02**/MF **A01**

Olfactory Toxicity of Beta,Beta'-Iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC **A02**/MF **A01**

**LODEN, M. E.**
Technology Assessment of Soil Vapor Extraction and Air Sparging.
PB93-100154/REB 93-01 PC **A04**/MF **A01**

**LOEFFLER, C.**
Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC **A20**/MF **A04**

**LOEHR, R. C.**
Bioremediation.
PB93-149193/REB 93-01 PC **A03**/MF **A01**

**LOEVGREN, K.**
Aatgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC **A14**/MF **A03**

**LOGAN, T. J.**
Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC **A03**/MF **A01**

Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
PB93-131704/REB 93-01 PC **A03**/MF **A01**

Maumee River Basin Pilot Watershed Study. Volume 5. Continued Watershed Monitoring (1981-1985) and Rainulator Study - Detailed Data (1986).
PB93-128098/REB 93-01 PC **A10**/MF **A03**

**LOGSDON, T. R.**
Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02**/MF **A01**

Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC **A01**/MF **A01**

In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with In vivo Data.
PB93-107167/REB 93-01 PC A03/MF A01

**LOHMAN, P. H. M.**
Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.
PB93-236362/REB 93-04 PC A04/MF A01

**LONG, W. D.**
Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC A11/MF A03

**LONGABUCCO, P.**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
PB93-128015/REB 93-01 PC A04/MF A01

**LONGEST, H. L.**
Determination of Imminent and Substantial Endangerment for Removal Actions.
PB93-963416/REB 93-04 PC A01/MF A01

**LONNEMAN, W. A.**
VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC A02/MF A01

**LOOBY, G. P.**
Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
PB93-123016/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC A02/MF A01

**LOPER, G. L.**
Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.
PB93-222628/REB 93-04 PC A01/MF A01

**LOPER, J. C.**
Characterization of the Alkane-Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis': Identification of a New P450 Gene Family.
PB93-229268/REB 93-04 PC A03/MF A01

Disruption of the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.
PB93-229276/REB 93-04 PC A03/MF A01

Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC A03/MF A01

Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
PB93-229458/REB 93-04 PC A03/MF A01

Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
PB93-229482/REB 93-04 PC A03/MF A01

Isolation of the Alkane Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis'.
PB93-229284/REB 93-04 PC A02/MF A01

Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC A02/MF A01

Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
PB93-229441/REB 93-04 PC A03/MF A01

Proteins from Eight Eukaryotic Cytochrome P-450 Families Share a Segmented Region of Sequence Similarity.
PB93-229235/REB 93-04 PC A02/MF A01

**LORD, A. E.**
Stress Cracking Behavior of HDPE Geomembranes and Its Prevention.
PB93-196616/REB 93-01 PC A06/MF A02

**LORES, E. M.**
Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204980/REB 93-01 PC A03/MF A01

**LOTT, R.**
Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC A03/MF A01

**LOTT, R. A.**
Methane Emissions from the Natural Gas Industry.
PB93-212421/REB 93-04 PC A03/MF A01

**LOVEJOY, S. B.**
Cost Effective Corn and Soybean Production Without Tillage: Fact or Fiction (May 1988).
PB93-157568/REB 93-01 PC A03/MF A01

**LOWANS, R. W.**
Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC A02/MF A01

**LOWE, S.**
Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC A05/MF A01

Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127801/REB 93-01 PC A06/MF A02

Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
PB93-135663/REB 93-01 PC A07/MF A02

**LOWRANCE, R.**
Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.
PB93-234540/REB 93-04 PC A04/MF A01

**LU, J.**
Laboratory Simulation of Turbulent Convection Over an Urban Heat Island.
PB93-120871/REB 93-01 PC A02/MF A01

**LU, P. Y. L.**
Drinking Water Toxicity Profiles.
PB93-122406/REB 93-01 PC A09/MF A02

**LUCIER, G.**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 6. Carcinogenicity of TCDD in Animals.
PB93-222701/REB 93-04 PC A04/MF A01

**LUDWIG, R.**
Watts Nickel and Rinse Water Recovery via an Advanced Reverse Osmosis System.
PB93-229011/REB 93-04 PC A05/MF A01

**LUK, K. K.**
Development of a Field Test Method for the Determination of Lead in Paint and Paint-Contaminated Dust and Soil.
PB93-173128/REB 93-01 PC A03/MF A01

Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.
PB93-221653/REB 93-04 PC A07/MF A02

Outreach to Manufacturers of Lead Test Kits.
PB93-216570/REB 93-04 PC A03/MF A01

**LUNDBERG, L. A.**
What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC A03/MF A01

**LUO, D.**
Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC A11/MF A03

**LUONG, H. V.**
UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC A02/MF A01

**LUTES, C. C.**
Characterization of Emissions from the Simulated Open-Burning of Non-Metallic Automobile Shredder Residue.
PB93-172914/REB 93-01 PC A05/MF A01

**LUTTNER, M.**
Benefits and Feasibility of Effluent Trading between Point Sources: An Analysis in Support of Clean Water Act Reauthorization.
PB93-217636/REB 93-04 PC A04/MF A01

Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC A06/MF A02

**LYERLY, D. L.**
Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC A03/MF A01

**LYKINS, B.**
Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC A03/MF A01

**LYKINS, B. W.**
Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.
PB93-222214/REB 93-04 PC A10/MF A03

Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC A02/MF A01

**LYON, W. G.**
Molecular Size Exclusion by Soil Organic Materials Estimated from Their Swelling in Organic Solvents.
PB93-228583/REB 93-04 PC A02/MF A01

**LYONS, R. P.**
Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC A02/MF A01

**LYTLE, D. A.**
Corrosion Control Principles and Strategies for Reducing Lead and Copper in Drinking Water Systems.
PB93-199420/REB 93-01 PC A03/MF A01

Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC A02/MF A01

Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222391/REB 93-04 PC A02/MF A01

Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194181/REB 93-01 PC A03/MF A01

Removal of Beryllium from Drinking Water by Chemical Coagulation and Lime Softening.
PB93-150134/REB 93-01 PC A03/MF A01

**MA, T. H.**
Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
PB93-141257/REB 93-01 PC A02/MF A01

**MAAS, R. P.**
Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC A04/MF A01

**MAC, M. J.**
Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC A03/MF A01

**MACARTHUR, M. P.**
Characteristics of Non-Petroleum Underground Storage Tanks.
PB93-185775/REB 93-01 PC A03/MF A01

**MACIER, B. A.**
Use of Microbial Risk Assessment in Setting U.S. Drinking Water Standards.
PB93-134930/REB 93-01 PC A03/MF A01

**MACK, G. A.**
Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC A02/MF A01

**MACLER, B.**
Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC A07/MF A02

**MACLER, B. A.**
Simulation of Microbial Occurrence, Exposure and Health Risks after Drinking Water Treatment Processes.
PB93-134393/REB 93-01 PC A05/MF A02

**MACPHAIL, R. C.**
Animal Models for Assessing the Neurobehavioral Impact of Airborne Pollutants.
PB93-107233/REB 93-01 PC A03/MF A01

Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.
PB93-228948/REB 93-04 PC A03/MF A01

Bitertanol, a Triazole Fungicide, Increases Operant Responding but Not Motor Activity.
PB93-236370/REB 93-04 PC A02/MF A01

Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC A02/MF A01

International Validation of a Neurobehavioral Screening Battery: The IPCS/WHO Collaborative Study.
PB93-175594/REB 93-01 PC A02

Strain Comparisons of DFP Neurotoxicity in Rats.
PB93-228609/REB 93-04 PC A03/MF A01

**MADDOX, J.**
Industrial Boiler Furnace Sorbent Injection Algorithm Development.
PB93-222438/REB 93-04 PC A01/MF A01

**MAEKINEN, I.**
Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC A03/MF A01

**MAGALHAES, A. M. T.**
Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC A03/MF A01

**MAGEE, T. K.**
Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC A09/MF A02

**MAGINN, J. C.**
Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC A02/MF A01

Waste Minimization Assessment for a Manufacturer of Penny Blanks and Zinc Products.
PB93-123107/REB 93-01 PC A02/MF A01

**MAHAFFEY, W. R.**
On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC A09/MF A02

**MAHONY, J. D.**
Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC A02/MF A01

# PERSONAL AUTHOR INDEX


**MAI, U.**
Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
PB93-205078/REB 93-04 PC **A02**/MF **A01**

**MAIER, W. E.**
Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC **A02**/MF **A01**

**MAILANDER, J. L.**
Rice Field Inventory Using AVHRR Data.
PB93-135697/REB 93-01 PC **A03**/MF **A01**

**MAKAREWICZ, J. C.**
Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

**MALCOLM, A. R.**
Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02**/MF **A01**

**MALES, R. M.**
Modeling Contaminant Propagation in Drinking-Water Distribution Systems.
PB93-205136/REB 93-04 PC **A03**/MF **A01**

Use of Expert System in a Water Utility.
PB93-123081/REB 93-01 PC **A04**/MF **A01**

**MALKINA, I. L.**
Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

**MAMANE, Y.**
Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.
PB93-229177/REB 93-04 PC **A03**/MF **A01**

**MANNING, R. O.**
Distribution of Cardiac Output during Diurnal Changes of Activity in Rats.
PB93-180982/REB 93-01 PC **A02**/MF **A01**

**MANSKI, D. A.**
Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04**/MF **A01**

**MANTIPLY, E. D.**
Measurements of electric and magnetic fields in the Waianae, Hawaii area.
DE92019691/REB 93-01 PC **A03**/MF **A01**

**MARCHANT, G. H.**
Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

**MARDEN, B. T.**
Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC **A02**/MF **A01**

**MARESCA, J. W.**
Characteristics of Non-Petroleum Underground Storage Tanks.
PB93-185775/REB 93-01 PC **A03**/MF **A01**

Location of Leaks in Pressurized Petroleum Pipelines by Means of Passive-Acoustic Sensing Methods.
PB93-185783/REB 93-01 PC **A03**/MF **A01**

**MARKS, D.**
Characterizing the Distribution of Observed Precipitation and Runoff over the Continental United States.
PB93-141570/REB 93-01 PC **A03**/MF **A01**

**MARMOREK, D.**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

**MARSDEN, P.**
Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203693/REB 93-04 PC **A07**/MF **A02**

**MARSHALL, R.**
Gonadal Effects of Fetal Exposure to the Azo Dye Congo Red in Mice: Infertility in Female but Not Male Offspring.
PB93-181071/REB 93-01 PC **A03**/MF **A01**

Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.
PB93-236347/REB 93-04 PC **A02**/MF **A01**

**MARTHI, B.**
Effect of Aerosolization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC **A02**/MF **A01**

**MARTIN, B. E.**
Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC **A03**/MF **A01**

**MARTIN, G. B.**
Biomass Combustion in Gas-Turbine-Based Systems.
PB93-185742/REB 93-01 PC **A02**/MF **A01**

**MARTIN, J. C.**
Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel - Final Report.
PB93-197929/REB 93-01 PC **A03**/MF **A01**

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC **A03**/MF **A01**

**MARTIN, J. L.**
Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC **A03**/MF **A01**

Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03**/MF **A01**

**MARTIN, L. S.**
Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
PB93-185866/REB 93-01 PC **A02**/MF **A01**

Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03**/MF **A01**

**MARTINEZ, J.**
Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC **A07**/MF **A02**

**MARTONEN, T. B.**
Comments on Recent Data for Particle Deposition in Human Nasal Passages.
PB93-181105/REB 93-01 PC **A02**/MF **A01**

Deposition of Sulfate Acid Aerosols in the Developing Human Lung.
PB93-236388/REB 93-04 PC **A03**/MF **A01**

Extrapolation Modeling of Aerosol Deposition in Human and Laboratory Rat Lungs.
PB93-181097/REB 93-01 PC **A03**/MF **A01**

Interspecies Modeling of Inhaled Particle Deposition Patterns.
PB93-181121/REB 93-01 PC **A03**/MF **A01**

Use of Analytically Defined Estimates of Aerosol Respirable Fraction to Predict Lung Deposition Patterns.
PB93-175743/REB 93-01 PC **A02**/MF **A01**

**MASLEY, M.**
Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
PB93-202620/REB 93-01 PC **A07**/MF **A02**

Clean Water and the American Economy. Proceedings: Surface Water. Volume 1. Held on October 19-21, 1992.
PB93-202612/REB 93-01 PC **A14**/MF **A03**

**MASON, B. J.**
Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies.
PB92-220532/REB 93-04 PC **A06**/MF **A02**

**MASON, C.**
Compliance Data System Quality Assurance Manual, June 1984.
PB93-199339/REB 93-01 PC **A10**/MF **A03**

**MASS, M. J.**
PCR Primers Specific for Detection of a Rat Repetitive Sequence.
PB93-141398/REB 93-01 PC **A01**/MF **A01**

**MASSCHELEYN, P. H.**
Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02**/MF **A01**

**MATHUR, R.**
Regional Modeling Analysis of the Dependencies of Atmospheric Oxidants to Perturbations in NOx and Hydrocarbon Emissions.
PB93-180925/REB 93-01 PC **A02**/MF **A01**

**MATHUR, S. B.**
Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03**/MF **A01**

Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03**/MF **A01**

**MATSUSHIMA, T.**
Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.
PB93-236362/REB 93-04 PC **A04**/MF **A01**

**MATTHEWS, J. E.**
In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC **A03**/MF **A01**

**MATTHEWS, W. J.**
Use of Ecoregions in Biological Monitoring.
PB93-106730/REB 93-01 PC **A03**/MF **A01**

**MATTHIAS, P.**
Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
PB93-229706/REB 93-04 PC **A02**/MF **A01**

**MATUSON, A.**
Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
PB93-216067/REB 93-04 PC **A07**/MF **A02**

**MAY, W. E.**
Two New Gas Standards Programs at the National Institute of Standards and Technology.
PB93-191427/REB 93-01 PC **A02**/MF **A01**

**MAYER, F. L.**
Cholinesterases of Aquatic Animals.
PB93-236222/REB 93-04 PC **A03**/MF **A01**

Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

Physiological and Nonspecific Biomarkers.
PB93-119832/REB 93-01 PC **A05**/MF **A01**

**MCALLISTER, L. S.**
Habitat Quality Assessment of Two Wetland Treatment Systems in Mississippi: A Pilot Study.
PB93-135614/REB 93-01 PC **A06**/MF **A02**

Habitat Quality Assessment of Two Wetland Treatment Systems in the Arid West: A Pilot Study.
PB93-222305/REB 93-04 PC **A06**/MF **A02**

Quality Assurance Field Operations Report for the Pilot Study Evaluating the Habitat Value of Wetland Treatment Systems.
PB93-134682/REB 93-01 PC **A04**/MF **A01**

Quality Assurance Plan for 1991 Pilot Study of the Ecological Condition of Municipal Wastewater Constructed Wetland Treatment Systems.
PB93-134674/REB 93-01 PC **A05**/MF **A01**

**MCALLISTER, R. A.**
Field Test of a Generic Method for Halogenated Hydrocarbons.
PB93-212181/REB 93-04 PC **A13**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
PB93-227163/REB 93-04 PC **A11**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
PB93-227171/REB 93-04 PC **A12**/MF **A03**

**MCCALLUM, D.**
Toxic and Hazardous Chemicals, Title III and Communities: An Outreach Manual for Community Groups.
PB93-200806/REB 93-01 PC **A08**/MF **A02**

**MCCARGAR, J. A.**
Report on the EPA/Manufacturer Cooperative I/M Testing Program.
PB93-208015/REB 93-04 PC **A10**/MF **A03**

**MCCARTHY, J.**
Rapid Phase Indentification of Mixed Crystalline Solids.
PB93-212355/REB 93-04 PC **A03**/MF **A01**

**MCCARTY, P. L.**
In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC **A12**/MF **A03**

Microcosm and In situ Field Studies of Enhanced Biotransformation of Trichloroethylene by Phenol-Utilizing Microorganisms.
PB93-222867/REB 93-04 PC **A02**/MF **A01**

**MCCLENNY, W. A.**
Evaluation of a Sorbent-Based Preconcentrated for Analysis of VOCs in Air Using Gas Chromatography-Atomic Emission Detection.
PB93-121077/REB 93-01 PC **A02**/MF **A01**

Optical Remote Measurement of Toxic Gases.
PB93-229409/REB 93-04 PC **A03**/MF **A01**

**MCCORMACK, K.**
Why do Wellhead Protection. Issues and Answers in Protecting Public Drinking Water Supply Systems.
PB93-115921/REB 93-01 PC **A03**/MF **A01**

**MCCREADY, J.**
User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

**MCCRILLIS, R. C.**
Evaluation of Emissions from Masonry Heaters and Masonry Fireplaces in Homes.
PB93-173078/REB 93-01 PC **A03**/MF **A01**

**MCCUTCHEON, S. C.**
Nutrient Movement through Beach Media: Problems and Field Results Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191344/REB 93-01 PC **A03**/MF **A01**

**MCDANIEL, D. D.**
Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.
PB93-229193/REB 93-04 PC **A02**/MF **A01**

**MCDANIEL, K. L.**
Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
PB93-229599/REB 93-04 PC **A03**/MF **A01**

**MCDONNELL, W. F.**
Predictors of Individual Differences in Acute Response to Ozone Exposure.
PB93-228849/REB 93-04 PC **A02**/MF **A01**

Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-228815/REB 93-04 PC **A02**/MF **A01**

Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC **A02**/MF **A01**

**MCDONOUGH, S. E.**
Alternate Performance Standard Project: Interpreting the Post-Construction Test.
PB93-175529/REB 93-01 PC **A03**/MF **A01**

Recommended Performance Standard of the Florida Radon Research Program.
PB93-122281/REB 93-01 PC **A03**/MF **A01**

**MCEVOY, L. R.**
Potential Bias from Non-Continuous Monitoring of Ambient Ozone Concentrations for Characterizing Hourly and Daily 7- and 12-Hour Average Concentrations.
PB93-191534/REB 93-01 PC **A02**/MF **A01**

**MCFARLANE, C.**
Mathematical Model of Plant Uptake and Translocation of Organic Chemicals: Development of the Model.
PB93-106938/REB 93-01 PC **A02**/MF **A01**

Mathematical Model of Plant Uptake and Translocations of Organic Chemicals: Application to Experiments.
PB93-106946/REB 93-01 PC **A03**/MF **A01**

**MCGAUGHEY, J. F.**
Development and Validation of a Source Test Method for 2,4-Toluene Diisocyanate.
PB93-204055/REB 93-01 PC **A03**/MF **A01**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-214419/REB 93-04 PC **A05**/MF **A01**

Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC **A03**/MF **A01**

Field Test of a Generic Method for Halogenated Hydrocarbons.
PB93-212181/REB 93-04 PC **A13**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
PB93-227163/REB 93-04 PC **A11**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
PB93-227171/REB 93-04 PC **A12**/MF **A03**

**MCGAUHEY, J. F.**
Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC **A02**/MF **A01**

**MCHENRY, J. N.**
Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03**/MF **A01**

Tagged Species Engineering Model (TSEM).
PB93-229417/REB 93-04 PC **A03**/MF **A01**

**MCKEE, M. J.**
Physiological and Nonspecific Biomarkers.
PB93-119832/REB 93-01 PC **A05**/MF **A01**

**MCKENNEY, C. L.**
Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02**/MF **A01**

**MCKINNEY, D. G.**
Air Toxics: The Research Challenge of the 1990 Clean Air Act Amendments.
PB93-106664/REB 93-01 PC **A02**/MF **A01**

**MCKINNEY, J. D.**
Metabolism and Disposition of Inorganic Arsenic in Laboratory Animals and Humans.
PB93-107183/REB 93-01 PC **A02**/MF **A01**

**MCKINNEY, R. A.**
Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03**/MF **A01**

**MCLEAN, J. E.**
Behavior of Metals in Soils.
PB93-131480/REB 93-01 PC **A03**/MF **A01**

**MCLELLAN, W. L.**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Tetranitromethane (TNM).
PB93-116994/REB 93-01 PC **A03**/MF **A01**

**MCLINDEN, M. O.**
Simplified Cycle Simulation Model for the Performance Rating of Refrigerants and Refrigerant Mixtures.
PB93-130383 93-01 Not available NTIS

**MCMAHON, G.**
DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03**/MF **A01**

**MCMAHON, T. F.**
Age-Related Changes in Disposition and Metabolism of Benzene in Male C57BL/6N Mice.
PB93-107191/REB 93-01 PC **A02**/MF **A01**

**MCMILLEN, R.**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

**MCMINN, B.**
Initial Assessment of Emissions from Heat Setting Carpet Yarn.
PB93-229862/REB 93-04 PC **A04**/MF **A01**

**MCNEIL, C.**
Toxic and Hazardous Chemicals, Title III and Communities: An Outreach Manual for Community Groups.
PB93-200806/REB 93-01 PC **A08**/MF **A02**

**MCSORLEY, J. A.**
Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

**MCTIERNAN, L.**
Measurement of Sediment Resuspension Rates in Long Island Sound.
PB93-222115/REB 93-04 PC **A01**/MF **A01**

**MEAD, R.**
Locating and Estimating Air Emissions from Sources of Methylene Chloride.
PB93-207579/REB 93-04 PC **A10**/MF **A03**

**MEARDON, K.**
Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC **A15**/MF **A03**

**MEARNS, A. J.**
Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03**/MF **A01**

**MECKES, M. C.**
Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC **A02**/MF **A01**

**MEDINSKY, M. A.**
Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC **A02**/MF **A01**

**MEECH, M.**
Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC **A07**/MF **A02**

**MEEKS, S. A.**
Measurement of Biogenic Emissions from Corn.
PB93-180883/REB 93-01 PC **A02**/MF **A01**

**MEGANCK, R. A.**
Expanding Global Forest Management: An 'Easy First' Proposal.
PB93-199669/REB 93-01 PC **A02**/MF **A01**

**MELILLO, J. M.**
Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC **A02**/MF **A01**

Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
PB93-222776/REB 93-04 PC **A02**/MF **A01**

**MENEREY, D.**
Life Cycle Design Guidance Manual. Environmental Requirements and the Product System.
PB93-164507/REB 93-04 PC **A09**/MF **A03**

**MENTZ, J.**
Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
PB93-115806/REB 93-01 PC **A05**/MF **A01**

**MENZIKOVA, O. V.**
Cholinesterases of Aquatic Animals.
PB93-236222/REB 93-04 PC **A03**/MF **A01**

**MERCER, J. W.**
DNAPL Site Evaluation.
PB93-150217/REB 93-01 PC **A16**/MF **A03**

**MERRILL, R. G.**
Field Test of a Generic Method for Halogenated Hydrocarbons.
PB93-212181/REB 93-04 PC **A13**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
PB93-227163/REB 93-04 PC **A11**/MF **A03**

Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
PB93-227171/REB 93-04 PC **A12**/MF **A03**

Using Method 301 to Validate Sampling and Analytical Methods for Selected CAAA Compounds.
PB93-191419/REB 93-01 PC **A03**/MF **A01**

**MERRIWEATHER, R.**
Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02**/MF **A01**

**MESSNER, M. J.**
Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

**METZ, D. M.**
Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC **A03**/MF **A01**

**METZ, S. G.**
Engineered Plants in the Environment.
PB93-234532/REB 93-04 PC **A03**/MF **A01**

**MEYERS, S. M.**
Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC **A02**/MF **A01**

**MICHAEL, L. C.**
Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02**/MF **A01**

**MIDDAUGH, D. P.**
Effects of 'Beauveria bassiana' on Embryos of the Inland Silverside Fish ('Menidia beryllina').
PB93-131811/REB 93-01 PC **A02**/MF **A01**

Spawning Periodicity of the Inland Silverside, 'Menidia beryllina' (Pisces: Atherinidae) in the Laboratory: Relationship to Lunar Cycles.
PB93-236297/REB 93-04 PC **A02**/MF **A01**

Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02**/MF **A01**

Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

**MIDGETT, M. R.**
Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC **A03**/MF **A01**

Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC **A02**/MF **A01**

Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC **A03**/MF **A01**

**MILAN, D.**
Use of Expert System in a Water Utility.
PB93-123081/REB 93-01 PC **A04**/MF **A01**

**MILESKI, G.**
Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC **A02**/MF **A01**

**MILESKI, G. J.**
Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191559/REB 93-01 PC **A02**/MF **A01**

**MILFORD, J.**
Relationships between Ozone Precursor Levels and Response to Emissions Reductions: Analysis of Regional Oxidant Model Results for the Northeastern United States.
PB93-186294/REB 93-01 PC **A07**/MF **A02**

**MILLER, D. B.**
Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02**/MF **A01**

**MILLER, G. D.**
Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
PB93-221638/REB 93-04 PC **A04**/MF **A01**

Ink and Cleaner Waste Reduction Evaluation for Flexographic Printers.
PB93-191286/REB 93-01 PC **A03**/MF **A01**

**MILLER, J. C.**
Bacillus thuringiensis var. kurstaki Affects a Beneficial Insect, the Cinnabar Moth (Lepidoptera: Arctidae).
PB93-199651/REB 93-01 PC **A02**/MF **A01**

**MILLER, J. L.**
Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.
PB93-229177/REB 93-04 PC **A03**/MF **A01**

Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC **A03**/MF **A01**

**MILLER, M.**
EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02**/MF **A01**

Evaluation of Commercially-Available Portable Gas Chromatographs.
PB93-121051/REB 93-01 PC **A02**/MF **A01**

Evaluation of Portable Gas Chromatographs.
PB93-168813/REB 93-01 PC **A03**/MF **A01**

**MILLER, M. C.**
Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
PB93-221638/REB 93-04 PC **A04**/MF **A01**

# PERSONAL AUTHOR INDEX


**MILLER, M. E.**
Column Vapor Extraction Experiments on Gasoline Contaminated Soil.
PB93-131514/REB 93-01 PC **A03**/MF **A01**

**MILLER, M. J.**
Environmental Protection Agency Civil Enforcement Docket.
PB93-921700/REB 93-01 Subscription

**MILLER, P. S.**
Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
PB93-123024/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC **A02**/MF **A01**

Waste Minimization Assessment for a Manufacturer Producing Printed Circuit Boards.
PB93-126621/REB 93-01 PC **A02**/MF **A01**

**MILLER, R. N.**
In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03**/MF **A01**

Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC **A05**/MF **A01**

**MILLER, R. S.**
Search for Radiative Neutrino Decay from Supernovae.
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

**MILLER, R. V.**
Application of DNA Probes to Analysis of Bacteriophage Distribution Patterns in the Environment.
PB93-121200/REB 93-01 PC **A02**/MF **A01**

**MILLER, W. C.**
Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120998/REB 93-01 PC **A02**/MF **A01**

**MILLETTE, J. R.**
Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC **A02**/MF **A01**

**MILLS, J. J.**
Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03**/MF **A01**

**MINEART, P.**
MULTIMED: The Multimedia Exposure Assessment Model for Evaluating the Land Disposal of Wastes-Model Theory.
PB93-186252/REB 93-01 PC **A07**/MF **A02**

**MIRAK, J.**
Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-228880/REB 93-04 PC **A03**/MF **A01**

**MISCHLER, S.**
Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.
PB93-215648/REB 93-04 PC **A03**/MF **A01**

Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215655/REB 93-04 PC **A04**/MF **A01**

Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215622/REB 93-04 PC **A04**/MF **A01**

Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215630/REB 93-04 PC **A04**/MF **A01**

**MITCHELL, G.**
Regulatory Effectiveness Study for the Armand Bayou Coastal Preserve.
PB93-205680/REB 93-04 PC **A08**/MF **A02**

Regulatory Effectiveness Study for the Christmas Bay Coastal Preserve.
PB93-205698/REB 93-04 PC **A09**/MF **A03**

**MITCHELL, M.**
Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC **A04**/MF **A01**

**MITCHELL, M. J.**
Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC **A02**/MF **A01**

**MITCHELL, W. J.**
EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02**/MF **A01**

Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

Summary of the 1987 EPA National Performance Audit Program on Source Measurements.
PB93-223444/REB 93-04 PC **A03**/MF **A01**

Two New Gas Standards Programs at the National Institute of Standards and Technology.
PB93-191427/REB 93-01 PC **A02**/MF **A01**

**MITRA, S.**
Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
PB93-204063/REB 93-01 PC **A02**/MF **A01**

**MOELLER, R. B.**
Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03**/MF **A01**

**MOEN, M. A.**
Oxidative Degradation of Phenanthrene by the Ligninolytic Fungus 'Phanerochaete chrysosposium'.
PB93-199511/REB 93-01 PC **A02**/MF **A01**

**MOLE, M. L.**
Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC **A03**/MF **A01**

**MOLZ, F. J.**
Development and Application of Borehole Flowmeters for Environmental Assessment.
PB93-185817/REB 93-01 PC **A03**/MF **A01**

**MOMIKI, S.**
Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
PB93-179950/REB 93-01 PC **A03**/MF **A01**

**MONDELLO, F. J.**
Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC **A03**/MF **A01**

Cloning and Expression in 'Escherichia coli' of Pseudomonas Strain LB400 Genes Encoding Polychlorinated Biphenyl Degradation.
PB93-229227/REB 93-04 PC **A02**/MF **A01**

Genetic and Cell-Free Studies of PCB Biodegradation in 'Pseudomonas putida' LB400.
PB93-229748/REB 93-04 PC **A03**/MF **A01**

Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
PB93-222909/REB 93-04 PC **A03**/MF **A01**

Sequence Similarities in the Genes Encoding Polychlorinated Biphenyl Degradation by 'Pseudomonas' Strain LB400 and 'Alcaligenes eutrophus' H850.
PB93-229201/REB 93-04 PC **A01**/MF **A01**

**MONKS, T. J.**
Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02**/MF **A01**

**MONOSSON, E.**
Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

**MONROE, C. C.**
EPA's Information Management System for Tracking Reasonable Further Progress.
PB93-212389/REB 93-04 PC **A03**/MF **A01**

**MONSON, B. A.**
Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

**MOODY, T.**
Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC **A03**/MF **A01**

Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02**/MF **A01**

**MOORE, G. E.**
Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC **A08**/MF **A02**

**MOORE, J. A.**
Design and Construction of Demonstration/Research Wetlands for Treatment of Dairy Farm Wastewater.
PB93-202836/REB 93-01 PC **A03**/MF **A01**

**MOORE, J. C.**
Characterization of Reference Artemia III for Marine Toxicological Studies.
PB93-212595/REB 93-04 PC **A03**/MF **A01**

**MOORE, K. A.**
Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC **A12**/MF **A03**

**MOORE, M. M.**
In vitro Mammalian Mutagenesis as a Model for Genetic Lesions in Human Cancer.
PB93-141471/REB 93-01 PC **A02**/MF **A01**

Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02**/MF **A01**

V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

**MOORE, M. W.**
Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
PB93-101160/REB 93-01 PC **A06**/MF **A02**

Use of Surface-Coating-Free Materials for Reduction of Volatile Organic Compound Emissions from Coating Operations.
PB93-106839/REB 93-01 PC **A03**/MF **A01**

**MOREA, S.**
Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
PB93-233914/REB 93-04 PC **A12**/MF **A03**

**MOREL, F. M. M.**
What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.
PB93-211985/REB 93-04 PC **A21**/MF **A04**

**MORGAN, K. T.**
Olfactory Toxicity of Beta,Beta'-Iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC **A02**/MF **A01**

**MORGAN, L.**
Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
PB93-202620/REB 93-01 PC **A07**/MF **A02**

Clean Water and the American Economy. Proceedings: Surface Water. Volume 1. Held on October 19-21, 1992.
PB93-202612/REB 93-01 PC **A14**/MF **A03**

**MORISON, M. O.**
Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).
PB93-222586/REB 93-04 PC **A01**/MF **A01**

**MORLAN, J. C.**
Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
PB93-143709/REB 93-01 PC **A08**/MF **A02**

**MORRIS, J. B.**
Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC **A02**/MF **A01**

**MORRISON, J. B.**
Use of the Black Creek Database to Analyze Techniques for Estimating Nonpoint Source Loadings from Small Watersheds (May 1988).
PB93-128072/REB 93-01 PC **A03**/MF **A01**

**MORRISON, M.**
Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC **A08**/MF **A02**

**MORRISON, M. L.**
Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.
PB93-236446/REB 93-04 PC **A03**/MF **A01**

**MORTENSEN, L. L.**
Global Climates: Past, Present, and Future. Activities for Integrated Science Education.
PB93-222313/REB 93-04 PC **A06**/MF **A02**

**MOSCHANDREAS, D. J.**
Evaluation of Portable Multisorbent Air Samplers for Use with an Automated Multitube Analyzer.
PB93-172930/REB 93-01 PC **A05**/MF **A01**

**MOSER, V.**
Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

**MOSER, V. C.**
Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02**/MF **A01**

Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
PB93-229599/REB 93-04 PC **A03**/MF **A01**

**MOSER, V. S.**
International Validation of a Neurobehavioral Screening Battery: The IPCS/WHO Collaborative Study.
PB93-175594/REB 93-01 PC **A02**

**MOSHER, J.**
Simulation of Raw Water and Treatment Parameters in Support of the Disinfection By-Products Regulatory Impact Analysis.
PB93-134401/REB 93-01 PC **A03**/MF **A01**

**MOSPAN, Y. M.**
Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC **A03**/MF **A01**

**MOYER, E. E.**
Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03**/MF **A01**

LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

**MUELLER, J. G.**
Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02**/MF **A01**

Recent Developments in Cleanup Technologies.
PB93-236289/REB 93-04 PC **A03**/MF **A01**

Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02**/MF **A01**

Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

**MUELLER, R. A.**
Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Industion of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC **A03**/MF **A01**

**MUKERJEE, S.**
Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03**/MF **A01**

**MUKHOPADHYAY, P.**
Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03**/MF **A01**

**MULDOON, M. A.**
Delineation of Wellhead Protection Areas in Fractured Rocks.
PB93-115822/REB 93-01 PC **A08**/MF **A02**

**MULIK, J.**
Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02**/MF **A01**

**MULKEY, L. A.**
Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC **A04**/MF **A01**

STREAM: An Exposure Assessment Methodology for Agricultural Pesticide Runoff.
PB93-106888/REB 93-01 PC **A03**/MF **A01**

**MULLER, K. E.**
Predictors of Individual Differences in Acute Response to Ozone Exposure.
PB93-228849/REB 93-04 PC **A02**/MF **A01**

**MULLER, P. K.**
Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC **A02**/MF **A01**

**MULLINS, J. A.**
PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
PB93-174027/REB 93-01 PC **A17**/MF **A04**

**MUMFORD, J.**
Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC **A03**/MF **A01**

Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-228831/REB 93-04 PC **A03**/MF **A01**

Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02**/MF **A01**

**MUMFORD, J. L.**
Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.
PB93-231835/REB 93-04 PC **A02**/MF **A01**

DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC **A02**/MF **A01**

Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03**/MF **A01**

**MUNDY, W. R.**
Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC **A02**/MF **A01**

Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC **A02**/MF **A01**

**MURALIDHARA, S.**
Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-180990/REB 93-01 PC **A03**/MF **A01**

**MURATA, K.**
Summary of Workshop III: Evoked Potentials.
PB93-175610/REB 93-01 PC **A01**/MF **A01**

**MURDOCH, P. S.**
Role of Nitrate in the Acidification of Streams in the Catskill Mountains of New York.
PB93-150167/REB 93-01 PC **A03**/MF **A01**

**MURDOCK, L.**
RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC **A05**/MF **A01**

**MURGUEYTIO, A. M.**
Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93-148252/REB 93-01 PC **A08**/MF **A02**

**MURRELL, J. D.**
Light-Duty Automotive Technology and Fuel Economy Trends through 1993.
PB93-199255/REB 93-01 PC **A06**/MF **A02**

**MYERS, V. B.**
Geotechnical Systems for Structures on Contaminated Sites: A Technical Guidance Document.
PB93-209419/REB 93-04 PC **A08**/MF **A02**

**NACCI, D.**
Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

**NADELHOFFER, K. J.**
Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC **A02**/MF **A01**

Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC **A02**/MF **A01**

**NADIM, L. M.**
Oxidation of Biphenyl by a Multicomponent Enzyme System from 'Pseudomonas' sp. Strain LB400.
PB93-229466/REB 93-04 PC **A02**/MF **A01**

**NAKAGAWA, P. A.**
Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
PB93-185866/REB 93-01 PC **A02**/MF **A01**

**NARAHARA, A. M.**
Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC **A04**/MF **A01**

**NARKHEDE, M.**
Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03**/MF **A01**

**NATSCHKE, D.**
Analysis of Atmospheric Deposition Samples from Easton, Pennsylvania.
PB93-181600/REB 93-01 PC **A04**/MF **A01**

**NAUMAN, C. H.**
Decision Model for Biomarkers of Exposure.
PB93-106995/REB 93-01 PC **A03**/MF **A01**

**NAUMANN, S.**
Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.
PB93-222354/REB 93-04 PC **A03**/MF **A01**

**NAUMOVA, N. N.**
Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC **A03**/MF **A01**

**NEBEKER, A. V.**
Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC **A02**/MF **A01**

**NEBEL, K. L.**
Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
PB93-105518/REB 93-01 PC **A08**/MF **A02**

**NEEFUS, J. D.**
Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC **A03**/MF **A01**

**NEFF, J. M.**
Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

**NEILSON, R. P.**
Digital Topographic Approach to Modeling: The Distribution of Precipitation in Mountainous Terrain.
PB93-106649/REB 93-01 PC **A03**/MF **A01**

Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC **A03**/MF **A01**

**NELSON, B.**
National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC **A07**/MF **A02**

**NELSON, C. J.**
Association of Personal and Workplace Characteristics with Reported Health Symptoms of 6771 Government Employees in Washington, DC.
PB93-212264/REB 93-04 PC **A02**/MF **A01**

NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC **A02**/MF **A01**

Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.
PB93-212306/REB 93-04 PC **A02**/MF **A01**

**NELSON, D. W.**
Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC **A03**/MF **A01**

**NELSON, G. B.**
DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

DNA Isolation from Small Tissue Samples Using Salt and Spermine.
PB93-181048/REB 93-01 PC **A01**/MF **A01**

**NELSON, G. M.**
Competition Potentials of Environmentally Applied Bacteria with Human Fecal Microbiota.
PB93-181147/REB 93-01 PC **A02**/MF **A01**

**NELSON, W.**
Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
PB93-228518/REB 93-04 PC **A02**/MF **A01**

**NELSON, W. G.**
Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02**/MF **A01**

Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03**/MF **A01**

**NESNOW, S.**
32P-Postlabeling in Studies of PAH Activation.
PB93-106631/REB 93-01 PC **A03**/MF **A01**

Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC **A02**/MF **A01**

**NEUE, H. U.**
Methane Emissions from Wetland Rice Areas of Asia.
PB93-191468/REB 93-01 PC **A03**/MF **A01**

**NEUMANN, G.**
Bladder-wrack (Fucus vesiculosus L) as an indicator for radionuclides in the environment of Swedish nuclear power plants.
DE93603681/REB 93-01 PC **A03**/MF **A01**

**NEWELL, A. D.**
Inter-Regional Comparison of Patterns and Trends in Surface Water Acidification Across the United States.
PB93-236453/REB 93-04 PC **A03**/MF **A01**

Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03**/MF **A01**

Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.
PB93-236446/REB 93-04 PC **A03**/MF **A01**

**NEWELL, C. J.**
Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1. Technical Report.
PB93-205722/REB 93-04 PC **A11**/MF **A03**

**NEWELL, T. A.**
Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
PB93-106821/REB 93-01 PC **A03**/MF **A01**

**NEWHALL, J. L.**
Biomass Combustion in Gas-Turbine-Based Systems.
PB93-185742/REB 93-01 PC **A02**/MF **A01**

**NEWSOM, J. S.**
Development of an Improved Urban Airshed Modeling System.
PB93-120889/REB 93-01 PC **A03**/MF **A01**

**NG, A. S.**
R-245ca: A Potential Far-Term Alternative for R-11.
PB93-173144/REB 93-01 PC **A02**/MF **A01**

**NIERING, W. A.**
Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).
PB93-212470/REB 93-04 PC **A03**/MF **A01**

**NIES, J. D.**
Enhancement of the Pesticide Residues Information System (PRIS). Volume 1.
PB93-209013/REB 93-04 PC **A03**/MF **A01**

Enhancement of the Pesticide Residues Information System (PRIS). Volume 2.
PB93-209021/REB 93-04 PC **A15**/MF **A03**

**NIKOLAIDIS, N. P.**
Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC **A02**/MF **A01**

**NILSSON, A.**
Metal concentrations of the mor layer.
DE92563061/REB 93-01 PC **A05**/MF **A01**

**NISHIOKA, M. G.**
Quantification of Nitro- and Hydroxylated Nitro-Aromatic/Polycyclic Aromatic Hydrocarbons in Selected Ambient Air Daytime Winter Samples.
PB93-141190/REB 93-01 PC **A03**/MF **A01**

**NODA, A.**
User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0.

Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122360/REB 93-01 PC A99/MF A06

**NOLT, C.**
Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC A04/MF A01

**NORRIS, J. E.**
Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC A03/MF A01

**NORRIS, R. D.**
In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC A12/MF A03

**NORTHEIM, C. M.**
Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
PB93-122307/REB 93-01 PC A03/MF A01

Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
PB93-101160/REB 93-01 PC A06/MF A02

Use of Surface-Coating-Free Materials for Reduction of Volatile Organic Compound Emissions from Coating Operations.
PB93-106839/REB 93-01 PC A03/MF A01

**NORTHROP, C.**
Water Quality in Illinois, 1990-1991.
PB93-210193/REB 93-04 PC A03/MF A01

**NORTON, S.**
Framework for Ecological Risk Assessment.
PB93-102192/REB 93-01 PC A04/MF A01

**NORTON, S. A.**
Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC A02/MF A01

MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC A02/MF A01

Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC A02/MF A01

**NORWOOD, C.**
Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC A02/MF A01

**NOSS, R. F.**
Who Will Speak for Biodiversity.
PB93-135782/REB 93-01 PC A01/MF A01

**NOTTER, M.**
Bladder-wrack (Fucus vesiculosus L) as an indicator for radionuclides in the environment of Swedish nuclear power plants.
*DE93003681/REB* 93-01 PC A03/MF A01

**NOWAK, J. F.**
Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and Chincoteague Bay, 1991.
PB93-191120/REB 93-01 PC A13/MF A03

**NUNEZ, C. M.**
Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC A02/MF A01

**O'CALLAGHAN, J. P.**
Olfactory Toxicity of Beta,Beta'-Iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC A02/MF A01

**O'ROURKE, J. A.**
Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.
PB93-221653/REB 93-04 PC A07/MF A02

**OBLESBY, L. A.**
In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with In vivo Data.
PB93-107167/REB 93-01 PC A03/MF A01

**OCAMB, D.**
Initial Assessment of Emissions from Heat Setting Carpet Yarn.
PB93-229862/REB 93-04 PC A04/MF A01

**OCKER, A. G.**
Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
PB93-221638/REB 93-04 PC A04/MF A01

**ODH, S.**
Air monitoring in the Arctic: 1980-90.
DE92563060/REB 93-01 PC A03/MF A01

**OEHLERT, G.**
Design of the Clean Air Act Deposition Monitoring Network.
PB93-120947/REB 93-01 PC A03/MF A01

**OEHRSTROEM, T.**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
DE93500877/REB 93-04 PC A04/MF A01

Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
DE93500872/REB 93-04 PC A03/MF A01

**OESTERBERG, K.**
Aatgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC A14/MF A03

**OEZKAYNAK, H.**
Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC A02/MF A01

**OGREN, J.**
Air monitoring in the Arctic: 1980-90.
DE92563060/REB 93-01 PC A03/MF A01

**OGUNSEITAN, O. A.**
Application of DNA Probes to Analysis of Bacteriophage Distribution Patterns in the Environment.
PB93-121200/REB 93-01 PC A02/MF A01

**OHANIAN, E. V.**
Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC A02/MF A01

**OHRENSCHALL, M. A.**
Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. Documentation Manual, DISC-A. Volume 1. NGDC Key to Geophysical Records Documentation No. 27.
PB93-146090/REB 93-01 PC A11/MF A03

**OKA, N.**
Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-226914/REB 93-04 PC A03/MF A01

**OLEM, H.**
Lake and Reservoir Restoration Guidance Manual: Second Edition.
PB93-207926/REB 93-04 PC A15/MF A03

Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC A08/MF A02

**OLFENBUTTEL, R. F.**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC A07/MF A02

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 1: Pages 1 through 662.
PB93-218246/REB 93-04 PC A99/MF A06

Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 2: Pages 663 through 1389.
PB93-218253/REB 93-04 PC A99/MF A06

Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC A04/MF A01

Mobile On-Site Recycling of Metalworking Fluids.
PB93-216562/REB 93-04 PC A04/MF A01

On-Site Waste Ink Recycling: Technology Evaluation Report.
PB93-141026/REB 93-01 PC A04/MF A01

**OLIVER, K.**
Evaluation of Commercially-Available Portable Gas Chromatographs.
PB93-121051/REB 93-01 PC A02/MF A01

Evaluation of Portable Gas Chromatographs.
PB93-168813/REB 93-01 PC A03/MF A01

**OLIVER, K. D.**
Evaluation of a Sorbent-Based Preconcentrated for Analysis of VOCs in Air Using Gas Chromatography-Atomic Emission Detection.
PB93-121077/REB 93-01 PC A02/MF A01

Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC A03/MF A01

**OLSEN, A. R.**
Acid Precipitation in North America: 1986 Annual and Seasonal Data Summaries from Acid Deposition System Data Base.
PB93-223154/REB 93-04 PC A04/MF A01

**OLSEN, R. H.**
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC A03/MF A01

**OLSON, G. R.**
Ninety-Day Toxicity Study of Chloral Hydrate in the Sprague-Dawley Rat.
PB93-107118/REB 93-01 PC A03/MF A01

Ninety-Day Toxicity Study of Sodium Monochloroacetate in Sprague-Dawley Rats.
PB93-107100/REB 93-01 PC A03/MF A01

**OLSON, J.**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 1. Disposition and Pharmacokinetics.
PB93-222651/REB 93-04 PC A07/MF A02

**OLSON, R. K.**
Future Context of Sustainable Agriculture: Planning for Uncertainty.
PB93-191518/REB 93-01 PC A03/MF A01

Integrating Sustainable Agriculture, Ecology, and Environmental Policy. Conference Proceedings.
PB93-191492/REB 93-01 PC A02/MF A01

Research and Information Needs Related to Nonpoint Source Pollution and Wetlands in the Watershed: An EPA Perspective.
PB93-168862/REB 93-01 PC A02/MF A01

**OLSZYK, D.**
Effects of CO2 and Temperature on Five Rice Cultivars.
PB93-141158/REB 93-01 PC A02/MF A01

Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC A07/MF A02

**OLSZYK, D. M.**
Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC A05/MF A01

**OMERNIK, J. M.**
Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC A08/MF A02

**ONG, S. K.**
Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC A05/MF A01

**OOMMEN, R.**
OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC A04/MF A01

**OPATKEN, E. J.**
Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC A03/MF A01

Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC A02/MF A01

**OPPELT, E. T.**
Incineration of Hazardous Waste: A Critical Review Update.
PB93-185916/REB 93-01 PC A03/MF A01

**ORLANDO, S. P.**
Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC A04/MF A01

Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC A03/MF A01

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC A03/MF A01

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC A03/MF A01

**ORTH, R. J.**
Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC A12/MF A03

Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and Chincoteague Bay, 1991.
PB93-191120/REB 93-01 PC A13/MF A03

**OSBORN, M.**
Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC A20/MF A04

**OSBORNE, M.**
Measurement and Distribution of Radon and Radon Progeny: An Overview of Indoor Radon Risk Reduction in the United States.
PB93-107092/REB 93-01 PC A02/MF A01

**OSBORNE, M. C.**
Establishing Priorities in the U.S. EPA's Indoor Air Engineering Research Program.
PB93-221984/REB 93-04 PC A02/MF A01

**OSSMAN, A. G.**
Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 1. Technical Report and Appendices A-F.
PB93-191302/REB 93-01 PC A13/MF A03

Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 2. Appendices G-N.
PB93-191310/REB 93-01 PC A15/MF A03

**OSTBY, J.**
Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.
PB93-236347/REB 93-04 PC A02/MF A01

**OSTBY, J. S.**
Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Bensidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC **A02**/MF **A01**

Gonadal Effects of Fetal Exposure to the Azo Dye Congo Red in Mice: Infertility in Female but Not Male Offspring.
PB93-181071/REB 93-01 PC **A03**/MF **A01**

**OSTENDORF, D. W.**
Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC **A03**/MF **A01**

Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03**/MF **A01**

LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

**OTT, W.**
Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
PB93-234508/REB 93-04 PC **A03**/MF **A01**

**OTTO, D.**
Summary of Workshop III: Evoked Potentials.
PB93-175610/REB 93-01 PC **A01**/MF **A01**

**OUYANG, Y.**
VIRTUS, a Model of Virus Transport in Unsaturated Soils.
PB93-185890/REB 93-01 PC **A02**/MF **A01**

**OVERTON, J. H.**
Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC **A02**/MF **A01**

**OVERTON, W. S.**
Comparing Sampling Designs for Monitoring Ecological Status and Trends: Impact of Temporal Patterns (Chapter 3).
PB93-222289/REB 93-04 PC **A03**/MF **A01**

**OWEN, D. M.**
Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

**OWEN, M. K.**
Airborne Particle Sizes and Sources Found in Indoor Air.
PB93-107019/REB 93-01 PC **A03**/MF **A01**

IAQPC: An Indoor Air Quality Simulator.
PB93-212397/REB 93-04 PC **A03**/MF **A01**

Relating Air Cleanar Efficiency to Indoor Air Quality.
PB93-212405/REB 93-04 PC **A03**/MF **A01**

**OZRETICH, R. J.**
Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC **A03**/MF **A01**

Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03**/MF **A01**

**PACE, T. G.**
Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or Inhalable Particulate Data (Draft).
PB93-200640/REB 93-01 PC **A04**/MF **A01**

**PACENKA, J.**
Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

**PADILLA, S.**
Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC **A02**/MF **A01**

Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02**/MF **A01**

Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03**/MF **A01**

**PAGE, N. P.**
Ninety-Day Toxicity Study of Chloral Hydrate in the Sprague-Dawley Rat.
PB93-107118/REB 93-01 PC **A03**/MF **A01**

Ninety-Day Toxicity Study of Sodium Monochloroacetate in Sprague-Dawley Rats.
PB93-107100/REB 93-01 PC **A03**/MF **A01**

**PAHL, D. A.**
Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC **A02**/MF **A01**

**PAINE, J. G.**
Wetland Plant Communities, Galveston Bay System.
PB93-205730/REB 93-04 PC **A07**/MF **A02**

**PALAZZOLO, M. A.**
Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
PB93-105518/REB 93-01 PC **A08**/MF **A02**

**PALMER, C. D.**
Rapid Phase Indentification of Mixed Crystalline Solids.
PB93-212355/REB 93-04 PC **A03**/MF **A01**

**PANDULLO, R.**
Technical Information Document for Residential Wood Combustion Best Available Control Measures.
PB93-122224/REB 93-01 PC **A05**/MF **A01**

**PAPADIMAS, S. P.**
Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC **A03**/MF **A01**

**PARIKH, P.**
Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.
PB93-205508/REB 93-04 PC **A99**/MF **A06**

**PARK, P.**
Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC **A03**/MF **A01**

Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC **A02**/MF **A01**

**PARKER, R. A.**
Removal of Radionuclides by Electrokinetic Soil Processing.
PB93-222875/REB 93-04 PC **A02**/MF **A01**

**PARRISH, C. R.**
Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
PB93-105518/REB 93-01 PC **A08**/MF **A02**

**PARTEE, G.**
Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC **A14**/MF **A03**

**PASCOE, V. M.**
Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
PB93-185866/REB 93-01 PC **A02**/MF **A01**

**PASZKO-KOLVA, C.**
Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
PB93-205078/REB 93-04 PC **A02**/MF **A01**

**PATE, B. A.**
Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02**/MF **A01**

**PATE, W. J.**
Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02**/MF **A01**

**PATRICK, J. M.**
Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204960/REB 93-01 PC **A03**/MF **A01**

**PATRICK, W. H.**
Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222600/REB 93-04 PC **A02**/MF **A01**

Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02**/MF **A01**

**PAUL, C. J.**
Comparison of Ground-Water Sampling Devices Based on Equilibration of Water Quality Indicator Parameters.
PB93-149201/REB 93-01 PC **A03**/MF **A01**

Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-228575/REB 93-04 PC **A03**/MF **A01**

**PAUL, J. F.**
Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03**/MF **A01**

Transport of Low-Level Radioactive Soil at Deep-Ocean Disposal Site.
PB93-199487/REB 93-01 PC **A03**/MF **A01**

**PAULSEN, S. G.**
Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC **A03**/MF **A01**

Surface Waters Component of the Environmental Monitoring and Assessment Program (EMAP): An Overview.
PB93-121267/REB 93-01 PC **A02**/MF **A01**

**PAUMIER, J. O.**
CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 2. Performance Characteristics.
PB93-107084/REB 93-01 PC **A03**/MF **A01**

**PAYNE, J. R.**
Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.
PB93-236578/REB 93-04 PC **A04**/MF **A01**

**PECHAN, E. H.**
Guidance on the Adjusted Base Year Emissions Inventory and the 1996 Target for the 15 Percent Rate of Progress Plans.
PB93-122356/REB 93-01 PC **A04**/MF **A01**

**PEDERSEN, T. A.**
Proceedings of the Symposium on Soil Venting. Held in Houston, Texas on April 29-May 1, 1991.
PB93-122323/REB 93-01 PC **A15**/MF **A03**

**PEDERSON, T. A.**
Column Vapor Extraction Experiments on Gasoline Contaminated Soil.
PB93-131514/REB 93-01 PC **A03**/MF **A01**

**PEELE, D. B.**
Animal Models for Assessing the Neurobehavioral Impact of Airborne Pollutants.
PB93-107233/REB 93-01 PC **A03**/MF **A01**

Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.
PB93-228872/REB 93-04 PC **A03**/MF **A01**

Olfactory Toxicity of Beta,Beta'-Iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC **A02**/MF **A01**

**PEELER, J. W.**
Recommended Quality Assurance Procedures for Opacity Continuous Emission Monitoring Systems.
PB93-199263/REB 93-01 PC **A05**/MF **A01**

**PEER, R. L.**
Comparison of Methods for Estimating Global Methane Emissions from Landfills.
PB93-212561/REB 93-04 PC **A03**/MF **A01**

**PELLIZZARI, E.**
Total Volatile Organic Concentrations in 2700 Personal, Indoor, and Outdoor Air Samples Collected in the US EPA Team Studies.
PB93-229730/REB 93-04 PC **A03**/MF **A01**

**PELLIZZARI, E. D.**
Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC **A02**/MF **A01**

**PENG, Y.**
Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
PB93-141257/REB 93-01 PC **A02**/MF **A01**

**PEPELKO, W. E.**
Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.
PB93-222081/REB 93-04 PC **A03**/MF **A01**

**PEREIRA, M. A.**
Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03**/MF **A01**

**PEREZ, R.**
Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC **A02**/MF **A01**

**PERKINS, R. L.**
Method for the Determination of Asbestos in Bulk Building Materials. (Test Method).
PB93-218576/REB 93-04 PC **A05**/MF **A02**

**PERROTT, M.**
Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC **A03**/MF **A01**

**PERRY, E.**
Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC **A03**/MF **A01**

**PERRY, S.**
Nonpoint Source Pollution: Land Use and Water Quality.
PB93-223014/REB 93-04 PC **A03**

**PERRY, S. G.**
CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 1. Technical Formulations.
PB93-107076/REB 93-01 PC **A03**/MF **A01**

CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 2. Performance Characteristics.
PB93-107084/REB 93-01 PC **A03**/MF **A01**

**PERSHING, D. W.**
Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-228450/REB 93-04 PC **A02**/MF **A01**

**PERSILY, A. K.**
Building and HVAC Characterization for Commercial Building Indoor Air Quality Investigations.
PB93-198844/REB 93-01 PC **A07**/MF **A02**

**PETERJOHN, W. T.**
Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
PB93-222776/REB 93-04 PC **A02**/MF **A01**

**PETERS, J.**
Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
PB93-216067/REB 93-04 PC **A07**/MF **A02**

**PETERSON, C. E.**
Uncertainties in Countrywide Forest Biomass Estimates.
PB93-149250/REB 93-01 PC **A03**/MF **A01**

**PETERSON, J. A.**
Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC **A02**/MF **A01**

**PETERSON, M. R.**
Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02**/MF **A01**

**PETERSON, R.**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.
PB93-222693/REB 93-04 PC **A06**/MF **A02**

**PETERSON, T. W.**
Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212538/REB 93-04 PC **A03**/MF **A01**

**PETTERSSON, A. H.**
New technology for refrigeration and heating plants.
DE93721673/REB 93-01 PC **A03**/MF **A01**

**PETTYJOHN, W. A.**
Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC **A06**/MF **A02**

Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC **A07**/MF **A02**

**PFEFFER, F. M.**
Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC **A03**/MF **A01**

**PHELPS, D. K.**
Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03**/MF **A01**

Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03**/MF **A01**

**PHILLIPS, D. L.**
Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.
PB93-229649/REB 93-04 PC **A03**/MF **A01**

**PHIPPS, G. L.**
Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.
PB93-222362/REB 93-04 PC **A03**/MF **A01**

**PICCOT, S. D.**
Estimate of Global Methane Emissions from Coal Mines.
PB93-212553/REB 93-04 PC **A03**/MF **A01**

Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC **A03**/MF **A01**

Global Inventory of Volatile Organic Compound Emissions from Anthropogenic Sources.
PB93-107001/REB 93-01 PC **A03**/MF **A01**

**PIELSTICKER, K. F.**
Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
PB93-128114/REB 93-01 PC **A04**/MF **A01**

**PIERCE, J. A.**
Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

**PINTO, J. P.**
Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC **A03**/MF **A01**

**PIOTROWSKI, G. K.**
Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03**/MF **A01**

Evaluation of Resistively Heated Fuel Injection Technology to Reduce Cold Start Emissions and Assist Starting/Driveaway of a Methanol-Fueled Vehicle.
PB93-144350/REB 93-01 PC **A03**/MF **A01**

Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.
PB93-216869/REB 93-04 PC **A03**/MF **A01**

**PITCHFORD, M.**
Empirical Model of Vehicle Emissions.
PB93-199602/REB 93-01 PC **A02**/MF **A01**

**PITT, R.**
Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC **A05**/MF **A02**

**PLEIL, J. D.**
Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC **A03**/MF **A01**

**PLEIM, J. E.**
Interpretive Analysis of Observed and Modeled Mesoscale Ozone Photochemistry in Areas with Numerous Point Sources.
PB93-212702/REB 93-04 PC **A03**/MF **A01**

Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.
PB93-212686/REB 93-04 PC **A03**/MF **A01**

**PLETCHER, J. M.**
Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03**/MF **A01**

**PLEWA, M. J.**
Ink and Cleaner Waste Reduction Evaluation for Flexographic Printers.
PB93-191286/REB 93-01 PC **A03**/MF **A01**

**PODAR, M.**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Project Peer Review. Report of the Peer Review Committee of the Amoco/EPA Pollution Prevention Project at the Yorktown, Virginia Refinery.
PB92-228618/REB 93-01 PC **A10**/MF **A03**

Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Project Summary.
PB92-228527/REB 93-01 PC **A06**/MF **A02**

Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Guidance.
PB93-154730/REB 93-01 PC **A10**/MF **A03**

Benefits and Feasibility of Effluent Trading between Point Sources: An Analysis in Support of Clean Water Act Reauthorization.
PB93-217636/REB 93-04 PC **A04**/MF **A01**

Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC **A06**/MF **A02**

Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.
PB93-205508/REB 93-04 PC **A99**/MF **A06**

**POHLAND, F. G.**
Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC **A10**/MF **A03**

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC **A15**/MF **A03**

Use of Alternative Materials for Daily Cover at Municipal Solid Waste Landfills.
PB93-227197/REB 93-04 PC **A06**/MF **A02**

**POINDEXTER, C. K.**
Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC **A02**/MF **A01**

**POLLAK, A. J.**
Evaluation of Portable Multisorbent Air Samplers for Use with an Automated Multitube Analyzer.
PB93-172930/REB 93-01 PC **A05**/MF **A01**

**POLLOCK, M. M.**
Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.
PB93-236305/REB 93-04 PC **A03**/MF **A01**

**PONDER, W. H.**
Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC **A02**/MF **A01**

**POPE, C. N.**
Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02**/MF **A01**

Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03**/MF **A01**

**POPPELL, S. W.**
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

**PORTEOUS, L. A.**
Simple Mini-Method to Extract DNA Directly from Soil for Use with Polymerase Chain Reaction Amplification.
PB93-222792/REB 93-04 PC **A02**/MF **A01**

**POURMOGHADDAS, H.**
Determination of Nine Haloacetic Acids in Finished Drinking Water.
PB93-204121/REB 93-01 PC **A03**/MF **A01**

**POWELL, R. M.**
Laboratory Studies on the Stability and Transport of Inorganic Colloids Through Natural Aquifer Material (Chapter 49).
PB93-175537/REB 93-01 PC **A02**/MF **A01**

Passive Sampling of Groundwater Monitoring Wells without Purging: Multilevel Well Chemistry and Tracer Disappearance.
PB93-181170/REB 93-01 PC **A03**/MF **A01**

**POWERS, C. F.**
Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

**POWERS, T. J.**
Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC **A02**/MF **A01**

Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
PB93-131761/REB 93-01 PC **A02**/MF **A01**

Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC **A03**/MF **A01**

**PRABEL, J. B.**
Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC **A02**/MF **A01**

**PRAGER, J. C.**
Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC **A03**/MF **A01**

**PRAH, J. D.**
Olfactory Evoked Responses to Odorous Stimuli of Different Intensities.
PB93-141315/REB 93-01 PC **A02**/MF **A01**

**PRESTON, E.**
EMAP and Other Tools for Measuring Biodiversity, Habitat Conditions, and Environmental Trends.
PB93-106748/REB 93-01 PC **A03**/MF **A01**

**PREUD'HOMME, E. B.**
Relationship between Water Temperatures and Air Temperatures for Central U.S. Streams.
PB93-135655/REB 93-01 PC **A07**/MF **A02**

**PRICE, L. A.**
Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
PB93-194223/REB 93-01 PC **A03**/MF **A01**

**PRICE, P.**
Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
PB93-212462/REB 93-04 PC **A03**/MF **A01**

**PRILL, R. J.**
Preliminary Diagnostic Procedures for Radon Control. Project Summary.
PB93-222545/REB 93-04 PC **A01**/MF **A01**

**PRINCIOTTA, F. T.**
Air Toxics: The Research Challenge of the 1990 Clean Air Act Amendments.
PB93-106664/REB 93-01 PC **A02**/MF **A01**

Technological Options for Acid Rain Control.
PB93-173094/REB 93-01 PC **A03**/MF **A01**

Technologies Options for Acid Rain Control.
PB93-106854/REB 93-01 PC **A03**/MF **A01**

**PRITCHARD, P. H.**
Bioremediation as a Technology: Experiences with the Exxon Valdez Oil Spill.
PB93-121226/REB 93-01 PC **A03**/MF **A01**

Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC **A03**/MF **A01**

Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02**/MF **A01**

Recent Developments in Cleanup Technologies.
PB93-236289/REB 93-04 PC **A03**/MF **A01**

Use of a Novel Plasmid to Monitor the Fate of a Genetically Engineered 'Pseudomonas putida' Strain.
PB93-169001/REB 93-01 PC **A02**/MF **A01**

Use of Inoculation in Bioremediation.
PB93-121150/REB 93-01 PC **A03**/MF **A01**

**PROBST, J. R.**
Adding a Landscape Ecology Perspective to Conservation and Management Planning.
PB93-234516/REB 93-04 PC **A03**/MF **A01**

**PROKOP, B.**
Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03**/MF **A01**

**PROTHRO, M.**
Guidance Manual for POTW Pretreatment Program Development.
PB93-186112/REB 93-01 PC **A14**/MF **A03**

**PRUELL, R. J.**
Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02**/MF **A01**

Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02**/MF **A01**

Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02**/MF **A01**

**PRYOR, G. T.**
Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC **A03**/MF **A01**

**PULS, R. W.**
Comparison of Ground-Water Sampling Devices Based on Equilibration of Water Quality Indicator Parameters.
PB93-149201/REB 93-01 PC **A03**/MF **A01**

Laboratory Studies on the Stability and Transport of Inorganic Colloids Through Natural Aquifer Material (Chapter 49).
PB93-175537/REB 93-01 PC **A02**/MF **A01**

Passive Sampling of Groundwater Monitoring Wells without Purging: Multilevel Well Chemistry and Tracer Disappearance.
PB93-181170/REB 93-01 PC **A03**/MF **A01**

Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-228575/REB 93-04 PC **A03**/MF **A01**

**PURDUE, L. J.**
Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03**/MF **A01**

Determination of the Strong Acidity of Atmospheric Fine-Particles (< 2.5 mum) Using Annular Denuder Technology. Standard Method, Enhanced Method.
PB93-178234/REB 93-01 PC **A07**/MF **A02**

**PURPLE, J.**
Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC **A05**/MF **A01**

**PYLE, B. E.**
Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04**/MF **A01**

Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

**QI, S.**
Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC **A03**/MF **A01**

Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC **A02**/MF **A01**

**QUARLES, P.**
Summary of Factors Affecting Compliance by Ferrous Foundaries. Volume 1. Text.
PB93-199347/REB 93-01 PC **A05**/MF **A02**

**QUAY, J.**
Cytokine (Tumor Necrosis Factor, IL-6, and IL-8) Production by Respiratory Syncytial Virus-Infected Human Alveolar Macrophages.
PB93-181006/REB 93-01 PC **A02**/MF **A01**

**QUINN, H.**
Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

**QUINN, J. G.**
Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02**/MF **A01**

Physical and Chemical Parameters of Sediment Extraction and Fractionation That Influence Toxicity, as Evaluated by Microtox (Trade Name).
PB93-185882/REB 93-01 PC **A03**/MF **A01**

**RABHAM, A. B.**
Applications of Pulse Combustion in Industrial and Incineration Processes.
PB93-131639/REB 93-01 PC **A03**/MF **A01**

**RADERMACHER, R.**
Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
PB93-173664/REB 93-01 PC **A02**/MF **A01**

Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131688/REB 93-01 PC **A03**/MF **A01**

**RAFFERTY, M. R.**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
PB93-128015/REB 93-01 PC **A04**/MF **A01**

**RAJAN, R. V.**
Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03**/MF **A01**

**RAJU, C. S.**
Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC **A04**/MF **A01**

**RAM DAS, B.**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Diethylene Glycol Dinitrate (DEGDN).
PB93-117000/REB 93-01 PC **A03**/MF **A01**

Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

**RAMADAN, W.**
Development of Residential Wood Consumption Estimation Models.
PB93-199248/REB 93-01 PC **A04**/MF **A01**

Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC **A06**/MF **A02**

**RAMANATHAN, R.**
Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-180990/REB 93-01 PC **A03**/MF **A01**

**RAMSAY, M.**
Framework for Characterization. (Revised Final Report March 1992).
PB93-191237/REB 93-01 PC **A04**/MF **A01**

**RAMSEY, G. H.**
Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC **A02**/MF **A01**

**RANDALL, P. M.**
Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
PB93-221638/REB 93-04 PC **A04**/MF **A01**

Ink and Cleaner Waste Reduction Evaluation for Flexographic Printers.
PB93-191286/REB 93-01 PC **A03**/MF **A01**

Pollution Prevention Research Ongoing: EPA's Risk Reduction Engineering Laboratory.
PB93-212447/REB 93-04 PC **A02**/MF **A01**

Recycling Nickel Electroplating Rinse Waters by Low Temperature Evaporation and Reverse Osmosis.
PB93-218865/REB 93-04 PC **A04**/MF **A01**

Replacement of Hazardous Material in Wide Web Flexographic Printing Process.
PB93-229128/REB 93-04 PC **A05**/MF **A01**

**RANDOLPH, R.**
Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC **A05**/MF **A01**

**RASMUSSEN, T. C.**
Role and Design of Water Quality Monitoring on Forested Watersheds.
PB93-222248/REB 93-04 PC **A02**/MF **A01**

**RATANAPHRUKS, K.**
R-245ca: A Potential Far-Term Alternative for R-11.
PB93-173144/REB 93-01 PC **A02**/MF **A01**

**RATHBUN, J. E.**
Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC **A03**/MF **A01**

Sampling, Characterizing and Mapping Contaminated Sediments in River Harbors.
PB93-135705/REB 93-01 PC **A02**/MF **A01**

**RAUCHER, R.**
Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC **A09**/MF **A02**

**RAVI, V.**
Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC **A03**/MF **A01**

**RAWE, J.**
Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Quick Reference Fact Sheet.
PB93-121325/REB 93-01 PC **A02**/MF **A01**

Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Remedy Selection. Interim Guidance.
PB93-126597/REB 93-01 PC **A03**/MF **A01**

Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC **A02**/MF **A01**

**RAY, W. D.**
Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC **A03**/MF **A01**

**RAYMOND, R. L.**
Bioremediation.
PB93-149193/REB 93-01 PC **A03**/MF **A01**

**REAGIN, M. J.**
Selection of a 'Pseudomonas cepacia' Strain Constitutive for the Degradation of Trichloroethylene.
PB93-169027/REB 93-01 PC **A02**/MF **A01**

**REBERT, C. S.**
Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC **A03**/MF **A01**

**REBSTOCK, C.**
UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

**REDDY, T. A.**
Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
PB93-100907/REB 93-01 PC **A07**/MF **A02**

Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

**REDDY, T. V.**
Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03**/MF **A01**

Macromolecular Adduction by Trichloroacetonitrile in the Fischer 344 Rat Following Oral Gavage.
PB93-107134/REB 93-01 PC **A03**/MF **A01**

**REDMOND, M. S.**
Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11**/MF **A03**

**REED, S. C.**
Constructed Wetland Design: the First Generation.
PB93-131753/REB 93-01 PC **A02**/MF **A01**

**REESE, J. L.**
Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.
PB93-228468/REB 93-04 PC **A02**/MF **A01**

**REGLI, S.**
Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC **A07**/MF **A02**

Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC **A05**/MF **A01**

Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

Simulation of Microbial Occurrence, Exposure and Health Risks after Drinking Water Treatment Processes.
PB93-134393/REB 93-01 PC **A05**/MF **A02**

Simulation of Raw Water and Treatment Parameters in Support of the Disinfection By-Products Regulatory Impact Analysis.
PB93-134401/REB 93-01 PC **A03**/MF **A01**

Use of Microbial Risk Assessment in Setting U.S. Drinking Water Standards.
PB93-134930/REB 93-01 PC **A03**/MF **A01**

**REID, R. C.**
Methods for Assessing Exposure to Chemical Substances. Volume 11. Methodology for Estimating the Migration of Additives and Impurities from Polymeric Materials.
PB93-134096/REB 93-01 PC **A09**/MF **A02**

**REILLY, L. M.**
Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
PB93-168946/REB 93-01 PC **A02**

**REINHARD, M.**
Transformation of Carbon Tetrachloride in the Presence of Sulfide, Biotite, and Vermiculite.
PB93-135713/REB 93-01 PC **A02**/MF **A01**

**REINHART, D. R.**
Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC **A10**/MF **A03**

Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC **A15**/MF **A03**

**REITER, L. W.**
Strategy for Environmental Health Research at EPA.
PB93-116168/REB 93-01 PC **A06**/MF **A02**

**RENARD, E.**
Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC **A02**/MF **A01**

**RENARD, E. R.**
Estimation of the Cost of Using Chemical Protective Clothing.
PB93-168805/REB 93-01 PC **A03**/MF **A01**

**RENNER, R. C.**
Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC **A10**/MF **A03**

**REPETTO, R.**
Greening of World Trade: A Report to EPA from the Trade and Environment Committee of the National Advisory Council for Environmental Policy and Technology.
PB93-176980/REB 93-01 PC **A11**/MF **A03**

**RESNICK, S.**
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism

and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC **A03**/MF **A01**

**RESNICK, S. M.**
Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02**/MF **A01**

Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

**REZVANI, A. H.**
Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02**/MF **A01**

**RHODERICK, G. C.**
Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC **A03**/MF **A01**

**RHODES, A. N.**
Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02**/MF **A01**

**RHODES, D. E.**
Molecular Size Exclusion by Soil Organic Materials Estimated from Their Swelling in Organic Solvents.
PB93-228583/REB 93-04 PC **A02**/MF **A01**

**RHOMBERG, L. R.**
Quantification of Germ-Cell Risk Associated with the Induction of Heritable Translocations.
PB93-199677/REB 93-01 PC **A03**/MF **A01**

**RIBIC, C.**
Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC **A02**/MF **A01**

**RIBIC, C. A.**
Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

EMAP and Other Tools for Measuring Biodiversity, Habitat Conditions, and Environmental Trends.
PB93-106748/REB 93-01 PC **A03**/MF **A01**

Glossary for Avian Conservation Biology.
PB93-106656/REB 93-01 PC **A03**/MF **A01**

**RICE, E. W.**
Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC **A03**/MF **A01**

Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC **A01**/MF **A01**

Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC **A01**/MF **A01**

**RICHARDS, D. V.**
Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04**/MF **A01**

**RICHARDS, J. H.**
Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
PB93-236321/REB 93-04 PC **A03**/MF **A01**

**RICHARDS, R. J.**
Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC **A03**/MF **A01**

LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

**RICHARDSON, G. N.**
Technical Guidance Document: Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems.
PB93-105625/REB 93-01 PC **A05**/MF **A02**

**RICKMAN, E. E.**
Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.
PB93-210383/REB 93-04 PC **A07**/MF **A02**

**RIDLEY, W.**
DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03**/MF **A01**

**RIFAI, H. S.**
Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1. Technical Report.
PB93-205722/REB 93-04 PC **A11**/MF **A03**

**RINGOLD, P. L.**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212468/REB 93-04 PC **A03**/MF **A01**

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

**RIVERA, M. D.**
Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC **A02**/MF **A01**

**RIZELL, P. O.**
New technology for refrigeration and heating plants.
DE93721673/REB 93-01 PC **A03**/MF **A01**

**ROBERTS, A. L.**
Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC **A03**/MF **A01**

**ROBERTS, D. W.**
Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93-148252/REB 93-01 PC **A08**/MF **A02**

**ROBERTS, F. A.**
Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC **A02**/MF **A01**

**ROBERTS, J. W.**
Chemical Contaminants in House Dust: Occurrences and Sources.
PB93-228542/REB 93-04 PC **A02**/MF **A01**

**ROBERTS, N. L.**
Direct Effects of Ethane Dimethanesulphonate on Epididymal Function in Adult Rats. An In vitro Demonstration.
PB93-141281/REB 93-01 PC **A03**/MF **A01**

**ROBERTS, W. C.**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Diethylene Glycol Dinitrate (DEGDN).
PB93-117000/REB 93-01 PC **A03**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Tetranitromethane (TNM).
PB93-116994/REB 93-01 PC **A03**/MF **A01**

Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC **A05**/MF **A01**

Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

**ROBILLARD, P. D.**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
PB93-128031/REB 93-01 PC **A06**/MF **A02**

**ROBINSON, B. L.**
Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02**/MF **A01**

**ROBINSON, M.**
Ninety-Day Toxicity Study of Chloral Hydrate in the Sprague-Dawley Rat.
PB93-107118/REB 93-01 PC **A03**/MF **A01**

Ninety-Day Toxicity Study of Sodium Monochloroacetate in Sprague-Dawley Rats.
PB93-107100/REB 93-01 PC **A03**/MF **A01**

**ROCCHIO, J. E.**
Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-228500/REB 93-04 PC **A02**/MF **A01**

**ROCHELLE, B. P.**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC **A18**/MF **A04**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC **A14**/MF **A03**

**ROCHETTE, E. A.**
Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC **A02**/MF **A01**

**RODES, C. E.**
Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC **A03**/MF **A01**

**RODIER, D.**
Framework for Ecological Risk Assessment.
PB93-102192/REB 93-01 PC **A04**/MF **A01**

**ROESNER, L. A.**
Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC **A02**/MF **A01**

**ROFFMAN, A.**
Air/Superfund National Technical Guidance Study Series. Volume 4. Guidance for Ambient Air Monitoring at Superfund Sites (Revised).
PB93-199214/REB 93-01 PC **A08**/MF **A02**

**ROGERS, C.**
Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC **A03**/MF **A01**

**ROGERS, C. J.**
Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02**/MF **A01**

**ROGERS, J. E.**
Anaerobic Dehalogenation and Its Environmental Implications. Abstracts of 1992 American Society for Microbiology Conference. Held in Athens, Georgia on August 30-September 4, 1992.
PB93-217792/REB 93-04 PC **A04**/MF **A01**

Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC **A03**/MF **A01**

Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC **A03**/MF **A01**

**ROGERS, J. M.**
Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02**/MF **A01**

Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC **A03**/MF **A01**

Review of the Literature on Potential Reproductive and Developmental Toxicity of Electric and Magnetic Fields.
PB93-141307/REB 93-01 PC **A03**/MF **A01**

**ROGERS, K. R.**
Immunoassay for p-Nitrophenol in Urine (Chapter XX).
PB93-175552/REB 93-01 PC **A03**/MF **A01**

**ROGERS, S. M.**
Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC **A03**/MF **A01**

**ROILA, T.**
Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC **A03**/MF **A01**

**ROLOFSON, E.**
Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC **A06**/MF **A02**

**ROOKWOOD, M.**
Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

**ROOP, B. C.**
PCR Primers Specific for Detection of a Rat Repetitive Sequence.
PB93-141398/REB 93-01 PC **A01**/MF **A01**

**ROOSE, D.**
Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
PB93-202851/REB 93-04 PC **A06**/MF **A02**

**ROSENBAUM, B.**
Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC **A07**/MF **A02**

**ROSS, D.**
Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02**/MF **A01**

**ROSS, J. A.**
32P-Postlabeling in Studies of PAH Activation.
PB93-106631/REB 93-01 PC **A03**/MF **A01**

DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

DNA Isolation from Small Tissue Samples Using Salt and Spermine.
PB93-181048/REB 93-01 PC **A01**/MF **A01**

**ROSSITER, B. J. F.**
Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC **A03**/MF **A01**

**ROSSMAN, L. A.**
EPANET Water Quality Model.
PB93-236552/REB 93-04 PC **A03**/MF **A01**

**ROTHMEL, R. K.**
Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC **A03**/MF **A01**

Molecular Basis of Biodegradation of Chloroaromatic Compounds.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC **A03**/MF **A01**

**ROWLAND, J. C.**
Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

**ROYER, M. D.**
Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
PB93-121333/REB 93-01 PC **A03**/MF **A01**

**RUBEY, W. A.**
Thermal Degradation Characteristics of Environmentally Sensitive Pesticide Products.
PB93-201127/REB 93-01 PC **A04**/MF **A01**

**RUBINSTEIN, N. I.**
Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02**/MF **A01**

**RUDD, N.**
Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
PB93-212652/REB 93-04 PC **A03**/MF **A01**

**RUIZ, J. T.**
VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC **A02**/MF **A01**

**RUNGSIMUNTAKUL, N.**
Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC **A02**/MF **A01**

**RUSSELL, H. H.**
In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC **A03**/MF **A01**

**RUSTAD, L. E.**
Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC **A04**/MF **A01**

**RUTLEDGE, J. C.**
Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03**/MF **A01**

Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03**/MF **A01**

**RYAN, J. V.**
Characterization of Emissions from the Simulated Open-Burning of Non-Metallic Automobile Shredder Residue.
PB93-172914/REB 93-01 PC **A05**/MF **A01**

Characterization of the Organic Emissions from the Thermal Destruction of CFCs.
PB93-205557/REB 93-04 PC **A10**/MF **A03**

Development of Sampling and Analytical Methods for the Measurement of Nitrous Oxide from Fossil Fuel Combustion Sources.
PB93-194330/REB 93-01 PC **A07**/MF **A02**

On-Line Measurement of Nitrous Oxide from Combustion Sources by Automated Gas Chromatography.
PB93-106847/REB 93-01 PC **A03**/MF **A01**

**RYAN, P. F.**
Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC **A07**/MF **A02**

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

**RYAN, T. P.**
Biodegradation of 2,4,5-Trichlorophenoxyacetic Acid in Liquid Culture and in Soil by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191542/REB 93-01 PC **A02**/MF **A01**

**RYGIEWICZ, P. T.**
Soil Biology and Ecology.
PB93-199453/REB 93-01 PC **A03**/MF **A01**

Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC **A03**/MF **A01**

**RZEMIEN, E. C.**
Synthesis of Basic Life Histories of Tampa Bay Species.
PB93-196012/REB 93-01 PC **A12**/MF **A03**

**SABOL, H. K.**
Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.
PB93-227205/REB 93-04 PC **A04**/MF **A01**

**SAFFERMAN, S. I.**
Evaluation of the Bioremediation of a Contaminated Soil with Phytotoxicity Tests.
PB93-191625/REB 93-01 PC **A03**/MF **A01**

**SAGA, H.**
Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
PB93-126290/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Dry Cleaning Equipment.
PB93-126225/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Plastic Containers by Injection Molding.
PB93-126241/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Scrap Metal Recovery Facility.
PB93-126266/REB 93-01 PC **A02**/MF **A01**

**SAGE,**
Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC **A01**/MF **A01**

**SAHATJIAN, K. A.**
Evaluation of Laboratory Tests to Determine the Effectiveness of Chemical Surface Washing Agents.
PB93-194215/REB 93-01 PC **A02**/MF **A01**

Evaluation of Three Oil Spill Laboratory Dispersant Effectiveness Tests.
PB93-191377/REB 93-01 PC **A02**/MF **A01**

**SAILOR, V. L.**
Identification of Cost Factors for the Ocean Disposal Alternative for Low-Level Radioactive Waste.
PB93-203917/REB 93-04 PC **A03**/MF **A01**

**SALAAM, S. A.**
Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-228815/REB 93-04 PC **A02**/MF **A01**

**SALES, J.**
Seminar Publication. Medical and Institutional Waste Incineration: Regulations, Management, Technology, Emissions, and Operations.
PB93-116283/REB 93-01 PC **A03**/MF **A01**

**SALHOTRA, A. M.**
MULTIMED: The Multimedia Exposure Assessment Model for Evaluating the Land Disposal of Wastes-Model Theory.
PB93-186252/REB 93-01 PC **A07**/MF **A02**

**SALMAN, D. I.**
Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC **A02**/MF **A01**

**SALVI-NARKHEDE, M.**
Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

**SAMS, R. L.**
Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC **A03**/MF **A01**

**SANDERFORD, B.**
Alternative Control Techniques Document-NOx Emissions from Process Heaters.
PB93-186211/REB 93-01 PC **A10**/MF **A03**

**SANDERS, B. M.**
Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
PB93-185866/REB 93-01 PC **A02**/MF **A01**

Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03**/MF **A01**

Stress Proteins in Aquatic Organisms: An Environmental Perspective.
PB93-199578/REB 93-01 PC **A03**/MF **A01**

**SANDHU, S. S.**
Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
PB93-141463/REB 93-01 PC **A02**/MF **A01**

Application of the 'Tradescantia micronucleus' Assay for the Genetic Evaluation of Chemical Mixtures in Soil and Aqueous Media.
PB93-141380/REB 93-01 PC **A02**/MF **A01**

Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
PB93-141257/REB 93-01 PC **A02**/MF **A01**

**SANGLARD, D.**
Characterization of the Alkane-Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis': Identification of a New P450 Gene Family.
PB93-229268/REB 93-04 PC **A03**/MF **A01**

Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
PB93-229458/REB 93-04 PC **A03**/MF **A01**

Isolation of the Alkane Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis'.
PB93-229284/REB 93-04 PC **A02**/MF **A01**

Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC **A02**/MF **A01**

**SANGODKAR, U. M. X.**
Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
PB93-204972/REB 93-04 PC **A03**/MF **A01**

Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC **A03**/MF **A01**

Molecular Basis of Biodegradation of Chloroaromatic Compounds.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC **A03**/MF **A01**

Repeated Sequences Including RS1100 'Pseudomonas cepacia' AC1100 Function as IS Elements.
PB93-205177/REB 93-04 PC **A02**/MF **A01**

**SANTELLA, R. M.**
DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC **A02**/MF **A01**

**SANTOYO, M. E. R.**
VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC **A02**/MF **A01**

**SANVIG, A. M.**
Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03**/MF **A01**

**SAPHIRE, D.**
Slowing the Waste Behemoth: Source Reduction is Overshadowed by Recycling's Success.
PB93-194546/REB 93-01 PC **A02**/MF **A01**

**SAQA, H.**
Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
PB93-123248/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
PB93-123149/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
PB93-123206/REB 93-01 PC **A02**/MF **A01**

**SARSONY, C.**
EPA's Indoor Air/Pollution Prevention Workshop.
PB93-222065/REB 93-04 PC **A03**/MF **A01**

**SARSONY, E. C.**
Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC **A13**/MF **A03**

**SARWAR, C.**
Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.
PB93-236578/REB 93-04 PC **A04**/MF **A01**

**SAUL, G. E.**
Recreational Fishery By-Catch in the Galveston Bay System.
PB93-205805/REB 93-04 PC **A06**/MF **A02**

**SAVEN, I.**
Air pollutants in urban areas. A bibliography 1985-1991.
DE93769990/REB 93-01 PC **A04**/MF **A01**

**SAYLER, G. S.**
Application of DNA Probes to Analysis of Bacteriophage Distribution Patterns in the Environment.
PB93-121200/REB 93-01 PC **A02**/MF **A01**

**SAYLES, G. D.**
In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03**/MF **A01**

**SCARBROUGH, J.**
3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
PB93-217669/REB 93-04 PC **A12**/MF **A03**

**SCARBROUGH, J. E.**
PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
PB93-174027/REB 93-01 PC **A17**/MF **A04**

**SCHAEFER, J. K.**
Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

**SCHAEFER, R. M.**
Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel - Final Report.
PB93-197929/REB 93-01 PC **A03**/MF **A01**

Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC **A03**/MF **A01**

Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03**/MF **A01**

Evaluation of Resistively Heated Fuel Injection Technology to Reduce Cold Start Emissions and Assist Starting/Driveaway of a Methanol-Fueled Vehicle.
PB93-144350/REB 93-01 PC A03/MF A01

Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.
PB93-216869/REB 93-04 PC A03/MF A01

**SCHALLERT, D. M.**
Exploring the Effects of Vector to Raster and Raster to Vector Conversion.
PB93-122166/REB 93-01 PC A04/MF A01

**SCHERE, K. L.**
Regional Modeling Analysis of the Dependencies of Atmospheric Oxidants to Perturbations in NOx and Hydrocarbon Emissions.
PB93-180925/REB 93-01 PC A02/MF A01

Stochastic Methodology for Regional Wind-Field Modeling.
PB93-229391/REB 93-04 PC A03/MF A01

**SCHILLER, S.**
Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC A03/MF A01

**SCHLEMM, D. J.**
Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC A02/MF A01

**SCHMELLING, S. G.**
Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC A03/MF A01

**SCHMIDT, C.**
Watts Nickel and Rinse Water Recovery via an Advanced Reverse Osmosis System.
PB93-229011/REB 93-04 PC A05/MF A01

**SCHNOOR, J. L.**
Kinetics of Chemical Weathering in B Horizon Spodosol Fraction.
PB93-141539/REB 93-01 PC A02/MF A01

Longterm Response of Lakes to Acidic Deposition.
PB93-229722/REB 93-04 PC A02/MF A01

Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC A02/MF A01

Reactions That Modify Chemistry in Lakes of the National Surface Water Survey.
PB93-229672/REB 93-04 PC A02/MF A01

**SCHOCK, M. R.**
Corrosion Control Principles and Strategies for Reducing Lead and Copper in Drinking Water Systems.
PB93-199420/REB 93-01 PC A03/MF A01

Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC A02/MF A01

Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222691/REB 93-04 PC A02/MF A01

Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194161/REB 93-01 PC A03/MF A01

Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC A03/MF A01

**SCHOCK, S. G.**
Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
PB93-229714/REB 93-04 PC A02/MF A01

**SCHOENHERR, J.**
Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
PB93-229706/REB 93-04 PC A02/MF A01

**SCHOLZE, R.**
Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC A02/MF A01

**SCHRIVER, P. E.**
Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.
PB93-212637/REB 93-04 PC A03/MF A01

**SCHROEDER, P. E.**
Conservation and Sequestration of Carbon: The Potential of Forest and Agroforest Management Practices.
PB93-229656/REB 93-04 PC A03/MF A01

**SCHULTS, D. W.**
Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC A02/MF A01

Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC A03/MF A01

Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC A03/MF A01

**SCHULTZ, G. A.**
Gene Expression in Pre-Implantation Mammalian Embryos.
PB93-194397/REB 93-01 PC A03/MF A01

**SCHULTZ, H.**
Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC A10/MF A03

**SCHUYTEMA, G. S.**
Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC A02/MF A01

**SCHWARTZMAN, D.**
Collection and Chemical Analysis of Lichens for Biomonitoring.
PB93-149862/REB 93-01 PC A03/MF A01

**SCHWEITZER, K. A.**
Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC A03/MF A01

**SCHWOPE, A. D.**
Estimation of the Cost of Using Chemical Protective Clothing.
PB93-168805/REB 93-01 PC A03/MF A01

Methods for Assessing Exposure to Chemical Substances. Volume 11. Methodology for Estimating the Migration of Additives and Impurities from Polymeric Materials.
PB93-134096/REB 93-01 PC A09/MF A02

**SCIRE, J. A.**
Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC A08/MF A02

**SCOTT, A.**
Measurement of the Surface Permeability of Basement Concretes.
PB93-232114/REB 93-04 PC A03/MF A01

Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
PB93-199386/REB 93-01 PC A03/MF A01

**SCOTT, D. R.**
Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.
PB93-229425/REB 93-04 PC A03/MF A01

Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.
PB93-229383/REB 93-04 PC A03/MF A01

**SCOTT, K. A.**
Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC A13/MF A03

**SCOTT, K. J.**
Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC A02/MF A01

Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC A03/MF A01

Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).
PB93-221836/REB 93-04 PC A03/MF A01

**SCOTTO, M. A.**
Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212536/REB 93-04 PC A03/MF A01

**SCULLY, F. E.**
Reactions of Potential Organic Water Contaminants with Aqueous Chlorine and Monochloramine.
PB93-175040/REB 93-01 PC A04/MF A01

**SEAL, E.**
Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-226815/REB 93-04 PC A02/MF A01

**SEBAUGH, J. L.**
Potential Bias from Non-Continuous Monitoring of Ambient Ozone Concentrations for Characterizing Hourly and Daily 7- and 12-Hour Average Concentrations.
PB93-191534/REB 93-01 PC A02/MF A01

**SEDMAN, C. B.**
Technological Options for Acid Rain Control.
PB93-173094/REB 93-01 PC A03/MF A01

**SEEKER, W. R.**
Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-228450/REB 93-04 PC A02/MF A01

**SEILA, R. L.**
VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC A02/MF A01

**SEITZ, S. D.**
EPA Bibliography on Surface Contamination.
PB93-168904/REB 93-01 PC A02/MF A01

**SELGRADE, M. J. K.**
Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC A03/MF A01

**SELGRADE, M. K.**
Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomegalovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC A03/MF A01

Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC A02/MF A01

**SELLE, A. R.**
Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC A03/MF A01

**SELVAKUMAR, A.**
Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
PB93-121333/REB 93-01 PC A03/MF A01

**SEMENOV, S. M.**
Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC A04/MF A01

**SEMPRINI, L.**
In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC A12/MF A03

Microcosm and In situ Field Studies of Enhanced Biotransformation of Trichloroethylene by Phenol-Utilizing Microorganisms.
PB93-222867/REB 93-04 PC A02/MF A01

**SENECA, E. D.**
Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC A03/MF A01

**SENGER, R. K.**
Wellhead Protection Strategies for Confined-Aquifer Settings.
PB93-115913/REB 93-01 PC A05/MF A01

**SERAGELDIN, M. A.**
Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC A02/MF A01

**SERRANO, J.**
Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.
PB93-222354/REB 93-04 PC A03/MF A01

**SETHI, V.**
Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
PB93-121127/REB 93-01 PC A03/MF A01

**SETZER, R. W.**
Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC A03/MF A01

**SETZER, W.**
Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC A01/MF A01

**SEWALL, J. E.**
Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC A11/MF A03

**SEXTON, K.**
EPA Priorities for Biologic Markers Research in Environmental Health.
PB93-181113/REB 93-01 PC A02/MF A01

Strategy for Environmental Health Research at EPA.
PB93-116168/REB 93-01 PC A06/MF A02

**SEXTON, R. G.**
Preliminary Diagnostic Procedures for Radon Control. Project Summary.
PB93-222545/REB 93-04 PC A01/MF A01

**SFERRA, P. R.**
Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
PB93-204972/REB 93-04 PC A03/MF A01

Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC A02/MF A01

**SHAFFER, B. T.**
Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC A02/MF A01

**SHAFFER, P. W.**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC A14/MF A03

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218186/REB 93-04 PC A14/MF A03

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the

Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC A18/MF A04

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC A14/MF A03

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC A03/MF A01

**SHAH, P. V.**
Dermal Penetration of ((14)C)Captan in Young and Adult Rats.
PB93-107142/REB 93-01 PC A03/MF A01

**SHAHAMAT, M.**
Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
PB93-205078/REB 93-04 PC A02/MF A01

**SHANK, T.**
Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC A02/MF A01

**SHAREEF, G.**
OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC A04/MF A01

**SHARP-HANSEN, S.**
3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
PB93-217669/REB 93-04 PC A12/MF A03

Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
PB93-217784/REB 93-04 PC A07/MF A02

MULTIMED: The Multimedia Exposure Assessment Model for Evaluating the Land Disposal of Wastes-Model Theory.
PB93-186252/REB 93-01 PC A07/MF A02

Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
PB93-185536/REB 93-01 PC A11/MF A03

**SHARPE, W. E.**
Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC A04/MF A01

**SHAVER, E. M.**
Pollution Prevention for Cleaner Air: EPA's Air and Energy Engineering Research Laboratory.
PB93-173730/REB 93-01 PC A03/MF A01

**SHEA, P. J.**
Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC A03/MF A01

**SHEEHAN, K. V.**
Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC A03/MF A01

**SHELBY, M. D.**
Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC A01/MF A01

ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC A02/MF A01

**SHELDON, L. S.**
Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC A02/MF A01

**SHELTON, M. E.**
Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC A02/MF A01

**SHEPARD, L. J.**
Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC A07/MF A02

**SHEPARD, L. S.**
Analysis of Acid Precipitation Samples Collected by State Agencies. Sampling Period: January-December 1990.
PB93-144152/REB 93-01 PC A12/MF A03

**SHERMAN, A. D.**
Quality Assurance Plan for 1991 Pilot Study of the Ecological Condition of Municipal Wastewater Constructed Wetland Treatment Systems.
PB93-134674/REB 93-01 PC A05/MF A01

**SHERRILL, M. T.**
Spawning Periodicity of the Inland Silverside, 'Menidia beryllina' (Pisces: Atherinidae) in the Laboratory: Relationship to Lunar Cycles.
PB93-236297/REB 93-04 PC A02/MF A01

**SHERWELL, J.**
Investigation of Possible Uses of Surplus CFC/Halon Chemicals.
PB93-229771/REB 93-04 PC A07/MF A02

**SHIELDS, M. S.**
Selection of a 'Pseudomonas cepacia' Strain Constitutive for the Degradation of Trichloroethylene.
PB93-169027/REB 93-01 PC A02/MF A01

**SHIMABUKU, R. A.**
Formaldehyde-Contaminated Fog Effects on Plant Growth.
PB93-121101/REB 93-01 PC A02/MF A01

**SHIPLEY, F. S.**
Proceedings: Galveston Bay Characterization Workshop. Held on February 21-23, 1991.
PB93-205672/REB 93-04 PC A11/MF A03

**SHORES, R. C.**
Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC A01/MF A01

**SHORT, T. E.**
Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
PB93-131845/REB 93-01 PC A03/MF A01

Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.
PB93-212363/REB 93-04 PC A02/MF A01

**SHOURBAJI, A.**
Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC A03/MF A01

**SHREFFLER, J. H.**
Survey of Data from the Continuous Sites of the 1990 Atlanta Ozone Precursor Study.
PB93-124618/REB 93-01 PC A04/MF A01

**SHRIVASTAVA, S. P.**
Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
PB93-141356/REB 93-01 PC A03/MF A01

**SHUEY, D. L.**
Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC A03/MF A01

**SHUGART, L.**
DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC A03/MF A01

**SHULTS, D. W.**
Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC A03/MF A01

**SHUMBORSKI, S. A.**
Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC A05/MF A01

**SHY, C. M.**
Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC A03/MF A01

Micronuclei and Other Nuclear Anomalies in Buccal Smears: A Field Test in Snuff Users.
PB93-141448/REB 93-01 PC A03/MF A01

Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC A03/MF A01

Predictors of Individual Differences in Acute Response to Ozone Exposure.
PB93-228849/REB 93-04 PC A02/MF A01

**SIFNEOS, J. C.**
Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
PB93-212462/REB 93-04 PC A03/MF A01

**SIGLER, E. M.**
Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
PB93-173979/REB 93-01 PC A22/MF A04

**SIMENSTAD, C. A.**
Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC A10/MF A03

**SIMMONS, J. E.**
Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC A02/MF A01

Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC A03/MF A01

**SIMON, T. P.**
Proceedings of the Midwest Pollution Control Biologists Meeting, 1991. Environmental Indicators: Measurement and Assessment Endpoints. Held in Lincolnwood, Illinois on March 19-22, 1991.
PB93-145712/REB 93-01 PC A06/MF A02

Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC A07/MF A02

Proceedings of the 1989 Midwest Pollution Control Biologists Meeting. Held in Chicago, Illinois on February 14-17, 1989.
PB93-143691/REB 93-01 PC A08/MF A02

**SIMS, J. L.**
In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC A03/MF A01

**SIMS, R.**
Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC A07/MF A02

RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC A05/MF A01

**SIMS, R. C.**
In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC A03/MF A01

**SIMSON, P. E.**
Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Industion of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC A03/MF A01

**SINCLAIR, J. L.**
Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.
PB93-222370/REB 93-04 PC A02/MF A01

**SINGER, C.**
Advacate-Low-Cost Process for SO2 Control.
PB93-141117/REB 93-01 PC A02/MF A01

**SINGH, A. K.**
X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.
PB93-203156/REB 93-04 PC A03/MF A01

**SINK, M.**
Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC A15/MF A03

**SKELDING, T.**
Survey of Portable Analyzers for the Measurement of Gaseous Fugitive Emissions.
PB93-126589/REB 93-01 PC A05/MF A01

**SLETTEN, R. S.**
Emerging Technology Report: Metals Treatment at Superfund Sites by Absorptive Filtration.
PB93-231165/REB 93-04 PC A04/MF A01

**SLEVA, S.**
Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC A06/MF A02

**SLOTT, V. L.**
Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC A03/MF A01

**SMITH, A.**
Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC A15/MF A03

**SMITH, D. D.**
Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC A02/MF A01

**SMITH, D. F.**
Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC A03/MF A01

Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC A03/MF A01

**SMITH, D. S.**
Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.
PB93-221653/REB 93-04 PC A07/MF A02

**SMITH, L. M.**
Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC A02/MF A01

**SMITH, M.**
Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
PB93-128114/REB 93-01 PC A04/MF A01

**SMITH, M. G.**
Development of Residential Wood Consumption Estimation Models.
PB93-199248/REB 93-01 PC A04/MF A01

**SMITH, M. K.**
Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
PB93-106821/REB 93-01 PC A03/MF A01

**SMITH, M. L.**
On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC A09/MF A02

**SMITH, N.**
Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
PB93-173102/REB 93-01 PC A03/MF A01

**SMITH, N. D.**
R-245ca: A Potential Far-Term Alternative for R-11.
PB93-173144/REB 93-01 PC A02/MF A01

**SMITH, V. E.**
Sampling, Characterizing and Mapping Contaminated Sediments in River Harbors.
PB93-135705/REB 93-01 PC A02/MF A01

**SMOLEN, M. D.**
Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC A04/MF A01

**SMYTHE, K.**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC A03/MF A01

**SNAPP, L. M.**
Report on the EPA/Manufacturer Cooperative I/M Testing Program.
PB93-208015/REB 93-04 PC A10/MF A03

**SNOEYINK, V. L.**
Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC A03/MF A01

**SNOEYLINK, V. L.**
Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC A02/MF A01

**SNOW, R.**
Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC A03/MF A01

**SNOW, R. F.**
Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC A03/MF A01

**SNOW, S.**
Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC A06/MF A02

**SNYDER, B.**
Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Guidance.
PB93-154730/REB 93-01 PC A10/MF A03

Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.
PB93-205508/REB 93-04 PC A99/MF A06

**SNYDER, R. B.**
Alternative Control Techniques Document. NOx Emissions from Stationary Gas Turbines.
PB93-156586/REB 93-01 PC A11/MF A03

**SNYDER, W. H.**
Downwash of Plumes in the Vicinity of Buildings: A Wind-Tunnel Study.
PB93-212819/REB 93-04 PC A03/MF A01

Laboratory Simulation of Turbulent Convection Over an Urban Heat Island.
PB93-120671/REB 93-01 PC A02/MF A01

New Mathematical Model of Pollutant Dispersion Near a Building.
PB93-236529/REB 93-04 PC A03/MF A01

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119673/REB 93-01 PC A02/MF A01

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-229185/REB 93-04 PC A02/MF A01

Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119681/REB 93-01 PC A03/MF A01

Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC A03/MF A01

Wind-Tunnel Measurements of Flow Fields in the Vicinity of Buildings.
PB93-236594/REB 93-04 PC A03/MF A01

**SOBOL, S. P.**
Pollution Prevention Opportunity Assessment: USDA Beltsville Agricultural Research Center.
PB93-146843/REB 93-01 PC A04/MF A01

**SOERGEL, G.**
Federal Policies and Technological Problem-Solving.
PB93-142107/REB 93-01 PC A03/MF A01

**SOLLINS, P.**
Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
PB93-212652/REB 93-04 PC A03/MF A01

**SOLOMON, P. R.**
Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-226880/REB 93-04 PC A03/MF A01

**SOMERS, J.**
Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC A24/MF A04

**SOMMER, T. M.**
Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.
PB93-228468/REB 93-04 PC A02/MF A01

**SONETHEIMER, H.**
Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
PB93-185759/REB 93-01 PC A03/MF A01

**SOONG, C. S.**
Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).
PB93-222586/REB 93-04 PC A01/MF A01

**SORG, T. J.**
Removal of Beryllium from Drinking Water by Chemical Coagulation and Lime Softening.
PB93-150134/REB 93-01 PC A03/MF A01

**SORIAL, G. A.**
Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC A03/MF A01

**SOUKUP, J.**
Cytokine (Tumor Necrosis Factor, IL-6, and IL-8) Production by Respiratory Syncytial Virus-Infected Human Alveolar Macrophages.
PB93-181006/REB 93-01 PC A02/MF A01

**SPARKS, A.**
Geostatistical Environmental Assessment Software: User's Guide. GEO-EAS 1.2.1.
PB93-163236/REB 93-01 PC A07/MF A02

**SPARKS, L.**
Modeling of Indoor Air Quality for a Personal Computer.
PB93-106771/REB 93-01 PC A03/MF A01

**SPARKS, L. E.**
Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC A02/MF A01

Airborne Particle Sizes and Sources Found in Indoor Air.
PB93-107019/REB 93-01 PC A03/MF A01

Analysis of IAQ Control Options and the Effects of Sources and Sinks.
PB93-131647/REB 93-01 PC A02/MF A01

Evaluation of Ventilation Performance for Indoor Space.
PB93-212751/REB 93-04 PC A02/MF A01

Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC A02/MF A01

Fundamental Mass Transfer Models for Indoor Air Pollution Sources.
PB93-221992/REB 93-04 PC A02/MF A01

Modeling Individual Exposure from Indoor Sources.
PB93-119640/REB 93-01 PC A03/MF A01

Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC A03/MF A01

Particle-Size-Dependent Efficiency of Air Cleaners.
PB93-221976/REB 93-04 PC A01/MF A01

Relating Air Cleaner Efficiency to Indoor Air Quality.
PB93-212405/REB 93-04 PC A03/MF A01

Removal Efficiencies in Terms of Particle Size and Concentration in a Suburban Home of Console Air Cleaners.
PB93-222016/REB 93-04 PC A03/MF A01

**SPEER, A.**
Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC A02/MF A01

Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC A02/MF A01

**SPEHAR, R. L.**
Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202828/REB 93-01 PC A06/MF A02

**SPENCE, J.**
Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC A02/MF A01

Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC A02/MF A01

Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC A02/MF A01

**SPENCE, J. W.**
Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
PB93-120970/REB 93-01 PC A02/MF A01

**SPENCER, G. G.**
Short Communication: Improved Thin-Layer Chromatographic Separation of 32P-Postlabeled DNA Adducts.
PB93-229615/REB 93-04 PC A02/MF A01

**SPENDLER, J. D.**
Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC A02/MF A01

**SPETH, T. F.**
Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC A03/MF A01

**SPIEGEL, R. J.**
EPA's Photovoltaic Demand-Side Management Cost-Shared Demonstrations.
PB93-212413/REB 93-04 PC A02/MF A01

**SPRINGSTEEN, B.**
Experimental Investigation of PIC Formation in CFC-12 Incineration.
PB93-191294/REB 93-01 PC A07/MF A02

**SPROAT, W.**
Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
PB93-202620/REB 93-01 PC A07/MF A02

Clean Water and the American Economy. Proceedings: Surface Water. Volume 1. Held on October 19-21, 1992.
PB93-202612/REB 93-01 PC A14/MF A03

**SQUIRES, L.**
Environmental Monitoring and Assessment Program: Gulf Coast Salt Marsh Pilot Study.
PB93-122398/REB 93-01 PC A03/MF A01

**SRIVASTAVA, R. K.**
Evaluation of Carbon Black Slurries as Clean Burning Fuels.
PB93-222057/REB 93-04 PC A03/MF A01

**STACK, H. F.**
Genetic Toxicology of Putative Nongenotoxic Carcinogens.
PB93-175636/REB 93-01 PC A03/MF A01

**STAHL, D. A.**
Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
PB93-121184/REB 93-01 PC A02/MF A01

Genus- and Group-Specific Hybridization Probes for Determinative and Environmental Studies of Sulfate-Reducing Bacteria.
PB93-168987/REB 93-01 PC A02/MF A01

**STALEY, L.**
Babcock and Wilcox Cyclone Furnace Vitrification Technology: Applications Analysis Report.
PB93-122315/REB 93-01 PC A03/MF A01

**STAM, A. C.**
Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC A02/MF A01

**STAMEY-HALL, S.**
Evaluation of Nitrogen Oxide Emissions Data from TVA Coal-Fired Boilers.
PB93-138865/REB 93-01 PC A06/MF A02

**STANDRIDGE, J.**
Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC A01/MF A01

**STANLEY, G.**
Greening of World Trade: A Report to EPA from the Trade and Environment Committee of the National Advisory Council for Environmental Policy and Technology.
PB93-176960/REB 93-01 PC A11/MF A03

**STANLEY, J. T.**
Rapid Phase Indentification of Mixed Crystalline Solids.
PB93-212355/REB 93-04 PC A03/MF A01

**STANTON, M. E.**
Behavioral Development Following Daily Episodes of Mother-Infant Separation in the Rat.
PB93-141406/REB 93-01 PC A01/MF A01

Repeated Maternal Separation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC A03/MF A01

**STAPS, S. J. J. M.**
International Evaluation of In-situ Biorestoration of Contaminated Soil and Groundwater (September 1990)--Translation.
PB93-207553/REB 93-04 PC A03/MF A01

**STARR, J. W.**
Characteristics of Non-Petroleum Underground Storage Tanks.
PB93-185775/REB 93-01 PC A03/MF A01

**STATON, M. E.**
Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.
PB93-228872/REB 93-04 PC A03/MF A01

**STEELE, R. L.**
Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC A03/MF A01

**STEEN, W. C.**
Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC A03/MF A01

**STEFAN, H. G.**
Relationship between Water Temperatures and Air Temperatures for Central U.S. Streams.
PB93-135655/REB 93-01 PC A07/MF A02

Vertical Diffusion in Small Stratified Lake: Data and Error Analysis.
PB93-149185/REB 93-01 PC **A03**/MF **A01**

Water Temperature Characteristics of Lakes Subjected to Climate Change.
PB93-135648/REB 93-01 PC **A09**/MF **A02**

**STEFANSKI, L. A.**
Reaction Kinetics of Ca-Based Sorbents with HC1.
PB93-131860/REB 93-01 PC **A03**/MF **A01**

**STEFFAN, R. J.**
Recovery of DNA from Soils and Sediments.
PB93-222834/REB 93-04 PC **A02**/MF **A01**

**STEGEMAN, J. J.**
Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

**STEHMAN, S.**
Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
PB93-202851/REB 93-04 PC **A06**/MF **A02**

**STEHMAN, S. V.**
Comparison of Systematic and Random Sampling for Estimating the Accuracy of Maps Generated from Remotely Sensed Data.
PB93-191443/REB 93-01 PC **A02**/MF **A01**

**STEIBER, R. S.**
Contribution to Indoor Ozone Levels of an Ozone Generator.
PB93-234557/REB 93-04 PC **A03**/MF **A01**

Organic Combustion Fingerprints of Three Common Home Heating Fuels.
PB93-222123/REB 93-04 PC **A02**/MF **A01**

Removal Efficiencies in Terms of Particle Size and Concentration in a Suburban Home of Console Air Cleaners.
PB93-222016/REB 93-04 PC **A03**/MF **A01**

**STEIGER, G. H.**
Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121620/REB 93-01 PC **A06**/MF **A02**

**STEINBERG, M.**
Coprocessing of Fossil Fuels and Biomass for CO2 Emission Reduction in the Transportation Sector.
PB93-194165/REB 93-01 PC **A02**/MF **A01**

Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.
PB93-229144/REB 93-04 PC **A03**/MF **A01**

**STENBERG, P.**
New technology for refrigeration and heating plants.
DE93721673/REB 93-01 PC **A03**/MF **A01**

**STEPHENS, N. D.**
Role of Ozone in Tracheal Cell Transformation.
PB93-179935/REB 93-01 PC **A03**/MF **A01**

**STEUDLER, P. A.**
Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
PB93-222776/REB 93-04 PC **A02**/MF **A01**

**STEUERNAGEL, D.**
Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
PB93-199388/REB 93-01 PC **A03**/MF **A01**

**STEVENS, D. K.**
Decision Model for Biomarkers of Exposure.
PB93-106995/REB 93-01 PC **A03**/MF **A01**

**STEVENS, D. L.**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC **A14**/MF **A03**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC **A18**/MF **A04**

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC **A14**/MF **A03**

Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC **A03**/MF **A01**

**STEVENS, M. A.**
Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC **A02**/MF **A01**

**STEVENS, R. K.**
Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
PB93-228534/REB 93-04 PC **A02**/MF **A01**

Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03**/MF **A01**

Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03**/MF **A01**

Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.
PB93-229177/REB 93-04 PC **A03**/MF **A01**

**STEVENS, T.**
Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC **A02**/MF **A01**

**STEVENSON, J. C.**
Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC **A12**/MF **A03**

**STOBER, J. A.**
Ninety-Day Toxicity Study of Chloral Hydrate in the Sprague-Dawley Rat.
PB93-107118/REB 93-01 PC **A03**/MF **A01**

Ninety-Day Toxicity Study of Sodium Monochloroacetate in Sprague-Dawley Rats.
PB93-107100/REB 93-01 PC **A03**/MF **A01**

**STOCKRAHM, J. W.**
Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC **A02**/MF **A01**

**STODDARD, J. L.**
Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

Role of Nitrate in the Acidification of Streams in the Catskill Mountains of New York.
PB93-150167/REB 93-01 PC **A03**/MF **A01**

Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.
PB93-236438/REB 93-04 PC **A03**/MF **A01**

**STOKER, T. E.**
Dithicarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.
PB93-228989/REB 93-04 PC **A02**/MF **A01**

**STONEMAN, C.**
Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC **A15**/MF **A03**

Technical Information Document for Residential Wood Combustion Best Available Control Measures.
PB93-122224/REB 93-01 PC **A05**/MF **A01**

**STONER, R.**
Air/Superfund National Technical Guidance Study Series. Volume 4. Guidance for Ambient Air Monitoring at Superfund Sites (Revised).
PB93-199214/REB 93-01 PC **A08**/MF **A02**

**STRADER, L. F.**
Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC **A03**/MF **A01**

**STREIB, E. W.**
Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

Summary of the 1987 EPA National Performance Audit Program on Source Measurements.
PB93-223444/REB 93-04 PC **A03**/MF **A01**

**STREICHER, J.**
Comparison of Modeled Concentration Profiles Using Site-Specific and Constant-Condition Meteorological Data for the ISCLT and PAL Models.
PB93-120921/REB 93-01 PC **A02**/MF **A01**

**STREICHER, J. J.**
Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02**/MF **A01**

**STRICKLAND, T. C.**
Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC **A07**/MF **A02**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

**STRIMAITIS, D.**
Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC **A08**/MF **A02**

**STROBL, R.**
3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
PB93-217669/REB 93-04 PC **A12**/MF **A03**

**STROMBORG, K.**
Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC **A04**/MF **A01**

**STUBECKI, S. G.**
Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

**STUCKI, J. W.**
Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02**/MF **A01**

**STULL, J. K.**
Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03**/MF **A01**

**SU, Y. C.**
Characterization of Selected Public Health Issues in Galveston Bay.
PB93-205771/REB 93-04 PC **A08**/MF **A02**

**SUAREZ, J. D.**
Direct Effects of Ethane Dimethanesulphonate on Epididymal Function in Adult Rats. An In vitro Demonstration.
PB93-141281/REB 93-01 PC **A03**/MF **A01**

Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC **A03**/MF **A01**

**SUDMAN, P. D.**
Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03**/MF **A01**

**SUH, H.**
Exposure Modeling of Acid Aerosols.
PB93-228559/REB 93-04 PC **A02**/MF **A01**

Indoor Concentration Modeling of Aerosol Strong Acidity.
PB93-204071/REB 93-01 PC **A02**/MF **A01**

**SUIDAN, M. T.**
Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC **A03**/MF **A01**

**SULLIVAN, D.**
Evaluation of Laboratory Tests to Determine the Effectiveness of Chemical Surface Washing Agents.
PB93-194215/REB 93-01 PC **A02**/MF **A01**

Evaluation of Three Oil Spill Laboratory Dispersant Effectiveness Tests.
PB93-191377/REB 93-01 PC **A02**/MF **A01**

Field Applications of Robotic Systems in Hazardous Environments, p1-29 1993. See also PB86-176344 and PB92-166743.
PB93-229755/REB 93-04 PC **A03**/MF **A01**

Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC **A03**/MF **A01**

**SULLIVAN, J.**
Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC **A04**/MF **A01**

**SUMLER, M. R.**
Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
PB93-141356/REB 93-01 PC **A03**/MF **A01**

Dermal Penetration of ((14)C)Captan in Young and Adult Rats.
PB93-107142/REB 93-01 PC **A03**/MF **A01**

**SUMMERS, J. K.**
Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03**/MF **A01**

Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03**/MF **A01**

Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204980/REB 93-01 PC **A03**/MF **A01**

Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03**/MF **A01**

**SUMMERS, R. S.**
Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
PB93-185759/REB 93-01 PC **A03**/MF **A01**

Removal of Beryllium from Drinking Water by Chemical Coagulation and Lime Softening.
PB93-150134/REB 93-01 PC A03/MF A01

**SUN, J. D.**
Role of Ozone in Tracheal Cell Transformation.
PB93-179935/REB 93-01 PC A03/MF A01

**SUTTER, T. R.**
Disruption of the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.
PB93-229276/REB 93-04 PC A03/MF A01

Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
PB93-229458/REB 93-04 PC A03/MF A01

Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
PB93-229482/REB 93-04 PC A03/MF A01

**SUTTER, T. S.**
Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
PB93-229243/REB 93-04 PC A03/MF A01

**SVENSGAARD, D. J.**
Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC A03/MF A01

**SVOBODA, R. C.**
Search for Radiative Neutrino Decay from Supernovae.
N93-30052/3/REB 93-04 PC A02/MF A01

**SWANSON, F. J.**
Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC A03/MF A01

**SWARTZ, R. C.**
Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC A03/MF A01

Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC A11/MF A03

Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC A03/MF A01

Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC A03/MF A01

Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC A03/MF A01

**SWEENEY, J. K.**
Acid Precipitation in North America: 1986 Annual and Seasonal Data Summaries from Acid Deposition System Data Base.
PB93-223154/REB 93-04 PC A04/MF A01

**SWEET, S.**
Shoreline Survey for Unpermitted Discharges to Galveston Bay.
PB93-205706/REB 93-04 PC A03/MF A01

**SWENSON, E. M.**
Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC A11/MF A03

**SWISTOCK, B. R.**
Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC A04/MF A01

**SWITZENBAUM, M. S.**
Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC A03/MF A01

**SWITZER, P.**
Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
PB93-234506/REB 93-04 PC A03/MF A01

**SWOBODA-COLBERG, N. G.**
Mineral Dissolution Rates: A Comparison of Laboratory and Field Studies.
PB93-141182/REB 93-01 PC A01/MF A01

**TABAK, H. H.**
Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC A02/MF A01

**TACKETT, S.**
Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194181/REB 93-01 PC A03/MF A01

**TAFURI, A. N.**
Screening Methodology for Assessing Leaking UST Sites and Clean Up Technologies.
PB93-199404/REB 93-01 PC A03/MF A01

**TAGLIABUE, M. D.**
Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC A03/MF A01

**TAKAYAMA, M. L.**
Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.
PB93-222628/REB 93-04 PC A01/MF A01

**TAKIZAWA, M.**
Isolation and Diversity of Actinomycetes in the Chesapeake Bay.
PB93-205060/REB 93-01 PC A02/MF A01

**TANCING, W. J.**
Ink and Cleaner Waste Reduction Evaluation for Flexographic Printers.
PB93-191286/REB 93-01 PC A03/MF A01

**TANDON, P.**
Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC A02/MF A01

**TANG, R. T.**
Development of an Improved Urban Airshed Modeling System.
PB93-120889/REB 93-01 PC A03/MF A01

**TANNER, C. D.**
Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC A10/MF A03

Potential Intertidal Habitat Restoration Sites in the Duwamish River Estuary.
PB93-122190/REB 93-01 PC A05/MF A02

**TAPLIN, B. K.**
Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC A02/MF A01

**TARDONE, P. J.**
Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC A02/MF A01

Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
PB93-194223/REB 93-01 PC A03/MF A01

**TAYLOR, D. G.**
Biomass Combustion in Gas-Turbine-Based Systems.
PB93-185742/REB 93-01 PC A02/MF A01

**TAYLOR, D. S.**
Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC A02/MF A01

**TAYLOR, P. H.**
Thermal Degradation Characteristics of Environmentally Sensitive Pesticide Products.
PB93-201127/REB 93-01 PC A04/MF A01

**TEASE, C.**
Radiation- and Chemically-Induced Chromosome Aberrations in Mouse Oocytes: A Comparison with Effects in Males.
PB93-194462/REB 93-01 PC A02/MF A01

**TEMPLEMAN, B.**
Comparison of Modeled Concentration Profiles Using Site-Specific and Constant-Condition Meteorological Data for the ISCLT and PAL Models.
PB93-120921/REB 93-01 PC A02/MF A01

Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC A02/MF A01

**TEPPER, J. S.**
Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC A03/MF A01

Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC A02/MF A01

**THOM, R. M.**
Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC A10/MF A03

**THOMAS, J. M.**
Bioremediation.
PB93-149193/REB 93-01 PC A03/MF A01

**THOMAS, R. D.**
Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC A02/MF A01

**THOMASSEN, D. G.**
Role of Ozone in Tracheal Cell Transformation.
PB93-179935/REB 93-01 PC A03/MF A01

**THOMPSON, C.**
Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.
PB93-215648/REB 93-04 PC A03/MF A01

Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC A02/MF A01

Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215655/REB 93-04 PC A04/MF A01

Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215622/REB 93-04 PC A04/MF A01

Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215630/REB 93-04 PC A04/MF A01

**THOMPSON, K.**
Control Technology Center FY92: A Summary of Program Accomplishments.
PB93-199230/REB 93-01 PC A03/MF A01

**THOMPSON, P.**
Control of Air Emissions from Superfund Sites.
PB93-215614/REB 93-04 PC A06/MF A02

**THOMPSON, R. S.**
Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.
PB93-236586/REB 93-04 PC A03/MF A01

**THOMPSON, W. E.**
Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.
PB93-228492/REB 93-04 PC A02/MF A01

**THORNELOE, S. A.**
Comparison of Methods for Estimating Global Methane Emissions from Landfills.
PB93-212561/REB 93-04 PC A03/MF A01

**THORNHILL, J. T.**
Mechanical Integrity Testing and Training Facility, Ada, Oklahoma.
PB93-222859/REB 93-04 PC A02/MF A01

**THORNTON, K. W.**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC A14/MF A03

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC A14/MF A03

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC A18/MF A04

Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC A14/MF A03

**THURNAU, R. C.**
Pilot-Scale Evaluation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC A02/MF A01

**THURSBY, G. B.**
Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC A03/MF A01

**TICHENOR, B. A.**
Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC A03/MF A01

Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC A02/MF A01

Evaluating Materials for Healthy Buildings.
PB93-131621/REB 93-01 PC A03/MF A01

Fundamental Mass Transfer Models for Indoor Air Pollution Sources.
PB93-221992/REB 93-04 PC A02/MF A01

International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.
PB93-222073/REB 93-04 PC A02/MF A01

Modeling Individual Exposure from Indoor Sources.
PB93-119640/REB 93-01 PC A03/MF A01

**TIEN, M.**
Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191351/REB 93-01 PC A02/MF A01

Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
PB93-191575/REB 93-01 PC A02/MF A01

**TILSON, H. A.**
Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC A02/MF A01

Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC A02/MF A01

**TILTON, B. E.**
Measurement of Biogenic Emissions from Corn.
PB93-180883/REB 93-01 PC A02/MF A01

**TINGEY, D. T.**
Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.
PB93-212785/REB 93-04 PC **A03**/MF **A01**

Potential Bias from Non-Continuous Monitoring of Ambient Ozone Concentrations for Characterizing Hourly and Daily 7- and 12-Hour Average Concentrations.
PB93-191534/REB 93-01 PC **A02**/MF **A01**

**TINLAND-BUTEZ, M. F.**
Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC **A02**/MF **A01**

**TIREY, D. A.**
Thermal Degradation Characteristics of Environmentally Sensitive Pesticide Products.
PB93-201127/REB 93-01 PC **A04**/MF **A01**

**TOLBERT, P. E.**
Micronuclei and Other Nuclear Anomalies in Buccal Smears: A Field Test in Snuff Users.
PB93-141448/REB 93-01 PC **A03**/MF **A01**

Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC **A03**/MF **A01**

**TOLLE, D. A.**
Life-Cycle Assessment: Inventory Guidelines and Principles.
PB93-139681/REB 93-01 PC **A07**/MF **A02**

**TOLSON, J. P.**
Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC **A03**/MF **A01**

Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

**TOMMERDAHL, M.**
Mechanisms Underlying Somatosensory Cortical Dynamics: 2. In vitro Studies.
PB93-107225/REB 93-01 PC **A03**/MF **A01**

**TOOLE-O'NEIL, B.**
Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107043/REB 93-01 PC **A02**/MF **A01**

**TORLA, R.**
Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC **A03**/MF **A01**

**TRABKA, E.**
Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC **A09**/MF **A02**

**TRACEY, G.**
Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
PB93-229714/REB 93-04 PC **A02**/MF **A01**

**TRACEY, G. A.**
Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
PB93-228518/REB 93-04 PC **A02**/MF **A01**

**TRANTER, M.**
Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC **A03**/MF **A01**

Modelling Episodic Acidification of Surface Waters: The State of Science.
PB93-106920/REB 93-01 PC **A03**/MF **A01**

**TRATNYEK, P. G.**
Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

**TRAVERS, C.**
Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
PB93-185536/REB 93-01 PC **A11**/MF **A03**

**TRAVERS, C. L.**
Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
PB93-217784/REB 93-04 PC **A07**/MF **A02**

**TRAYNOR, G. W.**
Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03**/MF **A01**

**TRENHOLM, A.**
Summary of Factors Affecting Compliance by Ferrous Foundaries. Volume 1. Text.
PB93-199347/REB 93-01 PC **A05**/MF **A02**

**TRUPPI, L.**
General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC **A04**/MF **A01**

**TRUPPI, L. E.**
Spatiotemporal Variability of Non-Urban Ozone Concentrations Over the Eastern United States and Its Potential Replication by Satellite Data.
PB93-191328/REB 93-01 PC **A03**/MF **A01**

**TSANG, S. F.**
Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203693/REB 93-04 PC **A07**/MF **A02**

**TUCKER, W. G.**
ASHRAE Standard 62: Ventilation for Acceptable Indoor Air Quality.
PB93-106797/REB 93-01 PC **A03**/MF **A01**

Bioresponse Testing of Sources of Indoor Air Contaminants.
PB93-222032/REB 93-04 PC **A02**/MF **A01**

Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03**/MF **A01**

Status of ASHRAE Standard 62. Ventilation for Acceptable Indoor Air Quality.
PB93-222040/REB 93-04 PC **A02**/MF **A01**

**TUDOR, N.**
Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03**/MF **A01**

Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03**/MF **A01**

**TUFTS, M. W.**
R-245ca: A Potential Far-Term Alternative for R-11.
PB93-173144/REB 93-01 PC **A02**/MF **A01**

**TULIS, D.**
Carbon Disulfide Emission Control Options.
PB93-124667/REB 93-01 PC **A03**/MF **A01**

**TURI, T. G.**
Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC **A02**/MF **A01**

Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
PB93-229441/REB 93-04 PC **A03**/MF **A01**

Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
PB93-229243/REB 93-04 PC **A03**/MF **A01**

**TURK, B. H.**
Preliminary Diagnostic Procedures for Radon Control. Project Summary.
PB93-222545/REB 93-04 PC **A01**/MF **A01**

**TURNBLOM, S. M.**
Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

**TURNER, B. J.**
Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC **A02**/MF **A01**

Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03**/MF **A01**

**TURNER, C. I.**
Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC **A03**/MF **A01**

**TURNER, D. P.**
Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
PB93-212652/REB 93-04 PC **A03**/MF **A01**

Forest Sector Carbon Budget of the United States: Carbon Pools and Flux under Alternative Policy Options.
PB93-196996/REB 93-01 PC **A10**/MF **A03**

Uncertainties in Countrywide Forest Biomass Estimates.
PB93-149250/REB 93-01 PC **A03**/MF **A01**

**TURNER, R. E.**
Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC **A11**/MF **A03**

**TURNER, R. J.**
Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.
PB93-212801/REB 93-04 PC **A03**/MF **A01**

**TURNER, R. S.**
Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC **A07**/MF **A02**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

**TYLER, G.**
Critical concentrations of heavy metals in the mor horizon of Swedish forests.
DE93778471/REB 93-01 PC **A03**/MF **A01**

**ULBRECHT, A.**
Waste Reduction Activities and Options for a Manufacturer of Artists Supply Paints.
PB93-123172/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
PB93-123214/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplating Chemical Products.
PB93-126258/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of General Purpose Paints and Painting Supplies.
PB93-126316/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Hardened Steel Gears.
PB93-126282/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Orthopedic Implants.
PB93-126217/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
PB93-123222/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Wire Stock Used for Production of Metal Items.
PB93-123180/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Printing Plate Preparation Section of a Newspaper.
PB93-126563/REB 93-01 PC **A02**/MF **A01**

**ULLRICH, S.**
Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175651/REB 93-01 PC **A03**/MF **A01**

**UNRUH, J. D.**
Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.
PB93-229680/REB 93-04 PC **A03**/MF **A01**

**UNTERMAN, R.**
Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC **A03**/MF **A01**

**URA, H.**
Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
PB93-179950/REB 93-01 PC **A03**/MF **A01**

**URQUHART, N. S.**
Comparing Sampling Designs for Monitoring Ecological Status and Trends: Impact of Temporal Patterns (Chapter 3).
PB93-222289/REB 93-04 PC **A03**/MF **A01**

Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
PB93-202851/REB 93-04 PC **A06**/MF **A02**

**VAIL, L. W.**
Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC **A03**/MF **A01**

**VALENTINE, R. L.**
Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.
PB93-205102/REB 93-04 PC **A02**/MF **A01**

Kinetics of Chemical Weathering in B Horizon Spodosol Fraction.
PB93-141539/REB 93-01 PC **A02**/MF **A01**

**VALINIEKS, J.**
Rapid Measurement of Aqueous Hydroxyl Radical Concentrations in Steady-State HO Flux Systems.
PB93-131779/REB 93-01 PC **A03**/MF **A01**

**VAN BEEK, N.**
Ecologically Acceptable Strategy for the Use of Genetically Engineered Baculovirus Pesticides.
PB93-149243/REB 93-01 PC **A02**/MF **A01**

**VAN DER HEIJDE, P. K. M.**
Compilation of Ground-Water Models.
PB93-209401/REB 93-04 PC **A13**/MF **A03**

Quality Assurance and Quality Control in the Development and Application of Ground-Water Models.
PB93-178226/REB 93-01 PC **A08**/MF **A02**

**VAN DER SLOOT, H.**
Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.
PB93-229870/REB 93-04 PC **A25**/MF **A06**

**VAN EE, J.**
Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells.
PB93-115897/REB 93-01 PC **A04**/MF **A01**

**VAN EMON, J. M.**
Immunoassay for p-Nitrophenol in Urine (Chapter XX).
PB93-175552/REB 93-01 PC **A03**/MF **A01**

**VAN HOOK, W.**
Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

**VANCE, G. F.**
Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC **A02/MF A01**

Dissolved Organic Carbon and Sulfate Sorption by Spodosol Mineral Horizons.
PB93-229631/REB 93-04 PC **A02/MF A01**

Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC **A02/MF A01**

Role of Soil Organic Acids in Mineral Weathering Processes (Chapter 6).
PB93-149268/REB 93-01 PC **A04/MF A01**

**VANHOOK, W. A.**
Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03/MF A01**

**VANNELLI, T.**
Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium 'Nitrosomonas europaea'.
PB93-169076/REB 93-01 PC **A02/MF A01**

**VANOSDELL, D.**
Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
PB93-222024/REB 93-04 PC **A02/MF A01**

Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC **A03/MF A01**

**VARNS, J.**
Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02/MF A01**

**VASCONCELOS, J.**
Consensus Method for Determining Groundwaters under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA).
PB93-180818/REB 93-01 PC **A04/MF A01**

**VATAVUK, W.**
OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC **A04/MF A01**

**VELLEUX, M. L.**
Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC **A03/MF A01**

**VELLIDIS, G.**
Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.
PB93-234540/REB 93-04 PC **A04/MF A01**

**VELLIOS, A. J.**
Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
PB93-115806/REB 93-01 PC **A05/MF A01**

**VENOSA, A. D.**
Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC **A03/MF A01**

Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC **A02/MF A01**

Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC **A02/MF A01**

**VERONESI, B.**
Using Neuroblastoma Cell Lines to Examine Organophosphate Neurotoxicity.
PB93-229508/REB 93-04 PC **A02/MF A01**

**VERSTEEG, D. J.**
Physiological and Nonspecific Biomarkers.
PB93-119832/REB 93-01 PC **A05/MF A01**

**VESCIO, N.**
Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03/MF A01**

**VIBERG, T.**
Foerbraenning av sorterat industriavfall. Undertagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
DE93500872/REB 93-04 PC **A03/MF A01**

**VIDIV, R. D.**
Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC **A03/MF A01**

**VIGON, B. W.**
EPA's Research in LCA Methodology.
PB93-212439/REB 93-04 PC **A03/MF A01**

Life-Cycle Assessment: Inventory Guidelines and Principles.
PB93-139681/REB 93-01 PC **A07/MF A02**

**VIMONT, J.**
Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC **A06/MF A02**

**VINSON, T. S.**
Equilibrium Analysis of Carbon Pools and Fluxes of Forest Biomes in the Former Soviet Union.
PB93-191484/REB 93-01 PC **A02/MF A01**

**VISON, T. S.**
Proceedings of the International Workshop on Carbon Cycling in Boreal Forest and Sub-Arctic Ecosystems: Biospheric Responses and Feedbacks to Global Climate Change.
PB93-205540/REB 93-04 PC **A13/MF A03**

**VOGEL, C. M.**
In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03/MF A01**

**VON ALTEN, T. R.**
Development of Good Combustion Practice for Municipal Waste Combustors.
PB93-131613/REB 93-01 PC **A03/MF A01**

**VON MOLTKE, K.**
Greening of World Trade: A Report to EPA from the Trade and Environment Committee of the National Advisory Council for Environmental Policy and Technology.
PB93-176980/REB 93-01 PC **A11/MF A03**

**VOSKUIL, T.**
Handbook: Remediation of Contaminated Sediments.
PB93-116275/REB 93-01 PC **A04/MF A01**

**VOUROS, R.**
Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC **A02/MF A01**

**VOYER, R. A.**
Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03/MF A01**

Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC **A02/MF A01**

**WADE, D. L.**
Compendium of Current Monitoring Programs in Tampa Bay and its Watershed.
PB93-191666/REB 93-01 PC **A05/MF A01**

**WADE, T. L.**
Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16/MF A03**

**WAGNER, T.**
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 1.
PB93-227122/REB 93-04 PC **A08/MF A02**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 1.
PB93-227130/REB 93-04 PC **A24/MF A04**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grant Calumet River, Gary, Indiana. Volume 2. Part 2.
PB93-227148/REB 93-04 PC **A99/MF A06**

Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 3.
PB93-227155/REB 93-04 PC **A11/MF A03**

**WAHL, G.**
Pollution Prevention Opportunity Assessment: Geochemistry Laboratory, Sandia National Laboratories.
PB93-146900/REB 93-01 PC **A03/MF A01**

Pollution Prevention Opportunity Assessment: Manufacturing and Fabrication Repair Laboratory at Sandia National Laboratories.
PB93-146868/REB 93-01 PC **A03/MF A01**

Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC **A02/MF A01**

**WALDMAN, J.**
Indoor Concentration Modeling of Aerosol Strong Acidity.
PB93-204071/REB 93-01 PC **A02/MF A01**

**WALDMAN, J. M.**
Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03/MF A01**

**WALKER, B.**
Control of Air Emissions from Superfund Sites.
PB93-215614/REB 93-04 PC **A08/MF A02**

**WALKER, H. A.**
Statistical Analyses of COADS Wind Data in Coastal Regions of the United States.
PB93-212777/REB 93-04 PC **A03/MF A01**

**WALKER, J.**
Summary of the 1987 Carver-Greenfield Sludge Drying Technology Workshop: Problems and Solutions. Held in Los Angeles, California on March 10-11, 1987.
PB93-174506/REB 93-01 PC **A04/MF A01**

**WALKER, W. W.**
Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02/MF A01**

**WALKUP, R.**
Determination of Carboxylic Acids by Ion-Exclusion Chromatography with Non-Suppressed Conductivity and Optical Detectors.
PB93-181212/REB 93-01 PC **A02/MF A01**

**WALL, T.**
Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.
PB93-184620/REB 93-01 PC **A03/MF A01**

**WALLACE, D.**
Summary of Factors Affecting Compliance by Ferrous Foundaries. Volume 1. Text.
PB93-199347/REB 93-01 PC **A05/MF A02**

**WALLACE, L.**
Recent Advances in Measuring Exhaled Breath and Estimating Exposure and Body Burden for Volatile Organic Compounds (VOCS).
PB93-212314/REB 93-04 PC **A03/MF A01**

Total Volatile Organic Concentrations in 2700 Personal, Indoor, and Outdoor Air Samples Collected in the US EPA Team Studies.
PB93-229730/REB 93-04 PC **A03/MF A01**

**WALLACE, L. A.**
Association of Personal and Workplace Characteristics with Reported Health Symptoms of 6771 Government Employees in Washington, DC.
PB93-212264/REB 93-04 PC **A02/MF A01**

Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC **A02/MF A01**

**WALLER, P.**
Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03/MF A01**

**WALSH, C.**
Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC **A02/MF A01**

**WALSH, D.**
Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02/MF A01**

**WALSH, G. E.**
Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC **A03/MF A01**

**WALTER, M. F.**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
PB93-128031/REB 93-01 PC **A06/MF A02**

**WALTER, M. V.**
Effect of Aerosolization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC **A02/MF A01**

**WALTON, B. T.**
Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02/MF A01**

**WANG, B. H.**
Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03/MF A01**

**WANG, L.**
Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC **A02/MF A01**

**WANG, Z.**
Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC **A02/MF A01**

**WANG, Z. P.**
Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02/MF A01**

**WARD, C. H.**
Bioremediation.
PB93-149193/REB 93-01 PC **A03/MF A01**

Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC **A02/MF A01**

**WARD, G. H.**
Ambient Water and Sediment Quality of Galveston Bay: Present Status and Historical Trends. Volume 1.
PB93-205789/REB 93-04 PC **A09/MF A03**

**WARD, T. E.**
Multiple Metals Stack Emission Measurement Methodology for Stationary Sources, Current Status.
PB93-185734/REB 93-01 PC **A02/MF A01**

**WARD, T. R.**
Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC **A02/MF A01**

**WARREN, J. L.**
Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
PB93-101160/REB 93-01 PC **A06**/MF **A02**

**WARREN, S. H.**
Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC **A02**/MF **A01**

**WARREN, T. M.**
Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
PB93-205011/REB 93-04 PC **A02**/MF **A01**

**WARSH, C.**
Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

**WASSARMAN, P. M.**
Gene Expression during Oogenesis in Mice.
PB93-194389/REB 93-01 PC **A03**/MF **A01**

**WATERLAND, L. R.**
Pilot-Scale Evlauation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02**/MF **A01**

Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

**WATERS, M. D.**
Genetic Toxicology of Putative Nongenotoxic Carcinogens.
PB93-175636/REB 93-01 PC **A03**/MF **A01**

**WATKINSON, W. P.**
Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC **A03**/MF **A01**

**WATRUD, L. S.**
Engineered Plants in the Environment.
PB93-234532/REB 93-04 PC **A03**/MF **A01**

**WATSON, J. J.**
Global Inventory of Volatile Organic Compound Emissions from Anthropogenic Sources.
PB93-107001/REB 93-01 PC **A03**/MF **A01**

**WATTS, A. J.**
Waste Reduction Activities and Options for a Manufacturer of Electroplating Chemical Products.
PB93-126258/REB 93-01 PC **A02**/MF **A01**

**WATTS, D. J.**
Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
PB93-123164/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Fossil Fuel Fired Electrical Generating Station.
PB93-126233/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
PB93-126290/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Artists Supply Paints.
PB93-123172/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Dry Cleaning Equipment.
PB93-126225/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
PB93-123198/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
PB93-123214/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fine Chemicals Using Batch Processes.
PB93-126308/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
PB93-123115/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
PB93-123248/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of General Purpose Paints and Painting Supplies.
PB93-126316/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Hardened Steel Gears.
PB93-126282/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Orthopedic Implants.
PB93-126217/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
PB93-123123/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Plastic Containers by Injection Molding.
PB93-126241/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
PB93-123149/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
PB93-123222/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Wire Stock Used for Production of Metal Items.
PB93-123180/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
PB93-123131/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Printing Plate Preparation Section of a Newspaper.
PB93-126563/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
PB93-123230/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Scrap Metal Recovery Facility.
PB93-126266/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
PB93-123206/REB 93-01 PC **A02**/MF **A01**

Waste Reduction Activities and Options for an Autobody Repair Facility.
PB93-123156/REB 93-01 PC **A01**/MF **A01**

Waste Reduction Activities and Options for an Electrical Utility Transmission System Monitoring and Maintenance Facility.
PB93-126639/REB 93-01 PC **A02**/MF **A01**

**WATTS, R. R.**
Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC **A02**/MF **A01**

**WAYSON, R. L.**
Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
PB93-175503/REB 93-01 PC **A03**/MF **A01**

**WEAVER, J. W.**
Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC **A03**/MF **A01**

**WEBER, D. E.**
Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC **A03**/MF **A01**

**WEDEPOHL, R. E.**
Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC **A08**/MF **A02**

**WEINBERG, A. C.**
Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC **A04**/MF **A01**

**WEINBERG, D. S.**
Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC **A04**/MF **A01**

**WEISBERG, S. B.**
Design of a Basinwide Monitoring Program for the Tampa Bay Estuary.
PB93-194694/REB 93-01 PC **A05**/MF **A01**

Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03**/MF **A01**

**WEISEL, C. P.**
Gasoline and Methanol Exposures from Automobiles within Residences and Attached Garages.
PB93-222222/REB 93-04 PC **A02**/MF **A01**

**WELCH, W.**
Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03**/MF **A01**

**WENDEL, C.**
Total Volatile Organic Concentrations in 2700 Personal, Indoor, and Outdoor Air Samples Collected in the US EPA Team Studies.
PB93-229730/REB 93-04 PC **A03**/MF **A01**

**WENDT, J. O.**
Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

**WENDT, J. O. L.**
Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212538/REB 93-04 PC **A03**/MF **A01**

**WERAKOON, W. M.**
Effects of CO2 and Temperature on Five Rice Cultivars.
PB93-141158/REB 93-01 PC **A02**/MF **A01**

**WEST, C. C.**
Surfactants and Subsurface Remediation.
PB93-149854/REB 93-01 PC **A02**/MF **A01**

**WESTBROOK, W.**
Air/Superfund National Technical Guidance Study Series. Air Emissions from Area Sources: Estimating Soil and Soil-Gas Sample Number Requirements.
PB93-173995/REB 93-01 PC **A04**/MF **A01**

Assessing Potential Indoor Air Impacts for Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-122257/REB 93-01 PC **A09**/MF **A03**

**WESTERHOLM, R.**
Impact of fuels on diesel exhaust emissions. A chemical and biological characterization.
DE92563058/REB 93-01 PC **A08**/MF **A02**

**WESTERMARK, L.**
Aatgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC **A14**/MF **A03**

**WHEELES, R. K.**
Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC **A02**/MF **A01**

**WHITAKER, C. O.**
Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC **A03**/MF **A01**

**WHITE, D.**
Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.
PB93-229649/REB 93-04 PC **A03**/MF **A01**

Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC **A02**/MF **A01**

Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC **A02**/MF **A01**

**WHITE, D. M.**
Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
PB93-105518/REB 93-01 PC **A08**/MF **A02**

**WHITE, I. E.**
Watts Nickel and Rinse Water Recovery via an Advanced Reverse Osmosis System.
PB93-229011/REB 93-04 PC **A05**/MF **A01**

**WHITE, J.**
Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02**/MF **A01**

**WHITE, J. B.**
EPA's Indoor Air/Pollution Prevention Workshop.
PB93-222065/REB 93-04 PC **A03**/MF **A01**

Modeling Individual Exposure from Indoor Sources.
PB93-119840/REB 93-01 PC **A03**/MF **A01**

**WHITE, P.**
Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03**/MF **A01**

**WHITE, W. A.**
Wetland Plant Communities, Galveston Bay System.
PB93-205730/REB 93-04 PC **A07**/MF **A02**

**WHITE, W. N.**
Reactions of Potential Organic Water Contaminants with Aqueous Chlorine and Monochloramine.
PB93-175040/REB 93-01 PC **A04**/MF **A01**

**WHITEHOUSE, D. A.**
Genotoxicity of 2,4,5-Trichlorophenoxyacetic Acid Biodegradation Products in the 'Salmonella' Reversion and Lambda Prophage-Induction Bioassays.
PB93-107175/REB 93-01 PC **A02**/MF **A01**

**WHITFORD, K.**
Pollution Prevention Opportunity Assessment: Geochemistry Laboratory, Sandia National Laboratories.
PB93-146900/REB 93-01 PC **A03**/MF **A01**

Pollution Prevention Opportunity Assessment: Manufacturing and Fabrication Repair Laboratory at Sandia National Laboratories.
PB93-146868/REB 93-01 PC **A03**/MF **A01**

**WHITING, J. R.**
Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and Chincoteague Bay, 1991.
PB93-191120/REB 93-01 PC **A13**/MF **A03**

**WHITLOCK, J.**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 2. Mechanisms of Toxic Actions.
PB93-222669/REB 93-04 PC **A03**/MF **A01**

**WHITSEL, B. L.**
Mechanisms Underlying Somatosensory Cortical Dynamics: 1. In vivo Studies.
PB93-107217/REB 93-01 PC **A03**/MF **A01**

Mechanisms Underlying Somatosensory Cortical Dynamics: 2. In vitro Studies.
PB93-107225/REB 93-01 PC **A03**/MF **A01**

**WHITTIER, T. R.**
Sampling and Assessment Issues in Using Fish as Indicators of Ecological Condition in Lakes: A Workshop Report. (3rd Draft Report).
PB93-186278/REB 93-01 PC **A03**/MF **A01**

Surface Waters Component of the Environmental Monitoring and Assessment Program (EMAP): An Overview.
PB93-121267/REB 93-01 PC **A02**/MF **A01**

**WICKLUND, W. A.**
Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC **A03**/MF **A01**

**WICKMAN, H. H.**
Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC **A03**/MF **A01**

**WIEDERHOLM, T.**
Freshwater environmental monitoring in Sweden. Proposals from a working group.
DE93778474/REB 93-01 PC **A08**/MF **A02**

**WIENER, R. W.**
Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC **A03**/MF **A01**

**WIESENBURG, D. A.**
Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16**/MF **A03**

**WIGINGTON, P. J.**
Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC **A03**/MF **A01**

Modelling Episodic Acidification of Surface Waters: The State of Science.
PB93-106920/REB 93-01 PC **A03**/MF **A01**

**WILCOSKY, T.**
Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-228831/REB 93-04 PC **A03**/MF **A01**

**WILD, D. K.**
Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC **A03**/MF **A01**

Comparing the Accuracy of Equation Formats for Modeling Microbial Population Decay Rates.
PB93-131548/REB 93-01 PC **A03**/MF **A01**

**WILDEMAN, T.**
Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
PB93-233914/REB 93-04 PC **A12**/MF **A03**

**WILES, C. C.**
Results of U.S. EPA Research Waste Combustion Residues.
PB93-106672/REB 93-01 PC **A03**/MF **A01**

Technical Issues on Long-Term Performance of Solidified/Stabilized Waste Forms.
PB93-106680/REB 93-01 PC **A03**/MF **A01**

**WILEY, D. N.**
Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02**/MF **A01**

**WILKINSON, D.**
Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16**/MF **A03**

**WILLEKE, K.**
Aerosol Measurement: Principles, Techniques, and Applications.
PB93-212827/REB 93-04 PC **A03**/MF **A01**

**WILLIAMS, D.**
Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120968/REB 93-01 PC **A02**/MF **A01**

**WILLIAMS, K.**
Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03**/MF **A01**

**WILLIAMS, R.**
Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02**/MF **A01**

**WILLIAMS, R. R.**
Performance of an Aquatic Multispecies System in Evaluating the Effects of a Model Microbial Pest Control Agent on Nontarget Organisms.
PB93-131803/REB 93-01 PC **A03**/MF **A01**

**WILLIAMS, R. W.**
Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC **A02**/MF **A01**

Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03**/MF **A01**

**WILLIAMS, T.**
Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC **A03**/MF **A01**

**WILLIAMS, V.**
Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
PB93-205011/REB 93-04 PC **A02**/MF **A01**

**WILLIAMSON, A. D.**
Alternate Performance Standard Project: Interpreting the Post-Construction Test.
PB93-175529/REB 93-01 PC **A03**/MF **A01**

Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04**/MF **A01**

Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

Recommended Performance Standard of the Florida Radon Research Program.
PB93-122281/REB 93-01 PC **A03**/MF **A01**

**WILLIAMSON, T. R.**
Replacement of Hazardous Material in Wide Web Flexographic Printing Process.
PB93-229128/REB 93-04 PC **A05**/MF **A01**

**WILLIS, R. D.**
Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.
PB93-229177/REB 93-04 PC **A03**/MF **A01**

Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC **A03**/MF **A01**

**WILLITS, N.**
Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
PB93-234508/REB 93-04 PC **A03**/MF **A01**

**WILMOTH, R. C.**
Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC **A02**/MF **A01**

**WILSHIRE, F.**
Guidelines for Mercury Measurements from Stationary Sources: Quality Assurance Handbook. Section 3.19. Volume 3.
PB93-131209/REB 93-01 PC **A08**/MF **A02**

**WILSHIRE, F. W.**
Development and Validation of a Source Test Method for 2,4-Toluene Diisocyanate.
PB93-204055/REB 93-01 PC **A03**/MF **A01**

Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02**/MF **A01**

Volatile Organic Sampling Train Soot Interference Report.
PB93-144145/REB 93-01 PC **A04**/MF **A01**

**WILSON, B. H.**
Bioremediation of Chlorinated Solvents in the Vadose Zone.
PB93-221935/REB 93-04 PC **A02**/MF **A01**

Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC **A03**/MF **A01**

**WILSON, B. M.**
Development of a Field Test Method for the Determination of Lead in Paint and Paint-Contaminated Dust and Soil.
PB93-173128/REB 93-01 PC **A03**/MF **A01**

**WILSON, D. L.**
Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
PB93-121259/REB 93-01 PC **A02**/MF **A01**

**WILSON, G.**
User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC **A99**/MF **A06**

**WILSON, G. N.**
Mutational Risks in Females: Genomic Imprinting and Maternal Molecules.
PB93-194488/REB 93-01 PC **A03**/MF **A01**

**WILSON, H. T.**
Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03**/MF **A01**

**WILSON, J. T.**
Bioremediation.
PB93-149193/REB 93-01 PC **A03**/MF **A01**

Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC **A02**/MF **A01**

Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC **A03**/MF **A01**

Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC **A02**/MF **A01**

Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.
PB93-222370/REB 93-04 PC **A02**/MF **A01**

Retrospective Performance Evaluation on In situ Bioremediation: Site Characterization.
PB93-221919/REB 93-04 PC **A03**/MF **A01**

**WILSON, M.**
Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.
PB93-212645/REB 93-04 PC **A02**/MF **A01**

Relationship of Total Viable and Culturable Cells in Epiphytic Populations of 'Pseudomonas syringae'.
PB93-222826/REB 93-04 PC **A02**/MF **A01**

**WILSON, N. K.**
Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02**/MF **A01**

**WILSON, R. J.**
Shoreline Survey for Unpermitted Discharges to Galveston Bay.
PB93-205706/REB 93-04 PC **A03**/MF **A01**

**WILSON, V. Z.**
Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC **A02**/MF **A01**

**WILSON, W. E.**
Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03**/MF **A01**

Comparison of Aerosol Acidity in Urban and Semi-Rural Environments.
PB93-131712/REB 93-01 PC **A03**/MF **A01**

Source Apportionment of Air Pollution in China: Extending the Usefulness of Receptor Modeling by Combining Multivariate and Chemical Mass Balance Models.
PB93-185726/REB 93-01 PC **A03**/MF **A01**

**WINDSOR, D.**
Regulatory Effectiveness Study for the Armand Bayou Coastal Preserve.
PB93-205680/REB 93-04 PC **A08**/MF **A02**

Regulatory Effectiveness Study for the Christmas Bay Coastal Preserve.
PB93-205698/REB 93-04 PC **A09**/MF **A03**

**WINFREY, J.**
Genus- and Group-Specific Hybridization Probes for Determinative and Environmental Studies of Sulfate-Reducing Bacteria.
PB93-168987/REB 93-01 PC **A02**/MF **A01**

**WINJUM, J. K.**
Conservation and Sequestration of Carbon: The Potential of Forest and Agroforest Management Practices.
PB93-229656/REB 93-04 PC **A03**/MF **A01**

Expanding Global Forest Management: An 'Easy First' Proposal.
PB93-199669/REB 93-01 PC **A02**/MF **A01**

Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.
PB93-212637/REB 93-04 PC **A03**/MF **A01**

**WINKLER, D.**
Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC **A05**/MF **A01**

Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127801/REB 93-01 PC **A06**/MF **A02**

Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
PB93-135663/REB 93-01 PC **A07**/MF **A02**

**WINKLER, J. D.**
Estimate of Global Methane Emissions from Coal Mines.
PB93-212553/REB 93-04 PC **A03**/MF **A01**

**WINSETT, D. W.**
Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC **A02**/MF **A01**

**WINSTEAD, J. T.**
Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC **A02**/MF **A01**

**WISE, C.**
Effects of CO2 and Temperature on Five Rice Cultivars.
PB93-141158/REB 93-01 PC **A02**/MF **A01**

**WISE, S. A.**
Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.
PB93-231835/REB 93-04 PC **A02**/MF **A01**

**WITTER, E.**
Heavy metal concentrations in agricultural soils critical to microorganisms.
DE93778472/REB 93-01 PC **A03**/MF **A01**

**WOLBERT, G. B.**
Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC **A08**/MF **A02**

**WOLF, S. H.**
Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3, Hydraulic Conductivity Variability and Calculated Macrodispersivities.
PB93-107050/REB 93-01 PC **A03**/MF **A01**

**WOLF, S. M.**
Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC **A02**/MF **A01**

**WOLFE, N. L.**
Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC **A03**/MF **A01**

**WOLFSON, M.**
Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02**/MF **A01**

**WOOD, H. A.**
Development of Genetically Enhanced Baculovirus Pesticides (Chapter 5).
PB93-149235/REB 93-01 PC **A02**/MF **A01**

Ecologically Acceptable Strategy for the Use of Genetically Engineered Baculovirus Pesticides.
PB93-149243/REB 93-01 PC **A02**/MF **A01**

Genetically Engineered Baculoviruses as Agents for Pest Control.
PB93-150175/REB 93-01 PC **A03**/MF **A01**

**WOODS, C. W.**
Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
PB93-229482/REB 93-04 PC **A03**/MF **A01**

Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
PB93-229243/REB 93-04 PC **A03**/MF **A01**

**WOODWARD, D. F.**
Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

**WORD, J. Q.**
Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

**WRIGHT, D.**
Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
PB93-191575/REB 93-01 PC **A02**/MF **A01**

**WRIGHT, D. A.**
Analysis of Original Equipment and Aftermarket Manufacturer Oxygen Sensor Constructional, Functional, and Price Differences.
PB93-208007/REB 93-04 PC **A18**/MF **A04**

**WRIGHT, D. S.**
Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191351/REB 93-01 PC **A02**/MF **A01**

**WRIGHT, H. A.**
Companies that Generate, Treat, Dispose or Recover Hazardous Waste. 1991 Annual Report.
PB93-216638/REB 93-04 PC **A15**/MF **A03**

**WRIGHT, R. F.**
MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC **A02**/MF **A01**

**WU, H.**
Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-226906/REB 93-04 PC **A01**/MF **A01**

**WYMER, L. J.**
Effect of the Distribution System on Drinking-Water Quality.
PB93-173722/REB 93-01 PC **A03**/MF **A01**

**WYSOCK, B. M.**
Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03**/MF **A01**

**XIAN, Y.**
Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC **A03**/MF **A01**

**XIE, Y.**
Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03**/MF **A01**

LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

**YAMAMOTO, T.**
Evaluation of Ventilation Performance for Indoor Space.
PB93-212751/REB 93-04 PC **A02**/MF **A01**

IAQPC: An Indoor Air Quality Simulator.
PB93-212397/REB 93-04 PC **A03**/MF **A01**

Modeling of Indoor Air Quality for a Personal Computer.
PB93-106771/REB 93-01 PC **A03**/MF **A01**

**YANG, Y.**
Extrapolation Modeling of Aerosol Deposition in Human and Laboratory Rat Lungs.
PB93-181097/REB 93-01 PC **A03**/MF **A01**

Interspecies Modeling of Inhaled Particle Deposition Patterns.
PB93-181121/REB 93-01 PC **A03**/MF **A01**

**YARBROUGH, D. W.**
Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.
DE93014387/REB 93-04 PC **A03**/MF **A01**

**YATES, J. R.**
Sequence Similarities in the Genes Encoding Polychlorinated Biphenyl Degradation by 'Pseudomonas' Strain LB400 and 'Alcaligenes eutrophus' H850.
PB93-229201/REB 93-04 PC **A01**/MF **A01**

**YATES, M. V.**
VIRTUS, a Model of Virus Transport in Unsaturated Soils.
PB93-185890/REB 93-01 PC **A02**/MF **A01**

**YE, M.**
Determination of Carboxylic Acids by Ion-Exclusion Chromatography with Non-Suppressed Conductivity and Optical Detectors.
PB93-181212/REB 93-01 PC **A02**/MF **A01**

**YEARSLEY, J.**
Dynamic River Basin Water Quality Model.
PB93-190890/REB 93-01 PC **A05**/MF **A01**

**YEH, G. T.**
3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
PB93-217669/REB 93-04 PC **A12**/MF **A03**

Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
PB93-131845/REB 93-01 PC **A03**/MF **A01**

Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.
PB93-212363/REB 93-04 PC **A02**/MF **A01**

**YEVICH, P.**
Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02**/MF **A01**

Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02**/MF **A01**

**YODER, C. O.**
Use of Ecoregions in Biological Monitoring.
PB93-106730/REB 93-01 PC **A03**/MF **A01**

**YOONG, M.**
Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC **A03**/MF **A01**

**YOUNG, D. A.**
Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03**/MF **A01**

**YOUNG, L. Y.**
Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC **A02**/MF **A01**

**YOUNG, S. C.**
Development and Application of Borehole Flowmeters for Environmental Assessment.
PB93-185817/REB 93-01 PC **A03**/MF **A01**

**YOUNG, T. C.**
Trace Organic Contaminants in Anthropogenically Acidified Surface Waters.
PB93-135689/REB 93-01 PC **A03**/MF **A01**

**YOUNG, T. L.**
DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC **A02**/MF **A01**

**YOUNIS, L. T.**
Carbon Monoxide Exposure of Subjects with Documented Cardiac Arrhythmias.
PB93-179943/REB 93-01 PC **A03**/MF **A01**

**YOUSTEN, A. A.**
Fate of 'Bacillus sphaericus' and 'Bacillus thuringiensis' Serovar 'Israelensis' in the Aquatic Environment.
PB93-121143/REB 93-01 PC **A02**/MF **A01**

Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC **A02**/MF **A01**

**YU, L.**
Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
PB93-234508/REB 93-04 PC **A03**/MF **A01**

**ZAFIRAKOU, A.**
Relationships between Ozone Precursor Levels and Response to Emissions Reductions: Analysis of Regional Oxidant Model Results for the Northeastern United States.
PB93-186294/REB 93-01 PC **A07**/MF **A02**

**ZAPOROZEC, A.**
Delineation of Wellhead Protection Areas in Fractured Rocks.
PB93-115822/REB 93-01 PC **A08**/MF **A02**

**ZAROOGIAN, G.**
Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02**/MF **A01**

Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02**/MF **A01**

Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03**/MF **A01**

**ZAYATZ, L. V.**
Setting an Agenda for Research in the Federal Statistical System: Needs for Statistical Disclosure Limitation Procedures.
PB93-204097/REB 93-04 PC **A03**/MF **A01**

**ZDOR, R. E.**
Influence of Root Colonizing Bacteria on the Defense Responses of Bean.
PB93-205045/REB 93-04 PC **A03**/MF **A01**

**ZELENKA, M.**
Exposure Modeling of Acid Aerosols.
PB93-228559/REB 93-04 PC **A02**/MF **A01**

Indoor Concentration Modeling of Aerosol Strong Acidity.
PB93-204071/REB 93-01 PC **A02**/MF **A01**

**ZELENKA, M. P.**
Source Apportionment of Air Pollution in China: Extending the Usefulness of Receptor Modeling by Combining Multivariate and Chemical Mass Balance Models.
PB93-185726/REB 93-01 PC **A03**/MF **A01**

**ZEPP, R. G.**
Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.
PB93-205102/REB 93-04 PC **A02**/MF **A01**

Photochemical Conversion of Solar Energy in the Environment.
PB93-167187/REB 93-01 PC **A03**/MF **A01**

Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC **A03**/MF **A01**

**ZHANG, X.**
Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC **A07**/MF **A02**

Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC **A05**/MF **A01**

Simulation of Raw Water and Treatment Parameters in Support of the Disinfection By-Products Regulatory Impact Analysis.
PB93-134401/REB 93-01 PC **A03**/MF **A01**

**ZHANG, Y. Q.**
Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119873/REB 93-01 PC **A02**/MF **A01**

Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-229185/REB 93-04 PC **A02**/MF **A01**

Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119881/REB 93-01 PC **A03**/MF **A01**

**ZHANG, Z.**
Comments on Recent Data for Particle Deposition in Human Nasal Passages.
PB93-181105/REB 93-01 PC **A02**/MF **A01**

Deposition of Sulfate Acid Aerosols in the Developing Human Lung.
PB93-236388/REB 93-04 PC **A03**/MF **A01**

Extrapolation Modeling of Aerosol Deposition in Human and Laboratory Rat Lungs.
PB93-181097/REB 93-01 PC **A03**/MF **A01**

Interspecies Modeling of Inhaled Particle Deposition Patterns.
PB93-181121/REB 93-01 PC **A03**/MF **A01**

**ZIELENIEWSKI, J.**
Standards of Performance for New Stationary Sources. Volume 1. Introduction, Summary and Standards: A Compilation as of December 31, 1985.
PB93-199297/REB 93-01 PC **A08**/MF **A02**

**ZIMMERMAN, D.**
Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127801/REB 93-01 PC **A06**/MF **A02**

Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
PB93-135663/REB 93-01 PC **A07**/MF **A02**

**ZIMMERMAN, L. J.**
Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC **A03**/MF **A01**

Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02**/MF **A01**

V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

**ZINN, B. T.**
Applications of Pulse Combustion in Industrial and Incineration Processes.
PB93-131639/REB 93-01 PC **A03**/MF **A01**

**ZIRKLE, T. G.**

Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
PB93-105518/REB 93-01 PC **A06/MF A02**

**ZIRSCHKY, J.**

Summary of the 1987 Carver-Greenfield Sludge Drying Technology Workshop: Problems and Solutions. Held in Los Angeles, California on March 10-11, 1987.
PB93-174506/REB 93-01 PC **A04/MF A01**

**ZUCKER, R. M.**

Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC **A03/MF A01**

**ZWEIDINGER, R. B.**

Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
PB93-228534/REB 93-04 PC **A02/MF A01**

Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02/MF A01**

Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC **A02/MF A01**

**ZYLSTRA, G. J.**

Aromatic Hydrocarbon Degradation: A Molecular Approach.
PB93-229433/REB 93-04 PC **A03/MF A01**

Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
PB93-229474/REB 93-04 PC **A02/MF A01**

# CONTRACT/GRANT NUMBER INDEX

Entries in this index list reports produced as a result of research done under specific contract or grant numbers. Entries are sequenced by contract or grant number, corporate author, and NTIS order number.

## SAMPLE ENTRY

| | |
|---|---|
| **Contract or Grant Number** | **EPA-68-C8-OOO6** |
| Performing Organization | Oregon State Univ., Corvallis, OR. |
| NTIS Order Number/Media Code Price Codes | PB90-120072/HSU PC A09/MF A01 |

# CONTRACT/GRANT NUMBER INDEX


**1531-ERER-ER-91**
Environmental Risk Ltd., Bloomfield, CT.
PB93-198950/REB 93-01 PC **A17**/MF **A04**
PB93-198968/REB 93-01 PC **A07**/MF **A02**

**AC05-84OR21400**
Oak Ridge National Lab., TN.
DE93014387/REB 93-04 PC **A03**/MF **A01**

**AFOSR-88-6225**
Cook Coll., New Brunswick, NJ. Center for Agricultural Molecular Biology.
PB93-229433/REB 93-04 PC **A03**/MF **A01**

**ARB-A032-0692**
California Univ., Riverside. Statewide Air Pollution Research Center.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

**ARB-A832-155**
Energy and Environmental Research Corp., Irvine, CA.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

**C91323**
California Univ., Riverside. Statewide Air Pollution Research Center.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

**DACW8891MO321**
Jackson State Univ., MS. Dept. of Biology.
PB93-222396/REB 93-04 PC **A02**/MF **A01**

**DAMD17-89-9031**
Nebraska Univ.-Lincoln. Dept. of Agronomy.
PB93-222099/REB 93-04 PC **A03**/MF **A01**

**DE-AC02-76CH00016**
Brookhaven National Lab., Upton, NY. Oceanographic and Atmospheric Sciences Div.
PB93-204923/REB 93-01 PC **A02**/MF **A01**
PB93-204931/REB 93-01 PC **A03**/MF **A01**

**DE-AC05-84OR21400**
ManTech Environmental Technology, Inc., Corvallis, OR.
PB93-212660/REB 93-04 PC **A02**/MF **A01**
PB93-229136/REB 93-04 PC **A07**/MF **A02**
Oak Ridge National Lab., TN. Biology Div.
PB93-194447/REB 93-01 PC **A03**/MF **A01**
Oak Ridge National Lab., TN. Environmental Sciences Div.
PB93-207561/REB 93-04 PC **A03**/MF **A01**
Washington Univ., Seattle. School of Medicine.
PB93-194496/REB 93-01 PC **A03**/MF **A01**

**DE-AC-0584OR21400**
ManTech Environmental Technology, Inc., Corvallis, OR.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

**DE-FC03-90-ER61010**
Louisiana State Univ., Baton Rouge. Wetland Biogeochemistry Inst.
PB93-222800/REB 93-04 PC **A02**/MF **A01**

**DE-FG01-90FE62072**
National Research Council, Washington, DC.
PB93-186393/REB 93-01 PC **A20**/MF **A04**

**DE-W-7405-ENG-48**
Lawrence Livermore National Lab., CA. Biomedical Sciences Div.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

**EPA-CE-000201**
Municipality of Metropolitan Seattle-METRO, WA. Water Pollution Control Div.
PB93-119568/REB 93-01 PC **A08**/MF **A02**

**EPA-CE-06550-01**
Galveston Bay National Estuary Program,, Austin, TX.
PB93-205755/REB 93-04 PC **A20**/MF **A04**
PB93-205763/REB 93-04 PC **A16**/MF **A03**

**EPA-CR-810605**
Cincinnati Univ. Medical Center, OH. Dept. of Microbiology and Molecular Genetics.
PB93-229250/REB 93-04 PC **A02**/MF **A01**
PB93-229284/REB 93-04 PC **A02**/MF **A01**

**EPA-CR-812727**
General Electric Corporate Research and Development, Schenectady, NY.
PB93-229748/REB 93-04 PC **A03**/MF **A01**
PB93-229763/REB 93-04 PC **A03**/MF **A01**

**EPA-CR-813155-01-0**
Woods Hole Oceanographic Institution, MA.
AD-A258 623/8/REB 93-01 PC **A11**/MF **A03**

**EPA-CR813198-01**
Rutgers - The State Univ., Piscataway, NJ. Dept. of Chemical and Biochemical Engineering.
PB93-229870/REB 93-04 PC **A25**/MF **A06**

**EPA-CR-813366**
Cincinnati Univ. Medical Center, OH. Dept. of Microbiology and Molecular Genetics.
PB93-229250/REB 93-04 PC **A02**/MF **A01**
PB93-229268/REB 93-04 PC **A03**/MF **A01**
Cincinnati Univ., OH. Coll. of Medicine.
PB93-229276/REB 93-04 PC **A03**/MF **A01**

**EPA-CR-815147**
Tennessee Univ., Knoxville. Dept. of Chemistry.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

**EPA-CR-815363**
Butler Univ., Indianapolis, IN. Holcomb Research Inst.
PB93-178226/REB 93-01 PC **A08**/MF **A02**
PB93-209401/REB 93-04 PC **A13**/MF **A03**

**EPA-CR-815682-01-0**
National Research Council, Washington, DC. Committee on Toxicology.
PB93-206449/REB 93-04 PC **A06**/MF **A02**

**EPA-CR-815829**
Illinois Dept. of Energy and Natural Resources, Champaign. Hazardous Waste Research and Information Center.
PB93-218865/REB 93-04 PC **A04**/MF **A01**
PB93-221638/REB 93-04 PC **A04**/MF **A01**

**EPA-CR816185**
Kentucky Univ., Lexington.
PB93-228906/REB 93-04 PC **A01**/MF **A01**

**EPA-CR-816352**
Iowa Univ., Iowa City.
PB93-229466/REB 93-04 PC **A02**/MF **A01**
PB93-229474/REB 93-04 PC **A02**/MF **A01**

**EPA-CR82023501**
Environmental and Occupational Health Sciences Inst., Piscataway, NJ. Exposure Measurement and Assessment Div.
PB93-222222/REB 93-04 PC **A02**/MF **A01**

**EPA-CX-813567-01-01**
Woods Hole Oceanographic Institution, MA.
AD-A258 623/8/REB 93-01 PC **A11**/MF **A03**

**EPA-CX-814627-01-0**
Georgia Tech Research Inst., Atlanta. Environment, Health and Safety Div.
PB93-780781/REB 93-01 PC **A21**
PB93-780799/REB 93-01 PC **A09**

**EPA-CX-815849-01-0**
Alice Hamilton Occupational Health Center, Washington, DC.
PB93-780930/REB 93-01 PC **A14**
PB93-780948/REB 93-01 PC **A15**

**EPA-DO-0036**
Sonotech, Atlanta, GA.
PB93-131639/REB 93-01 PC **A03**/MF **A01**

**EPA-DW69934659**
Traverse Group, Inc., Traverse City, MI.
PB93-119816/REB 93-01 PC **A02**/MF **A01**

**EPA-R-81-6740**
Harvard School of Public Health, Boston, MA.
PB93-131712/REB 93-01 PC **A03**/MF **A01**

**EPA-R005725-01**
Cornell Univ. Agricultural Experiment Station, Ithaca, NY. Dept. of Agronomy.
PB93-128023/REB 93-01 PC **A04**/MF **A01**
New York State Dept. of Environmental Conservation, Albany. Div. of Water.
PB93-128015/REB 93-01 PC **A04**/MF **A01**

**EPA-R005725-01/02**
New York State Coll. of Agriculture and Life Sciences, Ithaca. Dept. of Agricultural and Biological Engineering.
PB93-128031/REB 93-01 PC **A06**/MF **A02**

**EPA-R-005774-01**
Defiance Soil and Water Conservation District, OH.
PB93-128098/REB 93-01 PC **A10**/MF **A03**

**EPA-R005805**
Purdue Univ., Lafayette, IN. Dept. of Agricultural Economics.
PB93-157568/REB 93-01 PC **A03**/MF **A01**

**EPA-R005970-01**
Ohio State Univ., Columbus. Dept. of Agronomy.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

**EPA-R-81515**
North Carolina Univ. at Chapel Hill. Dept. of Environmental Sciences and Engineering.
PB93-107068/REB 93-01 PC **A03**/MF **A01**

**EPA-R-186700**
Cincinnati Univ., OH. Dept. of Civil and Environmental Engineering.
PB93-185759/REB 93-01 PC **A03**/MF **A01**

**EPA-R-810605**
Cincinnati Univ. Medical Center, OH.
PB93-229292/REB 93-04 PC **A03**/MF **A01**
Cincinnati Univ., OH. Coll. of Medicine.
PB93-229441/REB 93-04 PC **A03**/MF **A01**
PB93-229482/REB 93-04 PC **A03**/MF **A01**
Cincinnati Univ., OH. Dept. of Microbiological and Molecular Genetics.
PB93-229243/REB 93-04 PC **A03**/MF **A01**

**EPA-R-811464**
Michigan State Univ., East Lansing. Dept. of Biochemistry.
PB93-191575/REB 93-01 PC **A02**/MF **A01**
PB93-191583/REB 93-01 PC **A02**/MF **A01**

**EPA-R-812547**
National Research Council, Washington, DC. Commission on Life Sciences.
PB93-100980/REB 93-01 PC **A18**/MF **A04**

**EPA-R812660**
Illinois Univ. at Chicago. Dept. of Microbiology and Immunology.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

**EPA-R-812727**
General Electric Co., Schenectady, NY. Biological Sciences Lab.
PB93-229227/REB 93-04 PC **A02**/MF **A01**

**EPA-R-812808**
Camp, Dresser and McKee, Inc., Cambridge, MA.
PB93-122323/REB 93-01 PC **A15**/MF **A03**
Lund Univ. (Sweden). Dept. of Ecology.
PB93-141497/REB 93-01 PC **A02**/MF **A01**
Rice Univ., Houston, TX. Dept. of Environmental Science and Engineering.
PB93-141505/REB 93-01 PC **A03**/MF **A01**

**EPA-R-812911**
Illinois Univ. at the Medical Center, Chicago. Dept. of Microbiology and Immunology.
PB93-204139/REB 93-01 PC **A03**/MF **A01**

**EPA-R-812911-02**
Illinois Univ. at the Medical Center, Chicago. Dept. of Microbiology and Immunology.
PB93-204162/REB 93-01 PC **A03**/MF **A01**

**EPA-R-813366**
Cincinnati Univ., OH. Coll. of Medicine.
PB93-229441/REB 93-04 PC **A03**/MF **A01**

**EPA-R-813369**
Michigan State Univ., East Lansing. Dept. of Biochemistry.
PB93-204154/REB 93-01 PC **A02**/MF **A01**
Utah State Univ., Logan.
PB93-191542/REB 93-01 PC **A02**/MF **A01**
PB93-191559/REB 93-01 PC **A02**/MF **A01**
PB93-191567/REB 93-01 PC **A03**/MF **A01**

**EPA-R-813530**
Forest Products Lab., Madison, WI.
PB93-199511/REB 93-01 PC **A02**/MF **A01**
State Univ. of New York Coll. of Environmental Science and Forestry, Syracuse.
PB93-194223/REB 93-01 PC **A03**/MF **A01**
State Univ. of New York Coll. of Environmental Science and Forestry, Syracuse. Dept. of Chemistry.
PB93-199503/REB 93-01 PC **A02**/MF **A01**

**EPA-R-814043**
Illinois Univ. at Urbana-Champaign. Dept. of Civil Engineering.
PB93-107241/REB 93-01 PC **A02**/MF **A01**
PB93-131555/REB 93-01 PC **A03**/MF **A01**

**EPA-R-814121**
North Carolina State Univ. at Raleigh.
PB93-120939/REB 93-01 PC **A02**/MF **A01**
PB93-120962/REB 93-01 PC **A02**/MF **A01**
PB93-120996/REB 93-01 PC **A02**/MF **A01**

**EPA-R-814162**
Utah State Univ., Logan.
PB93-191559/REB 93-01 PC **A02**/MF **A01**
PB93-191567/REB 93-01 PC **A03**/MF **A01**

**EPA-R-814169**
Research Triangle Inst., Research Triangle Park, NC. Center for Aerosol Technology.
PB93-107019/REB 93-01 PC **A03**/MF **A01**
PB93-221976/REB 93-04 PC **A01**/MF **A01**

**EPA-R-814169-03**
Research Triangle Inst., Research Triangle Park, NC.
PB93-212397/REB 93-04 PC **A03**/MF **A01**

**EPA-R-814448**
Utah State Univ., Logan.
PB93-191542/REB 93-01 PC **A02**/MF **A01**

**EPA-R-814611**
New York Univ. Medical Center, NY.
PB93-222784/REB 93-04 PC **A02**/MF **A01**

**EPA-R-814621**
Southern Research Inst., Birmingham, AL.
PB93-175529/REB 93-01 PC **A03**/MF **A01**

**EPA-R-814721**
Rhode Island Univ., Kingston. Dept. of Zoology.
PB93-212587/REB 93-04 PC **A03**/MF **A01**
PB93-212595/REB 93-04 PC **A03**/MF **A01**

**EPA-R-814860-01-1**
Alberta Environmental Centre, Vegreville.
PB93-199396/REB 93-01 PC **A05**/MF **A01**

**EPA-R-814903**
Colorado State Univ., Fort Collins. Dept. of Mechanical Engineering.
PB93-123016/REB 93-01 PC **A02**/MF **A01**
PB93-123040/REB 93-01 PC **A02**/MF **A01**
PB93-123057/REB 93-01 PC **A02**/MF **A01**
PB93-123065/REB 93-01 PC **A02**/MF **A01**
PB93-123099/REB 93-01 PC **A02**/MF **A01**
PB93-126621/REB 93-01 PC **A02**/MF **A01**

# CONTRACT/GRANT NUMBER INDEX

Louisville Univ., KY. Dept. of Chemical Engineering.
PB93-123032/REB 93-01 PC **A02**/MF **A01**

PB93-123073/REB 93-01 PC **A02**/MF **A01**

Tennessee Univ., Knoxville. Dept. of Engineering Science and Mechanics.
PB93-123024/REB 93-01 PC **A02**/MF **A01**

PB93-123107/REB 93-01 PC **A02**/MF **A01**

**EPA-R-814915**
Southern Research Inst., Birmingham, AL.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

**EPA-R-815134**
Clemson Univ., SC. Dept. of Chemistry and Geology.
PB93-173102/REB 93-01 PC **A03**/MF **A01**

**EPA-R-815147**
Tennessee Univ., Knoxville. Dept. of Chemistry.
PB93-106805/REB 93-01 PC **A03**/MF **A01**

PB93-106813/REB 93-01 PC **A03**/MF **A01**

**EPA-R-815165**
New Jersey Inst. of Tech., Newark.
PB93-123115/REB 93-01 PC **A02**/MF **A01**

PB93-123123/REB 93-01 PC **A02**/MF **A01**

PB93-123131/REB 93-01 PC **A02**/MF **A01**

PB93-123149/REB 93-01 PC **A02**/MF **A01**

PB93-123156/REB 93-01 PC **A01**/MF **A01**

PB93-123164/REB 93-01 PC **A02**/MF **A01**

PB93-123172/REB 93-01 PC **A01**/MF **A01**

PB93-123180/REB 93-01 PC **A02**/MF **A01**

PB93-123198/REB 93-01 PC **A02**/MF **A01**

PB93-123206/REB 93-01 PC **A02**/MF **A01**

PB93-123214/REB 93-01 PC **A02**/MF **A01**

PB93-123222/REB 93-01 PC **A02**/MF **A01**

PB93-123230/REB 93-01 PC **A02**/MF **A01**

PB93-123248/REB 93-01 PC **A02**/MF **A01**

PB93-126217/REB 93-01 PC **A02**/MF **A01**

PB93-126225/REB 93-01 PC **A02**/MF **A01**

PB93-126233/REB 93-01 PC **A02**/MF **A01**

PB93-126241/REB 93-01 PC **A02**/MF **A01**

PB93-126258/REB 93-01 PC **A02**/MF **A01**

PB93-126266/REB 93-01 PC **A02**/MF **A01**

PB93-126282/REB 93-01 PC **A02**/MF **A01**

PB93-126290/REB 93-01 PC **A02**/MF **A01**

PB93-126308/REB 93-01 PC **A02**/MF **A01**

PB93-126316/REB 93-01 PC **A02**/MF **A01**

PB93-126563/REB 93-01 PC **A02**/MF **A01**

PB93-126639/REB 93-01 PC **A02**/MF **A01**

**EPA-R-815169**
Research Triangle Inst., Research Triangle Park, NC.
PB93-101160/REB 93-01 PC **A06**/MF **A02**

PB93-106839/REB 93-01 PC **A03**/MF **A01**

**EPA-R-815285-01-02**
Minnesota Univ.-Duluth. Dept. of Biology.
PB93-121184/REB 93-01 PC **A02**/MF **A01**

**EPA-R-815305**
California Univ., Berkeley. Dept. of Plant Pathology.
PB93-222826/REB 93-04 PC **A02**/MF **A01**

**EPA-R815734**
New Jersey Inst. of Tech., Newark. Dept. of Chemical Engineering.
PB93-204063/REB 93-01 PC **A02**/MF **A01**

**EPA-R-815736**
Stanford Univ., CA. Dept. of Civil Engineering.
PB93-222867/REB 93-04 PC **A02**/MF **A01**

**EPA-R-815784**
Washington Univ., Seattle.
PB93-231165/REB 93-04 PC **A04**/MF **A01**

**EPA-R-815829**
Illinois Dept. of Energy and Natural Resources, Champaign. Hazardous Waste Research and Information Center.
PB93-191286/REB 93-01 PC **A03**/MF **A01**

**EPA-R-815831-01-0**
Boyce Thompson Inst. for Plant Research, Ithaca, NY.
PB93-150175/REB 93-01 PC **A03**/MF **A01**

**EPA-R-816157-0-10**
Minnesota Univ., St. Paul. Dept. of Genetics and Cell Biology.
PB93-169076/REB 93-01 PC **A02**/MF **A01**

**EPA-R-816185**
Environmental Health Research and Testing, Inc., Research Triangle Park, NC.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

Kentucky Univ., Lexington.
PB93-229615/REB 93-04 PC **A02**/MF **A01**

**EPA-R-816205**
Electro-Pure Systems, Inc., Amherst, NY.
PB93-205144/REB 93-04 PC **A02**/MF **A01**

**EPA-R-816206**
Illinois Univ. at Urbana-Champaign. Dept. of Mechanical and Industrial Engineering.
PB93-106821/REB 93-01 PC **A03**/MF **A01**

**EPA-R-816230**
Minnesota Univ., Minneapolis. St. Anthony Falls Hydraulic Lab.
PB93-135648/REB 93-01 PC **A09**/MF **A02**

PB93-135655/REB 93-01 PC **A07**/MF **A02**

**EPA-R-816230-01-0**
Minnesota Univ.-Duluth. St. Anthony Falls Hydraulic Lab.
PB93-149185/REB 93-01 PC **A03**/MF **A01**

**EPA-R-816326**
Manhattan Coll., Bronx, NY.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

**EPA-R816740**
Environmental and Occupational Health Sciences Inst., Piscataway, NJ. Exposure Measurement and Assessment Div.
PB93-204071/REB 93-01 PC **A02**/MF **A01**

National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div.
PB93-228559/REB 93-04 PC **A02**/MF **A01**

**EPA-R-816748**
M.D. Anderson Cancer Center, Houston, TX.
PB93-175651/REB 93-01 PC **A03**/MF **A01**

**EPA-R-816762**
Erie County Dept. of Environment and Planning, Buffalo, NY.
PB93-229128/REB 93-04 PC **A05**/MF **A01**

**EPA-R-816776**
Stanford Univ., CA. Dept. of Civil Engineering.
PB93-135713/REB 93-01 PC **A02**/MF **A01**

**EPA-R-816813**
Aluminum Co. of America, Pittsburgh, PA.
PB93-227205/REB 93-04 PC **A04**/MF **A01**

**EPA-R-816821**
Massachusetts Univ., Amherst.
PB93-181204/REB 93-01 PC **A03**/MF **A01**

Massachusetts Univ., Amherst. Dept. of Civil Engineering.
PB93-181196/REB 93-01 PC **A03**/MF **A01**

Massachusetts Univ., Amherst. Environmental Engineering Program.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

**EPA-R-816947**
Oregon Graduate Inst. of Science and Technology, Beaverton. Dept. of Environmental Science and Engineering.
PB93-131738/REB 93-01 PC **A03**/MF **A01**

**EPA-R-817013**
Princeton Univ., NJ. Center for Energy and Environmental Studies.
PB93-100907/REB 93-01 PC **A07**/MF **A02**

PB93-100915/REB 93-01 PC **A04**/MF **A01**

**EPA-R-817083**
Research Triangle Inst., Research Triangle Park, NC.
PB93-106771/REB 93-01 PC **A03**/MF **A01**

PB93-212405/REB 93-04 PC **A03**/MF **A01**

Research Triangle Inst., Research Triangle Park, NC. Center for Aerosol Technology.
PB93-212751/REB 93-04 PC **A02**/MF **A01**

**EPA-R-817083-01-0**
Research Triangle Inst., Research Triangle Park, NC.
PB93-131597/REB 93-01 PC **A03**/MF **A01**

PB93-222024/REB 93-04 PC **A02**/MF **A01**

**EPA-R-817087**
INFORM, Inc., New York.
PB93-194546/REB 93-01 PC **A02**/MF **A01**

**EPA-R-817111**
Maryland Univ., College Park. Dept. of Mechanical Engineering.
PB93-173664/REB 93-01 PC **A02**/MF **A01**

**EPA-R817123**
Michigan Univ., Ann Arbor. School of Public Health.
PB93-228526/REB 93-04 PC **A02**/MF **A01**

**EPA-R-817219-01-1**
California State Univ., Long Beach.
PB93-185866/REB 93-01 PC **A02**/MF **A01**

**EPA-R-817367**
Florida Univ., Gainesville. Dept. of Nuclear Engineering Sciences.
PB93-172922/REB 93-01 PC **A09**/MF **A02**

**EPA-R-817586**
University of Central Florida, Orlando.
PB93-175503/REB 93-01 PC **A03**/MF **A01**

**EPA-R-818209-01-0**
Purus, Inc., San Jose, CA.
PB93-205383/REB 93-04 PC **A03**/MF **A01**

**EPA-R-818322**
Pennsylvania State Univ., University Park. Dept. of Civil Engineering.
PB93-131845/REB 93-01 PC **A03**/MF **A01**

**EPA-R-819665**
Oregon Graduate Inst. of Science and Technology, Beaverton.
PB93-212355/REB 93-04 PC **A03**/MF **A01**

**EPA-R-818321010**
North Carolina Univ. at Chapel Hill. Dept. of Psychology.
PB93-107225/REB 93-01 PC **A03**/MF **A01**

**EPA-S005698**
Allen County Soil and Water Conservation District, Fort Wayne, IN.
PB93-128056/REB 93-01 PC **A03**/MF **A01**

**EPA-T007287-01**
Kansas Univ., Lawrence. Div. of Continuing Education.
PB93-167096/REB 93-01 PC **A05**/MF **A01**

**EPA-T901758**
Michigan Univ., Ann Arbor. Air Quality Lab.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

PB93-121069/REB 93-01 PC **A02**/MF **A01**

**EPA-WA-6-99-2767-J**
Delaware Univ., Newark. Coll. of Marine Studies.
PB93-202927/REB 93-01 PC **A03**/MF **A01**

**EPA-X00346503**
Virginia Inst. of Marine Science, Gloucester Point.
PB93-191120/REB 93-01 PC **A13**/MF **A03**

**EPA-7D4127NAEX**
Western Illinois Univ., Macomb. Dept. of Biological Sciences.
PB93-141257/REB 93-01 PC **A02**/MF **A01**

**EPA-68-01-0031**
Radian Corp., Austin, TX.
PB93-229771/REB 93-04 PC **A07**/MF **A02**

**EPA-68-01-3169**
National Research Council, Washington, DC.
PB93-112290/REB 93-01 PC **A06**/MF **A02**

**EPA-68-01-4139**
Midwest Research Inst., Kansas City, MO.
PB93-199347/REB 93-01 PC **A05**/MF **A02**

**EPA-68-01-4456**
North Carolina Central Univ., Durham. Dept. of Biology.
PB93-141463/REB 93-01 PC **A02**/MF **A01**

**EPA-68-01-5767**
Jacobs Engineering Group, Inc., Pasadena, CA. Environmental Div.
PB93-206480/REB 93-04 PC **A11**/MF **A03**

**EPA-68-01-6288**
SMC Martin, Inc., Valley Forge, PA.
PB93-115806/REB 93-01 PC **A05**/MF **A01**

**EPA-68-01-6315**
TRC Environmental Consultants, Inc., East Hartford, CT.
PB93-199339/REB 93-01 PC **A10**/MF **A03**

**EPA-68-01-6621**
Development Planning and Research Associates, Inc., Manhattan, KS.
PB93-158988/REB 93-01 PC **A07**/MF **A02**

**EPA-68-01-6744**
Development Planning and Research Associates, Inc., Manhattan, KS.
PB93-156503/REB 93-01 PC **A05**/MF **A01**

PB93-203990/REB 93-04 PC **A07**/MF **A02**

**EPA-68-01-6989**
Pirnie (Malcolm), Inc., Paramus, NJ.
PB93-222933/REB 93-04 PC **A24**/MF **A04**

**EPA-68-01-7108**
Environmental Resources Management-Southeast, Inc., Marietta, GA.
PB93-174506/REB 93-01 PC **A04**/MF **A01**

**EPA-68-01-7176**
AQUA TERRA Consultants, Mountain View, CA.
PB93-185536/REB 93-01 PC **A11**/MF **A03**

**EPA-68-01-7350**
Research Triangle Inst., Research Triangle Park, NC.
PB93-203909/REB 93-04 PC **A03**/MF **A01**

**EPA-68-01-7365**
Computer Sciences Corp., Research Triangle Park, NC.
PB93-107084/REB 93-01 PC **A03**/MF **A01**

PB93-229391/REB 93-04 PC **A03**/MF **A01**

PB93-229417/REB 93-04 PC **A03**/MF **A01**

**EPA-68-01-7644**
Development Planning and Research Associates, Inc., Manhattan, KS.
PB93-156495/REB 93-01 PC **A04**/MF **A01**

**EPA-68-02-3679**
Research Triangle Inst., Research Triangle Park, NC.
PB93-212314/REB 93-04 PC **A03**/MF **A01**

**EPA-68-02-3816**
Radian Corp., Research Triangle Park, NC.
PB93-199354/REB 93-01 PC **A07**/MF **A02**

**EPA-68-02-3962**
Entropy Environmentalists, Inc., Research Triangle Park, NC.
PB93-199263/REB 93-01 PC **A05**/MF **A01**

**EPA-68-02-3963**
PEI Associates, Inc., Arlington, TX.
PB93-199370/REB 93-01 PC **A05**/MF **A01**

PEI Associates, Inc., Cincinnati, OH.
PB93-199297/REB 93-01 PC **A08**/MF **A02**

**EPA-68-02-4247**
Arizona Univ., Tucson. Dept. of Chemical Engineering.
PB93-212538/REB 93-04 PC **A03**/MF **A01**

**EPA-68-02-4254**
Versar, Inc., Springfield, VA.
PB93-105534/REB 93-01 PC **A04**/MF **A01**

**EPA-68-02-4274**
Science Applications International Corp., Durham, NC.
PB93-107001/REB 93-01 PC **A03**/MF **A01**

**EPA-68-02-4280**
ABB/Combustion Engineering, Inc., Windsor, CT.
PB93-236644/REB 93-04 PC **A03**/MF **A01**
Combustion Engineering, Inc., Windsor, CT.
PB93-131589/REB 93-01 PC **A03**/MF **A01**

**EPA-68-02-4284**
IT Corp., Cincinnati, OH.
PB93-100121/REB 93-01 PC **A04**/MF **A01**

**EPA-68-02-4400**
Pechan (E.H.) and Associates, Inc., Durham, NC.
PB93-169084/REB 93-01 PC **A03**/MF **A01**

**EPA-68-02-4442**
Southern Research Inst., Birmingham, AL.
PB93-144137/REB 93-01 PC **A04**/MF **A01**

**EPA-68-02-4450**
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
PB93-141281/REB 93-01 PC **A03**/MF **A01**
PB93-141356/REB 93-01 PC **A03**/MF **A01**
PB93-175594/REB 93-01 PC **A02**
PB93-175693/REB 93-01 PC **A02**/MF **A01**
PB93-228914/REB 93-04 PC **A03**/MF **A01**
PB93-229516/REB 93-04 PC **A03**/MF **A01**
PB93-229599/REB 93-04 PC **A03**/MF **A01**
PB93-236321/REB 93-04 PC **A03**/MF **A01**

**EPA-68-02-4451**
Environmental Science and Engineering, Inc., Durham, NC.
PB93-131696/REB 93-01 PC **A03**/MF **A01**
PB93-178242/REB 93-01 PC **A05**/MF **A02**

**EPA-68-02-4454**
Global Geochemistry Corp., Canoga Park, CA.
PB93-144152/REB 93-01 PC **A12**/MF **A03**

**EPA-68-02-4456**
Environmental Health Research and Testing, Inc., Research Triangle Park, NC.
PB93-141372/REB 93-01 PC **A02**/MF **A01**
PB93-173151/REB 93-01 PC **A02**/MF **A01**
PB93-228955/REB 93-04 PC **A02**/MF **A01**
North Carolina Univ. at Chapel Hill.
PB93-236677/REB 93-04 PC **A03**/MF **A01**

**EPA-68-02-4462**
Engineering-Science, Fairfax, VA.
PB93-199123/REB 93-01 PC **A06**/MF **A02**
Entropy Environmentalists, Inc., Research Triangle Park, NC.
PB93-199115/REB 93-01 PC **A03**/MF **A01**
Research Triangle Inst., Research Triangle Park, NC.
PB93-199362/REB 93-01 PC **A04**/MF **A01**

**EPA-68-02-4463**
Midwest Research Inst., Kansas City, MO.
PB93-144145/REB 93-01 PC **A04**/MF **A01**

**EPA-68-02-4544**
Research Triangle Inst., Research Triangle Park, NC.
PB93-119865/REB 93-01 PC **A03**/MF **A01**
PB93-212314/REB 93-04 PC **A03**/MF **A01**
PB93-212330/REB 93-04 PC **A02**/MF **A01**
PB93-229789/REB 93-04 PC **A14**/MF **A03**

**EPA-68-02-4550**
Research Triangle Inst., Research Triangle Park, NC.
PB93-119907/REB 93-01 PC **A03**/MF **A01**
PB93-121010/REB 93-01 PC **A03**/MF **A01**
PB93-216570/REB 93-04 PC **A03**/MF **A01**
PB93-218576/REB 93-04 PC **A05**/MF **A02**
PB93-221653/REB 93-04 PC **A07**/MF **A02**

**EPA-68-02-4701**
Acurex Environmental Corp., Research Triangle Park, NC.
PB93-181600/REB 93-01 PC **A04**/MF **A01**
Arizona Univ., Tucson. Dept. of Chemical Engineering.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

**EPA-68-03-3112**
Environmental Monitoring and Services, Inc., Washington, DC.
PB93-201192/REB 93-01 PC **A03**/MF **A01**
PB93-201200/REB 93-01 PC **A03**/MF **A01**
PB93-201218/REB 93-01 PC **A03**/MF **A01**
PB93-201226/REB 93-01 PC **A03**/MF **A01**
PB93-201234/REB 93-01 PC **A03**/MF **A01**
PB93-201242/REB 93-01 PC **A03**/MF **A01**
PB93-201259/REB 93-01 PC **A03**/MF **A01**
PB93-201267/REB 93-01 PC **A03**/MF **A01**
PB93-201275/REB 93-01 PC **A03**/MF **A01**
PB93-201283/REB 93-01 PC **A03**/MF **A01**
PB93-201291/REB 93-01 PC **A03**/MF **A01**
PB93-202257/REB 93-01 PC **A03**/MF **A01**
PB93-202265/REB 93-01 PC **A03**/MF **A01**
PB93-202273/REB 93-01 PC **A03**/MF **A01**
PB93-202281/REB 93-01 PC **A03**/MF **A01**
PB93-202299/REB 93-01 PC **A03**/MF **A01**
PB93-202307/REB 93-01 PC **A03**/MF **A01**
PB93-202315/REB 93-01 PC **A03**/MF **A01**
PB93-202323/REB 93-01 PC **A03**/MF **A01**
PB93-202331/REB 93-01 PC **A03**/MF **A01**
PB93-202349/REB 93-01 PC **A03**/MF **A01**
PB93-204584/REB 93-01 PC **A03**/MF **A01**
Syracuse Research Corp., NY.
PB93-181626/REB 93-01 PC **A03**/MF **A01**
PB93-181634/REB 93-01 PC **A03**/MF **A01**
PB93-181642/REB 93-01 PC **A03**/MF **A01**
PB93-181659/REB 93-01 PC **A03**/MF **A01**
PB93-181667/REB 93-01 PC **A03**/MF **A01**
PB93-184851/REB 93-01 PC **A03**/MF **A01**
PB93-184869/REB 93-01 PC **A03**/MF **A01**
PB93-184877/REB 93-01 PC **A03**/MF **A01**
PB93-184885/REB 93-01 PC **A03**/MF **A01**
PB93-184893/REB 93-01 PC **A03**/MF **A01**
PB93-184901/REB 93-01 PC **A03**/MF **A01**
PB93-184919/REB 93-01 PC **A03**/MF **A01**
PB93-184927/REB 93-01 PC **A03**/MF **A01**
PB93-184935/REB 93-01 PC **A03**/MF **A01**
PB93-184943/REB 93-01 PC **A03**/MF **A01**
PB93-184976/REB 93-01 PC **A03**/MF **A01**
PB93-184984/REB 93-01 PC **A03**/MF **A01**
PB93-184992/REB 93-01 PC **A03**/MF **A01**
PB93-185007/REB 93-01 PC **A03**/MF **A01**
PB93-185015/REB 93-01 PC **A03**/MF **A01**
PB93-185023/REB 93-01 PC **A03**/MF **A01**
PB93-185031/REB 93-01 PC **A03**/MF **A01**
PB93-185049/REB 93-01 PC **A03**/MF **A01**
PB93-185056/REB 93-01 PC **A03**/MF **A01**
PB93-185064/REB 93-01 PC **A03**/MF **A01**
PB93-185072/REB 93-01 PC **A03**/MF **A01**
PB93-185080/REB 93-01 PC **A03**/MF **A01**
PB93-185098/REB 93-01 PC **A03**/MF **A01**
PB93-185106/REB 93-01 PC **A03**/MF **A01**
PB93-185114/REB 93-01 PC **A03**/MF **A01**
PB93-185122/REB 93-01 PC **A03**/MF **A01**
PB93-185130/REB 93-01 PC **A03**/MF **A01**
PB93-185148/REB 93-01 PC **A03**/MF **A01**
PB93-185155/REB 93-01 PC **A03**/MF **A01**
PB93-185163/REB 93-01 PC **A03**/MF **A01**
PB93-185171/REB 93-01 PC **A03**/MF **A01**
PB93-185189/REB 93-01 PC **A03**/MF **A01**
PB93-185197/REB 93-01 PC **A03**/MF **A01**
PB93-185205/REB 93-01 PC **A03**/MF **A01**
PB93-185213/REB 93-01 PC **A03**/MF **A01**
PB93-185221/REB 93-01 PC **A03**/MF **A01**
PB93-185239/REB 93-01 PC **A03**/MF **A01**
PB93-185247/REB 93-01 PC **A03**/MF **A01**
PB93-185254/REB 93-01 PC **A03**/MF **A01**
PB93-185262/REB 93-01 PC **A03**/MF **A01**
PB93-185270/REB 93-01 PC **A03**/MF **A01**
PB93-185288/REB 93-01 PC **A03**/MF **A01**
PB93-185296/REB 93-01 PC **A03**/MF **A01**
PB93-185304/REB 93-01 PC **A03**/MF **A01**
PB93-185312/REB 93-01 PC **A03**/MF **A01**
PB93-185320/REB 93-01 PC **A03**/MF **A01**
PB93-185338/REB 93-01 PC **A03**/MF **A01**
PB93-185346/REB 93-01 PC **A03**/MF **A01**
PB93-185353/REB 93-01 PC **A03**/MF **A01**
PB93-185361/REB 93-01 PC **A03**/MF **A01**
PB93-185379/REB 93-01 PC **A03**/MF **A01**
PB93-185387/REB 93-01 PC **A03**/MF **A01**
PB93-185395/REB 93-01 PC **A03**/MF **A01**
PB93-185403/REB 93-01 PC **A03**/MF **A01**
PB93-185411/REB 93-01 PC **A03**/MF **A01**
PB93-185429/REB 93-01 PC **A03**/MF **A01**
PB93-190478/REB 93-01 PC **A03**/MF **A01**
PB93-190486/REB 93-01 PC **A03**/MF **A01**
PB93-190494/REB 93-01 PC **A03**/MF **A01**
PB93-190502/REB 93-01 PC **A03**/MF **A01**
PB93-190510/REB 93-01 PC **A03**/MF **A01**
PB93-190528/REB 93-01 PC **A03**/MF **A01**
PB93-190536/REB 93-01 PC **A03**/MF **A01**
PB93-190544/REB 93-01 PC **A03**/MF **A01**
PB93-190569/REB 93-01 PC **A03**/MF **A01**
PB93-190577/REB 93-01 PC **A03**/MF **A01**
PB93-192326/REB 93-01 PC **A03**/MF **A01**
PB93-192334/REB 93-01 PC **A03**/MF **A01**
PB93-192342/REB 93-01 PC **A03**/MF **A01**
PB93-192359/REB 93-01 PC **A03**/MF **A01**
PB93-192367/REB 93-01 PC **A03**/MF **A01**
PB93-192375/REB 93-01 PC **A03**/MF **A01**
PB93-193589/REB 93-01 PC **A03**/MF **A01**
PB93-193597/REB 93-01 PC **A03**/MF **A01**
PB93-193605/REB 93-01 PC **A03**/MF **A01**
PB93-193613/REB 93-01 PC **A03**/MF **A01**
PB93-194249/REB 93-01 PC **A03**/MF **A01**
PB93-194256/REB 93-01 PC **A03**/MF **A01**
PB93-194264/REB 93-01 PC **A03**/MF **A01**
PB93-194272/REB 93-01 PC **A03**/MF **A01**
PB93-194280/REB 93-01 PC **A03**/MF **A01**
PB93-194298/REB 93-01 PC **A03**/MF **A01**
PB93-194306/REB 93-01 PC **A03**/MF **A01**
PB93-194314/REB 93-01 PC **A03**/MF **A01**
PB93-194322/REB 93-01 PC **A03**/MF **A01**
PB93-196301/REB 93-01 PC **A03**/MF **A01**
PB93-196319/REB 93-01 PC **A03**/MF **A01**
PB93-196327/REB 93-01 PC **A03**/MF **A01**
PB93-196335/REB 93-01 PC **A03**/MF **A01**
PB93-196343/REB 93-01 PC **A03**/MF **A01**
PB93-196350/REB 93-01 PC **A03**/MF **A01**
PB93-196368/REB 93-01 PC **A03**/MF **A01**
PB93-196376/REB 93-01 PC **A03**/MF **A01**
PB93-196384/REB 93-01 PC **A03**/MF **A01**
PB93-196392/REB 93-01 PC **A03**/MF **A01**
PB93-196400/REB 93-01 PC **A03**/MF **A01**
PB93-196418/REB 93-01 PC **A03**/MF **A01**
PB93-196426/REB 93-01 PC **A03**/MF **A01**
PB93-196434/REB 93-01 PC **A03**/MF **A01**
PB93-196442/REB 93-01 PC **A03**/MF **A01**
PB93-196459/REB 93-01 PC **A03**/MF **A01**
PB93-196467/REB 93-01 PC **A03**/MF **A01**
PB93-196475/REB 93-01 PC **A03**/MF **A01**
PB93-196483/REB 93-01 PC **A03**/MF **A01**
PB93-196491/REB 93-01 PC **A03**/MF **A01**
PB93-196509/REB 93-01 PC **A03**/MF **A01**
PB93-196517/REB 93-01 PC **A03**/MF **A01**
PB93-196525/REB 93-01 PC **A03**/MF **A01**
PB93-196533/REB 93-01 PC **A03**/MF **A01**
PB93-196541/REB 93-01 PC **A03**/MF **A01**
PB93-196558/REB 93-01 PC **A03**/MF **A01**
PB93-196566/REB 93-01 PC **A03**/MF **A01**
PB93-196574/REB 93-01 PC **A03**/MF **A01**
PB93-196582/REB 93-01 PC **A03**/MF **A01**
PB93-196590/REB 93-01 PC **A03**/MF **A01**
PB93-196608/REB 93-01 PC **A03**/MF **A01**

**EPA-68-03-3116**
AQUA TERRA Consultants, Mountain View, CA.
PB93-106888/REB 93-01 PC **A03**/MF **A01**

# CONTRACT/GRANT NUMBER INDEX


**EPA-68-03-3182**
Environmental Monitoring and Services, Inc., Washington, DC.
PB93-201192/REB 93-01 PC A03/MF A01
PB93-201200/REB 93-01 PC A03/MF A01
PB93-201218/REB 93-01 PC A03/MF A01
PB93-201226/REB 93-01 PC A03/MF A01
PB93-201234/REB 93-01 PC A03/MF A01
PB93-201242/REB 93-01 PC A03/MF A01
PB93-201259/REB 93-01 PC A03/MF A01
PB93-201267/REB 93-01 PC A03/MF A01
PB93-201275/REB 93-01 PC A03/MF A01
PB93-201283/REB 93-01 PC A03/MF A01
PB93-201291/REB 93-01 PC A03/MF A01
PB93-202257/REB 93-01 PC A03/MF A01
PB93-202265/REB 93-01 PC A03/MF A01
PB93-202273/REB 93-01 PC A03/MF A01
PB93-202281/REB 93-01 PC A03/MF A01
PB93-202299/REB 93-01 PC A03/MF A01
PB93-202307/REB 93-01 PC A03/MF A01
PB93-202315/REB 93-01 PC A03/MF A01
PB93-202323/REB 93-01 PC A03/MF A01
PB93-202331/REB 93-01 PC A03/MF A01
PB93-202349/REB 93-01 PC A03/MF A01
PB93-204584/REB 93-01 PC A03/MF A01
Syracuse Research Corp., NY.
PB93-181626/REB 93-01 PC A03/MF A01
PB93-181634/REB 93-01 PC A03/MF A01
PB93-181642/REB 93-01 PC A03/MF A01
PB93-181659/REB 93-01 PC A03/MF A01
PB93-181667/REB 93-01 PC A03/MF A01
PB93-184851/REB 93-01 PC A03/MF A01
PB93-184869/REB 93-01 PC A03/MF A01
PB93-184877/REB 93-01 PC A03/MF A01
PB93-184885/REB 93-01 PC A03/MF A01
PB93-184893/REB 93-01 PC A03/MF A01
PB93-184901/REB 93-01 PC A03/MF A01
PB93-184919/REB 93-01 PC A03/MF A01
PB93-184927/REB 93-01 PC A03/MF A01
PB93-184935/REB 93-01 PC A03/MF A01
PB93-184943/REB 93-01 PC A03/MF A01
PB93-184976/REB 93-01 PC A03/MF A01
PB93-184984/REB 93-01 PC A03/MF A01
PB93-184992/REB 93-01 PC A03/MF A01
PB93-185007/REB 93-01 PC A03/MF A01
PB93-185015/REB 93-01 PC A03/MF A01
PB93-185023/REB 93-01 PC A03/MF A01
PB93-185031/REB 93-01 PC A03/MF A01
PB93-185049/REB 93-01 PC A03/MF A01
PB93-185056/REB 93-01 PC A03/MF A01
PB93-185064/REB 93-01 PC A03/MF A01
PB93-185072/REB 93-01 PC A03/MF A01
PB93-185080/REB 93-01 PC A03/MF A01
PB93-185098/REB 93-01 PC A03/MF A01
PB93-185106/REB 93-01 PC A03/MF A01
PB93-185114/REB 93-01 PC A03/MF A01
PB93-185122/REB 93-01 PC A03/MF A01
PB93-185130/REB 93-01 PC A03/MF A01
PB93-185148/REB 93-01 PC A03/MF A01
PB93-185155/REB 93-01 PC A03/MF A01
PB93-185163/REB 93-01 PC A03/MF A01
PB93-185171/REB 93-01 PC A03/MF A01
PB93-185189/REB 93-01 PC A03/MF A01
PB93-185197/REB 93-01 PC A03/MF A01
PB93-185205/REB 93-01 PC A03/MF A01
PB93-185213/REB 93-01 PC A03/MF A01
PB93-185221/REB 93-01 PC A03/MF A01
PB93-185239/REB 93-01 PC A03/MF A01
PB93-185247/REB 93-01 PC A03/MF A01
PB93-185254/REB 93-01 PC A03/MF A01
PB93-185262/REB 93-01 PC A03/MF A01
PB93-185270/REB 93-01 PC A03/MF A01
PB93-185288/REB 93-01 PC A03/MF A01
PB93-185296/REB 93-01 PC A03/MF A01
PB93-185304/REB 93-01 PC A03/MF A01
PB93-185312/REB 93-01 PC A03/MF A01
PB93-185320/REB 93-01 PC A03/MF A01
PB93-185338/REB 93-01 PC A03/MF A01
PB93-185346/REB 93-01 PC A03/MF A01
PB93-185353/REB 93-01 PC A03/MF A01
PB93-185361/REB 93-01 PC A03/MF A01
PB93-185379/REB 93-01 PC A03/MF A01
PB93-185387/REB 93-01 PC A03/MF A01
PB93-185395/REB 93-01 PC A03/MF A01
PB93-185403/REB 93-01 PC A03/MF A01
PB93-185411/REB 93-01 PC A03/MF A01
PB93-185429/REB 93-01 PC A03/MF A01
PB93-190478/REB 93-01 PC A03/MF A01
PB93-190486/REB 93-01 PC A03/MF A01
PB93-190494/REB 93-01 PC A03/MF A01
PB93-190502/REB 93-01 PC A03/MF A01
PB93-190510/REB 93-01 PC A03/MF A01
PB93-190528/REB 93-01 PC A03/MF A01
PB93-190536/REB 93-01 PC A03/MF A01
PB93-190544/REB 93-01 PC A03/MF A01
PB93-190569/REB 93-01 PC A03/MF A01
PB93-190577/REB 93-01 PC A03/MF A01
PB93-192326/REB 93-01 PC A03/MF A01
PB93-192334/REB 93-01 PC A03/MF A01
PB93-192342/REB 93-01 PC A03/MF A01
PB93-192359/REB 93-01 PC A03/MF A01
PB93-192367/REB 93-01 PC A03/MF A01
PB93-192375/REB 93-01 PC A03/MF A01
PB93-193589/REB 93-01 PC A03/MF A01
PB93-193597/REB 93-01 PC A03/MF A01
PB93-193605/REB 93-01 PC A03/MF A01
PB93-193613/REB 93-01 PC A03/MF A01
PB93-194249/REB 93-01 PC A03/MF A01
PB93-194256/REB 93-01 PC A03/MF A01
PB93-194264/REB 93-01 PC A03/MF A01
PB93-194272/REB 93-01 PC A03/MF A01
PB93-194280/REB 93-01 PC A03/MF A01
PB93-194298/REB 93-01 PC A03/MF A01
PB93-194306/REB 93-01 PC A03/MF A01
PB93-194314/REB 93-01 PC A03/MF A01
PB93-194322/REB 93-01 PC A03/MF A01
PB93-196301/REB 93-01 PC A03/MF A01
PB93-196319/REB 93-01 PC A03/MF A01
PB93-196327/REB 93-01 PC A03/MF A01
PB93-196335/REB 93-01 PC A03/MF A01
PB93-196343/REB 93-01 PC A03/MF A01
PB93-196350/REB 93-01 PC A03/MF A01
PB93-196368/REB 93-01 PC A03/MF A01
PB93-196376/REB 93-01 PC A03/MF A01
PB93-196384/REB 93-01 PC A03/MF A01
PB93-196392/REB 93-01 PC A03/MF A01
PB93-196400/REB 93-01 PC A03/MF A01
PB93-196418/REB 93-01 PC A03/MF A01
PB93-196426/REB 93-01 PC A03/MF A01
PB93-196434/REB 93-01 PC A03/MF A01
PB93-196442/REB 93-01 PC A03/MF A01
PB93-196459/REB 93-01 PC A03/MF A01
PB93-196467/REB 93-01 PC A03/MF A01
PB93-196475/REB 93-01 PC A03/MF A01
PB93-196483/REB 93-01 PC A03/MF A01
PB93-196491/REB 93-01 PC A03/MF A01
PB93-196509/REB 93-01 PC A03/MF A01
PB93-196517/REB 93-01 PC A03/MF A01
PB93-196525/REB 93-01 PC A03/MF A01
PB93-196533/REB 93-01 PC A03/MF A01
PB93-196541/REB 93-01 PC A03/MF A01
PB93-196558/REB 93-01 PC A03/MF A01
PB93-196566/REB 93-01 PC A03/MF A01
PB93-196574/REB 93-01 PC A03/MF A01
PB93-196582/REB 93-01 PC A03/MF A01
PB93-196590/REB 93-01 PC A03/MF A01
PB93-196608/REB 93-01 PC A03/MF A01
**EPA-68-03-3225**
A.S.L. and Associates, Helena, MT.
PB93-191534/REB 93-01 PC A02/MF A01
**EPA-68-03-3319**
Battelle Pacific Northwest Labs., Richland, WA.
PB93-206977/REB 93-04 PC A07/MF A02
**EPA-68-03-3365**
Energy and Environmental Research Corp., Durham, NC.
PB93-131613/REB 93-01 PC A03/MF A01
**EPA-68-03-3409**
Camp, Dresser and McKee, Inc., Cambridge, MA.
PB93-100154/REB 93-01 PC A04/MF A01
PB93-131514/REB 93-01 PC A03/MF A01
CDM Federal Programs Corp., Fairfax, VA.
PB93-185775/REB 93-01 PC A03/MF A01
PB93-185783/REB 93-01 PC A03/MF A01
**EPA-68-03-3474**
Radian Corp., Sacramento, CA.
PB93-208007/REB 93-04 PC A18/MF A04
**EPA-68-03-3479**
Technical Resources, Inc., Gulf Breeze, FL.
PB93-169027/REB 93-01 PC A02/MF A01
**EPA-68-03-3484**
PRC Environmental Management, Inc., McLean, VA.
PB93-172948/REB 93-01 PC A07/MF A02
**EPA-68-03-3490**
PEER Consultants, Inc., Dayton, OH.
PB93-116291/REB 93-01 PC A05/MF A01
**EPA-68-03-3513**
AQUA TERRA Consultants, Mountain View, CA.
PB93-185536/REB 93-01 PC A11/MF A03
PB93-217784/REB 93-04 PC A07/MF A02
Woodward-Clyde Consultants, Oakland, CA.
PB93-186252/REB 93-01 PC A07/MF A02
**EPA-68-03-3529**
Science Applications International Corp., Narragansett, RI.
PB93-229334/REB 93-04 PC A03/MF A01
**EPA-68-03-3532**
ManTech Environmental Technology, Inc., Corvallis, OR.
PB93-199446/REB 93-01 PC A03/MF A01
PB93-202851/REB 93-04 PC A06/MF A02
**EPA-68-03-4038**
Cincinnati Univ., OH. Dept. of Civil and Environmental Engineering.
PB93-121127/REB 93-01 PC A03/MF A01
**EPA-68-03-6304**
AQUA TERRA Consultants, Mountain View, CA.
PB93-131464/REB 93-01 PC A04/MF A01
Woodward-Clyde Consultants, Oakland, CA.
PB93-186252/REB 93-01 PC A07/MF A02
**EPA-68-C0-0003**
Battelle Columbus Labs., OH.
PB93-139681/REB 93-01 PC A07/MF A02
PB93-194231/REB 93-01 PC A03/MF A01
Battelle, Columbus, OH.
PB93-100105/REB 93-04 PC A04/MF A01
PB93-127793/REB 93-01 PC A05/MF A01
PB93-218519/REB 93-04 PC A04/MF A01
PB93-237535/REB 93-04 PC A16/MF A03
**EPA-68-C0-0016**
Environmental Quality Management, Inc., Cincinnati, OH.
PB93-218568/REB 93-04 PC A05/MF A01
IT Corp., Cincinnati, OH.
PB93-180966/REB 93-01 PC A03/MF A01
**EPA-68-C0-0019**
AQUA TERRA Consultants, Mountain View, CA.
PB93-217784/REB 93-04 PC A07/MF A02
**EPA-68-C0-0043**
Syracuse Research Corp., NY.
PB93-222651/REB 93-04 PC A07/MF A02
PB93-222669/REB 93-04 PC A03/MF A01
PB93-222677/REB 93-04 PC A04/MF A01
PB93-222685/REB 93-04 PC A04/MF A01
PB93-222693/REB 93-04 PC A06/MF A02
PB93-222701/REB 93-04 PC A04/MF A01
PB93-222719/REB 93-04 PC A07/MF A02
PB93-222727/REB 93-04 PC A11/MF A03

**EPA-68-C0-0047**
PRC Environmental Management, Inc., Cincinnati, OH.
PB93-101152/REB 93-01 PC **A03**/MF **A01**

**EPA-68-C0-0048**
Science Applications International Corp., Buffalo, NY.
PB93-216067/REB 93-04 PC **A07**/MF **A02**
Science Applications International Corp., McLean, VA.
PB93-227122/REB 93-04 PC **A06**/MF **A02**
PB93-227130/REB 93-04 PC **A24**/MF **A04**
PB93-227148/REB 93-04 PC **A99**/MF **A06**
PB93-227155/REB 93-04 PC **A11**/MF **A03**

**EPA-68-C0-0049**
Lockheed Environmental Systems and Technologies Co., Las Vegas, NV.
PB93-203156/REB 93-04 PC **A03**/MF **A01**

**EPA-68-C0-0051**
AScI Corp., Newport, OR.
PB93-212454/REB 93-04 PC **A03**/MF **A01**
Oregon State Univ., Newport. Hatfield Marine Science Center.
PB93-185874/REB 93-01 PC **A03**/MF **A01**

**EPA-68-C0-0054**
AScI Corp., Athens, GA.
PB93-174027/REB 93-01 PC **A17**/MF **A04**

**EPA-68-C0-0068**
Hazen and Sawyer, Raleigh, NC.
PB93-105625/REB 93-01 PC **A05**/MF **A02**

**EPA-68-C0-0069**
Miller (Wade) Associates, Inc., Arlington, VA.
PB93-134377/REB 93-01 PC **A04**/MF **A01**

**EPA-68-C0-0080**
Eastern Research Group, Inc., Lexington, MA.
PB93-173979/REB 93-01 PC **A22**/MF **A04**

**EPA-68-C0-0082/C**
National Research Council, Washington, DC. Water Science and Technology Board.
PB93-146348/REB 93-01 PC **A03**/MF **A01**

**EPA-68-C0-0093**
Abt Associates, Inc., Cambridge, MA.
PB93-111540/REB 93-04 PC **A14**/MF **A03**

**EPA-68-C1-0005**
Florida Atlantic Univ., Boca Raton. Dept. of Ocean Engineering.
PB93-229714/REB 93-04 PC **A02**/MF **A01**
National Oceanic and Atmospheric Administration, Boulder, CO. Environmental Research Labs.
PB93-212777/REB 93-04 PC **A03**/MF **A01**
Science Applications International Corp., Narragansett, RI.
PB93-185833/REB 93-01 PC **A03**/MF **A01**
PB93-204949/REB 93-04 PC **A02**/MF **A01**
PB93-204964/REB 93-04 PC **A02**/MF **A01**
PB93-228518/REB 93-04 PC **A02**/MF **A01**
PB93-229334/REB 93-04 PC **A03**/MF **A01**
Science Applications International Corp., Newport, RI.
PB93-229706/REB 93-04 PC **A02**/MF **A01**
Southern California Coastal Water Research Project Authority, Long Beach.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

**EPA-68-C1-0018**
Pittsburgh Univ., PA. Dept. of Civil Engineering.
PB93-227197/REB 93-04 PC **A08**/MF **A02**

**EPA-68-C1-0030**
Eastern Research Group, Inc., Lexington, MA.
PB93-146918/REB 93-01 PC **A08**/MF **A02**

**EPA-68-C1-0059**
ICF International, Inc., Fairfax, VA.
PB93-216174/REB 93-04 PC **A10**/MF **A03**

**EPA-68-C1-0079**
Sierra Research, Inc., Sacramento, CA.
PB93-180875/REB 93-01 PC **A06**/MF **A02**

**EPA-68-C1-C079**
Faucett (Jack) Associates, Bethesda, MD.
PB93-190098/REB 93-01 PC **A11**/MF **A03**

**EPA-68-C-0006**
ManTech Environmental Technology, Inc., Corvallis, OR.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

**EPA-68-C8-0000**
ManTech Environmental Technology, Inc., Corvallis, OR.
PB93-141570/REB 93-01 PC **A03**/MF **A01**

**EPA-68-C8-0006**
Corvallis Environmental Research Lab., OR.
PB93-122398/REB 93-01 PC **A03**/MF **A01**
Geological Survey, Albany, NY.
PB93-150167/REB 93-01 PC **A03**/MF **A01**
Magee (Teresa K), Corvallis, OR.
PB93-212058/REB 93-04 PC **A09**/MF **A02**
ManTech Environmental Technology, Inc., Corvallis, OR.
PB93-135697/REB 93-01 PC **A03**/MF **A01**
PB93-146793/REB 93-01 PC **A09**/MF **A02**
PB93-191492/REB 93-01 PC **A02**/MF **A01**
PB93-191500/REB 93-01 PC **A03**/MF **A01**
PB93-191518/REB 93-01 PC **A03**/MF **A01**
PB93-191526/REB 93-01 PC **A03**/MF **A01**
PB93-199446/REB 93-01 PC **A03**/MF **A01**
PB93-202851/REB 93-04 PC **A06**/MF **A02**
PB93-212660/REB 93-04 PC **A02**/MF **A01**
PB93-229136/REB 93-04 PC **A07**/MF **A02**
NSI Technology Services Corp., Corvallis, OR.
PB93-121267/REB 93-01 PC **A02**/MF **A01**

**EPA-68-C8-0025**
ManTech Environmental Technology, Inc., Ada, OK.
PB93-222370/REB 93-04 PC **A02**/MF **A01**
PB93-228583/REB 93-04 PC **A02**/MF **A01**

**EPA-68-C8-0034**
Industrial Economics, Inc., Cambridge, MA.
PB93-105567/REB 93-01 PC **A09**/MF **A03**

**EPA-68-C8-0048**
Science Applications International Corp., Cincinnati, OH.
PB93-217651/REB 93-04 PC **A03**/MF **A01**

**EPA-68-C8-0058**
GeoTrans, Inc., Sterling, VA.
PB93-150217/REB 93-01 PC **A16**/MF **A03**
Oak Ridge National Lab., TN.
PB93-181188/REB 93-01 PC **A02**/MF **A01**

**EPA-68-C8-0062**
Environmental Protection Agency, Washington, DC. Sediment Oversight Technical Committee.
PB93-115186/REB 93-01 PC **A11**/MF **A03**
NATO Committee on the Challenges of Modern Society, Brussels (Belgium).
PB93-218238/REB 93-04 PC **A07**/MF **A02**
PB93-218246/REB 93-04 PC **A99**/MF **A06**
PB93-218253/REB 93-04 PC **A99**/MF **A06**
Science Applications International Corp., Cincinnati, OH.
PB93-121325/REB 93-01 PC **A02**/MF **A01**
PB93-121341/REB 93-01 PC **A03**/MF **A01**
PB93-126597/REB 93-01 PC **A03**/MF **A01**
PB93-146843/REB 93-01 PC **A04**/MF **A01**
PB93-146868/REB 93-01 PC **A03**/MF **A01**
PB93-146900/REB 93-01 PC **A03**/MF **A01**
Science Applications International Corp., McLean, VA.
PB93-194215/REB 93-01 PC **A02**/MF **A01**
Science Applications International Corp., Olympia, WA.
PB93-145605/REB 93-01 PC **A04**/MF **A01**
PB93-145613/REB 93-01 PC **A04**/MF **A01**
PB93-145670/REB 93-01 PC **A05**/MF **A01**
Science Applications International Corp., San Diego, CA.
PB93-203693/REB 93-04 PC **A07**/MF **A02**
PB93-203701/REB 93-04 PC **A04**/MF **A01**
PB93-236578/REB 93-04 PC **A04**/MF **A01**
Science Applications International Corp., Santa Ana, CA.
PB93-229011/REB 93-04 PC **A05**/MF **A01**

**EPA-68-C8-0066**
Science Applications International Corp., Falls Church, VA.
PB93-154730/REB 93-01 PC **A10**/MF **A03**
PB93-205508/REB 93-04 PC **A99**/MF **A06**

**EPA-68-C8-0084**
Eastern Research Group, Inc., Lexington, MA.
PB93-173979/REB 93-01 PC **A22**/MF **A04**
RCG/Hagler, Bailly and Co., Inc., Boulder, CO.
PB93-168797/REB 93-01 PC **A08**/MF **A02**
PB93-174613/REB 93-01 PC **A06**/MF **A02**

**EPA-68-C8-80006**
ManTech Environmental Technology, Inc., Corvallis, OR.
PB93-121275/REB 93-01 PC **A02**/MF **A01**

**EPA-68-C9-0033**
Alabama Univ. in Birmingham. Dept. of Civil Engineering.
PB93-131472/REB 93-01 PC **A05**/MF **A02**
Foster Wheeler Enviresponse, Inc., Edison, NJ.
PB93-121333/REB 93-01 PC **A03**/MF **A01**
Foster Wheeler Enviresponse, Inc., Livingston, NJ.
PB93-236560/REB 93-04 PC **A03**/MF **A01**

**EPA-68-C9-0036**
IT Corp., Cincinnati, OH.
PB93-131761/REB 93-01 PC **A02**/MF **A01**
PB93-168904/REB 93-01 PC **A02**/MF **A01**
PB93-194363/REB 93-01 PC **A02**/MF **A01**
PB93-199537/REB 93-01 PC **A02**/MF **A01**
PB93-205532/REB 93-04 PC **A09**/MF **A02**
PB93-212801/REB 93-04 PC **A03**/MF **A01**
IT Environmental Programs, Inc., Cincinnati, OH.
PB93-178259/REB 93-01 PC **A09**/MF **A02**

**EPA-68-C9-0037**
Little (Arthur D.), Inc., Cambridge, MA.
PB93-168805/REB 93-01 PC **A03**/MF **A01**

**EPA-68-C9-0038**
Acurex Environmental Corp., Jefferson, AR.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

**EPA-68-C9-0062**
Coast Guard, Washington, DC.
PB93-191377/REB 93-01 PC **A02**/MF **A01**

**EPA/68-CO-0003**
Battelle, Columbus, OH.
PB93-107266/REB 93-01 PC **A06**/MF **A02**
PB93-121317/REB 93-01 PC **A03**/MF **A01**
PB93-141026/REB 93-01 PC **A04**/MF **A01**
PB93-216562/REB 93-04 PC **A04**/MF **A01**

**EPA-68-CO-0019**
AQUA TERRA Consultants, Mountain View, CA.
PB93-217669/REB 93-04 PC **A12**/MF **A03**

**EPA-68-CO-0027**
Environmental Engineering Consultants, Norwich, VT.
PB93-131753/REB 93-01 PC **A02**/MF **A01**

**EPA-68-CO-0032**
Radian Corp., McLean, VA.
PB93-202612/REB 93-01 PC **A14**/MF **A03**
PB93-202620/REB 93-01 PC **A07**/MF **A02**

**EPA-68-CO-0047**
PRC Environmental Management, Inc., McLean, VA.
PB93-172948/REB 93-01 PC **A07**/MF **A02**

**EPA-68-CO-0048**
Science Applications International Corp., Cincinnati, OH.
PB93-122315/REB 93-01 PC **A03**/MF **A01**
Science Applications International Corp., Hackensack, NJ.
PB93-216596/REB 93-04 PC **A08**/MF **A02**
Science Applications International Corp., San Diego, CA.
PB93-115160/REB 93-01 PC **A09**/MF **A02**
PB93-115178/REB 93-01 PC **A15**/MF **A03**

**EPA-68-CO-0049**
Lockheed Engineering and Sciences Co., Inc., Las Vegas, NV. Environmental Programs Office.
PB93-100139/REB 93-01 PC **A13**/MF **A03**

**EPA-68-CO-0051**
AScI Corp., Narragansett, RI.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

**EPA-68-CO-0062**
Black and Veatch, Kansas City, MO.
PB93-101533/REB 93-01 PC **A10**/MF **A03**

**EPA-68-CO-0065**
Energy and Environmental Analysis, Inc., Arlington, VA.
PB93-174332/REB 93-01 PC **A05**/MF **A01**

**EPA-68-CO-0068**
GeoSyntec Consultants, Atlanta, GA.
PB93-179885/REB 93-01 PC **A05**/MF **A01**

**EPA-68-CO-0083**
Apogee Research, Inc., Bethesda, MD.
PB93-205581/REB 93-04 PC **A06**/MF **A02**

**EPA-68-CO-0094**
Energy and Environmental Research Corp., Irvine, CA.
PB93-185742/REB 93-01 PC **A02**/MF **A01**
PB93-191294/REB 93-01 PC **A07**/MF **A02**

**EPA-68-D0-0007**
Battelle Columbus Labs., OH.
PB93-172930/REB 93-01 PC **A05**/MF **A01**
Battelle, Columbus, OH.
PB93-204105/REB 93-04 PC **A02**/MF **A01**
PB93-228542/REB 93-04 PC **A02**/MF **A01**
Southwest Research Inst., San Antonio, TX.
PB93-229151/REB 93-04 PC **A03**/MF **A01**

**EPA-68-D0-0102**
Systems Applications International, San Rafael, CA.
PB93-234375/REB 93-04 PC **A11**/MF **A03**

**EPA-68-D0-0106**
IIT Research Inst., Chicago, IL.
PB93-168813/REB 93-01 PC **A03**/MF **A01**
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
PB93-212264/REB 93-04 PC **A02**/MF **A01**
Technion - Israel Inst. of Tech., Haifa.
PB93-229177/REB 93-04 PC **A03**/MF **A01**

**EPA-68-D0-0120**
OMNI Environmental Services, Inc., Beaverton, OR.
PB93-173078/REB 93-01 PC **A03**/MF **A01**
Pechan (E.H.) and Associates, Inc., Durham, NC.
PB93-236107/REB 93-04 PC **A07**/MF **A02**
PB93-236115/REB 93-04 PC **A06**/MF **A02**

**EPA-68-D0-0121**
TRC Environmental Corp., Chapel Hill, NC.
PB93-124667/REB 93-01 PC **A03**/MF **A01**

**EPA-68-D0-0122**
Science Applications International Corp., Reston, VA.
PB93-169126/REB 93-01 PC **A13**/MF **A03**

# CONTRACT/GRANT NUMBER INDEX


**EPA-68-D0-0124**
Pacific Environmental Services, Inc., Herndon, VA.
PB93-122257/REB 93-01 PC A09/MF A03
PB93-173995/REB 93-01 PC A04/MF A01
Pacific Environmental Services, Inc., Research Triangle Park, NC.
PB93-210367/REB 93-04 PC A14/MF A03
PB93-226751/REB 93-04 PC A06/MF A02
PB93-226769/REB 93-04 PC A05/MF A01
PB93-226777/REB 93-04 PC A06/MF A02

**EPA-68-D0-0125**
Radian Corp., Research Triangle Park, NC.
PB93-122224/REB 93-01 PC A05/MF A01
PB93-150290/REB 93-01 PC A05/MF A01
PB93-212561/REB 93-04 PC A03/MF A01
PB93-216380/REB 93-04 PC A05/MF A01

**EPA-68-D0-0141**
Acurex Corp., Research Triangle Park, NC.
PB93-107027/REB 93-01 PC A02/MF A01
PB93-131654/REB 93-01 PC A02/MF A01
PB93-150100/REB 93-01 PC A02/MF A01
Acurex Environmental Corp., Research Triangle Park, NC.
PB93-107035/REB 93-01 PC A02/MF A01
PB93-131860/REB 93-01 PC A03/MF A01
PB93-173672/REB 93-01 PC A02/MF A01

**EPA-68-D0-0177**
VIGYAN, Inc., Falls Church, VA.
PB93-122422/REB 93-01 PC A07/MF A02

**EPA-68-D1-0009**
Research Triangle Inst., Research Triangle Park, NC.
PB93-131209/REB 93-01 PC A06/MF A02
PB93-173128/REB 93-01 PC A03/MF A01
PB93-210383/REB 93-04 PC A07/MF A02
PB93-212694/REB 93-04 PC A01/MF A01
PB93-218576/REB 93-04 PC A05/MF A02

**EPA-68-D1-0010**
Radian Corp., Austin, TX.
PB93-131704/REB 93-01 PC A03/MF A01
Radian Corp., Research Triangle Park, NC.
PB93-121085/REB 93-01 PC A02/MF A01
PB93-126589/REB 93-01 PC A05/MF A01
PB93-180691/REB 93-01 PC A03/MF A01
PB93-191419/REB 93-01 PC A03/MF A01
PB93-212181/REB 93-04 PC A13/MF A03
PB93-214419/REB 93-04 PC A05/MF A01
PB93-221893/REB 93-04 PC A03/MF A01
PB93-227163/REB 93-04 PC A11/MF A03
PB93-227171/REB 93-04 PC A12/MF A03

**EPA-68-D1-0010/006**
Radian Corp., Research Triangle Park, NC.
PB93-105518/REB 93-01 PC A06/MF A02

**EPA-68-D1-0013**
Radian Corp., Research Triangle Park, NC.
PB93-138865/REB 93-01 PC A06/MF A02

**EPA-68-D1-0031**
Radian Corp., Austin, TX.
PB93-212421/REB 93-04 PC A03/MF A01
Radian Corp., Research Triangle Park, NC.
PB93-131720/REB 93-01 PC A03/MF A01
PB93-212041/REB 93-04 PC A13/MF A03
PB93-222065/REB 93-04 PC A03/MF A01

**EPA-68-D1-0115**
Midwest Research Inst., Cary, NC.
PB93-156586/REB 93-01 PC A11/MF A03
PB93-186211/REB 93-01 PC A10/MF A03

**EPA-68-D1-0117**
Radian Corp., Research Triangle Park, NC.
PB93-138147/REB 93-01 PC A04/MF A01
PB93-212561/REB 93-04 PC A03/MF A01
PB93-229219/REB 93-04 PC A12/MF A03

**EPA-68-D1-0118**
Research Triangle Inst., Research Triangle Park, NC.
PB93-122307/REB 93-01 PC A03/MF A01

**EPA-68-D1-0125**
Radian Corp., Austin, TX.
PB93-206571/REB 93-04 PC A99/MF A06
Radian Corp., Research Triangle Park, NC.
PB93-206563/REB 93-04 PC A14/MF A03
PB93-206589/REB 93-04 PC A99/MF E06
PB93-207652/REB 93-04 PC A10/MF A03

**EPA-68-D1-0146**
Brookhaven National Lab., Upton, NY.
PB93-229144/REB 93-04 PC A03/MF A01
Pechan (E.H.) and Associates, Inc., Durham, NC.
PB93-212389/REB 93-04 PC A03/MF A01

**EPA-68-D1-0148**
Kentucky Univ., Lexington.
PB93-229557/REB 93-04 PC A02/MF A01

**EPA-68-D1-90016**
National Oceanic and Atmospheric Administration, Research Triangle Park, NC. Atmospheric Sciences Modeling Div.
PB93-212686/REB 93-04 PC A03/MF A01

**EPA-68-D2-0053**
Dynamac Corp., Rockville, MD.
PB93-209013/REB 93-04 PC A03/MF A01
PB93-209021/REB 93-04 PC A15/MF A03

**EPA-68-D2-0058**
Environmental Quality Management, Inc., Cincinnati, OH.
PB93-218501/REB 93-04 PC A07/MF A02
PB93-227551/REB 93-04 PC A06/MF A02

**EPA-68-D2-0131**
ICF, Inc., Fairfax, VA.
PB93-209989/REB 93-04 PC A16/MF A03
PB93-209997/REB 93-04 PC A11/MF A03

**EPA-68-D2-0148**
Ascension Technology, Inc., Lincoln Center, MA.
PB93-212413/REB 93-04 PC A02/MF A01

**EPA-68-D2-0181**
TRC Environmental Corp., Chapel Hill, NC.
PB93-229862/REB 93-04 PC A04/MF A01

**EPA-68-D6-0002**
IIT Research Inst., Chicago, IL.
PB93-121051/REB 93-01 PC A02/MF A01
PB93-168813/REB 93-01 PC A03/MF A01

**EPA-68-D6-0085**
Cascadia Research Collective, Olympia, WA.
PB93-121820/REB 93-01 PC A06/MF A02
Rensel Associates, Seattle, WA.
PB93-119576/REB 93-01 PC A06/MF A02

**EPA-68-D9-0054/2-56**
Radian Corp., Research Triangle Park, NC.
PB93-105518/REB 93-01 PC A06/MF A02

**EPA-68-D9-0066**
Systems Applications International, San Rafael, CA.
PB93-126571/REB 93-01 PC A05/MF A01
PB93-217412/REB 93-04 PC A23/MF A04

**EPA-68-D9-0067**
Sigma Research Corp., Concord, MA.
PB93-188233/REB 93-01 PC A06/MF A02
PB93-223592/REB 93-04 PC A06/MF A02

**EPA-68-D9-0131**
Acurex Environmental Corp., Mountain View, CA.
PB93-142016/REB 93-01 PC A18/MF A04
Technion - Israel Inst. of Tech., Haifa.
PB93-229177/REB 93-04 PC A03/MF A01

**EPA-68-D9-0166**
Little (Arthur D.), Inc., Cambridge, MA.
PB93-134096/REB 93-01 PC A09/MF A02
Old Dominion Univ., Norfolk, VA. Dept. of Chemistry and Biochemistry.
PB93-175040/REB 93-01 PC A04/MF A01
Science Applications International Corp., Narragansett, RI.
PB93-185833/REB 93-01 PC A03/MF A01

**EPA-68-D9-0168**
Pechan (E.H.) and Associates, Inc., Durham, NC.
PB93-131456/REB 93-01 PC A03/MF A01

**EPA-68-D9-0169**
Abt Associates, Inc., Cambridge, MA.
PB93-175784/REB 93-01 PC A10/MF A03

**EPA-68-D9-0173**
Alliance Technologies Corp., Chapel Hill, NC.
PB93-106623/REB 93-01 PC A05/MF A01
Science Applications International Corp., Durham, NC.
PB93-107001/REB 93-01 PC A03/MF A01
PB93-181592/REB 93-01 PC A06/MF A02
PB93-212546/REB 93-04 PC A03/MF A01
PB93-212553/REB 93-04 PC A03/MF A01
TRC Environmental Corp., Chapel Hill, NC.
PB93-127801/REB 93-01 PC A06/MF A02
PB93-135663/REB 93-01 PC A07/MF A02
PB93-199248/REB 93-01 PC A04/MF A01

**EPA-68D00121**
TRC Environmental Corp., Chapel Hill, NC.
PB93-131498/REB 93-01 PC A05/MF A01

**EPA-68D00123**
Pacific Environmental Services, Inc., Durham, NC.
PB93-122265/REB 93-01 PC A15/MF A03

**EPA-68-D00124**
Pacific Environmental Services, Inc., Research Triangle Park, NC.
PB93-216885/REB 93-04 PC A04/MF A01
Systems Applications International, San Rafael, CA.
PB93-122380/REB 93-01 PC A99/MF A06

**EPA-68-D00125**
Radian Corp., Austin, TX.
PB93-210359/REB 93-04 PC A20/MF A04

**EPA-68D9066**
Systems Applications International, San Rafael, CA.
PB93-122380/REB 93-01 PC A99/MF A06

**EPA-68-D10009**
Research Triangle Inst., Research Triangle Park, NC. Center for Environmental Measurements and Quality Assurance.
PB93-216604/REB 93-04 PC A06/MF A02
PB93-216612/REB 93-04 PC A05/MF A02

**EPA-68-D10010**
Radian Corp., Morrisville, NC.
PB93-105542/REB 93-01 PC A05/MF A01

**EPA-68D20056**
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
PB93-228989/REB 93-04 PC A02/MF A01

**EPA-68-D90054**
Radian Corp., Morrisville, NC.
PB93-105542/REB 93-01 PC A05/MF A01

**EPA-68D90067**
Sigma Research Corp., Concord, MA.
PB93-105559/REB 93-01 PC A10/MF A03
PB93-215663/REB 93-04 PC A08/MF A02

**EPA-68D90073**
Cambridge Systematics, Inc., MA.
PB93-185577/REB 93-01 PC A04/MF A01

**EPA-68-D90170**
Cohen (S.) and Associates, Inc., McLean, VA.
PB93-199321/REB 93-01 PC A14/MF A03

**EPA-68-DO-041**
Acurex Corp., Research Triangle Park, NC.
PB93-221992/REB 93-04 PC A02/MF A01

**EPA-68-DO-0097**
Scott (Arthur) and Associates, Mississauga (Ontario).
PB93-232114/REB 93-04 PC A03/MF A01

**EPA-68-DO-0106**
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
PB93-121077/REB 93-01 PC A02/MF A01

**EPA-68-DO-0110**
ABB Environmental Services, Inc., Chapel Hill, NC.
PB93-181006/REB 93-01 PC A02/MF A01
TRC Environmental Corp., Chapel Hill, NC.
PB93-175677/REB 93-01 PC A02/MF A01

**EPA-68-DO-0123**
Midwest Research Inst., Kansas City, MO.
PB93-122273/REB 93-01 PC A09/MF A03

**EPA-68-DO-0125**
Radian Corp., Austin, TX.
PB93-186807/REB 93-01 PC A06/MF A02
PB93-199214/REB 93-01 PC A06/MF A02
PB93-199222/REB 93-04 PC A05/MF A02
PB93-200913/REB 93-01 PC A14/MF A03
PB93-215622/REB 93-04 PC A04/MF A01
PB93-215630/REB 93-04 PC A04/MF A01
PB93-215648/REB 93-04 PC A03/MF A01
PB93-215655/REB 93-04 PC A04/MF A01

**EPA-68-DO-0128**
Bethlehem Steel Corp., PA.
PB93-191302/REB 93-01 PC A13/MF A03
PB93-191310/REB 93-01 PC A15/MF A03

**EPA-68-DO-0137**
Midwest Research Inst., Kansas City, MO.
PB93-150209/REB 93-01 PC A05/MF A01

**EPA-68-DO-0141**
Acurex Corp., Research Triangle Park, NC.
PB93-131852/REB 93-01 PC A02/MF A01
PB93-173144/REB 93-01 PC A02/MF A01
Acurex Environmental Corp., Research Triangle Park, NC.
PB93-106789/REB 93-01 PC A03/MF A01
PB93-106847/REB 93-01 PC A03/MF A01
PB93-172914/REB 93-01 PC A05/MF A01
PB93-194330/REB 93-01 PC A07/MF A02
PB93-199230/REB 93-01 PC A03/MF A01
PB93-205557/REB 93-04 PC A10/MF A03
PB93-222057/REB 93-04 PC A03/MF A01
Commission of the European Communities, Ispra (Italy). Environmental Inst.
PB93-222073/REB 93-04 PC A02/MF A01

**EPA-68-DO-6106**
Brookhaven National Lab., Upton, NY.
PB93-120970/REB 93-01 PC A02/MF A01

**EPA-68-W0-0039**
Booz-Allen and Hamilton, Inc., Bethesda, MD.
PB92-131374/REB 93-01 PC A07/MF A02

**EPA-68-W1-0009**
Industrial Economics, Inc., Cambridge, MA.
PB93-217636/REB 93-04 PC A04/MF A01

**EPA-68-W2-0011**
Computer Based Systems, Inc., Arlington, VA.
PB93-183440/REB 93-04 PC A05/MF A01
PB93-192755/REB 93-04 PC A05/MF A01

# CONTRACT/GRANT NUMBER INDEX




**EPA-68-W9-0080**
JACA Corp., Fort Washington, PA.
PB93-175776/REB 93-01 PC **A08**/MF **A02**

**EPA-68-W90065**
VIGYAN, Inc., Falls Church, VA.
PB93-236503/REB 93-04 PC **A17**/MF **A03**

**EPA-68-WI-0009**
RCG/Hagler, Bailly and Co., Inc., Boulder, CO.
PB93-154748/REB 93-01 PC **A09**/MF **A02**

**EPA-68-WO-0039**
Booz-Allen and Hamilton, Inc., Bethesda, MD.
PB93-159572/REB 93-01 PC **A05**/MF **A01**

**EPA-68-WO-0043**
Computer Sciences Corp., Cincinnati, OH.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

Computer Sciences Corp., Research Triangle Park, NC.
PB93-120913/REB 93-01 PC **A02**/MF **A01**

PB93-120921/REB 93-01 PC **A02**/MF **A01**

PB93-180925/REB 93-01 PC **A02**/MF **A01**

Virginia Inst. of Marine Science, Gloucester Point.
PB93-196665/REB 93-01 PC **A12**/MF **A03**

**EPA-69-DO-0141**
Acurex Environmental Corp., Research Triangle Park, NC.
PB93-141117/REB 93-01 PC **A02**/MF **A01**

**EPA-69-W9-0009**
PRC Environmental Management, Inc., Seattle, WA.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

**EPA-813530**
State Univ. of New York at Albany. Coll. of Environmental Science and Forestry.
PB93-199529/REB 93-01 PC **A02**/MF **A01**

**EPA-901909-01**
Waste Watch Center, Andover, MA.
PB93-170116/REB 93-01 PC **A99**/MF **A06**

**GRANTS NASA-UPN-16135-05-08**
Brookhaven National Lab., Upton, NY. Oceanographic and Atmospheric Sciences Div.
PB93-204923/REB 93-01 PC **A02**/MF **A01**

**H75-ATH90029**
Missouri Dept. of Health, Jefferson City.
PB93-148252/REB 93-01 PC **A08**/MF **A02**

**N00014-88-K-0093**
Illinois Univ. at Urbana-Champaign. Dept. of Veterinary Pathobiology.
PB93-168987/REB 93-01 PC **A02**/MF **A01**

**NA16RU0217-01**
Center of Marine Biotechnology, Baltimore, MD.
PB93-205086/REB 93-04 PC **A01**/MF **A01**

**NA86AA-D-56112**
Minnesota Univ., St. Paul. Dept. of Genetics and Cell Biology.
PB93-169076/REB 93-01 PC **A02**/MF **A01**

**NA89AA-D-SG139**
Environmental Research Lab., Gulf Breeze, FL.
PB93-169043/REB 93-01 PC **A03**/MF **A01**

Texas Univ. Medical Branch at Galveston. Marine Biomedical Inst.
PB93-168912/REB 93-01 PC **A02**/MF **A01**

**NA90AA-D-SG062**
North Carolina State Univ. at Raleigh. Sea Grant Coll. Program.
PB93-142420/REB 93-01 PC **A03**/MF **A01**

**NAG5-2062**
New Hampshire Univ., Durham.
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

**NIEHS-ES-04050-3**
Illinois Univ. at Chicago. Dept. of Microbiology and Immunology.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

**NIEHS-ES04050-06**
Illinois Univ. at the Medical Center, Chicago. Dept. of Microbiology and Immunology.
PB93-204972/REB 93-04 PC **A03**/MF **A01**

**NIEHS-ES-07266-02**
Kentucky Univ., Lexington.
PB93-229615/REB 93-04 PC **A02**/MF **A01**

**NIEHS-2-P30-ESO-2109-11**
Environmental Research Lab., Athens, GA.
PB93-222750/REB 93-04 PC **A03**/MF **A01**

**NIH-AI27450**
Texas A and M Univ., College Station. Dept. of Entomology.
PB93-168946/REB 93-01 PC **A02**

**NIH-AM-37098**
Georgia Univ., Athens. Dept. of Pharmacology and Toxicology.
PB93-180982/REB 93-01 PC **A02**/MF **A01**

**NIH-GM47552**
Texas A and M Univ., College Station. Dept. of Entomology.
PB93-168946/REB 93-01 PC **A02**

**NIH-HD-20068**
Tufts Univ., Boston, MA. Dept. of Anatomy and Cellular Biology.
PB93-194413/REB 93-01 PC **A03**/MF **A01**

**NIH-HD23511**
Calgary Univ. Health Sciences Centre (Alberta). Dept. of Medical Biochemistry.
PB93-194397/REB 93-01 PC **A03**/MF **A01**

**NIH-NS-18170**
ManTech Environmental Technology, Inc., Research Triangle Park, NC.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

**NOAA-NA170Z0359-01**
Virginia Inst. of Marine Science, Gloucester Point.
PB93-191120/REB 93-01 PC **A13**/MF **A03**

**NSF-BSR85-06417**
Environmental Research Lab., Gulf Breeze, FL.
PB93-169019/REB 93-01 PC **A02**/MF **A01**

**NSF-BSR90-09190**
Marine Biological Lab., Woods Hole, MA. Ecosystems Center.
PB93-141174/REB 93-01 PC **A02**/MF **A01**

**NSF-BSR-8806509**
Center of Marine Biotechnology, Baltimore, MD.
PB93-121176/REB 93-01 PC **A02**/MF **A01**

Saint Mary's Coll. of Maryland, St. Mary's City.
PB93-236230/REB 93-04 PC **A02**/MF **A01**

**NSF-BSR9020268**
Center of Marine Biotechnology, Baltimore, MD.
PB93-205060/REB 93-01 PC **A02**/MF **A01**

Maryland Biotechnology Inst., Baltimore.
PB93-205078/REB 93-04 PC **A02**/MF **A01**

**NSF-OCE89-15084**
Brookhaven National Lab., Upton, NY. Oceanographic and Atmospheric Sciences Div.
PB93-204931/REB 93-01 PC **A03**/MF **A01**

**NSF-USE90-50802**
Environmental Research Lab., Gulf Breeze, FL.
PB93-168938/REB 93-01 PC **A03**

**ONR-N00014-88-K-0093**
Minnesota Univ.-Duluth. Dept. of Biology.
PB93-121184/REB 93-01 PC **A02**/MF **A01**

**PHS-ES-04050-04**
Illinois Univ. at the Medical Center, Chicago. Dept. of Microbiology and Immunology.
PB93-205177/REB 93-04 PC **A02**/MF **A01**

PB93-205185/REB 93-04 PC **A02**/MF **A01**

**PHS-GM29909**
Cook Coll., New Brunswick, NJ. Center for Agricultural Molecular Biology.
PB93-229433/REB 93-04 PC **A03**/MF **A01**

**PTI-C704-1A**
Tetra Tech, Inc., Bellevue, WA.
PB93-181253/REB 93-01 PC **A05**/MF **A01**

**R-815546**
Hart-Crower Associates, Seattle, WA.
PB93-131746/REB 93-01 PC **A02**/MF **A01**

**R-817111**
Maryland Univ., College Park. Dept. of Mechanical Engineering.
PB93-131688/REB 93-01 PC **A03**/MF **A01**

**R-818321010**
North Carolina Univ. at Chapel Hill. Dept. of Psychology.
PB93-107217/REB 93-01 PC **A03**/MF **A01**

**T-91-01**
Tampa Bay Regional Planning Council, St. Petersburg, FL.
PB93-191237/REB 93-01 PC **A04**/MF **A01**

**T-91-06**
Coastal Environmental Services, Inc., Linthicum, MD.
PB93-191229/REB 93-01 PC **A04**/MF **A01**

**T-91-11**
Coastal Environmental Services, Inc., Linthicum, MD.
PB93-191633/REB 93-01 PC **A09**/MF **A03**

**T-91-12**
Coastal Environmental Services, Inc., Linthicum, MD.
PB93-191666/REB 93-01 PC **A05**/MF **A01**

Versar, Inc., Columbia, MD.
PB93-194694/REB 93-01 PC **A05**/MF **A01**

**USDA-88037263-3700**
Boyce Thompson Inst. for Plant Research, Ithaca, NY.
PB93-150175/REB 93-01 PC **A03**/MF **A01**

**VN08016CAS**
National Research Council, Washington, DC.
PB93-186393/REB 93-01 PC **A20**/MF **A04**

# NTIS ORDER/REPORT NUMBER INDEX

Entries in this index list the NTIS order number and the monitor agency numbers, each in its alphanumeric position. Please use the NTIS order number to order items available from NTIS to ensure faster service.

## SAMPLE ENTRY

| | |
|---|---|
| **NTIS Order Number** | **PB90-120072/HSU** |
| Title | Sensitivity of Ecological Landscapes and Regions to Global Climatic Change |
| NTIS Order Number/Media Code Price Codes | PB90-120072/HSU PC A09/MF A01 |
| **Sponsoring Organization Report Numbers(s)** | **EPA/600/3-89/073** |
| Title | Sensitivity of Ecological Landscapes and Regions to Global Climatic Change |
| NTIS Order Number/Media Code Price Codes | PB90-120072/HSU PC A09/MF A01 |

# NTIS ORDER/REPORT NUMBER INDEX

**AD-A258 623/8/REB**
Molecular Regulation of the Induction of Cytochrome P-450E in the Estuarine Fish Fundulus Heteroclitus.
AD-A258 623/8/REB 93-01 PC **A11**/MF **A03**

**AD-A267 517/1/REB**
Federal Consistency Guidance: Federal Consistency with State Nonpoint Source Management Programs.
AD-A267 517/1/REB 93-04 PC **A03**/MF **A01**

**AP-42-SUPPL-E**
Compilation of Air Pollutant Emission Factors. Volume 1. Stationary Point and Area Sources. Supplement E.
PB93-157105/REB 93-01 PC **A10**/MF **A03**

**ARB-R-93/462**
Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

**ATSDR/HS-93/21**
Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93-148252/REB 93-01 PC **A08**/MF **A02**

**AWBERC-91-09**
Always a River: Supplemental Environmental Education Curriculum on the Ohio River and Water Grades K-12.
PB93-200905/REB 93-01 PC **A14**/MF **A03**

**CBP/APR-92/100**
Chesapeake Bay Striped Bass Fishery Management Plan: Chesapeake Bay Program. Annual Progress Report (April 1992).
PB93-114585/REB 93-01 PC **A03**/MF **A01**

**CBP/APR-92/101**
Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans.
PB93-122182/REB 93-01 PC **A03**/MF **A01**

**CBP/APR-92/102**
Waterfowl Workgroup Living Resources Subcommittee: Annual Progress Report.
PB93-112704/REB 93-01 PC **A03**/MF **A01**

**CBP/APR-92/104**
Living Resources Monitoring Plan: Annual Progress Report.
PB93-116580/REB 93-01 PC **A03**/MF **A01**

**CBP/APR-92/105**
Chesapeake Bay Program Annual Progress Report, Wetlands Workgroup, December 1991.
PB93-136893/REB 93-01 PC **A03**/MF **A01**

**CBP/MAY-93/101**
Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans, December 1992.
PB93-226058/REB 93-04 PC **A04**/MF **A01**

**CBP/TRS-68/92**
Trends in Nitrogen in the Chesapeake Bay, 1984-1990.
PB93-122174/REB 93-01 PC **A04**/MF **A01**

**CBP/TRS-74/93**
Comparison of Mid-Bay and Lateral Station Water Quality Data in the Chesapeake Bay Mainstem: Chesapeake Bay Program.
PB93-208288/REB 93-04 PC **A05**/MF **A01**

**CBP/TRS-75/93**
Incorporating Uncertainty Associated with Censored Water Quality Data in Parametric Trend Analysis.
PB93-208262/REB 93-04 PC **A03**/MF **A01**

**CBP/TRS-76/93**
Chesapeake Bay Coordinated Split Sample Program Annual Report, 1990-1991: Analytical Methods and Quality Assurance Workgroup of the Chesapeake Bay Program Monitoring Subcommittee.
PB93-208270/REB 93-04 PC **A06**/MF **A02**

**CBP/TRS-78/92**
Guide to Using Chesapeake Bay Program Water Quality Monitoring Data.
PB93-205888/REB 93-04 PC **A07**/MF **A02**

**CBP/TRS-79/92**
Restoration of the Anacostia River.
PB93-136364/REB 93-01 PC **A05**/MF **A01**

**CBP/TRS-83/92**
Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC **A12**/MF **A03**

**CBP/TRS-85/93**
Baseline Point Source Load Inventory, 1985. 1991 Reevaluation Report No. 2.
PB93-193761/REB 93-01 PC **A03**/MF **A01**

**CBP/TRS-86/93**
Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Atmospheric Deposition of Critical Issue Forum. Held in Annapolis, Maryland on November 5, 1992.
PB93-193738/REB 93-01 PC **A03**/MF **A01**

**CBP/TRS-87/93**
Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Contaminated Sediments Critical Issue Forum. Held in Annapolis, Maryland on December 10, 1992.
PB93-194017/REB 93-01 PC **A03**/MF **A01**

**CBP/TRS-89/93**
Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11**/MF **A03**

**CBP/TRS-91/93**
Role and Function of Forest Buffers in the Chesapeake Bay Basin for Nonpoint Source Management.
PB93-207405/REB 93-04 PC **A03**/MF **A01**

**CCMS-190-VOL-1**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC **A07**/MF **A02**

**CCMS-190-VOL-2-PT-1**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 1: Pages 1 through 662.
PB93-218246/REB 93-04 PC **A99**/MF **A06**

**CCMS-190-VOL-2-PT-2**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 2: Pages 663 through 1389.
PB93-218253/REB 93-04 PC **A99**/MF **A06**

**CH-92-04**
Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC **A05**/MF **A01**

**CH-93-27**
Initial Assessment of Emissions from Heat Setting Carpet Yarn.
PB93-229862/REB 93-04 PC **A04**/MF **A01**

**CONTRIB-ERL-N-191**
Plume Definition in Regions of Strong Bending.
PB93-221844/REB 93-04 PC **A02**/MF **A01**

**CONTRIB-N-240**
Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11**/MF **A03**

**CONTRIB-30**
Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
PB93-205011/REB 93-04 PC **A02**/MF **A01**

**CONTRIB-196**
Isolation and Diversity of Actinomycetes in the Chesapeake Bay.
PB93-205060/REB 93-01 PC **A02**/MF **A01**

**CONTRIB-372**
Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03**/MF **A01**

**CONTRIB-737**
Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC **A03**/MF **A01**

**CONTRIB-738**
Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02**/MF **A01**

**CONTRIB-741**
Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03**/MF **A01**

**CONTRIB-745**
Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03**/MF **A01**

**CONTRIB-746**
Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204980/REB 93-01 PC **A03**/MF **A01**

**CONTRIB-751**
Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC **A23**/MF **A04**
Importance of Fish Diseases: An Overview.
PB93-204113/REB 93-01 PC **A03**/MF **A01**

**CONTRIB-753**
Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC **A03**/MF **A01**

**CONTRIB-763**
Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

**CONTRIB-765**
Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02**/MF **A01**

**CONTRIB-769**
Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC **A02**/MF **A01**

**CONTRIB-774**
Effects of 'Beauveria bassiana' on Embryos of the Inland Silverside Fish ('Menidia beryllina').
PB93-131811/REB 93-01 PC **A02**/MF **A01**

**CONTRIB-777**
Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

**CONTRIB-779**
Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02**/MF **A01**

**CONTRIB-780**
Observations on the State of Marine Disease Studies (Chapter 18).
PB93-204170/REB 93-01 PC **A03**/MF **A01**

**CONTRIB-790**
Selection of a 'Pseudomonas cepacia' Strain Constitutive for the Degradation of Trichloroethylene.
PB93-169027/REB 93-01 PC **A02**/MF **A01**

**CONTRIB-795**
Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

**CONTRIB-803**
Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02**/MF **A01**

**CONTRIB-1272**
Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC **A03**/MF **A01**

**CONTRIB-1326**
Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
PB93-228518/REB 93-04 PC **A02**/MF **A01**

**CRC-APRAC-ME-9**
Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

**DCN-89-245-076-02-02**
Analysis of Original Equipment and Aftermarket Manufacturer Oxygen Sensor Constructional, Functional, and Price Differences.
PB93-208007/REB 93-04 PC **A18**/MF **A04**

**DCN-91-293-052-03**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Measurements of Hydrocarbon Emissions and Ambient Air Concentrations at the Amoco Yorktown Refinery. Air Quality Data. Volume 1.
PB92-228592/REB 93-01 PC **A12**/MF **A03**

**DCN-92-203-164-04-09**
National Air Toxics Information Clearinghouse: NATICH Data Base Report of Federal, State, Local and EPA Air Toxics Activities.
PB93-206589/REB 93-04 PC **A99**/MF **E08**

**DCN-92-239-022-02-06**
Evaluation of Nitrogen Oxide Emissions Data from TVA Coal-Fired Boilers.
PB93-138865/REB 93-01 PC **A06**/MF **A02**

**DCN-92-239-026-12-07**
Evaluation of Two Methods for the Measurement of Mercury Emissions in Exhaust Gases from a Municipal Waste Combustor.
PB93-105542/REB 93-01 PC **A05**/MF **A01**

**DCN-93-239-026-85-02**
Protocol for Equipment Leak Emission Estimates.
PB93-229219/REB 93-04 PC **A12**/MF **A03**

**DE92019891/REB**
Measurements of electric and magnetic fields in the Waianae, Hawaii area.
DE92019891/REB 93-01 PC **A03**/MF **A01**

**DE92563057/REB**
Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC **A03**/MF **A01**

**DE92563058/REB**
Impact of fuels on diesel exhaust emissions. A chemical and biological characterization.
DE92563058/REB 93-01 PC **A08**/MF **A02**

**DE92563059/REB**
Measurements of total ozone.
DE92563059/REB 93-01 PC **A04**/MF **A01**

**DE92563060/REB**
Air monitoring in the Arctic: 1980-90.
DE92563060/REB 93-01 PC **A03**/MF **A01**

**DE92563061/REB**
Metal concentrations of the mor layer.
DE92563061/REB 93-01 PC **A05**/MF **A01**

**DE92643948/REB**
Radioecology in Nordic limnic systems - present knowledge and future prospects.
DE92643948/REB 93-01 PC **A04**/MF **A01**

**DE93014387/REB**
Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.
DE93014387/REB 93-04 PC **A03**/MF **A01**

**DE93500869/REB**
Foerbraenning av sorterat industriavfall. Huvudrapport. (Incineration of sorted industrial wastes. Main report).
DE93500869/REB 93-04 PC **A03**/MF **A01**

**DE93500872/REB**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
DE93500872/REB 93-04 PC **A03**/MF **A01**

# NTIS ORDER/REPORT NUMBER INDEX

**DE93500877/REB**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
DE93500877/REB 93-04 PC **A04**/MF **A01**

**DE93603681/REB**
Bladder-wrack (Fucus vesiculosus L) as an indicator for radionuclides in the environment of Swedish nuclear power plants.
DE93603681/REB 93-01 PC **A03**/MF **A01**

**DE93711212/REB**
Phasing out of CFCs in the electronics and engineering industries in Sweden.
DE93711212/REB 93-01 PC **A03**/MF **A01**

**DE93711213/REB**
Sanering av Jaemsjoen i Emaan. Huvudstudie. (Remediation of lake Jaemsjoen in the Emaan river. Main report).
DE93711213/REB 93-01 PC **A04**/MF **A01**

**DE93711214/REB**
Risk assessment, Health-Environment. A research programme during the period 1992/93-1994/95.
DE93711214/REB 93-01 PC **A03**/MF **A01**

**DE93721673/REB**
New technology for refrigeration and heating plants.
DE93721673/REB 93-01 PC **A03**/MF **A01**

**DE93721674/REB**
Greenhouse gases. Emissions and countermeasures in an international perspective.
DE93721674/REB 93-01 PC **A07**/MF **A02**

**DE93769990/REB**
Air pollutants in urban areas. A bibliography 1985-1991.
DE93769990/REB 93-01 PC **A04**/MF **A01**

**DE93778468/REB**
Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC **A04**/MF **A01**

**DE93778469/REB**
Release of PCB and mercury from fibre sediments.
DE93778469/REB 93-01 PC **A05**/MF **A01**

**DE93778470/REB**
Trace elements in agricultural soils. Fluxes, balances and background values.
DE93778470/REB 93-01 PC **A03**/MF **A01**

**DE93778471/REB**
Critical concentrations of heavy metals in the mor horizon of Swedish forests.
DE93778471/REB 93-01 PC **A03**/MF **A01**

**DE93778472/REB**
Heavy metal concentrations in agricultural soils critical to microorganisms.
DE93778472/REB 93-01 PC **A03**/MF **A01**

**DE93778473/REB**
Long-term forest fertilization experiments in Finland and Sweden - their use for vitality and nutrient balance studies.
DE93778473/REB 93-01 PC **A07**/MF **A02**

**DE93778474/REB**
Freshwater environmental monitoring in Sweden. Proposals from a working group.
DE93778474/REB 93-01 PC **A06**/MF **A02**

**DE93778475/REB**
Aatgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC **A14**/MF **A03**

**DE93778476/REB**
Recovery of CFCs from refrigeration equipment. Current processes.
DE93778476/REB 93-01 PC **A04**/MF **A01**

**EMSL-1435**
Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

**EPA/AA/CA/CPSB-90/01**
Formation and Control of Combustion Pollutants from Gasoline-Fueled Spark-Ignition Motor Vehicle Engines. (Revised November 1992).
PB93-141042/REB 93-01 PC **A04**/MF **A01**

**EPA/AA/CTAB-92/02**
Evaluation of Resistively Heated Fuel Injection Technology to Reduce Cold Start Emissions and Assist Starting/Driveaway of a Methanol-Fueled Vehicle.
PB93-144350/REB 93-01 PC **A03**/MF **A01**

**EPA/AA/CTAB-92/04**
Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03**/MF **A01**

**EPA/AA/EPSD-I/M-92-01**
Report on the EPA/Manufacturer Cooperative I/M Testing Program.
PB93-208015/REB 93-04 PC **A10**/MF **A03**

**EPA/AA/EVRB-92/01**
Development of Conversion Factors for Heavy-Duty Bus Engines G/BHP-HR to G/Mile.
PB93-232932/REB 93-04 PC **A03**/MF **A01**

**EPA/AA/TDG-92/06**
Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC **A03**/MF **A01**

**EPA/AA/TDG-93/01**
Light-Duty Automotive Technology and Fuel Economy Trends through 1993.
PB93-199255/REB 93-01 PC **A06**/MF **A02**

**EPA/AA/TDG-93/02A**
Cold Starting an Alcohol-Fueled Engine with Ultrasonic Fuel Atomization.
PB93-206597/REB 93-04 PC **A03**/MF **A01**

**EPA/AA/TDG-93/03**
Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.
PB93-216869/REB 93-04 PC **A03**/MF **A01**

**EPA/AA/TDG-93/04**
Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel - Final Report.
PB93-197929/REB 93-01 PC **A03**/MF **A01**

**EPA/AA/TDG-93/05**
Spray Characteristics of Two Types of Fuel Injectors.
PB93-180859/REB 93-01 PC **A03**/MF **A01**

**EPA/AA/TEB-92/01**
Emissions and Fuel Economy Effects of the Fuelon Power Gasoline Fuel Additive.
PB93-236701/REB 93-04 PC **A03**/MF **A01**

**EPA/AA/TEB-511/92/01**
EPA Evaluation of the Fuelon Power Gasoline Fuel Additive under Section 511 of the Motor Vehicle Information and Cost Savings Act.
PB93-236693/REB 93-04 PC **A03**/MF **A01**

**EPA/AA/TETSB-93/01**
Heavy-Duty Engine Testing Report Non-Road Engine Configurations Injection Timing Effects Test Results, 1992.
PB93-236164/REB 93-04 PC **A05**/MF **A01**

**EPA/AA/TETSB-93/02**
Heavy-Duty Engine Testing Report Cummins/EPA/Taiwan Correlation Test Results, 1993.
PB93-236172/REB 93-04 PC **A03**/MF **A01**

**EPA/DF/CD-93/020**
Toxic Release Inventory (TRI), 1987-1990 (on CD-ROM).
PB93-500742/REB 93-01 CD-ROM$45.00

**EPA/DF/DK-93/010**
Oil and Hazardous Materials, Technical Assistance Data System (OHM-TADS) (for Microcomputers).
PB93-500577/REB 93-01 CP **D06**

**EPA/DF/DK-93/010A**
Oil and Hazardous Materials Technical Assistance Data System, (OHM-TADS) Fields and Their Definitions. Users' Guide.
PB93-111706/REB 93-01 PC **A03**/MF **A01**

**EPA/DF/DK-93/011**
Preamble and Final Sludge Rule (for Microcomputers).
PB93-500478/REB 93-01 CP **D01**

**EPA/DF/DK-93/063**
Regulatory Impact Analysis (RIA) for the Proposed Great Lakes Water Quality Guidance (for Microcomputers).
PB93-505386/REB 93-04 CP **D02**

**EPA/DF/DK-93/064**
Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Initiative Guidance (for Microcomputers).
PB93-505394/REB 93-04 CP **D02**

**EPA/DF/DK-93/065**
Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study Technical Background Document (for Microcomputers).
PB93-505402/REB 93-04 CP **D04**

**EPA/DF/DK-93/076**
Site Assessment Information Directory (SAID) Region 1 (for Microcomputers). Date of Coverage: October 1991.
PB93-506111/REB 93-04 CP **D03**

**EPA/DF/DK-93/077**
Site Assessment Information Directory (SAID) Region 2 (for Microcomputers). Date of Coverage: October 1991.
PB93-506129/REB 93-04 CP **D03**

**EPA/DF/DK-93/078**
Site Assessment Information Directory (SAID) Region 3 (for Microcomputers). Date of Coverage: October 1991.
PB93-506137/REB 93-04 CP **D03**

**EPA/DF/DK-93/079**
Site Assessment Information Directory (SAID) Region 4 (for Microcomputers). Date of Coverage: October 1991.
PB93-506145/REB 93-04 CP **D03**

**EPA/DF/DK-93/080**
Site Assessment Information Directory (SAID) Region 5 (for Microcomputers). Date of Coverage: 1991.
PB93-506152/REB 93-04 CP **D03**

**EPA/DF/DK-93/081**
Site Assessment Information Directory (SAID) Region 6 (for Microcomputers). Date of Coverage: October 1991.
PB93-506160/REB 93-04 CP **D03**

**EPA/DF/DK-93/082**
Site Assessment Information Directory (SAID) Region 7 (for Microcomputers). Date of Coverage: October 1991.
PB93-506178/REB 93-04 CP **D03**

**EPA/DF/DK-93/083**
Site Assessment Information Directory (SAID) Region 8 (for Microcomputers). Date of Coverage: 1991.
PB93-506186/REB 93-04 CP **D03**

**EPA/DF/DK-93/084**
Site Assessment Information Directory (SAID) Region 9 (for Microcomputers). Date of Coverage: October 1991.
PB93-506194/REB 93-04 CP **D03**

**EPA/DF/DK-93/085**
Site Assessment Information Directory (SAID) Region 10 (for Microcomputers). Date of Coverage: October 1991.
PB93-506202/REB 93-04 CP **D03**

**EPA/DF/MT-93/001**
Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, June 1992.
PB93-500197/REB 93-01 CP **T05**

**EPA/DF/MT-93/001A**
Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, June 1992. Record and Data Element Description.
PB93-100261/REB 93-01 PC **A03**/MF **A01**

**EPA/DF/MT-93/037**
Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, January 1993.
PB93-504595/REB 93-01 CP **T05**

**EPA/DF/MT-93/050**
Aquatic Toxicity Information Retrieval Data Base (AQUIRE).
PB93-505725/REB 93-04 CP **T02**

**EPA/DF/MT-93/050A**
Aquatic Toxicity Information Retrieval Data Base: A Technical Support Document. (Revised July 1992).
PB93-192631/REB 93-04 PC **A03**/MF **A01**

**EPA/DF/MT-93/051**
Aquatic Toxicity Information on VAX VMS Backup (AQUIRE for VMS).
PB93-505733/REB 93-01 CP **T02**

**EPA/DF/MT-93/061**
Toxic Release Inventory, (TRI), 1991.
PB93-505873/REB 93-04 CP **T14**

**EPA/DF/MT-93/061A**
Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-183440/REB 93-04 PC **A05**/MF **A01**

**EPA/DF/MT-93/062**
Toxic Release Inventory, 1991 Reporting Facilities Names and Addresses.
PB93-505881/REB 93-04 CP **T02**

**EPA/DF/MT-93/068**
Toxic Release Inventory (TRI), 1987.
PB93-506004/REB 93-04 CP **T16**

**EPA/DF/MT-93/069**
Toxic Release Inventory (TRI), 1988.
PB93-506012/REB 93-04 CP **T14**

**EPA/DF/MT-93/070**
Toxic Release Inventory (TRI), 1989.
PB93-506020/REB 93-04 CP **T14**

**EPA/DF/MT-93/071**
Toxic Release Inventory (TRI), 1990.
PB93-506038/REB 93-04 CP **T14**

**EPA/DF/MT-93/087**
Environmental Fate Data Base (EFDB) Complete: XREF, CASLST, DATALOG, BIOLOG, CHEMFATE, and BIODEG. (Date of Coverage 1993).
PB93-506426/REB 93-04 CP **T05**

**EPA/DF/MT-93/089**
Biennial Reporting System (BRS) 1989 (Date of Coverage: 1989).
PB93-507044/REB 93-04 CP **T04**

**EPA/OE/LE-133**
Enforcement Four-Year Strategic Plan: Enhanced Environmental Enforcement for the 1990's.
PB93-129724/REB 93-01 PC **A05**/MF **A01**

**EPA/ROD/R01-92/064**
Superfund Record of Decision (EPA Region 1): Darling Hill Dump, Lyndon, VT. (First Remedial Action), June 1992.
PB93-963702/REB 93-01 PC **A03**/MF **A01**

**EPA/ROD/R01-92/066**
Superfund Record of Decision (EPA Region 1): Brunswick Naval Air Station, Operable Unit 2, ME. (Second Remedial Action), June 1992.
PB93-963706/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R01-92/067**
Superfund Record of Decision (EPA Region 1): Revere Textile Prints, Sterling, CT. (First Remedial Action), September 1992.
PB93-963703/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R01-92/068**
Superfund Record of Decision (EPA Region 1): Tibbetts Road, Barrington, NH. (First Remedial Action), September 1992.
PB93-963709/REB 93-04 PC **A07**/MF **A02**

**EPA/ROD/R01-92/069**
Superfund Record of Decision (EPA Region 1): PSC Resources Site, Palmer, MA. (First Remedial Action), September 1992.
PB93-963708/REB 93-04 PC **A09**/MF **A02**

**EPA/ROD/R01-92/070**
Superfund Record of Decision (EPA Region 1): Town Garage Radio Beacon, Londonderry, NH. (First Remedial Action), September 1992.
PB93-963705/REB 93-04 PC **A06**/MF **A02**

**EPA/ROD/R01-92/071**
Superfund Record of Decision (EPA Region 1): Otis Air National Guard/Camp Edwards, MA. (First Remedial Action), May 1992.
PB93-963704/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R01-92/072**
Superfund Record of Decision (EPA Region 1): Newport Naval Education/Training Center, Newport, RI. (First Remedial Action), September 1992.
PB93-963707/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R02-92/169**
Superfund Record of Decision (EPA Region 2): Ramapo Landfill Site, Rockland County, NY. (First Remedial Action), March 1992.
PB93-963801/REB 93-01 PC **A04**/MF **A01**

**EPA/ROD/R02-92/171**
Superfund Record of Decision (EPA Region 2): Pasley Solvents and Chemicals, Town of Hempstead, Nassau County, NY. (First Remedial Action), April 1992.
PB93-963805/REB 93-01 PC **A06**/MF **A02**

**EPA/ROD/R02-92/173**
Superfund Record of Decision (EPA Region 2): Facet Enterprises, Village of Elmira Heights, Chemung County, NY. (First Remedial Action), September 1992.
PB93-963822/REB 93-04 PC **A07**/MF **A02**

**EPA/ROD/R02-92/175**
Superfund Record of Decision (EPA Region 2): North Sea Municipal Landfill, Suffolk County, Southampton, NY. (Second Remedial Action), September 1992.
PB93-963811/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R02-92/176**
Superfund Record of Decision (EPA Region 2): Ellis Property, Sharp Road, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963820/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R02-92/177**
Superfund Record of Decision (EPA Region 2): Witco Chemical (Oakland Plant), Bergen County, Oakland, NJ. (First Remedial Action), September 1992.
PB93-963812/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R02-92/178**
Superfund Record of Decision (EPA Region 2): FAA Technical Center, Atlantic County, Atlantic City International Airport, NJ. (Third Remedial Action), September 1992.
PB93-963808/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R02-92/179**
Superfund Record of Decision (EPA Region 2): Rowe Industries Groundwater Contamination, Sag Harbor, NY. (First Remedial Action), September 1992.
PB93-963827/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R02-92/180**
Superfund Record of Decision (EPA Region 2): Higgins Farm, Franklin Township, Somerset County, NJ. (Second Remedial Action), September 1992.
PB93-963813/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R02-92/181**
Superfund Record of Decision (EPA Region 2): Preferred Plating, Suffolk County, Farmingdale, NY. (Second Remedial Action), September 1992.
PB93-963817/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R02-92/182**
Superfund Record of Decision (EPA Region 2): Bioclinical Laboratories, Town of Islip, Suffolk County, NY. (First Remedial Action), September 1992.
PB93-963807/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R02-92/183**
Superfund Record of Decision (EPA Region 2): Islip Municipal Sanitary Landfill, Town of Islip, NY. (First Remedial Action), September 1992.
PB93-963825/REB 93-04 PC **A05**/MF **A02**

**EPA/ROD/R02-92/184**
Superfund Record of Decision (EPA Region 2): Endicott Village Well Field, Broome County, NY. (Third Remedial Action), September 1992.
PB93-963821/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R02-92/185**
Superfund Record of Decision (EPA Region 2): Industrial Latex, Bergen County, Wallington, NJ. (First Remedial Action), September 1992.
PB93-963824/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R02-92/186**
Superfund Record of Decision (EPA Region 2): Imperial Oil/Champion Chemicals, Monmouth County, NJ. (Second Remedial Action), September 1992.
PB93-963823/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R02-92/187**
Superfund Record of Decision (EPA Region 2): Cosden Chemical Coatings, City of Beverly, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963818/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R02-92/188**
Superfund Record of Decision (EPA Region 2): Evor Phillips Leasing Company, Old Bridge Township, Middlesex County, NJ. (First Remedial Action), September 1992.
PB93-963814/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R02-92/189**
Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 1), Clinton County, NY. (First Remedial Action), September 1992.
PB93-963815/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R02-92/190**
Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 3), Clinton County, NY. (Second Remedial Action), September 1992.
PB93-963816/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R02-92/191**
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 5), Lakehurst, NJ. (Sixth Remedial Action), January 1992.
PB93-963809/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R02-92/192**
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 6), Lakehurst, NJ. (Fifth Remedial Action), December 1991.
PB93-963810/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R02-92/193**
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 7), Ocean County, NJ. (Seventh Remedial Action), March 1992.
PB93-963826/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R02-92/194**
Superfund Record of Decision (EPA Region 2): Dover Municipal Well 4, Morris County, Dover, NJ. (First Remedial Action), September 1992.
PB93-963819/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R03-92/141**
Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, Operable Unit 1, Richmond, VA. (First Remedial Action), May 1992.
PB93-963923/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R03-92/142**
Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, (Operable Unit 5), Richmond, VA. (First Remedial Action), March 1992.
PB93-963901/REB 93-01 PC **A04**/MF **A01**

**EPA/ROD/R03-92/143**
Superfund Record of Decision (EPA Region 3): Strasburg Landfill, Newlin Township, Chester County, PA. (Third Remedial Action), March 1992.
PB93-963916/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R03-92/144**
Superfund Record of Decision (EPA Region 3): Raymark Site, Operable Unit 1, Montgomery County, PA. (First Remedial Action), December 1991.
PB93-963902/REB 93-01 PC **A07**/MF **A02**

**EPA/ROD/R03-92/145**
Superfund Record of Decision (EPA Region 3): Dublin Water Supply, Bucks County, PA. (First Remedial Action), December 1991.
PB93-963903/REB 93-01 PC **A06**/MF **A02**

**EPA/ROD/R03-92/149**
Superfund Record of Decision (EPA Region 3): Butz Landfill, Pocono and Jackson Townships, Monroe County, PA. (Second Remedial Action), June 1992.
PB93-963919/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R03-92/150**
Superfund Record of Decision (EPA Region 3): Brown's Battery Breaking, Tilden Township, Berks County, PA. (Second Remedial Action), July 1992.
PB93-963918/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R03-92/152**
Superfund Record of Decision (EPA Region 3): Eastern Diversified Metals Site, Schuylkill County, Hometown, PA. (Second Remedial Action), July 1992.
PB93-963914/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R03-92/153**
Superfund Record of Decision (EPA Region 3): MW Manufacturing Site, Montour County, PA. (Subsequent Remedial Action), June 1992.
PB93-963904/REB 93-01 PC **A05**/MF **A01**

**EPA/ROD/R03-92/155**
Superfund Record of Decision (EPA Region 3): Commodore Semiconductor Group, Lower Providence Township, PA. (First Remedial Action), September 1992.
PB93-963920/REB 93-04 PC **A06**/MF **A02**

**EPA/ROD/R03-92/156**
Superfund Record of Decision (EPA Region 3): Tonolli Corporation, Nesquehoning Borough, Carbon County, PA. (First Remedial Action), September 1992.
PB93-963922/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R03-92/157**
Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.
PB93-963912/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R03-92/158**
Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.
PB93-963913/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R03-92/159**
Superfund Record of Decision (EPA Region 3): Abex Corporation, Portsmouth, VA. (First Remedial Action), September 1992.
PB93-963917/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R03-92/160**
Superfund Record of Decision (EPA Region 3): Rhinehart Tire Fire Dump, Operable Unit 2, Winchester, VA. (Second Remedial Action), September 1992.
PB93-963921/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R03-92/161**
Superfund Record of Decision (EPA Region 3): Dixie Caverns Landfill Site, Operable Unit 2, Roanoke County, VA. (Second Remedial Action), September 1992.
PB93-963907/REB 93-01 PC **A03**/MF **A01**

**EPA/ROD/R03-92/162**
Superfund Record of Decision (EPA Region 3): USA Aberdeen, Operable Unit One, Michaelsville, MD. (Second Remedial Action), June 1992.
PB93-963915/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R04-92/103**
Superfund Record of Decision (EPA Region 4): Yellow Water Road Dump, Duval County, Baldwin, FL. (Second Remedial Action), June 1992.
PB93-964015/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R04-92/104**
Superfund Record of Decision (EPA Region 4): Benfield Industries, Haywood County, Hazelwood, NC. (First Remedial Action), July 1992.
PB93-964018/REB 93-04 PC **A09**/MF **A02**

**EPA/ROD/R04-92/108**
Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 1, SC. (First Remedial Action), June 1992.
PB93-964023/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R04-92/109**
Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 2, SC. (Second Remedial Action), June 1992.
PB93-964024/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R04-92/110**
Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), A/M Area Groundwater Operable Unit 3, Aiken County, SC. (Third Remedial Action), June 1992.
PB93-964013/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R04-92/112**
Superfund Record of Decision (EPA Region 4): Carrier Air Conditioning, Collierville, TN. (First Remedial Action), September 1992.
PB93-964019/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R04-92/115**
Superfund Record of Decision (EPA Region 4): Madison County Sanitary Landfill, Madison, FL. (First Remedial Action), September 1992.
PB93-964021/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R04-92/116**
Superfund Record of Decision (EPA Region 4): Standard Auto Bumper Site, Dade County, Hialeah, FL. (First Remedial Action), September 1992.
PB93-964014/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R04-92/118**
Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation, Operable Unit 6, Roane County, TN. (Fourth Remedial Action), September 1992.
PB93-964025/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R04-92/119**
Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.
PB93-964010/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R04-92/120**
Superfund Record of Decision (EPA Region 4): USMC Camp Lejeune Military Reservation, NC. (First Remedial Action), September 1992.
PB93-964026/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R04-92/121**
Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.
PB93-964012/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R04-92/122**
Superfund Record of Decision (EPA Region 4): Florida Steel Corporation, Martin County, Indiantown, FL. (First Remedial Action), June 1992.
PB93-964020/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R04-92/123**
Superfund Record of Decision (EPA Region 4): Agrico Chemical, Escambia County, Pensacola, FL. (First Remedial Action), September 1992.
PB93-964017/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R04-92/124**
Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964011/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R04-92/125**
Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964009/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R04-92/126**
Superfund Record of Decision (EPA Region 4): Milan Army Ammunition Plant, TN. (First Remedial Action), September 1992.
PB93-964022/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R04-92/127**
Superfund Record of Decision (EPA Region 4): National Electric Coil/Cooper Industries, KY. (First Remedial Action), September 1992.
PB93-964016/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R05-92/192**
Superfund Record of Decision (EPA Region 5): Twin Cities AF Reserve (SAR Landfill), MN. (First Remedial Action), March 1992.
PB93-964103/REB 93-01 PC **A04**/MF **A01**

**EPA/ROD/R05-92/193**
Superfund Record of Decision (EPA Region 5): Midco II, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964102/REB 93-01 PC **A05**/MF **A01**

**EPA/ROD/R05-92/194**
Superfund Record of Decision (EPA Region 5): Columbus Old Municipal Landfill, Columbus, IN. (First Remedial Action), March 1992.
PB93-964104/REB 93-01 PC **A03**/MF **A01**

**EPA/ROD/R05-92/195**
Superfund Record of Decision (EPA Region 5): Grand Traverse Overall Supply Site, Grellickville, MI. (First Remedial Action), February 1992.
PB93-964101/REB 93-01 PC **A03**/MF **A01**

**EPA/ROD/R05-92/196**
Superfund Record of Decision (EPA Region 5): MIDCO I, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964130/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R05-92/199**
Superfund Record of Decision (EPA Region 5): Metal Working Shop, Benzie County, Lake Ann, MI. (First Remedial Action), June 1992.
PB93-964113/REB 93-01 PC **A03**/MF **A01**

**EPA/ROD/R05-92/200**
Superfund Record of Decision (EPA Region 5): Savanna Army Depot, Savanna, IL. (First Remedial Action), March 1992.
PB93-964116/REB 93-01 PC **A04**/MF **A01**

**EPA/ROD/R05-92/202**
Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 2, Anoka County, Andover, MN. (Second Remedial Action), December 1992.
PB93-964132/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R05-92/203**
Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 1, Anoka County, Andover, MN. (Second Remedial Action), (Amendment), June 1992.
PB93-964123/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R05-92/206**
Superfund Record of Decision (EPA Region 5): Kohler Landfill, Kohler, WI. (First Remedial Action), March 1992.
PB93-964111/REB 93-01 PC **A05**/MF **A02**

**EPA/ROD/R05-92/209**
Superfund Record of Decision (EPA Region 5): Clare Water Supply Site, Clare County, Clare, MI. (Second Remedial Action), September 1992.
PB93-964106/REB 93-01 PC **A04**/MF **A01**

**EPA/ROD/R05-92/210**
Superfund Record of Decision (EPA Region 5): New Brighton/Arden Hills, Ramsey County, MN. (Eighth Remedial Action), September 1992.
PB93-964131/REB 93-04 PC **A07**/MF **A02**

**EPA/ROD/R05-92/213**
Superfund Record of Decision (EPA Region 5): Reilly Tar and Chemical, St. Louis Park, MN. (Fourth Remedial Action), September 1992.
PB93-964124/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R05-92/214**
Superfund Record of Decision (EPA Region 5): Alsco Anaconda Site, Gnadenhutten, OH. (Second Remedial Action), September 1992.
PB93-964121/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R05-92/215**
Superfund Record of Decision (EPA Region 5): Torch Lake Site, Operable Units 1 and 3, Houghton County, MI. (First Remedial Action), September 1992.
PB93-964120/REB 93-01 PC **A04**/MF **A01**

**EPA/ROD/R05-92/217**
Superfund Record of Decision (EPA Region 5): American Chemical Services, Griffith, IN. (First Remedial Action), September 1992.
PB93-964125/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R05-92/218**
Superfund Record of Decision (EPA Region 5): Tri County/Elgin Landfill Site, Elgin, IL. (First Remedial Action), September 1992.
PB93-964133/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R05-92/219**
Superfund Record of Decision (EPA Region 5): Central Illinois Public Service, Taylorville Manufactured Gas Plant Site, Christian County, IL. (First Remedial Action), September 1992.
PB93-964127/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R05-92/220**
Superfund Record of Decision (EPA Region 5): Cannelton Industries Site, Sault Sainte Marie, MI. (First Remedial Action), September 1992.
PB93-964126/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R05-92/221**
Superfund Record of Decision (EPA Region 5): Butterworth No. 2 Landfill Site, Grand Rapids, MI. (First Remedial Action), September 1992.
PB93-964122/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R05-92/222**
Superfund Record of Decision (EPA Region 5): City Disposal Sanitary Landfill, Dane County, WI. (First Remedial Action), September 1992.
PB93-964128/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R05-92/223**
Superfund Record of Decision (EPA Region 5): H. Brown Company, Walker, MI. (First Remedial Action), September 1992.
PB93-964129/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R06-92/068**
Superfund Record of Decision (EPA Region 6): Koppers (Texarkana Plant), TX. (First Remedial Action), (Amendment), March 1992.
PB93-964208/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R06-92/073**
Superfund Record of Decision (EPA Region 6): Double Eagle Refinery, Oklahoma City, OK. (First Remedial Action), September 1992.
PB93-964210/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R06-92/074**
Superfund Record of Decision (EPA Region 6): Prewitt Abandoned Refinery, Prewitt, NM. (First Remedial Action), September 1992.
PB93-964209/REB 93-04 PC **A09**/MF **A02**

**EPA/ROD/R06-92/075**
Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 2), Vermilion Parish, LA. (First Remedial Action), September 1992.
PB93-964206/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R06-92/076**
Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 1), Vermilion Parish, LA. (Second Remedial Action), September 1992.
PB93-964207/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R07-92/060**
Superfund Record of Decision (EPA Region 7): Pester Refinery, Butler County, El Dorado, KS. (First Remedial Action), September 1992.
PB93-964305/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R07-92/061**
Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.
PB93-964304/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R08-92/056**
Superfund Record of Decision (EPA Region 8): Portland Cement Co. (Kiln Dust No. 2 and No. 3), Operable Unit 2, Salt Lake City, UT. (Second Remedial Action), March 1992.
PB93-964410/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R08-92/058**
Superfund Record of Decision (EPA Region 8): Idaho Pole National Priorities List Site, Bozeman, MT. (First Remedial Action), September 1992.
PB93-964406/REB 93-04 PC **A07**/MF **A02**

**EPA/ROD/R08-92/059**
Superfund Record of Decision (EPA Region 8): Silver Bow Creek/Butte Area, MT. (Second Remedial Action), June 1992.
PB93-964412/REB 93-04 PC **A07**/MF **A02**

**EPA/ROD/R08-92/060**
Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 1, Weber County, UT. (Second Remedial Action), June 1992.
PB93-964407/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R08-92/061**
Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 4, UT. (Third Remedial Action), September 1992.
PB93-964409/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R08-92/062**
Superfund Record of Decision (EPA Region 8): Denver Radium, Operable Unit 9, Denver, CO. (Eighth Remedial Action), December 1991.
PB93-964402/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R08-92/063**
Superfund Record of Decision (EPA Region 8): Denver Radium Site, Operable Unit 8, Denver, CO. (Ninth Remedial Action), January 1992.
PB93-964405/REB 93-04 PC **A06**/MF **A02**

**EPA/ROD/R08-92/064**
Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), (Operable Unit 4), Golden, CO. (Third Remedial Action), April 1992.
PB93-964404/REB 93-04 PC **A06**/MF **A02**

**EPA/ROD/R08-92/065**
Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), Operable Unit 2, Golden, CO. (Fourth Remedial Action), September 1992.
PB93-964411/REB 93-04 PC **A19**/MF **A04**

**EPA/ROD/R08-92/066**
Superfund Record of Decision (EPA Region 8): Hill Air Force Base, UT. (Second Remedial Action), September 1992.
PB93-964403/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R08-92/067**
Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 3, Weber County, UT. (Fourth Remedial Action), September 1992.
PB93-964408/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R09-92/077**
Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 3, Sacramento, CA. (Second Remedial Action), December 1991.
PB93-964509/REB 93-04 PC **A09**/MF **A03**

**EPA/ROD/R09-92/079**
Superfund Record of Decision (EPA Region 9): Westinghouse Electric (Sunnyvale Plant), Sunnyvale, CA. (First Remedial Action), October 1991.
PB93-964501/REB 93-01 PC **A05**/MF **A01**

**EPA/ROD/R09-92/082**
Superfund Record of Decision (EPA Region 9): Hassayampa Landfill, AZ. (First Remedial Action), August 1992.
PB93-964505/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R09-92/083**
Superfund Record of Decision (EPA Region 9): Iron Mountain Mine, Shasta County, CA. (Second Remedial Action), September 1992.
PB93-964506/REB 93-04 PC **A06**/MF **A02**

**EPA/ROD/R09-92/084**
Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 4, Sacramento, CA. (Third Remedial Action), September 1992.
PB93-964510/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R09-92/085**
Superfund Record of Decision (EPA Region 9): Jasco Chemical Company, Mountain View, CA. (First Remedial Action), September 1992.
PB93-964507/REB 93-04 PC **A05**/MF **A01**

**EPA/ROD/R09-92/086**
Superfund Record of Decision (EPA Region 9): Purity Oil Sales, Fresno County, CA. (Second Remedial Action), September 1992.
PB93-964508/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R10-92/034**
Superfund Record of Decision (EPA Region 10): Naval Air Station Whidbey Island - Ault Field, (Operable Unit 1, Area 6), Oak Harbor, WA. (First Remedial Action), April 1992.
PB93-964609/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R10-92/039**
Superfund Record of Decision (EPA Region 10): Arrcom (Drexler Enterprise), Rathdrum, ID. (First Remedial Action), June 1992.
PB93-964606/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R10-92/040**
Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 23, ID. (Second Remedial Action), June 1992.
PB93-964617/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R10-92/041**
Superfund Record of Decision (EPA Region 10): Bunker Hill Mining and Metallurgical Complex, Shoshone County, ID. (Second Remedial Action), September 1992.
PB93-964611/REB 93-04 PC **A08**/MF **A02**

**EPA/ROD/R10-92/042**
Superfund Record of Decision (EPA Region 10): Pesticide Laboratory, Yakima, WA. (First Remedial Action), September 1992.
PB93-964608/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R10-92/043**
Superfund Record of Decision (EPA Region 10): Joseph Forest Products, Wallowa County, OR. (First Remedial Action), September 1992.
PB93-964613/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R10-92/044**
Superfund Record of Decision (EPA Region 10): Elmendorf Air Force Base, Operable Unit 2, Source Area ST41, Anchorage, AK. (First Remedial Action), September 1992.
PB93-964604/REB 93-01 PC **A03**/MF **A01**

**EPA/ROD/R10-92/045**
Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 2, ID. (Third Remedial Action), September 1992.
PB93-964615/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R10-92/046**
Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 22, ID. (Fourth Remedial Action), September 1992.
PB93-964616/REB 93-04 PC **A03**/MF **A01**

**EPA/ROD/R10-92/047**
Superfund Record of Decision (EPA Region 10): Wyckoff/Eagle Harbor, WA. (First Remedial Action), September 1992.
PB93-964618/REB 93-04 PC **A07**/MF **A02**

**EPA/ROD/R10-92/048**
Superfund Record of Decision (EPA Region 10): McChord AFB, Washrack Treatment Area, WA. (First Remedial Action), September 1992.
PB93-964614/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R10-92/049**
Superfund Record of Decision (EPA Region 10): Fort Lewis Military Reservation, Landfill No. 5, Pierce County, WA. (First Remedial Action), July 1992.
PB93-964607/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R10-92/050**
Superfund Record of Decision (EPA Region 10): Eielson Air Force Base, AK. (First Remedial Action), September 1992.
PB93-964612/REB 93-04 PC **A04**/MF **A01**

**EPA/ROD/R10-92/051**
Superfund Record of Decision (EPA Region 10): Umatilla Army Depot (Lagoons), Soils Operable Unit 2, Hermiston, OR. (First Remedial Action), September 1992.
PB93-964610/REB 93-04 PC **A04**/MF **A01**

**EPA/SW/DK-89/176**
COMPLEX1 (for Microcomputers).
PB93-504538/REB 93-01 CP **D05**

**EPA/SW/DK-92/038**
Crosswalk/Air Toxic Emission Factor Data Base Management System (XATEF) Version 2.0 (for Microcomputers).
PB93-504793/REB 93-01 CP **D02**

**EPA/SW/DK-92/043**
Volatile Organic Compound/Particulate Matter Speciation Data Base Management System (SPECIATE), Version 1.5 (for Microcomputers).
PB93-505238/REB 93-01 CP **D02**

**EPA/SW/DK-92/053**
AutoMOUSE (Modular Oriented Uncertainty SystEm) - An Improvement to the MOUSE Computerized Uncertainty Analysis Program (for Microcomputers).
PB93-500007/REB 93-01 CP **D03**

**EPA/SW/DK-92/053A**
AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
PB93-100113/REB 93-01 PC **A10**/MF **A03**

**EPA/SW/DK-93/002**
Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 3) (for Microcomputers).
PB93-500270/REB 93-01 CP **D02**

**EPA/SW/DK-93/003**
Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 2) (for Microcomputers).
PB93-500288/REB 93-01 CP **D02**

**EPA/SW/DK-93/004**
Industrial Source Complex Short Term (ISCST) (for Microcomputers).
PB93-500221/REB 93-01 CP **D03**

**EPA/SW/DK-93/005**
Industrial Source Complex LongTerm (ISCLT) (for Microcomputers).
PB93-500239/REB 93-01 CP **D03**

**EPA/SW/DK-93/006**
MESOPUFF (for Microcomputers).
PB93-500247/REB 93-01 CP **D02**

**EPA/SW/DK-93/007**
CALINE: California Line Source Model (for Microcomputers).
PB93-500254/REB 93-01 CP **D02**

**EPA/SW/DK-93/008**
PA-Score (Preliminary Assessment Score), Version 2.1, 5 1/4 inch (for Microcomputers).
PB93-500346/REB 93-01 CP **D02**

**EPA/SW/DK-93/009**
PA-Score (Preliminary Assessment Score), Version 2.1, 3 1/2 inch (for Microcomputers).
PB93-500353/REB 93-01 CP **D02**

**EPA/SW/DK-93/012**
ADL Migration Estimation Model (for Microcomputers) (Release Number 1).
PB93-500684/REB 93-01 CP **D02**

**EPA/SW/DK-93/029**
Flexible Membrane Liner Advisory Expert System (FLEX) (for Microcomputers) (Version 3.0).
PB93-502631/REB 93-01 CP **D02**

**EPA/SW/DK-93/029A**
User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

**EPA/SW/DK-93/039**
Geo-EAS: Software for Geostatistics 1.2.1 (5 1/4 Inch Version) (for Microcomputers).
PB93-504959/REB 93-01 CP **D02**

**EPA/SW/DK-93/040**
Geo-EAS: Software for Geostatistics 1.2.1 (3 1/2 inch Version) (for Microcomputers).
PB93-504967/REB 93-01 CP **D02**

**EPA/SW/DK-93/041**
ASESS 1.01A (3 1/2 Inch Diskette) (for Microcomputers).
PB93-505154/REB *93-01* CP **D02**

**EPA/SW/DK-93/042**
Geophysics Advisor Expert System (Version 2.0) (for Microcomputers).
PB93-505162/REB 93-01 CP **D02**

**EPA/SW/DK-93/042A**
Geophysics Advisor Expert System, Version 2.0.
PB93-163285/REB 93-01 PC **A03**/MF **A01**

**EPA/SW/DK-93/044**
ASSESS 1.01A (5 1/4 Inch Diskette) (for Microcomputers).
PB93-505295/REB 93-01 CP **D02**

**EPA/SW/DK-93/044A**
ASSESS User's Guide.
PB93-163251/REB 93-01 PC **A03**/MF **A01**

**EPA/SW/DK-93/045**
SCOUT: A Data Analysis Program (Version 1.40) (for Microcomputers).
PB93-505303/REB 93-01 CP **D02**

**EPA/SW/DK-93/046**
Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 4) (for Microcomputers).
PB93-505345/REB 93-04 CP **D02**

**EPA/SW/DK-93/047**
Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 3) (for Microcomputers).
PB93-505352/REB 93-04 CP **D02**

**EPA/SW/DK-93/048**
Emissions and Fuel Economy Results 1992 Car Models (for Microcomputers).
PB93-504546/REB *93-01* CP **D02**

**EPA/SW/DK-93/049**
Emissions and Fuel Economy Results 1993 Car Models (for Microcomputers).
PB93-504553/REB 93-01 CP **D02**

**EPA/SW/DK-93/052**
Economic Growth Analysis System (E-GAS) for all EPA Regions (I through X) (for Microcomputers).
PB93-505469/REB 93-04 CP **D18**

**EPA/SW/DK-93/053**
Economic Growth Analysis System (E-GAS) for EPA Region I - New England States (for Microcomputers).
PB93-505477/REB 93-04 CP **D03**

**EPA/SW/DK-93/054**
Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
PB93-505485/REB 93-04 CP **D03**

**EPA/SW/DK-93/055**
Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).
PB93-505493/REB 93-04 CP **D03**

**EPA/SW/DK-93/056**
Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).
PB93-505501/REB 93-04 CP **D03**

**EPA/SW/DK-93/057**
Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).
PB93-505519/REB 93-04 CP **D03**

**EPA/SW/DK-93/058**
Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).
PB93-505527/REB 93-04 CP **D03**

**EPA/SW/DK-93/059**
Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP **D03**

**EPA/SW/DK-93/060**
Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).
PB93-505543/REB 93-04 CP **D03**

**EPA/SW/DK-93/066**
Preliminary Ranking Evaluation Score (PREscore) Version 2.0 (for Microcomputers).
PB93-505915/REB 93-04 CP **D02**

**EPA/SW/DK-93/066A**
PREscore Software: Users Manual and Tutorial Version 2.0.
PB93-192698/REB 93-04 PC **A05**/MF **A01**

**EPA/SW/DK-93/072**
PRELIM, Version 4.0 (for Microcomputers).
*PB93-505980/REB* 93-04 CP **D03**

**EPA/SW/DK-93/072A**
PRELIM Version 4.0 Users Guide. Documentation for the *EPA Computer Program* for Development of Local Discharge Limitations under the Pretreatment Program. Data Tape Documentation.
PB93-192748/REB 93-04 PC **A05**/MF **A01**

**EPA/SW/DK-93/073**
Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 5) (for Microcomputers).
*PB93-506053/REB* 93-04 CP **D02**

**EPA/SW/DK-93/074**
Protocol-A Computerized Solid Waste Quantity and Composition Estimation System (Version 1.02) (for Microcomputers).
PB93-506061/REB 93-04 CP **D03**

**EPA/SW/DK-93/075**
EPA Model Pretreatment Ordinance (for Microcomputers).
PB93-506079/REB 93-04 CP **D02**

**EPA/SW/DK-93/086**
Evaporative Emission Model (EVAP 3.0) (for Microcomputers).
PB93-506301/REB 93-04 CP **D02**

**EPA/SW/DK-93/088**
Field Certification Tracking System (FCTS), Version 2.1 (for Microcomputers).
PB93-506582/REB 93-04 CP **D02**

**EPA-21M-1013**
U.S. Environmental Protection Agency Advisory Committees Charters, Rosters and Accomplishments.
PB93-130094/REB 93-01 PC **A05**/MF **A01**

**EPA-21T-1004**
Pesticide Reregistration, March 1991.
PB93-205896/REB 93-04 PC **A03**/MF **A01**

**EPA/21W-4002**
Supplemental Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation.
PB93-209872/REB 93-04 PC **A06**/MF **A02**

**EPA-22T-1001**
Pesticide Reregistration Progress Report, October 1991.
PB93-206605/REB 93-04 PC **A03**/MF **A01**

**EPA/100/R-93/002**
Greening of World Trade: A Report to EPA from the Trade and Environment Committee of the National Advisory Council for Environmental Policy and Technology.
PB93-176980/REB 93-01 PC **A11**/MF **A03**

**EPA/202/B-92/006**
*Financing Models for Environmental Protection:* Helping Communities Meet Their Environmental Goals.
PB93-124998/REB 93-01 PC **A05**/MF **A01**

**EPA/208/R-92/001**
Information Technology Architecture.
PB93-122430/REB 93-01 PC **A03**/MF **A01**

**EPA/220/B-92/021**
Public Access: A How To Guide.
PB93-111029/REB 93-01 PC **A09**/MF **A03**

**EPA/230/1-73/026**
Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC **A07**/MF **A02**

**EPA/230/1-76/041A**
Economic Analysis of Pretreatment Standards: The Secondary Copper and Aluminum Subcategories of the Nonferrous Metals Manufacturing Point Source Category.
PB93-167757/REB 93-01 PC **A07**/MF **A02**

**EPA/230/1-76/065E**
Economic Analysis of Interim Final Effluent Guidelines for the Gum and Wood Chemicals Industry. Group 2.
PB93-167740/REB 93-01 PC **A04**/MF **A01**

**EPA/230/2-74/059A**
Economic Analysis of Effluent Guidelines: Mineral Mining and Processing Industry.
PB93-167765/REB 93-01 PC **A14**/MF **A03**

**EPA/230/09-89/067**
Risk Communication About Chemicals in Your Community. Facilitator's Manual and Guide.
PB93-200541/REB 93-01 PC **A05**/MF **A02**

**EPA/230/B-93/001**
Guide to Federal Water Quality Programs and Information: A Guide with Computer Software Developed by the Interagency Work Group on Water Quality.
PB93-186245/REB 93-01 PC **A09**/MF **A02**

**EPA/230/R-92/004**
Overview of Strategic Planning at the Environmental Protection Agency.
PB93-128064/REB 93-01 PC **A03**/MF **A01**

**EPA/230/R-93/006**
International Trade in Environmental Protection Equipment: An Assessment of Existing Data.
PB93-236206/REB 93-04 PC **A04**/MF **A01**

**EPA/340/1-80/020**
Summary of Factors Affecting Compliance by Ferrous Foundaries. Volume 1. Text.
PB93-199347/REB 93-01 PC **A05**/MF **A02**

**EPA/340/1-84/011**
Compliance Data System Quality Assurance Manual, June 1984.
PB93-199339/REB 93-01 PC **A10**/MF **A03**

**EPA/340/1-85/019**
Guide to Effective Inspection Reports for Air Pollution Violations. Stationary Source Compliance Training Series.
PB93-199107/REB 93-01 PC **A04**/MF **A01**

**EPA/340/1-86/005A**
Standards of Performance for New Stationary Sources. Volume 1. Introduction, Summary and Standards: A Compilation as of December 31, 1985.
PB93-199297/REB 93-01 PC **A08**/MF **A02**

**EPA/340/1-88/004**
*Guideline for Graphic Arts Calculations.*
PB93-199370/REB 93-01 PC **A05**/MF **A01**

**EPA/340/1-90/001**
*Benzene Equipment* Leak Inspection Manual.
PB93-199123/REB 93-01 PC **A06**/MF **A02**

**EPA/340/1-90/015**
Guide to the Asbestos NESHAP as Revised November 1990.
PB93-199362/REB 93-01 PC **A04**/MF **A01**

**EPA/340/1-90/016**
Reporting and Recordkeeping Requirements for Waste Disposal: A Field Guide.
PB93-199115/REB 93-01 PC **A03**/MF **A01**

**EPA/400/R-92/008**
National List of Asbestos Landfills.
PB93-200517/REB 93-01 PC **A10**/MF **A03**

**EPA-400R-92-009**
Measurements of electric and magnetic fields in the Waianae, Hawaii area.
DE92019891/REB 93-01 PC **A03**/MF **A01**

**EPA/400/R-92/010**
Laboratory Testing of Commercially Available Power Frequency Magnetic Field Survey Meters.
PB93-131506/REB 93-01 PC **A15**/MF **A03**

**EPA/402/R-92/014**
Radon Measurement in Schools: Revised Edition.
PB93-237493/REB 93-04 PC **A04**/MF **A01**

**EPA/402/R-93/011**
Environmental Characteristics of EPA, NRC, and DOE Sites Contaminated with *Radioactive Substances.*
PB93-185551/REB 93-01 PC **A05**/MF **A01**

**EPA/402/R-93/079**
National Radon *Measurement Proficiency Program:* Individual Proficiency Report.
PB93-209989/REB 93-04 PC **A16**/MF **A03**

**EPA/402/R-93/080**
National Radon Contractor Proficiency (RCP) Program. Proficiency Report, July 1993.
PB93-209997/REB 93-04 PC **A11**/MF **A03**

**EPA/420/R-93/003**
Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
*PB93-180675/REB* 93-01 PC **A06**/MF **A02**

**EPA/420/R-93/004**
Nonroad Mobile Source Sales and Attrition Study: Identification and Evaluation of Available Data Sources.
PB93-190098/REB 93-01 PC **A11**/MF **A03**

# NTIS ORDER/REPORT NUMBER INDEX

**EPA/420/R-93/006**
Federal Test Procedure Review Project: Status Report.
PB93-197903/REB 93-01 PC **A03**/MF **A01**

**EPA/420/R-93/007**
Federal Test Procedure Review Project: Preliminary Technical Report.
PB93-207975/REB 93-04 PC **A11**/MF **A03**

**EPA/420/R-93/008**
Marine Industry Characterization Report.
PB93-216174/REB 93-04 PC **A10**/MF **A03**

**EPA/430/9-87/010**
Summary of the 1987 Carver-Greenfield Sludge Drying Technology Workshop: Problems and Solutions. Held in Los Angeles, California on March 10-11, 1987.
PB93-174506/REB 93-01 PC **A04**/MF **A01**

**EPA/440/1-76/061C**
Supplemental for Pretreatment to the Interim Final Development Document for the Secondary Aluminum Segment of the Nonferrous Metals Manufacturing. Point Source Category.
PB93-232122/REB 93-04 PC **A07**/MF **A02**

**EPA/440/1-79/049B**
Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards, and Pretreatment Standards for the Paint Formulating Point Source Category.
PB93-206472/REB 93-04 PC **A21**/MF **A04**

**EPA/440/1-79/300**
Fate of Priority Pollutants in Publicly Owned Treatment Works. Pilot Study.
PB93-203974/REB 93-04 PC **A03**/MF **A01**

**EPA/440/1-80/073A**
Development Document for Effluent Limitations Guidelines and Standards for the Aluminum Forming Point Source Category.
PB93-206213/REB 93-04 PC **A99**/MF **A06**

**EPA/440/1-80/103**
Treatability Studies for the Inorganic Chemicals Manufacturing Point Source Category.
PB93-206480/REB 93-04 PC **A11**/MF **A03**

**EPA/440/1-82/070B-VOL-1**
Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 1.
PB93-206498/REB 93-04 PC **A24**/MF **A04**

**EPA/440/1-82/070B-VOL-2**
Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 2.
PB93-206506/REB 93-04 PC **A22**/MF **A04**

**EPA/440/1-82/072**
Development Document for Effluent Limitations Guidelines and Standards for the Porcelain Enameling. Point Source Category.
PB93-206514/REB 93-04 PC **A21**/MF **A04**

**EPA/440/1-82/074B**
Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category (Proposed).
PB93-206522/REB 93-04 PC **A23**/MF **A04**

**EPA/440/1-82/084B**
Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Pharmaceutical Manufacturing Point Source Category.
PB93-206221/REB 93-04 PC **A22**/MF **A04**

**EPA/440/1-83/007B**
Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Inorganic Chemicals Manufacturing Point Source Category, Phase 2 (Proposed).
PB93-206530/REB 93-04 PC **A24**/MF **A04**

**EPA/440/1-83/084B**
Development Document for Effluent Limitations Guidelines and Standards for the Pharmaceuticals Manufacturing. Point Source Category.
PB93-206969/REB 93-04 PC **A04**/MF **A01**

**EPA/440/1-84/040**
Proceedings of Annual Analytical Symposium (7th). Held in Norfolk, Virginia on March 26-29, 1984.
PB93-237519/REB 93-04 PC **A99**/MF **A06**

**EPA/440/1-86/016S**
Supplementary Development Document for Effluent Limitations Guidelines for the Leather Tanning and Finishing Point Source Category.
PB93-207934/REB 93-04 PC **A06**/MF **A02**

**EPA/440/1-89/025**
Preliminary Data Summary for the Pulp, Paper and Paperboard Point Source Category.
PB93-202935/REB 93-01 PC **A04**/MF **A01**

**EPA/440/1-91/009A**
Supplement to the *OCPSF Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category.*
PB93-186096/REB 93-04 PC **A11**/MF **A03**

**EPA/440/1-91/009B**
*Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry Using Revised Compliance Costs.* (Revised January 1992).
PB93-186104/REB 93-01 PC **A03**/MF **A01**

**EPA/440/2-84/001**
Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Plastics Molding and Forming Industry.
PB93-167773/REB 93-01 PC **A05**/MF **A01**

**EPA/440/2-85/026**
Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Gold Placer Mining Industry.
PB93-203990/REB 93-04 PC **A07**/MF **A02**

**EPA/440/2-85/030**
Economic Impact Analysis of Effluent Limitations and Standards for the Nonferrous Metals Smelting and Refining Industry. Phase 2.
PB93-167781/REB 93-01 PC **A09**/MF **A03**

**EPA/440/4-87/005**
Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.
PB93-184620/REB 93-01 PC **A03**/MF **A01**

**EPA/440/4-90/006**
*Lake and Reservoir Restoration Guidance Manual: Second Edition.*
PB93-207926/REB 93-04 PC **A15**/MF **A03**

**EPA/440/4-90/007**
Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC **A08**/MF **A02**

**EPA/440/4-90/010**
Volunteer Water Monitoring: A Guide for State Managers.
PB93-202596/REB 93-01 PC **A05**/MF **A01**

**EPA/440/5-87/011**
Ambient Aquatic Life Water Quality Criteria for Silver.
PB93-202604/REB 93-01 PC **A06**/MF **A02**

**EPA/440/5-87/013**
Ambient Aquatic Life Water Quality Criteria for Di-2-Ethylhexyl Phthalate.
PB93-202752/REB 93-01 PC **A03**/MF **A01**

**EPA/440/5-88/092**
Ambient Aquatic Life Water Quality Criteria for Hexachlorobenzene.
PB93-202760/REB 93-01 PC **A03**/MF **A01**

**EPA/440/5-88/093**
Ambient Aquatic Life Water Quality Criteria for Antimony (III).
PB93-202778/REB 93-01 PC **A03**/MF **A01**

**EPA/440/5-93/001**
Guidelines for Delineation of Wellhead Protection Areas, 1993.
PB93-215861/REB 93-04 PC **A10**/MF **A03**

**EPA/440/6-89/002**
Wellhead Protection Programs: Tools for Local Governments.
PB93-101111/REB 93-01 PC **A04**/MF **A01**

**EPA/440/6-90/004**
Citizen's Guide to Ground-Water Protection.
PB93-115814/REB 93-01 PC **A03**/MF **A01**

**EPA/440/6-90/006**
Compendium of Federal Financial Assistance Programs: Targeting Programs for State and Local Ground-Water Protection.
PB93-116069/REB 93-01 PC **A06**/MF **A02**

**EPA/450/1-89/001A**
Air/Superfund National Technical Guidance Study Series. Volume 1. Overview of Air Pathway Assessments for Superfund Sites (Revised).
PB93-173987/REB 93-01 PC **A05**/MF **A01**

**EPA/450/2-76/005-e**
Aeros Manual Series. Volume 5. Aeros Manual of Codes. Update Number 9.
PB93-200798/REB 93-01 PC **A10**/MF **A03**

**EPA/450/2-92/002**
Technical Information Document for Residential Wood Combustion Best Available Control Measures.
PB93-122224/REB 93-01 PC **A05**/MF **A01**

**EPA-450/2-92/003**
Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC **A15**/MF **A03**

**EPA/450/2-92/004**
Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures.
PB93-122273/REB 93-01 PC **A09**/MF **A03**

**EPA/450/3-84/10B**
Sewage Treatment Plant NSPS: Responses to Comments on April 1986 Proposed Revisions.
PB93-223584/REB 93-04 PC **A03**/MF **A01**

**EPA/450/3-85/025B**
Calciners and Dryers in Mineral Industries: Background Information for Promulgated Standards.
PB93-122448/REB 93-01 PC **A04**/MF **A01**

**EPA/450/3-85/028**
Enabling Document for New Source Performance Standards for Calciners and Dryers in Mineral Industries.
PB93-122455/REB 93-01 PC **A04**/MF **A01**

**EPA/450/3-87/020**
Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC **A07**/MF **A02**

**EPA/450/3-90/006B**
OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC **A04**/MF **A01**

**EPA/450/3-91/013**
Enabling Document for Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants.
PB93-147007/REB 93-01 PC **A07**/MF **A02**

**EPA/450/3-91/019**
General Provisions for 40 CFR Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories. Background Information for Proposed Regulation.
PB93-226090/REB 93-04 PC **A06**/MF **A02**

**EPA/450/3-91/023**
Carbon Disulfide Emission Control Options.
PB93-124667/REB 93-01 PC **A03**/MF **A01**

**EPA/450/3-92/001A**
VOC/HAP Emissions from Marine Vessel Loading Operations. Technical Support Document for Proposed Standards.
PB93-193910/REB 93-01 PC **A13**/MF **A03**

**EPA/450/3-92/006B**
*National Emission Standards for Hazardous Air Pollutants* Compliance Extensions for Early Reductions: Background Information for Promulgated Standards.
PB93-149425/REB 93-01 PC **A08**/MF **A02**

**EPA/450/3-92/007A**
Guidelines for MACT Determinations under Section 112(j) (Proposal).
PB93-183283/REB 93-04 PC **A08**/MF **A02**

**EPA/450/3-92/009**
Regulatory Impact Analysis for the *National Emissions Standards for Hazardous Air Pollutants* for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Seven Other Processes.
PB93-143972/REB 93-01 PC **A09**/MF **A02**

**EPA/450/4-84/010**
Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or Inhalable Particulate Data (Draft).
PB93-200640/REB 93-01 PC **A04**/MF **A01**

**EPA/450/4-90/007D**
*User's Guide for the Urban Airshed Model. Volume 4.* User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC **A99**/MF **A06**

**EPA/450/4-91/005B**
Feasibility of Including Fugitive PM-10 Emissions Estimates in the EPA Emissions Trends Report.
PB93-169084/REB 93-01 PC **A03**/MF **A01**

**EPA/450/4-92/006**
SCREEN2 Model User's Guide.
PB93-216885/REB 93-04 PC **A04**/MF **A01**

**EPA/450/4-92/013**
Evaluation of Two Methods for the Measurement of Mercury Emissions in Exhaust Gases from a Municipal Waste Combustor.
PB93-105542/REB 93-01 PC **A05**/MF **A01**

**EPA/450/R-92/001**
National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC **A07**/MF **A02**

**EPA/451/R-92/001**
Air/Superfund National Technical Guidance Study Series: Applicability of Open Path Monitors for Superfund.
PB93-138154/REB 93-01 PC **A07**/MF **A02**

**EPA/451/R-92/002**
Assessing Potential Indoor Air Impacts for Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-122257/REB 93-01 PC **A09**/MF **A03**

**EPA/451/R-93/001**
Air/Superfund National Technical Guidance Study Series. Models for Estimating Air Emission Rates from Superfund Remedial Actions.
PB93-186807/REB 93-01 PC **A08**/MF **A02**

**EPA/451/R-93/002**
Air/Superfund National Technical Guidance Study Series. Air Emissions from Area Sources: Estimating Soil and Soil-Gas Sample Number Requirements.
PB93-173995/REB 93-01 PC **A04**/MF **A01**

**EPA/451/R-93/003**
Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215655/REB 93-04 PC **A04**/MF **A01**

**EPA/451/R-93/004**
Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.
PB93-215648/REB 93-04 PC **A03**/MF **A01**

**EPA/451/R-93/005**
Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215630/REB 93-04 PC **A04**/MF **A01**

**EPA/451/R-93/006**
Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215622/REB 93-04 PC **A04**/MF **A01**

**EPA/451/R-93/007**
Air/Superfund National Technical Guidance Study Series. Volume 4. Guidance for Ambient Air Monitoring at Superfund Sites (Revised).
PB93-199214/REB 93-01 PC **A08**/MF **A02**

**EPA/451/R-93/008**
Air/Superfund National Technical Guidance Study Series: Compilation of Information on Real-Time Air Monitoring for Use at Superfund Sites.
PB93-199222/REB 93-04 PC **A05**/MF **A02**

**EPA/451/R-93/009**
Air/Superfund National Technical Guidance Study Series: Evaluation of Short-Term Air Action Levels for Superfund Sites.
PB93-200913/REB 93-01 PC **A14**/MF **A03**

**EPA/452/B-93/006**
Directory of OAQPS Information Services, May 1993.
PB93-196624/REB 93-01 PC **A03**/MF **A01**

**EPA/452/R-92/005**
Guidance on the Adjusted Base Year Emissions Inventory and the 1996 Target for the 15 Percent Rate of Progress Plans.
PB93-122356/REB 93-01 PC **A04**/MF **A01**

**EPA/452/R-92/006**
State Air Pollution Control Programs: A Profile Report.
PB93-122364/REB 93-01 PC **A03**/MF **A01**

**EPA/452/R-92/010**
Guidelines for Estimating and Applying Rule Effectiveness for Ozone CO State Implementation Plan Base Year Inventories.
PB93-131498/REB 93-01 PC **A05**/MF **A01**

**EPA/452/R-93/001**
Procedures for Identifying Reasonably Available Control Technology for Stationary Sources of PM-10.
PB93-175776/REB 93-01 PC **A08**/MF **A02**

**EPA/452/R-93/002**
Guidance for Growth Factors, Projections, and Control Strategies for the 15 Percent Rate-of-Progress Plans.
PB93-186476/REB 93-01 PC **A09**/MF **A03**

**EPA/452/R-93/003**
Issues and Approaches to Improving Transportation Modeling for Air Quality Analysis.
PB93-194066/REB 93-01 PC **A05**/MF **A02**

**EPA/452/R-93/007**
Guidance on the Relationship between the 15 Percent Rate-of-Progress Plans and Other Provisions of the Clean Air Act.
PB93-200525/REB 93-01 PC **A04**/MF **A01**

**EPA/452/R-93/011**
Study of Highway Vehicle Emission Inventory Procedures for Selected Urban Areas.
PB93-185577/REB 93-01 PC **A04**/MF **A01**

**EPA/452/R-93/013**
Simultaneous Control of PM-10 and Hazardous Air Pollutants: Rationale for Selection of Hazardous Air Pollutants as Potential Particulate Matter or Associated with Particulate Matter at Source Conditions.
PB93-216380/REB 93-04 PC **A05**/MF **A01**

**EPA/452/S-92/001**
Highlights of the EPA Innovative Regulatory Strategies Workshop: Market-Based Incentives and other Innovations for Air Pollution Control. Summary of Workshop Discussion Sessions. Held in Washington, DC. on January 15-17, 1992.
PB93-150290/REB 93-01 PC **A05**/MF **A01**

**EPA/453/B-92/006**
National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Volume 6. Citations, 1992.
PB93-207652/REB 93-04 PC **A10**/MF **A03**

**EPA/453/B-92/007**
National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Index, 1992.
PB93-206571/REB 93-04 PC **A99**/MF **A06**

**EPA/453/B-92/012**
User's Manual for the BLIS BBS.
PB93-122422/REB 93-01 PC **A07**/MF **A02**

**EPA/453/B-93/018**
Medical Waste Incinerator Operator Training Program: Course Handbook.
PB93-781979/REB 93-04 PC**$56.00**/MF**$22.00**

**EPA/453/D-92/016A**
Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1A. National Impacts Assessment.
PB93-156552/REB 93-01 PC **A08**/MF **A02**

**EPA/453/D-92/016B**
Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1B. Control Technologies.
PB93-156560/REB 93-01 PC **A13**/MF **A03**

**EPA/453/D-92/016C**
Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1C. Model Emission Sources.
PB93-156578/REB 93-01 PC **A11**/MF **A03**

**EPA/453/D-93/016**
Ethylene Oxide Emissions from Commercial Sterilization/Fumigation Operations: Background Information for Proposed Standards.
PB93-226744/REB 93-04 PC **A13**/MF **A03**

**EPA/453/R-92/005**
National Air Toxics Information Clearinghouse: Ongoing Research and Regulatory Development Projects, July 1992.
PB93-206563/REB 93-04 PC **A14**/MF **A03**

**EPA/453/R-92/008**
National Air Toxics Information Clearinghouse: NATICH Data Base Report of Federal, State, Local and EPA Air Toxics Activities.
PB93-206589/REB 93-04 PC **A99**/MF **E08**

**EPA/453/R-92/010**
Evaluation and Costing of NOx Controls for Existing Utility Boilers in the NESCAUM Region.
PB93-142016/REB 93-01 PC **A18**/MF **A04**

**EPA/453/R-92/011**
Alternative Control Technology Document: Control of VOC Emissions from the Application of Agricultural Pesticides.
PB93-199131/REB 93-01 PC **A12**/MF **A03**

**EPA/453/R-92/018**
Control Techniques for Volatile Organic Compound Emissions from Stationary Sources, December 1992.
PB93-150258/REB 93-01 PC **A20**/MF **A04**

**EPA/453/R-92/019**
Alternative Control Technology Document: Carbon Reactivation Processes.
PB93-180826/REB 93-01 PC **A06**/MF **A02**

**EPA/453/R-93/007**
Alternative Control Techniques Document. NOx Emissions from Stationary Gas Turbines.
PB93-156586/REB 93-01 PC **A11**/MF **A03**

**EPA/453/R-93/015**
Alternative Control Techniques Document-NOx Emissions from Process Heaters.
PB93-186211/REB 93-01 PC **A10**/MF **A03**

**EPA/453/R-93/024**
Report to Congress on Implementation of Section 112 of the Clean Air Act Amendments of 1990.
PB93-236008/REB 93-04 PC **A05**/MF **A01**

**EPA/453/R-93/026**
Protocol for Equipment Leak Emission Estimates.
PB93-229219/REB 93-04 PC **A12**/MF **A03**

**EPA/454/B-92/008**
User's Manual for the Plume Visibility Model PLUVUE II (Revised).
PB93-188233/REB 93-01 PC **A06**/MF **A02**

**EPA/454/B-93/012**
Reactive Plume Model IV (RPM-IV) User's Guide.
PB93-217412/REB 93-04 PC **A23**/MF **A04**

**EPA/454/R-92/004**
Evaluation of CO Intersection Modeling Techniques Using a New York City Database.
PB93-105559/REB 93-01 PC **A10**/MF **A03**

**EPA/454/R-92/005**
Guideline for Modeling Carbon Monoxide from Roadway Intersections.
PB93-210391/REB 93-04 PC **A04**/MF **A01**

**EPA/454/R-92/006**
User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections.
PB93-210250/REB 93-04 PC **A05**/MF **A02**

**EPA/454/R-92/014**
Comparison of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model and Wind Tunnel Data.
PB93-226751/REB 93-04 PC **A08**/MF **A02**

**EPA/454/R-92/015**
Sensitivity Analysis of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model.
PB93-226769/REB 93-04 PC **A05**/MF **A01**

**EPA/454/R-92/016**
Development and Evaluation of a Revised Area Source Algorithm for the Industrial Source Complex Long Term Model.
PB93-226777/REB 93-04 PC **A06**/MF **A02**

**EPA/454/R-92/017**
Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC **A08**/MF **A02**

**EPA/454/R-92/019**
Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised.
PB93-219095/REB 93-04 PC **A05**/MF **A01**

**EPA/454/R-92/021**
Modeling Protocol for Applying MESOPUFF II to Long Range Transport Problems.
PB93-226108/REB 93-04 PC **A04**/MF **A01**

**EPA/454/R-92/023**
Workbook for Plume Visual Impact Screening and Analysis (Revised).
PB93-223592/REB 93-04 PC **A08**/MF **A02**

**EPA/454/R-92/024**
Workbook of Screening Techniques for Assessing Impacts of Toxic Air Pollutants (Revised).
PB93-210367/REB 93-04 PC **A14**/MF **A03**

**EPA/454/R-92/025**
Protocol for Determining the Best Performing Model.
PB93-226082/REB 93-04 PC **A03**/MF **A01**

**EPA/454/R-92/026**
Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone. Volume 2. Emission Inventory Requirements for Photochemical Air Quality Simulation Models (Revised).
PB93-234375/REB 93-04 PC **A11**/MF **A03**

**EPA/454/R-93/001**
Contingency Analysis Modeling for Superfund Sites and Other Sources.
PB93-169126/REB 93-01 PC **A13**/MF **A03**

**EPA/454/R-93/002**
Guidance on the Application of Refined Dispersion Models for Hazardous/Toxic Air Releases.
PB93-210359/REB 93-04 PC **A20**/MF **A04**

**EPA/454/R-93/006**
Locating and Estimating Air Emissions from Sources of Methylene Chloride.
PB93-207579/REB 93-04 PC **A10**/MF **A03**

**EPA/454/R-93/007**
Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.
PB93-210383/REB 93-04 PC **A07**/MF **A02**

**EPA/454/R-93/011**
Locating and Estimating Air Emissions from Sources of Styrene.
PB93-207520/REB 93-04 PC **A08**/MF **A02**

**EPA/454/R-93/015**
Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC **A06**/MF **A02**

**EPA/454/R-93/021A**
Regional Interim Emission Inventories (1987-1991). Volume 1. Development Methodologies.
PB93-236107/REB 93-04 PC **A07**/MF **A02**

**EPA/454/R-93/021B**
Regional Interim Emission Inventories (1987-1991). Volume 2. Emission Summaries.
PB93-236115/REB 93-04 PC **A06**/MF **A02**

**EPA/454/R-93/024**
Role of Ozone Precursors in Tropospheric Ozone Formation and Control: A Report to Congress.
PB93-226694/REB 93-04 PC **A04**/MF **A01**

**EPA/454/R-93/025**
Summary of Public Comments and EPA Responses on the Draft Report: The Role of Ozone Precursors in Tropospheric Ozone Formation and Control.
PB93-226702/REB 93-04 PC **A03**/MF **A01**

**EPA/460/3-89/002**
Analysis of Original Equipment and Aftermarket Manufacturer Oxygen Sensor Constructional, Functional, and Price Differences.
PB93-208007/REB 93-04 PC **A18**/MF **A04**

**EPA/500/B-92/006**
Ground-Water Modeling Compendium. Model Fact Sheets, Descriptions, Applications and Assessment Framework.
PB93-207504/REB 93-04 PC **A08**/MF **A02**

**EPA/503/2-89/001**
Compendium of Methods for Marine and Estuarine Environmental Studies.
PB93-202570/REB 93-01 PC **A10**/MF **A03**

**EPA/503/2-91/004**
Portraits of Our Coastal Waters. Supplement to the National Water Quality Inventory. Report from the EPA Regions.
PB93-207546/REB 93-04 PC **A03**/MF **A01**

**EPA/503/3-88/001**
Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
PB93-207561/REB 93-04 PC **A03**/MF **A01**

**EPA/503/4-91/001**
Monitoring, Research, and Surveillance Plan for the 106-Mile Deepwater Municipal Sludge Dump Site and Environs.
PB93-207744/REB 93-04 PC **A07**/MF **A02**

**EPA/503/6-88/000**
Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

**EPA/503/6-90/001**
Report to Congress on Implementation of Section 403(c) of the Federal Water Pollution Control Act.
PB93-207488/REB 93-04 PC **A07**/MF **A02**

**EPA/503/8-88/003**
Estuary Program Primer. National Estuary Program.
PB93-193753/REB 93-01 PC **A06**/MF **A02**

**EPA/503/8-90/005**
Saving Bays and Estuaries: A Primer for Establishing and Managing Estuary Programs. Appendices G, H, and I.
PB93-116077/REB 93-01 PC **A05**/MF **A02**

**EPA/503/9-89/002**
Marine and Estuarine Protection: Programs and Activities.
PB93-179000/REB 93-01 PC **A03**/MF **A01**

**EPA/503/9-89/009**
Proceedings of the Ocean Dumping Workshop 106-Mile Site. Held in Ocean City, NJ., on March 28-30, 1989.
PB93-208072/REB 93-04 PC **A07**/MF **A02**

**EPA/503/9-90/004**
National Directory of Citizen Volunteer Environmental Monitoring Programs (Third Edition).
PB93-207496/REB 93-04 PC **A03**/MF **A01**

**EPA/520/1-84/026**
Identification of Cost Factors for the Ocean Disposal Alternative for Low-Level Radioactive Waste.
PB93-203917/REB 93-04 PC **A03**/MF **A01**

**EPA/520/1-87/012-1**
Low-Level and NARM Radioactive Wastes. Draft Environmental Impact Statement for Proposed Rules. Volume 1. Background Information Document.
PB93-200673/REB 93-01 PC **A99**/MF **A06**

**EPA/520/1-87/015**
Radon/Radon Progeny Measurement Proficiency Program: Cumulative Proficiency Report (Revised September 1987).
PB93-203909/REB 93-04 PC **A03**/MF **A01**

**EPA/520/1-91/019**
Background Information Document to Support NESHAPS Rulemaking on Nuclear Power Reactors.
PB93-199321/REB 93-01 PC **A14**/MF **A03**

**EPA/520/F-92/006**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Valley of the Drums, Bullitt County, Kentucky).
PB92-963618/REB 93-01 PC **A02**/MF **A01**

**EPA/520/F-92/009**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (American Thermostat Corporation, New York).
PB92-963627/REB 93-01 PC **A02**/MF **A01**

**EPA/520/F-92/010**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Wide Beach Section of Brant, New York).
PB92-963628/REB 93-01 PC **A02**/MF **A01**

**EPA/520/F-92/011**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Krysowaty Farm, Hillsborough, New Jersey).
PB92-963629/REB 93-01 PC **A02**/MF **A01**

**EPA/520/F-92/017**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Ciba-Geigy Corporation, McIntosh, Alabama).
PB92-963630/REB 93-01 PC **A02**/MF **A01**

**EPA/520/F-93/007**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Harvey and Knott Drum Site, New Castle County, Delaware).
PB93-963614/REB 93-04 PC **A01**/MF **A01**

**EPA/520/F-93/008**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Fulton Terminals Site Profile, Oswego County, NY).
PB93-963616/REB 93-04 PC **A02**/MF **A01**

**EPA/530/R-92/014M**
Inside the Hotline: A Compilation of 1992 Monthly Hotline Reports.
PB93-159572/REB 93-01 PC **A05**/MF **A01**

**EPA/530/R-92/017**
RCRA Implementation Plan, FY 1993.
PB93-176956/REB 93-01 PC **A05**/MF **A02**

**EPA/530/R-93/001**
RCRA Ground-Water Monitoring: Draft Technical Guidance.
PB93-139350/REB 93-01 PC **A10**/MF **A03**

**EPA/530/R-93/002**
Geotechnical Systems for Structures on Contaminated Sites: A Technical Guidance Document.
PB93-209419/REB 93-04 PC **A06**/MF **A02**

**EPA/530/R-93/006**
RCRA Public Involvement Manual.
PB93-231066/REB 93-04 PC **A11**/MF **A03**

**EPA/530/R-93/007**
Petitions to Delist Hazardous Wastes: A Guidance Manual. Second Edition.
PB93-169365/REB 93-01 PC **A06**/MF **A02**

**EPA/530/R-93/008**
Proceedings of the National United States Environmental Protection Agency Conference on Household Hazardous Waste Management (7th). Held in Minneapolis, Minnesota on December 8-12, 1992.
PB93-170116/REB 93-01 PC **A99**/MF **A06**

**EPA/530/R-93/010**
Hazardous Waste Management Planning Needs and Practices: A Review of Several State Agency Approaches.
PB93-193225/REB 93-04 PC **A04**/MF **A01**

**EPA/530/R-93/012**
Technical Resource Document: Solidification/Stabilization and Its Application to Waste Materials.
PB93-237535/REB 93-04 PC **A16**/MF **A03**

**EPA/530/R-93/014**
Guidance for Capacity Assurance Planning. Capacity Planning Pursuant to CERCLA Section 104(c)(9).
PB93-209698/REB 93-04 PC **A09**/MF **A02**

**EPA/530/SW-90/071A**
Markets for Recovered Glass.
PB93-169645/REB 93-01 PC **A03**/MF **A01**

**EPA/530/SW-90/072A**
Markets for Recovered Aluminum.
PB93-170132/REB 93-01 PC **A03**/MF **A01**

**EPA/530/SW-91/094**
Index to the Monthly Hotline Report Questions (June 1982 to December 1991).
PB92-131374/REB 93-01 PC **A07**/MF **A02**

**EPA/540/2-90/004**
Bioremediation in the Field: Number 1, November 1990.
PB93-206340/REB 93-04 PC **A03**/MF **A01**

**EPA/540/2-90/012**
International Evaluation of In-situ Biorestoration of Contaminated Soil and Groundwater (September 1990)--Translation.
PB93-207553/REB 93-04 PC **A03**/MF **A01**

**EPA/540/2-91/002**
Understanding Bioremediation: A Guidebook for Citizens.
PB93-205870/REB 93-04 PC **A03**/MF **A01**

**EPA/540/5-91/007A**
Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 1.
PB93-115160/REB 93-01 PC **A09**/MF **A02**

**EPA/540/5-91/007B**
Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 2.
PB93-115178/REB 93-01 PC **A15**/MF **A03**

**EPA/540/5-91/009**
Technology Evaluation Report: Pilot-Scale Demonstration of a Slurry-Phase Biological Reactor for Creosote-Contaminated Soil. Volume 1.
PB93-205532/REB 93-04 PC **A09**/MF **A02**

**EPA/540/8-90/101**
Superfund: Environmental Progress.
PB93-206209/REB 93-04 PC **A03**/MF **A01**

**EPA/540/8-91/005**
Superfund Innovative Technology Evaluation (SITE) Program.
PB93-116093/REB 93-01 PC **A03**/MF **A01**

**EPA/540/09-89/012**
Federal Insecticide, Fungicide, and Rodenticide Act as Amended.
PB93-116085/REB 93-01 PC **A05**/MF **A01**

**EPA/540/09-93/233**
Proceedings of National Integrated Pest Management Forum. Held in Arlington, VA., on June 17-19, 1992.
PB93-124675/REB 93-01 PC **A07**/MF **A02**

**EPA/540/09-93/240**
PR Notice 86-5. Notice to Producers, Formulators, Distributors and Registrants.
PB93-144053/REB 93-01 PC **A03**/MF **A01**

**EPA/540/09-93/241**
PR Notice 86-4. Notice to Registrants of Pesticides, and Applicants for Pesticide Registration.
PB93-144046/REB 93-01 PC **A02**/MF **A01**

**EPA/540/09-93/242**
PR Notice 86-3. Notice to Producers, Registrants, and Formulators.
PB93-144038/REB 93-01 PC **A01**/MF **A01**

**EPA/540/09-93/243**
PR Notice 86-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144020/REB 93-01 PC **A01**/MF **A01**

**EPA/540/09-93/244**
PR Notice 86-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144012/REB 93-01 PC **A01**/MF **A01**

**EPA/540/09-93/246**
PR Notice 87-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-141687/REB 93-01 PC **A03**/MF **A01**

**EPA/540/09-93/247**
PR Notice 87-2. Notice to Procedures, Registrants, and Formulators.
PB93-144061/REB 93-01 PC **A01**/MF **A01**

**EPA/540/09-93/248**
PR Notice 87-3. Notice to Manufacturers, Formulators, Distributors and Registrants of Pesticide Products.
PB93-144079/REB 93-01 PC **A01**/MF **A01**

**EPA/540/09-93/249**
PR Notice 87-4. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-141695/REB 93-01 PC **A03**/MF **A01**

**EPA/540/09-93/250**
PR Notice 87-5. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-144087/REB 93-01 PC **A03**/MF **A01**

**EPA/540/09-93/251**
PR Notice 87-6. Notice to Manufacturers, Formulators, Procedures, and Registrants of Pesticide Products.
PB93-144095/REB 93-01 PC **A02**/MF **A01**

**EPA/540/09-93/252**
PR Notice 87-7. Notice to Producers, Formulators and Registrants of Pesticides.
PB93-146108/REB 93-01 PC **A02**/MF **A01**

**EPA/540/09-93/253**
PR Notice 87-8. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-147015/REB 93-01 PC **A02**/MF **A01**

**EPA/540/09-93/254**
PR Notice 87-9. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149151/REB 93-01 PC **A01**/MF **A01**

**EPA/540/09-93/255**
PR Notice 87-10. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149169/REB 93-01 PC **A01**/MF **A01**

**EPA/540/09-93/256**
PR Notice 87-11. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-149664/REB 93-01 PC **A01**/MF **A01**

**EPA/540/AR-92/002**
Carver-Greenfield Process (Trade Name) Dehydro-Tech Corporation. Applications Analysis Report.
PB93-101152/REB 93-01 PC **A03**/MF **A01**

**EPA/540/AR-92/010**
Applications Analysis Report: Silicate Technology Corporation's Solidification/Stabilization Technology for Organic and Inorganic Contaminants in Soils.
PB93-172948/REB 93-01 PC **A07**/MF **A02**

**EPA/540/AR-92/015**
Demonstration of a Trial Excavation at the McColl Superfund Site.
PB93-100121/REB 93-01 PC **A04**/MF **A01**

**EPA/540/AR-92/017**
Babcock and Wilcox Cyclone Furnace Vitrification Technology: Applications Analysis Report.
PB93-122315/REB 93-01 PC **A03**/MF **A01**

**EPA/540/C-93/003**
Field Certification Tracking System (FCTS). User's Guide. Version 2.1.
PB93-963415/REB 93-04 PC **A04**/MF **A01**

**EPA/540/F-93/004**
Required Contracts Management Training for Regional Superfund Personnel.
PB93-963258/REB 93-01 PC **A01**/MF **A01**

**EPA/540/F-93/005**
Extending the Tracking of Analytical Services to Potentially Responsible Party-Lead Superfund Sites (Supplemental Guidance on OSWER Directive 9240.0-2A).
PB93-963502/REB 93-01 PC **A03**/MF **A01**

**EPA/540/F-93/006**
Reassignment of CLP Transportation Functions.
PB93-963501/REB 93-01 PC **A01**/MF **A01**

**EPA/540/F-93/007**
OSWER Integrated Health and Safety Standard Operating Practices.
PB93-963401/REB 93-01 PC **A01**/MF **A01**

**EPA/540/F-93/008**
SARA '200' Remedial Action Starts Requirement.
PB93-963324/REB 93-01 PC **A01**/MF **A01**

**EPA/540/F-93/009**
Permits and Permit 'Equivalency' Processes for CERCLA On-Site Response Actions.
PB93-963325/REB 93-01 PC **A02**/MF **A01**

**EPA/540/F-93/010**
Use of Time and Materials and Cost Reimbursement Subcontracts for Remedial Actions under the Alternative Remedial Contracting Strategy Contracts.
PB93-963282/REB 93-01 PC **A02**/MF **A01**

**EPA/540/F-93/011**
Clarification of Delegation to Approve Consistency Exemptions at NPL Sites.
PB93-963281/REB 93-01 PC **A01**/MF **A01**

**EPA/540/F-93/012**
Guidance on Program Management Activities under ARCS.
PB93-963280/REB 93-01 PC **A03**/MF **A01**

**EPA/540/F-93/013**
Amendment to Historical Definitions of NPL Deletion Start and Completion Dates.
PB93-963278/REB 93-01 PC **A01**/MF **A01**

**EPA/540/F-93/014**
Identification of a Senior Superfund Official for Addressing Special NPL Site-Related Issues.
PB93-963279/REB 93-01 PC **A01**/MF **A01**

**EPA/540/F-93/015**
Performance Tracking under ARCS Contracts.
PB93-963276/REB 93-01 PC **A01**/MF **A01**

**EPA/540/F-93/016**
Initiatives to Streamline the Alternative Remedial Contracting Strategy (ARCS) Contracts' Award Fee Process.
PB93-963275/REB 93-01 PC **A03**/MF **A01**

**EPA/540/F-93/019**
NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC **A01**/MF **A01**

**EPA/540/F-93/020**
Technology Selection Guide for Wood Treater Sites.
PB93-963329/REB 93-04 PC **A02**/MF **A01**

**EPA/540/F-93/024**
Superfund Accelerated Cleanup Model (SACM): Questions and Answers.
PB93-963286/REB 93-04 PC **A01**/MF **A01**

**EPA/540/F-93/029**
Facility Response Plans.
PB93-963408/REB 93-01 PC **A01**/MF **A01**

**EPA/540/F-93/030**
Guidance on Setting Priorities for NPL Candidate Sites.
PB93-963333/REB 93-01 PC **A02**/MF **A01**

**EPA/540/F-93/032**
Questions and Answers on Release Notification Requirements and Reportable Quantity Adjustments.
PB93-963411/REB 93-01 PC **A03**/MF **A01**

**EPA/540/F-93/033**
Expedited Response Actions.
PB93-963410/REB 93-01 PC **A02**/MF **A01**

**EPA/540/F-93/035**
Presumptive Remedy for CERCLA Municipal Landfill Sites.
PB93-963339/REB 93-04 PC **A03**/MF **A01**

**EPA/540/F-93/039**
Determination of Imminent and Substantial Endangerment for Removal Actions.
PB93-963416/REB 93-04 PC **A01**/MF **A01**

**EPA/540/F-93/042**
Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis.
PB93-963297/REB 93-04 PC **A03**/MF **A01**

**EPA/540/F-93/047**
Presumptive Remedies: Policy and Procedures.
PB93-963345/REB 93-04 PC **A02**/MF **A01**

**EPA/540/F-93/048**
Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites with Volatile Organic Compounds in Soils.
PB93-963346/REB 93-04 PC **A03**/MF **A01**

**EPA/540/FS-92/216**
EPA Pesticide RED FACTS Sheets: Indole-3-Butyric Acid.
PB93-107282/REB 93-01 PC **A02**/MF **A01**

**EPA/540/FS-92/219**
RED Facts: Capsaicin.
PB93-100311/REB 93-01 PC **A02**/MF **A01**

**EPA/540/FS-92/224**
RED Facts: Ethylene.
PB93-100345/REB 93-01 PC **A02**/MF **A01**

**EPA/540/FS-93/225**
RED Facts: 'Nosema locustae'.
PB93-100352/REB 93-01 PC **A02**/MF **A01**

**EPA/540/FS-93/227**
RED Facts: Streptomycin and Streptomycin Sulfate.
PB93-100378/REB 93-01 PC **A02**/MF **A01**

**EPA/540/FS-93/230**
RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC **A02**/MF **A01**

**EPA/540/FS-93/232**
RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02**/MF **A01**

**EPA/540/FS-93/236**
Pesticide Fact Sheet Number 236: Pyridate.
PB93-130441/REB 93-01 PC **A03**/MF **A01**

**EPA/540-FS-93/238**
Pesticide Fact Sheet Number 20.1: Amitrole.
PB93-149680/REB 93-01 PC **A02**/MF **A01**

**EPA/540/FS-93/239**
Pesticide Fact Sheet Number 20.2: Amitrole.
PB93-144368/REB 93-01 PC **A02**/MF **A01**

**EPA/540/M-91/003**
Abstract Proceedings: Superfund Technical Support Project General Meeting. Held in Athens, Georgia on December 3-6, 1990.
PB93-205862/REB 93-04 PC **A03**/MF **A01**

**EPA/540/N-92/001**
Bioremediation: An Information Update on Applying Bioremediation to Site Cleanup.
PB93-126175/REB 93-01 PC **A03**/MF **A01**

**EPA/540/R-92/020**
Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC **A09**/MF **A02**

**EPA/540/R-92/021**
Guidance for Performing Site Inspections under CERCLA.
PB92-963375/REB 93-01 PC **A11**/MF **A03**

**EPA/540/R-92/026**
Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC **A22**/MF **A04**

**EPA/540/R-92/027**
OSWER Superfund Telephone Directory.
PB92-963289/REB 93-01 PC **A03**/MF **A01**

**EPA/540/R-92/029**
Mentor-Protege Program.
PB93-963251/REB 93-01 PC **A02**/MF **A01**

**EPA/540/R-92/071A**
Guide for Conducting Treatability Studies under CERCLA.
PB93-126787/REB 93-01 PC **A05**/MF **A01**

**EPA/540/R-92/073**
Technical Guidance Document: Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems.
PB93-105625/REB 93-01 PC **A05**/MF **A02**

**EPA/540/R-92/074A**
Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Remedy Selection. Interim Guidance.
PB93-126597/REB 93-01 PC **A03**/MF **A01**

**EPA/540/R-92/074B**
Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Quick Reference Fact Sheet.
PB93-121325/REB 93-01 PC **A02**/MF **A01**

**EPA/540/R-92/076**
Superfund Innovative Technology Evaluation Program: Progress and Accomplishments Fiscal Year 1991. A 5th Report to Congress.
PB93-126613/REB 93-01 PC **A05**/MF **A01**

**EPA/540/R-92/079A**
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 1.
PB93-227122/REB 93-04 PC **A08**/MF **A02**

**EPA/540/R-92/079B**
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 1.
PB93-227130/REB 93-04 PC **A24**/MF **A04**

**EPA/540/R-92/079C**
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grant Calumet River, Gary, Indiana. Volume 2. Part 2.
PB93-227148/REB 93-04 PC **A99**/MF **A06**

**EPA/540/R-92/079D**
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 3.
PB93-227155/REB 93-04 PC **A11**/MF **A03**

**EPA/540/R-92/080**
SITE-Emerging Technologies: Laser Induced Photochemical Oxidative Destruction of Toxic Organics in Leachates and Groundwaters.
PB93-131431/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/001**
National Priorities List Sites: Alabama, 1992.
PB93-963201/REB 93-01
see individual report for order number and price

**EPA/540/R-93/002**
National Priorities List Sites: Alaska, 1992.
PB93-963202/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/003**
National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/004**
National Priorities List Sites: Arkansas, 1992.
PB93-963205/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/005**
National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC **A12**/MF **A03**

**EPA/540/R-93/006**
National Priorities List Sites: Colorado, 1992.
PB93-963207/REB 93-01 PC **A05**/MF **A01**

**EPA/540/R-93/007**
National Priorities List Sites: Connecticut, 1992.
PB93-963208/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/008**
National Priorities List Sites: Delaware, 1992.
PB93-963209/REB 93-01 PC **A05**/MF **A01**

**EPA/540/R-93/009**
National Priorities List Sites: Florida, 1992.
PB93-963210/REB 93-01 PC **A08**/MF **A02**

**EPA/540/R-93/010**
National Priorities List Sites: Georgia, 1992.
PB93-963211/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/011**
National Priorities List Sites: Idaho, 1992.
PB93-963212/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/012**
National Priorities List Sites: Illinois, 1992.
PB93-963213/REB 93-01 PC **A06**/MF **A02**

**EPA/540/R-93/013**
National Priorities List Sites: Indiana, 1992.
PB93-963214/REB 93-01 PC **A06**/MF **A02**

**EPA/540/R-93/014**
National Priorities List Sites: Iowa, 1992.
PB93-963215/REB 93-01 PC **A05**/MF **A01**

**EPA/540/R-93/015**
National Priorities List Sites: Kansas, 1992.
PB93-963216/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/016**
National Priorities List Sites: Kentucky, 1992.
PB93-963217/REB 93-01 PC **A05**/MF **A01**

**EPA/540/R-93/017**
National Priorities List Sites: Louisiana, 1992.
PB93-963218/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/018**
National Priorities List Sites: Maine, 1992.
PB93-963219/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/019**
National Priorities List Sites: Maryland, 1992.
PB93-963220/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/020**
National Priorities List Sites: Massachusetts, 1992.
PB93-963221/REB 93-01 PC **A06**/MF **A02**

**EPA/540/R-93/021**
National Priorities List Sites: Michigan, 1992.
PB93-963222/REB 93-01 PC **A10**/MF **A03**

**EPA/540/R-93/022**
National Priorities List Sites: Minnesota, 1992.
PB93-963223/REB 93-01 PC **A07**/MF **A02**

**EPA/540/R-93/023**
National Priorities List Sites: Mississippi, 1992.
PB93-963224/REB 93-01 PC **A03**/MF **A01**

**EPA/540/R-93/024**
National Priorities List Sites: Missouri, 1992.
PB93-963225/REB 93-01 PC **A05**/MF **A02**

**EPA/540/R-93/025**
National Priorities List Sites: Montana, 1992.
PB93-963226/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/026**
National Priorities List Sites: Nebraska, 1992.
PB93-963227/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/027**
National Priorities List Sites: New Hampshire, 1992.
PB93-963228/REB 93-01 PC **A05**/MF **A01**

**EPA/540/R-93/028**
National Priorities List Sites: New Jersey, 1992.
PB93-963229/REB 93-01 PC **A14**/MF **A03**

**EPA/540/R-93/029**
National Priorities List Sites: New Mexico, 1992.
PB93-963230/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/030**
National Priorities List Sites: New York, 1992.
PB93-963231/REB 93-01 PC **A11**/MF **A03**

**EPA/540/R-93/031**
National Priorities List Sites: North Carolina, 1992.
PB93-963232/REB 93-01 PC **A05**/MF **A01**

**EPA/540/R-93/032**
National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/033**
National Priorities List Sites: Ohio, 1992.
PB93-963234/REB 93-01 PC **A06**/MF **A02**

**EPA/540/R-93/034**
National Priorities List Sites: Oklahoma, 1992.
PB93-963235/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/035**
National Priorities List Sites: Oregon, 1992.
PB93-963236/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/036**
National Priorities List Sites: Pennsylvania, 1992.
PB93-963237/REB 93-01 PC **A12**/MF **A03**

**EPA/540/R-93/037**
National Priorities List Sites: Rhode Island, 1992.
PB93-963239/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/038**
National Priorities List Sites: South Carolina, 1992.
PB93-963240/REB 93-01 PC **A05**/MF **A01**

**EPA/540/R-93/039**
National Priorities List Sites: Tennessee, 1992.
PB93-963241/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/040**
National Priorities List Sites: Texas, 1992.
PB93-963242/REB 93-01 PC **A06**/MF **A02**

**EPA/540/R-93/041**
National Priorities List Sites: Utah, 1992.
PB93-963243/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/042**
National Priorities List Sites: Vermont, 1992.
PB93-963244/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/043**
National Priorities List Sites: Virginia, 1992.
PB93-963245/REB 93-01 PC **A05**/MF **A01**

**EPA/540/R-93/044**
National Priorities List Sites: Washington, 1992.
PB93-963246/REB 93-01 PC **A08**/MF **A02**

**EPA/540/R-93/045**
National Priorities List Sites: West Virginia, 1992.
PB93-963247/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/046**
National Priorities List Sites: Wisconsin, 1992.
PB93-963248/REB 93-01 PC **A07**/MF **A02**

**EPA/540/R-93/047**
National Priorities List Sites: Wyoming, 1992.
PB93-963249/REB 93-01 PC **A03**/MF **A01**

**EPA/540/R-93/048**
National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/049**
National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/055**
Superfund: EPA/ICMA Superfund Revitalization Conference. Held in Chicago, Illinois on November 12-13, 1992.
PB93-963274/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/057**
Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA.
PB93-963402/REB 93-04 PC **A04**/MF **A01**

**EPA/540/R-93/059**
Compendium of ROD Language for FY 1993 Focus Areas.
PB93-963328/REB 93-01 PC **A04**/MF **A01**

**EPA/540/R-93/067**
Superfund Administrative Improvements. Executive Summary.
PB93-963294/REB 93-04 PC **A03**/MF **A01**

**EPA/540/R-93/068**
Superfund Administrative Improvements. Final Report.
PB93-963295/REB 93-04 PC **A04**/MF **A01**

**EPA/540/R-93/072**
Superfund Reauthorization: NACEPT Subcommittee Handbook.
PB93-963298/REB 93-04 PC **A05**/MF **A02**

**EPA/540/R-93/509**
Technology Evaluation Report: Site Program Demonstration Test. Accutech Pneumatic Fracturing Extraction and Hot Gas Injection, Phase 1. Volume 1.
PB93-216596/REB 93-04 PC **A08**/MF **A02**

**EPA/540/R-93/515**
Emerging Technology Report: Metals Treatment at Superfund Sites by Absorptive Filtration.
PB93-231165/REB 93-04 PC **A04**/MF **A01**

**EPA/540/R-93/516**
Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.
PB93-205383/REB 93-04 PC **A03**/MF **A01**

**EPA/540/R-93/517**
Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
PB93-216067/REB 93-04 PC **A07**/MF **A02**

**EPA/540/R-93/521**
Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.
PB93-227205/REB 93-04 PC **A04**/MF **A01**

**EPA/540/R-93/523**
Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
PB93-233914/REB 93-04 PC **A12**/MF **A03**

**EPA/540/RS-92/222**
Reregistration Eligibility Document (RED): Capsaicin. (List D, Case 4018).
PB93-101434/REB 93-01 PC **A08**/MF **A02**

**EPA/540/RS-93/226**
Reregistration Eligibility Document (RED) 'Nosema locustae'.
PB93-100360/REB 93-01 PC **A07**/MF **A02**

**EPA/540/RS-93/228**
Reregistration Eligibility Document (RED): Streptomycin and Streptomycin Sulfate.
PB93-100386/REB 93-01 PC **A09**/MF **A02**

**EPA/540/RS-93/229**
Reregistration Eligibility Document (RED) Zinc Salts.
PB93-101657/REB 93-01 PC **A11**/MF **A03**

**EPA/540/RS-93/231**
Reregistration Eligibility Document (RED) Soap Salts.
PB93-101673/REB 93-01 PC **A13**/MF **A03**

**EPA/540/RS-93/235**
Reregistration Eligibility Document (RED): Sodium Hydroxide.
PB93-124691/REB 93-01 PC **A07**/MF **A02**

**EPA/540/S5-91/005**
Horsehead Resource Development Company, Inc., Flame Reactor Technology. Technology Demonstration Summary.
PB93-145639/REB 93-01 PC **A02**/MF **A01**

**EPA/540/S-92/008**
Engineering Bulletin: Slurry Walls.
PB93-105575/REB 93-01 PC **A02**/MF **A01**

**EPA/540/S-92/009**
Engineering Bulletin: Technology Preselection Data Requirements.
PB93-105591/REB 93-01 PC **A02**/MF **A01**

**EPA/540/S-92/010**
Engineering Bulletin: Pyrolysis Treatment.
PB93-105583/REB 93-01 PC **A02**/MF **A01**

**EPA/540/S-92/011**
Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
PB93-121333/REB 93-01 PC **A03**/MF **A01**

**EPA/540/S-92/014**
Superfund Engineering Issue: Considerations for Evaluating the Impact of Metals Partitioning during the Incineration of Contaminated Soils from Superfund Sites.
PB93-121341/REB 93-01 PC **A03**/MF **A01**

**EPA/540/S-92/016**
Basic Concepts of Contaminant Sorption.
PB93-146835/REB 93-01 PC **A01**/MF **A01**

**EPA/540/S-92/017**
In-situ Bioremediation of Ground Water.
PB93-146850/REB 93-01 PC **A01**/MF **A01**

**EPA/540/S-92/018**
Behavior of Metals in Soils.
PB93-131480/REB 93-01 PC **A03**/MF **A01**

**EPA/540/S-93/501**
In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC **A03**/MF **A01**

**EPA/540/SR-92/017**
Babcock and Wilcox Cyclone Furnace Vitrification. Technology Demonstration Summary.
PB93-145621/REB 93-01 PC **A02**/MF **A01**

**EPA/542/B-92/003**
Synopses of Federal Demonstrations of Innovative Site Remediation Technologies.
PB93-144111/REB 93-01 PC **A11**/MF **A03**

**EPA/542/B-92/004**
Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC **A03**/MF **A01**

**EPA/542/B-92/005A**
OSWER Source Book. Volume 1. Training and Technology Transfer Resources, 1992-1993.
PB93-143980/REB 93-01 PC **A10**/MF **A03**

**EPA/542/B-92/005B**
OSWER Source Book. Volume 2. Training and Technology Transfer Resources, 1992-1993.
PB93-144129/REB 93-01 PC **A11**/MF **A03**

**EPA/542/B-93/001**
Online Guided Tour of the Cleanup Information Bulletin Board System. (CLU-IN: Cleanup Information Bulletin Board).
PB93-193704/REB 93-01 PC **A03**/MF **A01**

**EPA/542/R-92/010**
Technologies and Options for UST Corrective Actions: Overview of Current Practice.
PB93-145589/REB 93-01 PC **A05**/MF **A01**

**EPA/542/R-92/011**
Innovative Treatment Technologies: Semi-Annual Status Report (Fourth Edition).
PB93-133387/REB 93-01 PC **A05**/MF **A01**

**EPA/550/B-93/002**
Opportunities and Challenges for Local Emergency Planning Committees: Bestseller in EPCRA.
P393-234789/REB 93-04 PC **A02**/MF **A01**

**EPA/550/K-93/001**
Chemical Emergency Preparedness and Prevention Advisory: Hydrogen Fluoride, Series 8, No. 3.
PB93-234797/REB 93-04 PC **A02**/MF **A01**

**EPA/556/1-87/001**
INSEA User's Manual Environmental Performance Model of Incineration at Sea Operations.
PB93-206977/REB 93-04 PC **A07**/MF **A02**

**EPA/556/1-87/005**
Proceeding of the Workshop on the Sea-Surface Microlayer in Relation to Ocean Disposal. Held in Airlie, Virginia on December 18-19, 1985.
PB93-206993/REB 93-04 PC **A06**/MF **A02**

**EPA/560/1-89/002**
Toxic and Hazardous Chemicals, Title III and Communities: An Outreach Manual for Community Groups.
PB93-200806/REB 93-01 PC **A08**/MF **A02**

**EPA/560/4-88/004A**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Monofilament Fiber Manufacturing.
PB93-205961/REB 93-04 PC **A02**/MF **A01**

**EPA/560/4-88/004B**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Printing Operations.
PB93-205979/REB 93-04 PC **A02**/MF **A01**

**EPA/560/4-88/004C**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electrodeposition of Organic Coatings.
PB93-205987/REB 93-04 PC **A02**/MF **A01**

**EPA/560/4-88/004D**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Spray Application of Organic Coatings.
PB93-205995/REB 93-04 PC **A02**/MF **A01**

**EPA/560/4-88/004E**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Semiconductor Manufacturing.
PB93-206001/REB 93-04 PC **A02**/MF **A01**

**EPA/560/4-88/004F**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Formulation of Aqueous Solutions.
PB93-206019/REB 93-04 PC **A02**/MF **A01**

**EPA/560/4-88/004G**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electroplating Operations.
PB93-206027/REB 93-04 PC **A02**/MF **A01**

**EPA/560/4-88/004H**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Textile Dyeing.
PB93-206035/REB 93-04 PC **A02**/MF **A01**

**EPA/560/4-88/004I**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Presswood and Laminated Wood Products Manufacturing.
PB93-206043/REB 93-04 PC **A02**/MF **A01**

**EPA/560/4-88/004J**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Roller, Knife, and Gravure Coating Operations.
PB93-206050/REB 93-04 PC **A03**/MF **A01**

**EPA/560/4-88/004K**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Paper and Paperboard Production.
PB93-206068/REB 93-04 PC **A03**/MF **A01**

**EPA/560/4-88/004L**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Leather Tanning and Finishing.
PB93-206076/REB 93-04 PC **A03**/MF **A01**

**EPA/560/4-88/004P**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Wood Preserving Operations.
PB93-206084/REB 93-04 PC **A03**/MF **A01**

**EPA/560/4-88/004Q**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Rubber Production and Compounding.
PB93-206092/REB 93-04 PC **A03**/MF **A01**

**EPA/560/4-91/006**
Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (1991).
PB93-205854/REB 93-04 PC **A03**/MF **A01**

**EPA/560/4-91/008**
Toxic Chemical Release Inventory Magnetic Media Submission Instructions. Section 313 of the Emergency Planning and Community Right-to-Know Act (Revised 1990 Version).
PB93-116127/REB 93-01 PC **A03**/MF **A01**

**EPA/560/4-92/002**
Emergency Planning and Community Right-to-Know Act: Section 313 Release Reporting Requirements (August 1991).
PB93-205847/REB 93-04 PC **A03**/MF **A01**

**EPA/560/5-85/015**
Methods for Assessing Exposure to Chemical Substances. Volume 11. Methodology for Estimating the Migration of Additives and Impurities from Polymeric Materials.
PB93-134096/REB 93-01 PC **A09**/MF **A02**

**EPA/570/9-86/001**
Economic Assessment of Reducing Fluoride in Drinking Water.
PB93-115830/REB 93-01 PC **A05**/MF **A01**

**EPA/570/9-87/002**
Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells.
PB93-115897/REB 93-01 PC **A04**/MF **A01**

**EPA/570/9-87/003**
Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
PB93-115806/REB 93-01 PC **A05**/MF **A01**

**EPA/570/9-88/003**
Sanitary Survey Training: Instructor's Guide for Inspectors of Small Water Systems.
PB93-115871/REB 93-01 PC **A05**/MF **A01**

**EPA/570/9-88/004**
Sanitary Survey Training: Instructor's Guide for Sanitarians of Micronesia.
PB93-115889/REB 93-01 PC **A09**/MF **A02**

**EPA/570/9-89/002**
General Public Notification for Public Water Systems.
PB93-167096/REB 93-01 PC **A05**/MF **A01**

**EPA/570/9-89/003**
Underground Injection Control Program.
PB93-115905/REB 93-01 PC **A03**/MF **A01**

**EPA/570/9-91/006**
Florida Small Systems Compliance Project.
PB93-115855/REB 93-01 PC **A04**/MF **A01**

**EPA/570/09-91/007**
Protecting Local Ground-Water Supplies through Wellhead Protection.
PB93-216109/REB 93-04 PC **A03**/MF **A01**

**EPA/570/9-91/008**
Wellhead Protection Strategies for Confined-Aquifer Settings.
PB93-115913/REB 93-01 PC **A05**/MF **A01**

**EPA/570/9-91/009**
Delineation of Wellhead Protection Areas in Fractured Rocks.
PB93-115822/REB 93-01 PC **A08**/MF **A02**

**EPA/570/9-91/014**
Why do Wellhead Protection. Issues and Answers in Protecting Public Drinking Water Supply Systems.
PB93-115921/REB 93-01 PC **A03**/MF **A01**

**EPA/570/9-91/023**
Managing Ground Water Contamination Sources in Wellhead Protection Areas: A Priority Setting Approach.
PB93-115863/REB 93-01 PC **A12**/MF **A03**

**EPA/570/9-91/033**
Guide for Conducting Contaminant Source Inventories for Public Drinking Water Supplies. Technical Assistance Document.
PB93-126407/REB 93-01 PC **A06**/MF **A02**

**EPA/570/9-91/035**
Restructuring Manual: A Training Manual for State Drinking Water Personnel as They Meet the Challenges of the 1986 Safe Drinking Water Act Amendments.
PB93-180842/REB 93-01 PC **A04**/MF **A01**

**EPA/570/9-91/040**
Status Report on Development of Regulations for Disinfectants and Disinfection By-Products.
PB93-134914/REB 93-01 PC **A03**/MF **A01**

**EPA/570/9-91/700**
Radionuclides in Drinking Water. National Primary Drinking Water Regulations for Radionuclides. Proposed Rules.
PB93-194058/REB 93-01 PC **A03**/MF **A01**

**EPA/570/F-90/017**
Drinking Water Regulations under the Safe Drinking Water Act.
PB93-194033/REB 93-01 PC **A03**/MF **A01**

**EPA/570/F-91/044**
Phase II Fact Sheet: National Primary Drinking Water Regulations for 38 Inorganic and Synthetic Organic Chemicals.
PB93-193787/REB 93-01 PC **A03**/MF **A01**

**EPA/570/F-91/047**
Fact Sheet: National Primary Drinking Water Regulations for Lead and Copper.
PB93-193746/REB 93-01 PC **A03**/MF **A01**

**EPA/600/3-89/005**
Summary of the 1987 EPA National Performance Audit Program on Source Measurements.
PB93-223444/REB 93-04 PC **A03**/MF **A01**

**EPA/600/3-89/061A**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC **A14**/MF **A03**

**EPA/600/3-89/061B**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC **A18**/MF **A04**

**EPA/600/3-89/061C**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC **A14**/MF **A03**

**EPA/600/3-89/061D**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC **A14**/MF **A03**

**EPA/600/4-89/005**
Acid Precipitation in North America: 1986 Annual and Seasonal Data Summaries from Acid Deposition System Data Base.
PB93-223154/REB 93-04 PC **A04**/MF **A01**

**EPA/600/4-90/033**
Near Coastal Program Plan for 1991: Estuaries.
PB93-116176/REB 93-01 PC **A12**/MF **A03**

**EPA/600/4-91/013**
Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC **A12**/MF **A03**

**EPA/600/4-91/018**
Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13**/MF **A03**

**EPA/600/6-90/006F**
Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders.
PB93-134419/REB 93-01 PC**$29.00**/MF **A04**

**EPA/600/8-89/053**
Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04**/MF **A01**

**EPA/600/8-90/045F**
Air Quality Criteria for Carbon Monoxide.
PB93-167492/REB 93-01 PC **A99**/MF **A06**

**EPA/600/8-91/008A**
Geostatistical Environmental Assessment Software: User's Guide. GEO-EAS 1.2.1.
PB93-163236/REB 93-01 PC **A07**/MF **A02**

**EPA/600/8-91/057**
Evaluation of the Potential Carcinogenicity of Acetamide, N-Fluoren-2-yl (53-96-3).
PB93-181626/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/058**
Evaluation of the Potential Carcinogenicity of Acrylonitrile (107-13-1).
PB93-181634/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/059**
Evaluation of the Potential Carcinogenicity of Aldrin (309-00-2).
PB93-181642/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/060**
Evaluation of the Potential Carcinogenicity of Amitrole (61-82-5).
PB93-181659/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/061**
Evaluation of the Potential Carcinogenicity of Arsenic and Inorganic Arsenic Compounds.
PB93-181667/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/062**
Evaluation of the Potential Carcinogenicity of Cacodylic Acid (75-60-5).
PB93-184851/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/063**
Evaluation of the Potential Carcinogenicity of Dichlorophenylarsine (696-28-6).
PB93-184869/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/064**
Evaluation of the Potential Carcinogenicity of Diethylarsine (692-42-2).
PB93-184877/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/065**
Evaluation of the Potential Carcinogenicity of Asbestos (1332-21-4).
PB93-184885/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/066**
Evaluation of the Potential Carcinogenicity of Auramine (492-80-8).
PB93-184893/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/067**
Evaluation of the Potential Carcinogenicity of Azaserine (115-02-6).
PB93-184901/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/068**
Evaluation of the Potential Carcinogenicity of Aziridine (151-56-4).
PB93-184919/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/069**
Evaluation of the Potential Carcinogenicity of Benz(c)acridine (225-51-4).
PB93-184927/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/070**
Evaluation of the Potential Carcinogenicity of Benz(a)anthracene (00056-55-3).
PB93-184935/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/071**
Evaluation of the Potential Carcinogenicity of Benzene (71-43-2).
PB93-184943/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/072**
Evaluation of the Potential Carcinogenicity of Benzidine and Its Salt (92-87-5).
PB93-184976/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/073**
Evaluation of the Potential Carcinogenicity of Benzo(b)fluoranthene (00205-99-2).
PB93-184984/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/074**
Evaluation of the Potential Carcinogenicity of Benzo(k)fluoranthene (207-08-9).
PB93-184992/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/075**
Evaluation of the Potential Carcinogenicity of Benzo(a)Pyrene (50-32-8).
PB93-185007/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/076**
Evaluation of the Potential Carcinogenicity of Benzotrichloride (97-07-7).
PB93-185015/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/077**
Evaluation of the Potential Carcinogenicity of Benzyl Chloride (100-44-7).
PB93-185023/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/078**
Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
PB93-185031/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/079**
Evaluation of the Potential Carcinogenicity of Alpha-Hexachlorocyclohexane (319-84-6).
PB93-185049/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/080**
Evaluation of the Potential Carcinogenicity of Beta-Hexachlorocyclohexane (319-85-7).
PB93-185056/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/081**
Evaluation of the Potential Carcinogenicity of Gamma-Hexachlorocyclohexane (Lindane) (58-89-9).
PB93-185064/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/082**
Evaluation of the Potential Carcinogenicity of Bis(2-Chloroethyl)Ether (111-44-4).
PB93-185072/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/083**
Evaluation of the Potential Carcinogenicity of Bis(Chloromethyl)Ether (542-88-1).
PB93-185080/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/084**
Evaluation of the Potential Carcinogenicity of Bis(2-Ethylhexyl)Phthalate (117-81-7).
PB93-185098/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/085**
Evaluation of the Potential Carcinogenicity of Cadmium (7440-43-9), Cadium Acetate (543-90-8), Cadmium Bromide (7789-42-6), Cadmium Chloride (10108-64-2).
PB93-185106/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/086**
Evaluation of the Potential Carcinogenicity of Carbon Tetrachloride (56-23-5).
PB93-185114/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/087**
Evaluation of the Potential Carcinogenicity of Chlorambucil (305-03-3).
PB93-185213/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/088**
Evaluation of the Potential Carcinogenicity of Chlordane (57-74-9).
PB93-185221/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/089**
Evaluation of the Potential Carcinogenicity of Chlornaphazine (494-03-1).
PB93-185239/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/090**
Evaluation of the Potential Carcinogenicity of Chloroform (67-66-3).
PB93-194249/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/091**
Evaluation of the Potential Carcinogenicity of Chloromethyl Methyl Ether (Technical Grade) (107-30-2).
PB93-185122/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/092**
Evaluation of the Potential Carcinogenicity of 4-Chloro-o-Toluidine Hydrochloride (3165-93-3).
PB93-185130/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/093**
Evaluation of the Potential Carcinogenicity of Chromium and Hexavalent Chromium Compounds.
PB93-185148/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/094**
Evaluation of the Potential Carcinogenicity of Chrysene (218-01-9).
PB93-185155/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/095**
Evaluation of the Potential Carcinogenicity of Coke Oven Emissions.
PB93-185163/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/096**
Evaluation of the Potential Carcinogenicity of Creosote (8001-58-9).
PB93-185171/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/097**
Evaluation of the Potential Carcinogenicity of Cyclophosphamide (50-18-0).
PB93-185189/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/098**
Evaluation of the Potential Carcinogenicity of Daunomycin (20830-81-3).
PB93-185197/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/099**
Evaluation of the Potential Carcinogenicity of DDD (72-54-8).
PB93-185205/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/100**
Evaluation of the Potential Carcinogenicity of DDE (72-55-9).
PB93-185247/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/101**
Evaluation of the Potential Carcinogenicity of DDT (50-29-3).
PB93-185254/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/102**
Evaluation of the Potential Carcinogenicity of Diallate (2303-16-4).
PB93-185262/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/103**
Evaluation of the Potential Carcinogenicity of Diaminotoluene (Mixed) (95-80-7).
PB93-185270/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/104**
Evaluation of the Potential Carcinogenicity of Dibenz(a,h)Anthracene (53-70-3).
PB93-185288/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/105**
Evaluation of the Potential Carcinogenicity of 1,2:7,8-Dibenzopyrene (189-55-9).
PB93-185296/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/106**
Evaluation of the Potential Carcinogenicity of 1,2-Dibromo-3-Chloropropane (96-12-8).
PB93-185304/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/107**
Evaluation of the Potential Carcinogenicity of 3,3'-Dichlorobenzidine (91-94-1).
PB93-194256/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/108**
Evaluation of the Potential Carcinogenicity of 1,2-Dichloroethane (107-06-2).
PB93-194264/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/109**
Evaluation of the Potential Carcinogenicity of Dieldrin (60-57-1).
PB93-194272/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/110**
Evaluation of the Potential Carcinogenicity of 1,2:3,4-Diepoxybutane (1464-53-5).
PB93-194280/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/111**
Evaluation of the Potential Carcinogenicity of 1,2-Diethylhydrazine (1615-80-1).
PB93-194298/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/112**
Evaluation of the Potential Carcinogenicity of Diethylstilbestrol (56-53-1).
PB93-194306/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/113**
Evaluation of the Potential Carcinogenicity of Dihydrosafrole (94-58-6).
PB93-185312/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/114**
Evaluation of the Potential Carcinogenicity of 3,3'-Dimethoxybenzidine (119-90-4).
PB93-194314/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/115**
Evaluation of the Potential Carcinogenicity of Dimethyl Sulfate (77-78-1).
PB93-194322/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/116**
Evaluation of the Potential Carcinogenicity of Dimethylaminoazobenzene (60-11-7).
PB93-185338/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/117**
Evaluation of the Potential Carcinogenicity of 7,12-Dimethylbenz(a)anthracene (57-97-6).
PB93-185346/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/118**
Evaluation of the Potential Carcinogenicity of 3,3'-Dimethylbenzidine (119-93-7).
PB93-185353/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/119**
Evaluation of the Potential Carcinogenicity of Dimethylcarbamoyl Chlo.
PB93-185361/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/120**
Evaluation of the Potential Carcinogenicity of 1,1 Dimethylhydrazine (57-14-7).
PB93-185379/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/121**
Evaluation of the Potential Carcinogenicity of 1,2-Dimethylhydrazine (540-73-8).
PB93-185387/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/122**
Evaluation of the Potential Carcinogenicity of Dinitrotoluene (Mixture) (25321-14-6).
PB93-185395/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/123**
Evaluation of the Potential Carcinogenicity of 2,4-Dinitrotoluene (121-14-2).
PB93-185403/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/124**
Evaluation of the Potential Carcinogenicity of 2,6-Dinitrotoluene (606-20-2).
PB93-185411/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/125**
Evaluation of the Potential Carcinogenicity of 1,4-Dioxane (123-91-1).
PB93-185429/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/126**
Evaluation of the Potential Carcinogenicity of 1,2-Diphenylhydrazine (122-66-7).
PB93-192326/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/127**
Evaluation of the Potential Carcinogenicity of Epichlorohydrin (106-89-8).
PB93-192334/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/128**
Evaluation of the Potential Carcinogenicity of Ethyl Carbamate (Urethane) (51-79-6).
PB93-192342/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/129**
Evaluation of the Potential Carcinogenicity of Ethyl 4,4'-Dichlorobenzilate (510-15-6).
PB93-192359/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/130**
Evaluation of the Potential Carcinogenicity of Ethylene Dibromide (106-93-4).
PB93-192367/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/131**
Evaluation of the Potential Carcinogenicity of Ethylene Oxide (75-21-8).
PB93-192375/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/132**
Evaluation of the Potential Carcinogenicity of Ethylenethioures (96-45-7).
PB93-193589/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/133**
Evaluation of the Potential Carcinogenicity of Ethyl Methanesulfonate (62-50-0).
PB93-193597/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/134**
Evaluation of the Potential Carcinogenicity of Formaldehyde (50-00-0).
PB93-193605/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/135**
Evaluation of the Potential Carcinogenicity of Glycidylaldehyde (765-34-4).
PB93-193613/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/136**
Evaluation of the Potential Carcinogenicity of Heptachlor (76-44-8).
PB93-190478/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/137**
Evaluation of the Potential Carcinogenicity of Heptachlor Epoxide (1024-57-3).
PB93-190486/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/138**
Evaluation of the Potential Carcinogenicity of Hexachlorobenzene (118-74-1).
PB93-190494/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/139**
Evaluation of the Potential Carcinogenicity of Hexachlorobutadiene (87-68-3).
PB93-190502/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/140**
Evaluation of the Potential Carcinogenicity of Hexachloroethane (67-72-1).
PB93-190510/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/141**
Evaluation of the Potential Carcinogenicity of Hydrazine (302-01-2).
PB93-190528/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/142**
Evaluation of the Potential Carcinogenicity of Indeno(1,2,3-CD)Pyrene (193-39-5).
PB93-190536/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/143**
Evaluation of the Potential Carcinogenicity of Isosafrole (120-58-1).
PB93-190544/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/144**
Evaluation of the Potential Carcinogenicity of Kepone Chlordecone (143-50-0).
PB93-190569/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/145**
Evaluation of the Potential Carcinogenicity of Lasiocarpine (303-34-4).
PB93-190577/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/146**
Evaluation of the Potential Carcinogenicity of Melphalan (148-82-3).
PB93-196301/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/147**
Evaluation of the Potential Carcinogenicity of Methyl Chloride (74-87-3).
PB93-196319/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/148**
Evaluation of the Potential Carcinogenicity of 3-Methylcholanthrene (59-49-5).
PB93-196327/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/149**
Evaluation of the Potential Carcinogenicity of 4,4'-Methylenebis (1-Chloroaniline) (101-14-4).
PB93-196335/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/150**
Evaluation of the Potential Carcinogenicity of Methyl Iodide (74-88-4).
PB93-196343/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/151**
Evaluation of the Potential Carcinogenicity of N-Methyl-N'-Nitro-N-Nitrosoguanidine (70-25-7).
PB93-196350/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/152**
Evaluation of the Potential Carcinogenicity of Methylthiouracil (56-04-2).
PB93-196368/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/153**
Evaluation of the Potential Carcinogenicity of Mitomycin C (50-07-7).
PB93-196376/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/154**
Evaluation of the Potential Carcinogenicity of 1-Naphthylamine (134-32-7).
PB93-196384/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/155**
Evaluation of the Potential Carcinogenicity of 2-Naphthylamine (91-59-8).
PB93-196392/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/156**
Evaluation of the Potential Carcinogenicity of Nickel (7740-02-0).
PB93-196400/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/157**
Evaluation of the Potential Carcinogenicity of 2-Nitropropane (79-46-9).
PB93-196418/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/158**
Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Butylamine (924-16-3).
PB93-196426/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/159**
Evaluation of the Potential Carcinogenicity of N-Nitrosodiethanolamine (1116-54-7).
PB93-196434/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/160**
Evaluation of the Potential Carcinogenicity of N-Nitrosodiethylamine (55-18-5).
PB93-196442/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/161**
Evaluation of the Potential Carcinogenicity of N-Nitrosodimethylamine (62-75-9).
PB93-196459/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/162**
Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Propylamine (621-64-7).
PB93-196467/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/163**
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Ethylurea (759-73-9).
PB93-196475/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/164**
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurea (684-93-5).
PB93-196483/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/165**
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurethane (165-53-2).
PB93-196491/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/166**
Evaluation of the Potential Carcinogenicity of N-Nitrosomethylvinylamine (4549-40-0).
PB93-196509/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/167**
Evaluation of the Potential Carcinogenicity of N-Nitrosopiperidine (100-75-4).
PB93-196517/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/168**
Evaluation of the Potential Carcinogenicity of N-Nitrosopyrrolidine.
PB93-196525/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/169**
Evaluation of the Potential Carcinogenicity of 5-Nitro-O-Toluidine (99-55-8).
PB93-196533/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/170**
Evaluation of the Potential Carcinogenicity of Pentachloroethane (76-01-7).
PB93-185320/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/171**
Evaluation of the Potential Carcinogenicity of Pentachloronitrobenzene (82-68-8).
PB93-196541/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/172**
Evaluation of the Potential Carcinogenicity of Pentachlorophenol (87-86-5).
PB93-196558/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/173**
Evaluation of the Potential Carcinogenicity of Phenacetin (62-44-2).
PB93-196566/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/174**
Evaluation of the Potential Carcinogenicity of Polychlorinated Biphenyls (1336-36-3) Including Specific Aroclors.
PB93-196574/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/175**
Evaluation of the Potential Carcinogenicity of 1,3-Propane Sultone (1120-71-4).
PB93-196582/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/176**
Evaluation of the Potential Carcinogenicity of 1,2-Propylenimine (75-55-8).
PB93-196590/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/177**
Evaluation of the Potential Carcinogenicity Saccharin (81-07-2).
PB93-196608/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/178**
Evaluation of the Potential Carcinogenicity of Safrole (94-59-7).
PB93-201291/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/179**
Evaluation of the Potential Carcinogenicity of Selenium Sulfide (Selenium Disulfide) (7488-56-4).
PB93-201283/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/180**
Evaluation of the Potential Carcinogenicity of Streptozotocin (18883-66-4).
PB93-201275/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/181**
Evaluation of the Potential Carcinogenicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (1746-01-6).
PB93-201267/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/182**
Evaluation of the Potential Carcinogenicity of 1,1,1,2-Tetrachloroethane (630-20-6).
PB93-201259/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/183**
Evaluation of the Potential Carcinogenicity of 1,1,2,2-Tetrachloroethane (79-34-5).
PB93-201242/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/184**
Evaluation of the Potential Carcinogenicity of Tetrachloroethylene (127-18-4).
PB93-201234/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/185**
Evaluation of the Potential Carcinogenicity of Thioacetamide (62-55-5).
PB93-201226/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/186**
Evaluation of the Potential Carcinogenicity of Thiourea (62-56-6).
PB93-201218/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/187**
Evaluation of the Potential Carcinogenicity of o-Toluidine (95-53-4).
PB93-201200/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/188**
Evaluation of the Potential Carcinogenicity of p-Toluidine (106-49-0).
PB93-201192/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/189**
Evaluation of the Potential Carcinogenicity of o-Toluidine Hydrochloride (636-21-5).
PB93-202349/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/190**
Evaluation of the Potential Carcinogenicity of Toxaphene (8001-35-2).
PB93-202331/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/191**
Evaluation of the Potential Carcinogenicity of 1,1,2-Trichloroethane (79-00-5).
PB93-204584/REB 93-01 PC **A03/MF A01**

**EPA/600/8-91/192**
Evaluation of the Potential Carcinogenicity of Trichloroethylene (79-01-6).
PB93-202323/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/193**
Evaluation of the Potential Carcinogenicity of Trichlorophenol (Mixed) (2516-78-22).
PB93-202315/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/194**
Evaluation of the Potential Carcinogenicity of 2,4,5-Trichlorophenol (95-95-4).
PB93-202307/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/195**
Evaluation of the Potential Carcinogenicity of 2,4,6-Trichlorophenol (88-06-2).
PB93-202299/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/196**
Evaluation of the Potential Carcinogenicity of Tris(2,3-Dibromopropyl) Phosphate (126-72-7).
PB93-202281/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/197**
Evaluation of the Potential Carcinogenicity of Trypan Blue (72-57-1).
PB93-202273/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/198**
Evaluation of the Potential Carcinogenicity of Uracil Mustard (66-75-1).
PB93-202265/REB 93-01 PC **A03**/MF **A01**

**EPA/600/8-91/199**
Evaluation of the Potential Carcinogenicity of Vinyl Chloride (75-01-4).
PB93-202257/REB 93-01 PC **A03**/MF **A01**

**EPA/600/9-90/028**
Environmental Monitoring and Assessment Program: 1990 Project Descriptors.
PB93-116150/REB 93-01 PC **A04**/MF **A01**

**EPA/600/9-90/038**
Research to Improve Health Risk Assessments (RIHRA) Program.
PB93-116226/REB 93-01 PC **A06**/MF **A02**

**EPA/600/9-90/041**
Bioremediation of Hazardous Wastes.
PB93-116143/REB 93-01 PC **A04**/MF **A01**

**EPA/600/9-90/053**
Strategy for Environmental Health Research at EPA.
PB93-116168/REB 93-01 PC **A06**/MF **A02**

**EPA/600/A-92/31**
Laboratory Simulation of Turbulent Convection Over an Urban Heat Island.
PB93-120871/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/176**
32P-Postlabeling in Studies of PAH Activation.
PB93-106631/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/186**
Status of ASHRAE Standard 62. Ventilation for Acceptable Indoor Air Quality.
PB93-222040/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-92/195**
Digital Topographic Approach to Modeling: The Distribution of Precipitation in Mountainous Terrain.
PB93-106649/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/196**
Glossary for Avian Conservation Biology.
PB93-106656/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/197**
Air Toxics: The Research Challenge of the 1990 Clean Air Act Amendments.
PB93-106664/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/199**
Technical Issues on Long-Term Performance of Solidified/Stabilized Waste Forms.
PB93-106680/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/200**
Landfill Containment and Cover Systems.
PB93-106698/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/201**
FLEX: An Expert System for Reviewing the Chemical Resistance of Flexible Membrane Liners for Waste Management.
PB93-106706/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/202**
Resistance of Membranes in Cover Systems to Root Penetration by Grass and Trees.
PB93-106714/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/203**
Landfill Containment Systems Regulations.
PB93-106722/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/204**
Use of Ecoregions in Biological Monitoring.
PB93-106730/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/205**
EMAP and Other Tools for Measuring Biodiversity, Habitat Conditions, and Environmental Trends.
PB93-106748/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/207**
Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/208**
Modeling of Indoor Air Quality for a Personal Computer.
PB93-106771/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/209**
Validation of Source and Sink Models: Problems and Possible Solutions.
PB93-106789/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/210**
ASHRAE Standard 62: Ventilation for Acceptable Indoor Air Quality.
PB93-106797/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/211**
Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/212**
Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/213**
Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
PB93-106821/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/214**
Use of Surface-Coating-Free Materials for Reduction of Volatile Organic Compound Emissions from Coating Operations.
PB93-106839/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/215**
On-Line Measurement of Nitrous Oxide from Combustion Sources by Automated Gas Chromatography.
PB93-106847/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/216**
Technologies Options for Acid Rain Control.
PB93-106854/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/217**
Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/218**
Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/219**
STREAM: An Exposure Assessment Methodology for Agricultural Pesticide Runoff.
PB93-106888/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/220**
Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/221**
Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/222**
Physiological and Nonspecific Biomarkers.
PB93-119832/REB 93-01 PC **A05**/MF **A01**

**EPA/600/A-92/224**
Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/226**
Survey of Protocols for Conducting Indoor Air Quality Investigations in Large Buildings.
PB93-119865/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/227**
Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119873/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/228**
Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119881/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/229**
Pilot Study to Evaluate Methods for the Assessment of Exposure of Small Children to Pesticides in the Residential Environment.
PB93-119899/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/230**
Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/232**
Development of an Improved Urban Airshed Modeling System.
PB93-120889/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/233**
Stagnation Diffusion Observed in a Deeply Pooling Valley during STAGMAP.
PB93-120897/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/234**
Model Calculations of the Annual Atmospheric Deposition of Toxic Metals to Lake Michigan.
PB93-120905/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/235**
Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/236**
Comparison of Modeled Concentration Profiles Using Site-Specific and Constant-Condition Meteorological Data for the ISCLT and PAL Models.
PB93-120921/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/237**
Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/238**
Design of the Clean Air Act Deposition Monitoring Network.
PB93-120947/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/239**
Atmospheric Deposition of Toxic Metals to Lake Michigan: Preliminary Annual Model Calculations.
PB93-120954/REB 93-01 PC **E02**/MF **A01**

**EPA/600/A-92/240**
Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/241**
Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
PB93-120970/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/242**
Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/243**
Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/244**
Atmopheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/245**
Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/246**
Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/247**
Geographical Distribution and Source Type Analysis of Toxic Metal Emissions.
PB93-121036/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/248**
Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/249**
Evaluation of Commercially-Available Portable Gas Chromatographs.
PB93-121051/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/250**
Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
PB93-121069/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/251**
Evaluation of a Sorbent-Based Preconcentrated for Analysis of VOCs in Air Using Gas Chromatography-Atomic Emission Detection.
PB93-121077/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/252**
Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/253**
Proceedings of the EPA/A and WMA International Symposium (1992), Measurement of Toxic and Related Air Pollutants. Held in Durham, North Carolina on May 4-9, 1992.
PB93-121093/REB 93-01 PC **A01**/MF **A01**

**EPA/600/A-92/254**
Column Vapor Extraction Experiments on Gasoline Contaminated Soil.
PB93-131514/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/255**
Formaldehyde-Contaminated Fog Effects on Plant Growth.
PB93-121101/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/256**
Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/257**
Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/259**
Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-92/260**
Comparing the Accuracy of Equation Formats for Modeling Microbial Population Decay Rates.
PB93-131548/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/261**
Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-92/262**
Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC A03/MF A01

**EPA/600/A-92/263**
Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC A03/MF A01

**EPA/600/A-92/264**
Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC A03/MF A01

**EPA/600/A-92/265**
Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC A03/MF A01

**EPA/600/A-92/266**
Dry Flue Gas Cleaning Processes for Achieving Air Pollutant Emissions Requirements.
PB93-131605/REB 93-01 PC A03/MF A01

**EPA/600/A-92/267**
Development of Good Combustion Practice for Municipal Waste Combustors.
PB93-131613/REB 93-01 PC A03/MF A01

**EPA/600/A-92/268**
Evaluating Materials for Healthy Buildings.
PB93-131621/REB 93-01 PC A03/MF A01

**EPA/600/A-92/269**
Applications of Pulse Combustion in Industrial and Incineration Processes.
PB93-131639/REB 93-01 PC A03/MF A01

**EPA/600/A-92/270**
Analysis of IAQ Control Options and the Effects of Sources and Sinks.
PB93-131647/REB 93-01 PC A02/MF A01

**EPA/600/A-92/271**
Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC A02/MF A01

**EPA/600/A-92/272**
Design of New Schools and Other Large Buildings Which Are Radon Resistant and Easy to Mitigate.
PB93-131662/REB 93-01 PC A03/MF A01

**EPA/600/A-92/273**
Opportunities for the Use of Geosynthetics in Waste Management Facilities.
PB93-131670/REB 93-01 PC A03/MF A01

**EPA/600/A-92/274**
Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131688/REB 93-01 PC A03/MF A01

**EPA/600/A-92/275**
Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC A03/MF A01

**EPA/600/A-92/277**
Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
PB93-131704/REB 93-01 PC A03/MF A01

**EPA/600/A-92/278**
Comparison of Aerosol Acidity in Urban and Semi-Rural Environments.
PB93-131712/REB 93-01 PC A03/MF A01

**EPA/600/A-92/279**
Inventory of Methane Losses from the Natural Gas Industry.
PB93-131720/REB 93-01 PC A03/MF A01

**EPA/600/A-92/281**
Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
PB93-135671/REB 93-01 PC A01/MF A01

**EPA/600/A-92/282**
Trace Organic Contaminants in Anthropogenically Acidified Surface Waters.
PB93-135689/REB 93-01 PC A03/MF A01

**EPA/600/A-92/283**
Rice Field Inventory Using AVHRR Data.
PB93-135697/REB 93-01 PC A03/MF A01

**EPA/600/A-92/285**
Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC A02/MF A01

**EPA/600/A-92/286**
Advacate-Low-Cost Process for SO2 Control.
PB93-141117/REB 93-01 PC A02/MF A01

**EPA/600/A-92/287**
Soil-Mediated Effects of Atmospheric Deposition on Eastern U.S. Spruce-Fir Forests.
PB93-141125/REB 93-01 PC A03/MF A01

**EPA/600/A-92/288**
Characterization of Eastern U.S. Spruce-Fir Soils.
PB93-141133/REB 93-01 PC A03/MF A01

**EPA/600/A-92/289**
Influence of Elevated CO2 and Temperature on Wetland Rice Root Dynamics.
PB93-141141/REB 93-01 PC A02/MF A01

**EPA/600/A-92/290**
Effects of CO2 and Temperature on Five Rice Cultivars.
PB93-141158/REB 93-01 PC A02/MF A01

**EPA/600/A-92/291**
Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC A02/MF A01

**EPA/600/A-92/292**
Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC A02/MF A01

**EPA/600/A-92/293**
Mineral Dissolution Rates: A Comparison of Laboratory and Field Studies.
PB93-141182/REB 93-01 PC A01/MF A01

**EPA/600/A-92/937**
Modeling Individual Exposure from Indoor Sources.
PB93-119840/REB 93-01 PC A03/MF A01

**EPA/600/A-93/002**
Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC A03/MF A01

**EPA/600/A-93/003**
Vertical Diffusion in Small Stratified Lake: Data and Error Analysis.
PB93-149185/REB 93-01 PC A03/MF A01

**EPA/600/A-93/004**
Bioremediation.
PB93-149193/REB 93-01 PC A03/MF A01

**EPA/600/A-93/005**
Comparison of Ground-Water Sampling Devices Based on Equilibration of Water Quality Indicator Parameters.
PB93-149201/REB 93-01 PC A03/MF A01

**EPA/600/A-93/006**
U.S. EPA's QA/QC Program for Waste Management Facilities. Proceedings of the GRI Seminar (6th), MQC/MQA and CQC/CQA of Geosynthetics. Held in Philadelphia, Pennsylvania on December 10-11, 1992.
PB93-149219/REB 93-01 PC A02/MF A01

**EPA/600/A-93/007**
Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC A03/MF A01

**EPA/600/A-93/008**
Development of Genetically Enhanced Baculovirus Pesticides (Chapter 5).
PB93-149235/REB 93-01 PC A02/MF A01

**EPA/600/A-93/009**
Collection and Chemical Analysis of Lichens for Biomonitoring.
PB93-149862/REB 93-01 PC A03/MF A01

**EPA/600/A-93/010**
Ecologically Acceptable Strategy for the Use of Genetically Engineered Baculovirus Pesticides.
PB93-149243/REB 93-01 PC A02/MF A01

**EPA/600/A-93/011**
Uncertainties in Countrywide Forest Biomass Estimates.
PB93-149250/REB 93-01 PC A03/MF A01

**EPA/600/A-93/012**
Role of Soil Organic Acids in Mineral Weathering Processes (Chapter 6).
PB93-149268/REB 93-01 PC A04/MF A01

**EPA/600/A-93/013**
Isolation and Purification of Bacterial DNA from Soil.
PB93-149276/REB 93-01 PC A04/MF A01

**EPA/600/A-93/018**
Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC A03/MF A01

**EPA/600/A-93/019**
Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC A03/MF A01

**EPA/600/A-93/042**
Photochemical Conversion of Solar Energy in the Environment.
PB93-167187/REB 93-01 PC A03/MF A01

**EPA/600/A-93/052**
Estimation of the Cost of Using Chemical Protective Clothing.
PB93-168805/REB 93-01 PC A03/MF A01

**EPA/600/A-93/053**
Evaluation of Portable Gas Chromatographs.
PB93-168813/REB 93-01 PC A03/MF A01

**EPA/600/A-93/054**
Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC A03/MF A01

**EPA/600/A-93/055**
Analysis of Protocol Gases: An On-Going Quality Assurance Audit.
PB93-168839/REB 93-01 PC A02/MF A01

**EPA/600/A-93/056**
Effects of Kraft Mill Effluent on the Sexuality of Fishes: An Environmental Early Warning.
PB93-168847/REB 93-01 PC A03/MF A01

**EPA/600/A-93/058**
Assessing Potential Exposures from Routine Use of VOC-Contaminated Groundwater.
PB93-173060/REB 93-01 PC A02/MF A01

**EPA/600/A-93/059**
Evaluation of Emissions from Masonry Heaters and Masonry Fireplaces in Homes.
PB93-173078/REB 93-01 PC A03/MF A01

**EPA/600/A-93/061**
Technological Options for Acid Rain Control.
PB93-173094/REB 93-01 PC A03/MF A01

**EPA/600/A-93/062**
Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
PB93-173102/REB 93-01 PC A03/MF A01

**EPA/600/A-93/063**
Using a Neural Network to Estimate Solvent Consumption.
PB93-173110/REB 93-01 PC A02/MF A01

**EPA/600/A-93/064**
Development of a Field Test Method for the Determination of Lead in Paint and Paint-Contaminated Dust and Soil.
PB93-173128/REB 93-01 PC A03/MF A01

**EPA/600/A-93/065**
Agricultural Pesticide Emissions Associated with Common Crops in the United States.
PB93-173136/REB 93-01 PC A03/MF A01

**EPA/600/A-93/066**
What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC A03/MF A01

**EPA/600/A-93/067**
Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC A03/MF A01

**EPA/600/A-93/068**
Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC A03/MF A01

**EPA/600/A-93/069**
Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
PB93-175503/REB 93-01 PC A03/MF A01

**EPA/600/A-93/070**
Simulation of Performance of Chlorine-Free Fluorinated Ethers and Fluorinated Hydrocarbons to Replace CFC-11 and CFC-114 in Chillers.
PB93-175511/REB 93-01 PC A03/MF A01

**EPA/600/A-93/071**
Alternate Performance Standard Project: Interpreting the Post-Construction Test.
PB93-175529/REB 93-01 PC A03/MF A01

**EPA/600/A-93/072**
Laboratory Studies on the Stability and Transport of Inorganic Colloids Through Natural Aquifer Material (Chapter 49).
PB93-175537/REB 93-01 PC A02/MF A01

**EPA/600/A-93/073**
Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC A02/MF A01

**EPA/600/A-93/074**
Immunoassay for p-Nitrophenol in Urine (Chapter XX).
PB93-175552/REB 93-01 PC A03/MF A01

**EPA/600/A-93/075**
Measurement of Biogenic Emissions from Corn.
PB93-180883/REB 93-01 PC A02/MF A01

**EPA/600/A-93/076**
Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC A03/MF A01

**EPA/600/A-93/077**
Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC A02/MF A01

**EPA/600/A-93/078**
Sorption and Reemission of Formaldehyde by Gypsum Wallboard.
PB93-180917/REB 93-01 PC A03/MF A01

**EPA/600/A-93/079**
Spatiotemporal Variability of Non-Urban Ozone Concentrations Over the Eastern United States and Its Potential Replication by Satellite Data.
PB93-191328/REB 93-01 PC A03/MF A01

**EPA/600/A-93/080**
Regional Modeling Analysis of the Dependencies of Atmospheric Oxidants to Perturbations in NOx and Hydrocarbon Emissions.
PB93-180925/REB 93-01 PC A02/MF A01

**EPA/600/A-93/081**
Air Emissions Testing.
PB93-180933/REB 93-01 PC A02/MF A01

**EPA/600/A-93/082**
Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC A02/MF A01

**EPA/600/A-93/083**
Protecting Confidentiality in Establishment Surveys.
PB93-180958/REB 93-01 PC A03/MF A01

**EPA/600/A-93/084**
Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC A03/MF A01

**EPA/600/A-93/085**
Field-Deployable Monitors for Volatile Organic Compounds in Air. (Essential Capabilities of a Portable Gas Chromatograph).
PB93-185700/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/087**
Statistical Problems Arising from Environmental Issues.
PB93-185718/REB 93-01 PC **A01**/MF **A01**

**EPA/600/A-93/088**
Source Apportionment of Air Pollution in China: Extending the Usefulness of Receptor Modeling by Combining Multivariate and Chemical Mass Balance Models.
PB93-185726/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/089**
Multiple Metals Stack Emission Measurement Methodology for Stationary Sources, Current Status.
PB93-185734/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/090**
Biomass Combustion in Gas-Turbine-Based Systems.
PB93-185742/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/091**
Storm and Combined Sewer Overflow: An Overview of EPA's Research Program.
PB93-185957/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/092**
Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
PB93-185759/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/093**
Planning and Progress of EPA's Pollution Prevention Research Program.
PB93-185767/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/094**
Characteristics of Non-Petroleum Underground Storage Tanks.
PB93-185775/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/095**
Location of Leaks in Pressurized Petroleum Pipelines by Means of Passive-Acoustic Sensing Methods.
PB93-185783/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/096**
Reclamation of Urban Stormwater.
PB93-185791/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/097**
Program for Providing Engineering Technical Assistance to Site Remediation Managers.
PB93-185809/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/098**
Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/099**
Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191351/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/100**
Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/101**
Nutrient Movement through Beach Media: Problems and Field Results Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191344/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/102**
Evaluation of Three Oil Spill Laboratory Dispersant Effectiveness Tests.
PB93-191377/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/103**
Discussion: Response to Internal Reviews of My Paper, 1993 Census Bureau Annual Research Conference.
PB93-191385/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/104**
Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/105**
Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/106**
Using Method 301 to Validate Sampling and Analytical Methods for Selected CAAA Compounds.
PB93-191419/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/107**
Two New Gas Standards Programs at the National Institute of Standards and Technology.
PB93-191427/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/108**
Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/109**
Coprocessing of Fossil Fuels and Biomass for CO2 Emission Reduction in the Transportation Sector.
PB93-194165/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/110**
EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/111**
Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194181/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/112**
EPA's Life Cycle Methodology: Guidelines for Use in Development of Packaging.
PB93-194199/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93.113**
Life Cycle Analysis (Video Conference Paper).
PB93-194207/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/114**
Evaluation of Laboratory Tests to Determine the Effectiveness of Chemical Surface Washing Agents.
PB93-194215/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/115**
Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
PB93-194223/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/116**
In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/117**
Screening Methodology for Assessing Leaking UST Sites and Clean Up Technologies.
PB93-199404/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/118**
Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/119**
Corrosion Control Principles and Strategies for Reducing Lead and Copper in Drinking Water Systems.
PB93-199420/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/120**
Field and Laboratory Studies of Chemical Contamination and Environmentally Related Diseases in Fish and Molluscs of New England.
PB93-199438/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/121**
Statistical Evaluation of the EMAP-Wetlands Classification.
PB93-199446/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/122**
Soil Biology and Ecology.
PB93-199453/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/123**
Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/124**
Development and Validation of a Source Test Method for 2,4-Toluene Diisocyanate.
PB93-204055/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/125**
Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
PB93-204063/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/126**
Indoor Concentration Modeling of Aerosol Strong Acidity.
PB93-204071/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/127**
Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/128**
Setting an Agenda for Research in the Federal Statistical System: Needs for Statistical Disclosure Limitation Procedures.
PB93-204097/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/129**
Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/130**
Importance of Fish Diseases: An Overview.
PB93-204113/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/131**
Determination of Nine Haloacetic Acids in Finished Drinking Water.
PB93-204121/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/132**
Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/133**
Biodegradation of Chlorinated Organic Compounds by 'Phanerochaete chrysosporium', a Wood-Rotting Fungus.
PB93-204147/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/134**
Mineralization of Recalcitrant Environmental Pollutants by a White Rot Fungus. Proceedings of the National Conference on Hazardous Wastes and Hazardous Materials. Held in Washington, DC. on March 16-18, 1987.
PB93-204154/REB 93-01 PC **A02**/MF **A01**

**EPA/600/A-93/135**
Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/136**
Observations on the State of Marine Disease Studies (Chapter 18).
PB93-204170/REB 93-01 PC **A03**/MF **A01**

**EPA/600/A-93/137**
Association of Personal and Workplace Characteristics with Reported Health Symptoms of 6771 Government Employees in Washington, DC.
PB93-212264/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/138**
UV Monitoring Program at US EPA.
PB93-212272/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/140**
Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/141**
Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.
PB93-212306/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/142**
Recent Advances in Measuring Exhaled Breath and Estimating Exposure and Body Burden for Volatile Organic Compounds (VOCS).
PB93-212314/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/143**
National Performance Audit Program (NPAP).
PB93-212322/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/144**
Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/145**
NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/146**
Rapid Phase Indentification of Mixed Crystalline Solids.
PB93-212355/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/147**
Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.
PB93-212363/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/148**
Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/149**
EPA's Information Management System for Tracking Reasonable Further Progress.
PB93-212389/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/150**
IAQPC: An Indoor Air Quality Simulator.
PB93-212397/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/151**
Relating Air Cleaner Efficiency to Indoor Air Quality.
PB93-212405/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/152**
EPA's Photovoltaic Demand-Side Management Cost-Shared Demonstrations.
PB93-212413/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/153**
Methane Emissions from the Natural Gas Industry.
PB93-212421/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/154**
EPA's Research in LCA Methodology.
PB93-212439/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/155**
Evaluation of Ventilation Performance for Indoor Space.
PB93-212751/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/156**
Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.
PB93-212769/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/157**
Statistical Analyses of COADS Wind Data in Coastal Regions of the United States.
PB93-212777/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/158**
Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.
PB93-212785/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/159**
Ecotoxicological Principles for Avian Field Studies Using Radiotelemetry or Remote Sensing.
PB93-212793/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/160**
Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.
PB93-212801/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/161**
Downwash of Plumes in the Vicinity of Buildings: A Wind-Tunnel Study.
PB93-212819/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/162**
Aerosol Measurement: Principles, Techniques, and Applications.
PB93-212827/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/163**
Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/164**
DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/165**
Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).
PB93-221836/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/166**
Plume Definition in Regions of Strong Bending.
PB93-221844/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/167**
Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/168**
Analysis of Protocol Gases: An On-Going Quality Assurance Audit (May 1993).
PB93-221869/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/169**
VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/170**
Acid Aerosol Measurement Methods: A Summary of U.S. EPA Intercomparisons.
PB93-221885/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/171**
Replacement of Charcoal Sorbent in the VOST.
PB93-221893/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/172**
Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/173**
Retrospective Performance Evaluation on In situ Bioremediation: Site Characterization.
PB93-221919/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/174**
Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/175**
Bioremediation of Chlorinated Solvents in the Vadose Zone.
PB93-221935/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/176**
Performance of Pilot Scale Bioventing at an Aviation Gasoline Spill Site.
PB93-221943/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/177**
Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.
PB93-221950/REB 93-04 PC **A01**/MF **A01**

**EPA/600/A-93/178**
Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.
PB93-221968/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/179**
Particle-Size-Dependent Efficiency of Air Cleaners.
PB93-221976/REB 93-04 PC **A01**/MF **A01**

**EPA/600/A-93/180**
Establishing Priorities in the U.S. EPA's Indoor Air Engineering Research Program.
PB93-221984/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/181**
Fundamental Mass Transfer Models for Indoor Air Pollution Sources.
PB93-221992/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/182**
Technological Considerations for Planning the Global Carbon Future.
PB93-222008/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/183**
Removal Efficiencies in Terms of Particle Size and Concentration in a Suburban Home of Console Air Cleaners.
PB93-222016/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/184**
Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
PB93-222024/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/185**
Bioresponse Testing of Sources of Indoor Air Contaminants.
PB93-222032/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/187**
Evaluation of Carbon Black Slurries as Clean Burning Fuels.
PB93-222057/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/188**
EPA's Indoor Air/Pollution Prevention Workshop.
PB93-222065/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/189**
International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.
PB93-222073/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/190**
Gasoline and Methanol Exposures from Automobiles within Residences and Attached Garages.
PB93-222222/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/191**
Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/192**
Role and Design of Water Quality Monitoring on Forested Watersheds.
PB93-222248/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/193**
Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04**/MF **A01**

**EPA/600/A-93/194**
Chemically Induced Histopathology in Aquatic Invertebrates (Chapter 14).
PB93-222263/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/195**
Climate Change Impacts on Net Primary Production in China.
PB93-222271/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/196**
Comparing Sampling Designs for Monitoring Ecological Status and Trends: Impact of Temporal Patterns (Chapter 3).
PB93-222289/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/197**
Dynamometer Testing of On-Road Vehicles from the Los Angeles in-Use Emissions Study.
PB93-222297/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/198**
Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.
PB93-229144/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/199**
Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
PB93-229151/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/201**
Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.
PB93-229177/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/202**
Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-229185/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/203**
Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.
PB93-229193/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/204**
Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/205**
Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
PB93-229706/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/206**
Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
PB93-229714/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/207**
Longterm Response of Lakes to Acidic Deposition.
PB93-229722/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/208**
Total Volatile Organic Concentrations in 2700 Personal, Indoor, and Outdoor Air Samples Collected in the US EPA Team Studies.
PB93-229730/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/209**
Genetic and Cell-Free Studies of PCB Biodegradation in 'Pseudomonas putida' LB400.
PB93-229748/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/211**
Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/212**
Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
PB93-228518/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/213**
Development and Evaluation of a Transportable Fast Gas Chromatograph for the Monitoring of Organic Vapors in Air.
PB93-228526/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/214**
Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
PB93-228534/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/215**
Chemical Contaminants in House Dust: Occurrences and Sources.
PB93-228542/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/216**
Exposure Modeling of Acid Aerosols.
PB93-228559/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/217**
Engineered Plants in the Environment.
PB93-234532/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/218**
Role of Ecological Sample Surveys in the Implementation of Biocriteria.
PB93-234524/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/219**
Adding a Landscape Ecology Perspective to Conservation and Management Planning.
PB93-234516/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/220**
Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
PB93-234508/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/221**
Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.
PB93-234490/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/222**
Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/223**
New Mathematical Model of Pollutant Dispersion Near a Building.
PB93-236529/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/224**
Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/225**
Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC **A02**/MF **A01**

**EPA/600/A-93/226**
EPANET Water Quality Model.
PB93-236552/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/227**
Foam Scrubbing (Chapter 9).
PB93-236560/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/228**
Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.
PB93-236578/REB 93-04 PC **A04**/MF **A01**

**EPA/600/A-93/229**
Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.
PB93-236586/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/230**
Wind-Tunnel Measurements of Flow Fields in the Vicinity of Buildings.
PB93-236594/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/232**
Establishing Quantitative Performance Criteria for Wetland Restoration.
PB93-236610/REB 93-04 PC **A01**/MF **A01**

**EPA/600/A-93/233**
Landscape-Scale Effects of Toxic Events for Ecological Risk Assessment.
PB93-236628/REB 93-04 PC **A03**/MF **A01**

**EPA/600/A-93/234**
Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC **A02**/MF **A01**

**EPA/600/AP-92/001A**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 1. Disposition and Pharmacokinetics.
PB93-222651/REB 93-04 PC **A07**/MF **A02**

**EPA/600/AP-92/001B**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 2. Mechanisms of Toxic Actions.
PB93-222669/REB 93-04 PC **A03**/MF **A01**

**EPA/600/AP-92/001C**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 3. Acute, Subchronic, and Chronic Toxicity.
PB93-222677/REB 93-04 PC **A04**/MF **A01**

**EPA/600/AP-92/001D**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 4. Immunotoxic Effects.
PB93-222685/REB 93-04 PC **A04**/MF **A01**

**EPA/600/AP-92/001E**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.
PB93-222693/REB 93-04 PC **A06**/MF **A02**

**EPA/600/AP-92/001F**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 6. Carcinogenicity of TCDD in Animals.
PB93-222701/REB 93-04 PC **A04**/MF **A01**

**EPA/600/AP-92/001G**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 7. Epidemiology/ Human Data.
PB93-222719/REB 93-04 PC **A07**/MF **A02**

**EPA/600/AP-92/001H**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 8. Dose-Response Relationships.
PB93-222727/REB 93-04 PC **A11**/MF **A03**

**EPA/600/C-92/006**
User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

**EPA/600/C-93/001**
Aquatic Toxicity Information Retrieval Data Base: A Technical Support Document. (Revised July 1992).
PB93-192631/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-90/119**
Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/024**
Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/280**
Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/342**
Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/343**
Effect of Aerosolization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/344**
Biodiversity and Management of Natural Resources: The Issues.
PB93-106912/REB 93-01 PC **A01**/MF **A01**

**EPA/600/J-92/345**
Modelling Epicodic Acidification of Surface Waters: The State of Science.
PB93-106920/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/346**
Mathematical Model of Plant Uptake and Translocation of Organic Chemicals: Development of the Model.
PB93-106938/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/347**
Mathematical Model of Plant Uptake and Translocations of Organic Chemicals: Application to Experiments.
PB93-106946/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/348**
Introduction to Nonpoint Source Pollution and Wetland Mitigation.
PB93-106953/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/349**
Forest Management in Russia: Challenges and Opportunities in the Era of Perestroika.
PB93-106961/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/350**
Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/351**
Technology for Reduction of CO2 Emissions from the Transportation Sector.
PB93-106987/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/353**
Decision Model for Biomarkers of Exposure.
PB93-106995/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/354**
Global Inventory of Volatile Organic Compound Emissions from Anthropogenic Sources.
PB93-107001/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/355**
Airborne Particle Sizes and Sources Found in Indoor Air.
PB93-107019/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/356**
Modeling of the Fast Organic Emissions from a Wood-Finishing Product: Floor Wax.
PB93-107027/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/357**
Evaluation of Para-Dichlorobenzene Emissions from Solid Moth Repellant as a Source of Indoor Air Pollution.
PB93-107035/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/358**
Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107043/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/359**
Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3, Hydraulic Conductivity Variability and Calculated Macrodispersivities.
PB93-107050/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/360**
Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/363**
CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 1. Technical Formulations.
PB93-107076/REB 93-01 PC **A03**/MF **A01**
CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 2. Performance Characteristics.
PB93-107084/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/364**
Measurement and Distribution of Radon and Radon Progeny: An Overview of Indoor Radon Risk Reduction in the United States.
PB93-107092/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/365**
Ninety-Day Toxicity Study of Sodium Monochloroacetate in Sprague-Dawley Rats.
PB93-107100/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/366**
Ninety-Day Toxicity Study of Chloral Hydrate in the Sprague-Dawley Rat.
PB93-107118/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/368**
Macromolecular Adduction by Trichloroacetonitrile in the Fischer 344 Rat Following Oral Gavage.
PB93-107134/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/369**
Dermal Penetration of ((14)C)Captan in Young and Adult Rats.
PB93-107142/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/370**
Thermal Influences on Nervous System Function.
PB93-107159/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/371**
In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with In vivo Data.
PB93-107167/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/372**
Genotoxicity of 2,4,5-Trichlorophenoxyacetic Acid Biodegradation Products in the 'Salmonella' Reversion and Lambda Prophage-Induction Bioassays.
PB93-107175/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/373**
Metabolism and Disposition of Inorganic Arsenic in Laboratory Animals and Humans.
PB93-107183/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/374**
Age-Related Changes in Disposition and Metabolism of Benzene in Male C57BL/6N Mice.
PB93-107191/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/375**
Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Industion of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/376**
Mechanisms Underlying Somatosensory Cortical Dynamics: 2. In vitro Studies.
PB93-107225/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/377**
Mechanisms Underlying Somatosensory Cortical Dynamics: 1. In vivo Studies.
PB93-107217/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/378**
Animal Models for Assessing the Neurobehavioral Impact of Airborne Pollutants.
PB93-107233/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/379**
Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/380**
Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
PB93-121127/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/381**
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/382**
Fate of 'Bacillus sphaericus' and 'Bacillus thuringiensis' Serovar 'Israelensis' in the Aquatic Environment.
PB93-121143/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/383**
Use of Inoculation in Bioremediation.
PB93-121150/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/384**
Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/386**
Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
PB93-121176/REB 93-01 PC **A02**/MF **A01**

Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
PB93-121184/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/387**
Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/388**
Application of DNA Probes to Analysis of Bacteriopnage Distribution Patterns in the Environment.
PB93-121200/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/389**
UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/390**
Bioremediation as a Technology: Experiences with the Exxon Valdez Oil Spill.
PB93-121226/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/391**
Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/392**
Hydraulic Conductivity of Three Geosynthetic Clay Liners.
PB93-131746/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/393**
Inhibition of Alkylbenzene Biodegradation under Denitrifying Conditions by Using Acetylene Block Technique.
PB93-121242/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/394**
Constructed Wetland Design: the First Generation.
PB93-131753/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/395**
Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
PB93-131761/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/396**
Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
PB93-121259/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/397**
Surface Waters Component of the Environmental Monitoring and Assessment Program (EMAP): An Overview.
PB93-121267/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/398**
Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/399**
Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/400**
MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/401**
Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/402**
Rapid Measurement of Aqueous Hydroxyl Radical Concentrations in Steady-State HO Flux Systems.
PB93-131779/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/403**
Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/404**
Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/405**
Performance of an Aquatic Multispecies System in Evaluating the Effects of a Model Microbial Pest Control Agent on Nontarget Organisms.
PB93-131803/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/406**
Effects of 'Beauveria bassiana' on Embryos of the Inland Silverside Fish ('Menidia beryllina').
PB93-131811/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/407**
Periphyton Photosynthesis as an Indicator of Effluent Toxicity: Relationship to Effects on Animal Test Species.
PB93-131829/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-92/408**
Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/409**
Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
PB93-131845/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-92/410**
Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/411**
Reaction Kinetics of Ca-Based Sorbents with HC1.
PB93-131860/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/412**
Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/413**
Sampling, Characterizing and Mapping Contaminated Sediments in River Harbors.
PB93-135705/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/414**
Transformation of Carbon Tetrachloride in the Presence of Sulfide, Biotite, and Vermiculite.
PB93-135713/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/415**
Recent Sulfur Enrichment in the Sediments of Little Rock Lake, Wisconsin.
PB93-135721/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/416**
Pathogenicity of 'Salmonella pullorum' in Northern Bobwhite Quail and Mallard Ducks.
PB93-135739/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/417**
Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/418**
Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/419**
Who Will Speak for Biodiversity.
PB93-135762/REB 93-01 PC **A01/MF A01**

**EPA/600/J-92/420**
Quantification of Nitro- and Hydroxylated Nitro-Aromatic/Polycyclic Aromatic Hydrocarbons in Selected Ambient Air Daytime Winter Samples.
PB93-141190/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/421**
Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/422**
V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/423**
Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/424**
Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/425**
Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/426**
Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
PB93-141257/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/427**
Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/428**
Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/429**
Direct Effects of Ethane Dimethanesulphonate on Epididymal Function in Adult Rats. An In vitro Demonstration.
PB93-141281/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/430**
Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC **A01/MF A01**

**EPA/600/J-92/431**
Review of the Literature on Potential Reproductive and Developmental Toxicity of Electric and Magnetic Fields.
PB93-141307/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/432**
Olfactory Evoked Responses to Odorous Stimuli of Different Intensities.
PB93-141315/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/433**
Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/434**
Health Effects of Arsenic in Drinking Water: Research Needs.
PB93-141331/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/436**
Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
PB93-141356/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/437**
Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/438**
DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/439**
Application of the 'Tradescantia micronucleus' Assay for the Genetic Evaluation of Chemical Mixtures in Soil and Aqueous Media.
PB93-141380/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/440**
PCR Primers Specific for Detection of a Rat Repetitive Sequence.
PB93-141398/REB 93-01 PC **A01/MF A01**

**EPA/600/J-92/441**
Behavioral Development Following Daily Episodes of Mother-Infant Separation in the Rat.
PB93-141406/REB 93-01 PC **A01/MF A01**

**EPA/600/J-92/442**
Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/443**
Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/444**
Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomegalovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/445**
Micronuclei and Other Nuclear Anomalies in Buccal Smears: A Field Test in Snuff Users.
PB93-141448/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/446**
Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/447**
Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
PB93-141463/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/448**
In vitro Mammalian Mutagenesis as a Model for Genetic Lesions in Human Cancer.
PB93-141471/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/449**
Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/450**
Applied Geologic, Microbiological, and Engineering Constraints of In-situ BTEX Bioremediation.
PB93-141513/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/451**
Cell Density and Non-Equilibrium Sorption Effects on Bacterial Dispersal in Groundwater Microcosms.
PB93-141505/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/452**
Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport.
PB93-141497/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/453**
Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/454**
Kinetics of Chemical Weathering in B Horizon Spodosol Fraction.
PB93-141539/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/455**
Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC **A03/MF A01**

**EPA/600/J-92/456**
Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
PB93-141554/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/457**
Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC **A02/MF A01**

**EPA/600/J-92/458**
Characterizing the Distribution of Observed Precipitation and Runoff over the Continental United States.
PB93-141570/REB 93-01 PC **A03/MF A01**

**EPA/600/J-93/001**
Characterization of Organic Emission from a Wood Finishing Product-Wood Stain.
PB93-150100/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/002**
Pilot-Scale Evlauation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02/MF A01**

**EPA/600/J093/003**
Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC **A03/MF A01**

**EPA/600/J-93/004**
Removal of Beryllium from Drinking Water by Chemical Coagulation and Lime Softening.
PB93-150134/REB 93-01 PC **A03/MF A01**

**EPA/600/J-93/005**
Surfactants and Subsurface Remediation.
PB93-149854/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/006**
Extraction and Recovery of Lead Species from Soil.
PB93-150142/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/007**
Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC **A03/MF A01**

**EPA/600/J-93/008**
Role of Nitrate in the Acidification of Streams in the Catskill Mountains of New York.
PB93-150167/REB 93-01 PC **A03/MF A01**

**EPA/600/J-93/011**
Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/047**
Developing Improved Strategies to Determine Male Reproductive Risk from Environmental Toxins.
PB93-167286/REB 93-01 PC **A03/MF A01**

**EPA/600/J-93/052**
Research and Information Needs Related to Nonpoint Source Pollution and Wetlands in the Watershed: An EPA Perspective.
PB93-168862/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/053**
Precollege Education: A Vital Component if Sustainable Agriculture is to Take Root.
PB93-168870/REB 93-01 PC **A03/MF A01**

**EPA/600/J-93/056**
EPA Bibliography on Surface Contamination.
PB93-168904/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/057**
Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/058**
Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/059**
Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

**EPA/600/J-93/060**
Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
PB93-168946/REB 93-01 PC **A02**

**EPA/600/J-93/061**
Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC **A03/MF A01**

**EPA/600/J-93/062**
Effects of Chemical Contaminants on Blood Chemistry of Teleost Fish: A Bibliography and Synopsis of Selected Effects.
PB93-168961/REB 93-01 PC **A03/MF A01**

**EPA/600/J-93/063**
Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/064**
Genus- and Group-Specific Hybridization Probes for Determinative and Environmental Studies of Sulfate-Reducing Bacteria.
PB93-168987/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/065**
Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/066**
Use of a Novel Plasmid to Monitor the Fate of a Genetically Engineered 'Pseudomonas putida' Strain.
PB93-169001/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/067**
Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC **A02/MF A01**

**EPA/600/J-93/068**
Selection of a 'Pseudomonas cepacia' Strain Constitutive for the Degradation of Trichloroethylene.
PB93-169027/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/069**
Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/070**
Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/071**
Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/072**
Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/073**
Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium 'Nitrosomonas europaea'.
PB93-169076/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/075**
R-245ca: A Potential Far-Term Alternative for R-11.
PB93-173144/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/076**
Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/077**
Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/078**
Indoor Radon Reduction in Crawl-Space Houses: A Review of Alternative Approaches.
PB93-173177/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/079**
Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
PB93-173664/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/080**
Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/081**
Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/082**
Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/083**
Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/084**
Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/085**
Effect of the Distribution System on Drinking-Water Quality.
PB93-173722/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/086**
Pollution Prevention for Cleaner Air: EPA's Air and Energy Engineering Research Laboratory.
PB93-173730/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/087**
Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/088**
Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/089**
Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/090**
International Validation of a Neurobehavioral Screening Battery: The IPCS/WHO Collaborative Study.
PB93-175594/REB 93-01 PC **A02**

**EPA/600/J-93/091**
Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/092**
Summary of Workshop III: Evoked Potentials.
PB93-175610/REB 93-01 PC **A01**/MF **A01**

**EPA/600/J-93/093**
Importance of Experimenter-Blind Procedure in Neurotoxicology (Mini-Review).
PB93-175628/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/094**
Genetic Toxicology of Putative Nongenotoxic Carcinogens.
PB93-175636/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/095**
Relationship between Serum Cholinesterase Activity and the Change in Body Temperature and Motor Activity in the Rat: A Dose-Response Study of Diisopropyl Fluorophosphate.
PB93-175644/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/096**
Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175651/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/097**
Olfactory Toxicity of Beta,Beta'-iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/098**
Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
PB93-175677/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/099**
Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/100**
Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/101**
Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/102**
Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/103**
Twenty-Four Hour Rhythms of Selected Ambient Temperature in Rat and Hamster.
PB93-175727/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/104**
Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/105**
Use of Analytically Defined Estimates of Aerosol Respirable Fraction to Predict Lung Deposition Patterns.
PB93-175743/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/106**
Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Bensidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/107**
Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/108**
Analysis of DNA Strand Breaks Induced in Rodent Liver In vivo, Hepatocytes in Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/109**
Distribution of Cardiac Output during Diurnal Changes of Activity in Rats.
PB93-180982/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/110**
Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-180990/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/111**
Cytokine (Tumor Necrosis Factor, IL-6, and IL-8) Production by Respiratory Syncytial Virus-Infected Human Alveolar Macrophages.
PB93-181006/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/112**
Electrophoresis Gel Buffer Recirculator for under Twenty Dollars.
PB93-181014/REB 93-01 PC **A01**/MF **A01**

**EPA/600/J-93/113**
Steroidogenic Assessment Using Ovary Culture in Cycling Rats: Effects of Bis(2-Diethylhexyl) Phthalate on Ovarian Steroid Production.
PB93-181022/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/114**
Effect of Methoxychlor on Ovarian Steroidogenesis: Role in Early Pregnancy Loss.
PB93-181030/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/115**
DNA Isolation from Small Tissue Samples Using Salt and Spermine.
PB93-181048/REB 93-01 PC **A01**/MF **A01**

**EPA/600/J-93/117**
Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/118**
Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/119**
Gonadal Effects of Fetal Exposure to the Azo Dye Congo Red in Mice: Infertility in Female but Not Male Offspring.
PB93-181071/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/120**
Human Upper Respiratory Tract Responses to Inhaled Pollutants with Emphasis on Nasal Lavage.
PB93-181089/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/121**
Extrapolation Modeling of Aerosol Deposition in Human and Laboratory Rat Lungs.
PB93-181097/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/122**
Comments on Recent Data for Particle Deposition in Human Nasal Passages.
PB93-181105/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/123**
EPA Priorities for Biologic Markers Research in Environmental Health.
PB93-181113/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/124**
Interspecies Modeling of Inhaled Particle Deposition Patterns.
PB93-181121/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/125**
Repeated Maternal Separation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/126**
Competition Potentials of Environmentally Applied Bacteria with Human Fecal Microbiota.
PB93-181147/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/127**
Program to Analyze Aquifer Test Data and Check for Validity with the Jacob Method.
PB93-181154/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/128**
Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/129**
Passive Sampling of Groundwater Monitoring Wells without Purging: Multilevel Well Chemistry and Tracer Disappearance.
PB93-181170/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/130**
Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/131**
Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/132**
Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/133**
Determination of Carboxylic Acids by Ion-Exclusion Chromatography with Non-Suppressed Conductivity and Optical Detectors.
PB93-181212/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/134**
Development and Application of Borehole Flowmeters for Environmental Assessment.
PB93-185817/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/135**
Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/136**
Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/137**
Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/138**
Taxonomic Level Sufficient for Assessing a Moderate Impact on Macrobenthic Communities in Puget Sound, Washington, USA.
PB93-185858/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/139**
Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
PB93-185866/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/140**
Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/141**
Physical and Chemical Parameters of Sediment Extraction and Fractionation That Influence Toxicity, as Evaluated by Microtox (Trade Name).
PB93-185882/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/142**
VIRTUS, a Model of Virus Transport in Unsaturated Soils.
PB93-185890/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/143**
New Approaches to Estimation of Solid-Waste Quantity and Composition.
PB93-185908/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/144**
Incineration of Hazardous Waste: A Critical Review Update.
PB93-185916/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/145**
Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/146**
Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC **A01**/MF **A01**

**EPA/600/J-93/147**
Comparison of Systematic and Random Sampling for Estimating the Accuracy of Maps Generated from Remotely Sensed Data.
PB93-191443/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/148**
Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/149**
Methane Emissions from Wetland Rice Areas of Asia.
PB93-191468/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/150**
Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/151**
Equilibrium Analysis of Carbon Pools and Fluxes of Forest Biomes in the Former Soviet Union.
PB93-191484/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/152**
Integrating Sustainable Agriculture, Ecology, and Environmental Policy. Conference Proceedings.
PB93-191492/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/153**
Conservation Tillage Impacts on National Soil and Atmospheric Carbon Levels.
PB93-191500/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/154**
Future Context of Sustainable Agriculture: Planning for Uncertainty.
PB93-191518/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/155**
Impacts of Climate Change on Rice Yield: A Comparison of Four Model Performances.
PB93-191526/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/156**
Potential Bias from Non-Continuous Monitoring of Ambient Ozone Concentrations for Characterizing Hourly and Daily 7- and 12-Hour Average Concentrations.
PB93-191534/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/157**
Biodegradation of 2,4,5-Trichlorophenoxyacetic Acid in Liquid Culture and in Soil by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191542/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/158**
Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191559/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/159**
Effects of Culture Parameters on DDT (1,1,1-Trichloro-2,2-BIS(4-Chlorophenyl)Ethane) Biodegradation by 'Phanerochaete chrysosporium'.
PB93-191567/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/160**
Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
PB93-191575/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/161**
Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium': Involvement of the Lignin Degrading System.
PB93-191583/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/162**
Biodegradation of Polycyclic Aromatic Hydrocarbons by 'Phanerochaete chrysosporium'.
PB93-191591/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/163**
Biodegradation of Crystal Violet by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191609/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/164**
Biodegradation of DDT (1,1,1-Trichloro-2,2-Bis(4-Chlorophenyl)Ethane) by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191617/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/166**
Evaluation of the Bioremediation of a Contaminated Soil with Phytotoxicity Tests.
PB93-191625/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/167**
Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/168**
Comparison of the Efficiency of Polycarbonate and Mixed Cellulose Ester Filters for Use in the Filtration of Water Samples.
PB93-194363/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/169**
Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC **A01**/MF **A01**

**EPA/600/J-93/170**
Gene Expression during Oogenesis in Mice.
PB93-194389/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/171**
Gene Expression in Pre-Implantation Mammalian Embryos.
PB93-194397/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/172**
Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence In situ Hybridization.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/174**
Cytoplasmic Microtubular Dynamics and Chromatin Organization during Mammalian Oogenesis and Oocyte Maturation.
PB93-194413/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/175**
Maternal Age Effect: The Enigma of Down Syndrome and Other Trisomic Conditions.
PB93-194421/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/176**
Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/177**
Frequency and Nature of Specific-Locus Mutations Induced in Female Mice by Radiations and Chemicals: A Review.
PB93-194447/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/178**
ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/179**
Radiation- and Chemically-Induced Chromosome Aberrations in Mouse Oocytes: A Comparison with Effects in Males.
PB93-194462/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/180**
Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/181**
Mutational Risks in Females: Genomic Imprinting and Maternal Molecules.
PB93-194488/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/182**
Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/183**
Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/184**
Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/185**
Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/186**
Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/187**
Slowing the Waste Behemoth: Source Reduction is Overshadowed by Recycling's Success.
PB93-194546/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/188**
Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.
PB93-222081/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/189**
Transport of Low-Level Radioactive Soil at Deep-Ocean Disposal Site.
PB93-199487/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/190**
Broad-Based Environmental Life Cycle Assessment.
PB93-199495/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/191**
Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/192**
Oxidative Degradation of Phenanthrene by the Ligninolytic Fungus 'Phanerochaete chrysosposium'.
PB93-199511/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/193**
Lignin Degradation and Lignin Peroxidase Production in Cultures of 'Phanerochaete chrysosporium' Immobilized on Porous Ceramic Supports.
PB93-199529/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/194**
Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/195**
Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/196**
Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/197**
Application of the Ecotone Concept in Defining Nutrient Management Requirements for the Upper Potomac River Basin.
PB93-199560/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/198**
Stress Proteins in Aquatic Organisms: An Environmental Perspective.
PB93-199578/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/199**
Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/200**
Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: Comparison of Response in Fish from Georges Bank and Narragansett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/201**
Empirical Model of Vehicle Emissions.
PB93-199602/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/202**
Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/203**
Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/204**
Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/205**
Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/206**
Bacillus thuringiensis var. kurstaki Affects a Beneficial Insect, the Cinnabar Moth (Lepidoptera: Arctidae).
PB93-199651/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/208**
Quantification of Germ-Cell Risk Associated with the Induction of Heritable Translocations.
PB93-199677/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/209**
Physiological Limitations on Phytoplankton Productivity in the Ocean.
PB93-204923/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/210**
Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/211**
Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/212**
Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/213**
Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/214**
Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
PB93-204972/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/215**
Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204980/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/216**
Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows ('Cyprinodon variegatus').
PB93-204998/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/217**
Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/218**
Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
PB93-205011/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/219**
Genetic Analysis of the aggA Locus Involved in Agglutination and Adherence of 'Pseudomonas putida', a Beneficial Fluorescent Pseudomonad.
PB93-205029/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/220**
Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
PB93-205037/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/221**
Influence of Root Colonizing Bacteria on the Defense Responses of Bean.
PB93-205045/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/222**
Characterization of Catalase Activities in a Root-Colonizing Isolate of 'Pseudomonas putida' (Revised).
PB93-205052/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/223**
Isolation and Diversity of Actinomycetes in the Chesapeake Bay.
PB93-205060/REB 93-01 PC **A02**/MF **A01**

**EPA/600/J-93/224**
Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
PB93-205078/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/225**
Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC **A01**/MF **A01**

**EPA/600/J-93/226**
Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03**/MF **A01**

**EPA/600/J-93/227**
Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.
PB93-205102/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/228**
FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/229**
Possible Influence of Hydrogen Concentration on Microbial Methane Stable Hydrogen Isotopic Composition.
PB93-205128/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/230**
Modeling Contaminant Propagation in Drinking-Water Distribution Systems.
PB93-205136/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/231**
Alternating Current Electrocoagulation for Superfund Site Remediation.
PB93-205144/REB 93-04 PC **A02**/MF **A01**
Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC **A01**/MF **A01**

**EPA/600/J-93/234**
Molecular Basis of Biodegradation of Chloroaromatic Compounds.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/235**
Repeated Sequences Including RS1100 'Pseudomonas cepacia' AC1100 Function as IS Elements.
PB93-205177/REB 93-04 PC **A02**/MF **A01**
Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/236**
Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/237**
Pollution Prevention Research Ongoing: EPA's Risk Reduction Engineering Laboratory.
PB93-212447/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/238**
Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
PB93-212454/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/239**
Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
PB93-212462/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/240**
Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).
PB93-212470/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/241**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/242**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/243**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/244**
Impacts of Section 404 Permits Requiring Compensatory Mitigation on Wetlands in California (USA).
PB93-212512/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/245**
Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/246**
Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212538/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/248**
Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/249**
Estimate of Global Methane Emissions from Coal Mines.
PB93-212553/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/250**
Comparison of Methods for Estimating Global Methane Emissions from Landfills.
PB93-212561/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/251**
Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.
PB93-212579/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/252**
Effects of Food Density on Growth and on Patterns of Prey Depletion by Larval Silverside Fish, 'Menidia beryllina' (Cope): A Laboratory Investigation with Image Analysis.
PB93-212587/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/253**
Characterization of Reference Artemia III for Marine Toxicological Studies.
PB93-212595/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/254**
Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/255**
Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/256**
Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. aeschynomene' Transformants with Benomyl Resistance.
PB93-212629/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/257**
Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.
PB93-212637/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/258**
Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.
PB93-212645/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/259**
Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
PB93-212652/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/260**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/261**
Synthesis of Ectomycorrhizae on Northern Red Oak Seedlings in a Michigan Nursery.
PB93-212678/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/262**
Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.
PB93-212686/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/263**
Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

**EPA/600/J-93/264**
Interpretive Analysis of Observed and Modeled Mesoscale Ozone Photochemistry in Areas with Numerous Point Sources.
PB93-212702/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/265**
Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/266**
Final Results of the Condors Convective Diffusion Experiment.
PB93-212728/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/267**
Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/268**
Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/271**
Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/272**
Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/273**
Measurement of Sediment Resuspension Rates in Long Island Sound.
PB93-222115/REB 93-04 PC **A01**/MF **A01**

**EPA/600/J-93/274**
Organic Combustion Fingerprints of Three Common Home Heating Fuels.
PB93-222123/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/275**
Sequence Similarities in the Genes Encoding Polychlorinated Biphenyl Degradation by 'Pseudomonas' Strain LB400 and 'Alcaligenes eutrophus' H850.
PB93-229201/REB 93-04 PC **A01**/MF **A01**

**EPA/600/J-93/276**
Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/277**
Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.
PB93-222354/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/278**
Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.
PB93-222362/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/279**
Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.
PB93-222370/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/280**
Global Flux of Methane from Shallow Submarine Sediments.
PB93-222388/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/281**
Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/282**
Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.
PB93-222404/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/283**
Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/284**
Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/285**
Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/286**
Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
PB93-222776/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/287**
Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC **A02**/MF **A01**
Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/288**
Simple Mini-Method to Extract DNA Directly from Soil for Use with Polymerase Chain Reaction Amplification.
PB93-222792/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/289**
Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/290**
Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/291**
Relationship of Total Viable and Culturable Cells in Epiphytic Populations of 'Pseudomonas syringae'.
PB93-222826/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/292**
Recovery of DNA from Soils and Sediments.
PB93-222834/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/293**
Armitage-Doll Two-Stage Model: Implications and Extension.
PB93-222842/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/294**
Mechanical Integrity Testing and Training Facility, Ada, Oklahoma.
PB93-222859/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/295**
Microcosm and In situ Field Studies of Enhanced Biotransformation of Trichloroethylene by Phenol-Utilizing Microorganisms.
PB93-222867/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/296**
Removal of Radionuclides by Electrokinetic Soil Processing.
PB93-222875/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/297**
Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC **A01/MF A01**

**EPA/600/J-93/298**
Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/299**
Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
PB93-222909/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/300**
Cloning and Expression in 'Escherichia coli' of Pseudomonas Strain LB400 Genes Encoding Polychlorinated Biphenyl Degradation.
PB93-229227/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/301**
Proteins from Eight Eukaryotic Cytochrome P-450 Families Share a Segmented Region of Sequence Similarity.
PB93-229235/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/302**
Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
PB93-229243/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/303**
Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/304**
Characterization of the Alkane-Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis': Identification of a New P450 Gene Family.
PB93-229268/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/305**
Disruption of the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.
PB93-229276/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/306**
Isolation of the Alkane Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis'.
PB93-229284/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/307**
Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Proteins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/308**
Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/309**
Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/310**
Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/311**
Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/312**
Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/313**
Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/314**
Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/315**
Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/317**
Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.
PB93-229383/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/318**
Stochastic Methodology for Regional Wind-Field Modeling.
PB93-229391/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/319**
Optical Remote Measurement of Toxic Gases.
PB93-229409/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/321**
Tagged Species Engineering Model (TSEM).
PB93-229417/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/322**
Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.
PB93-229425/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/324**
SITE Program Demonstration of the SBP Technologies, Inc., Membrane Filtration System on Creosote-Contaminated Water.
PB93-228567/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/325**
Aromatic Hydrocarbon Degradation: A Molecular Approach.
PB93-229433/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/326**
Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
PB93-229441/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/327**
Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
PB93-229458/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/328**
Oxidation of Biphenyl by a Multicomponent Enzyme System from 'Pseudomonas' sp. Strain LB400.
PB93-229466/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/329**
Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
PB93-229474/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/330**
Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
PB93-229482/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/331**
Maturational Changes in Dermal Absorption of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Fischer 344 Rats.
PB93-229490/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/332**
Using Neuroblastoma Cell Lines to Examine Organophosphate Neurotoxicity.
PB93-229508/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/333**
Ammonia Abatement System for Whole-Body Small Animal Inhalation Exposures to Acid Aerosols.
PB93-229516/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/334**
Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/335**
Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/336**
Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/337**
Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/338**
Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
PB93-229565/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/339**
Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/340**
In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/341**
Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
PB93-229599/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/342**
Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
PB93-229607/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/343**
Short Communication: Improved Thin-Layer Chromatographic Separation of 32P-Postlabeled DNA Adducts.
PB93-229615/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/344**
Biotransformation and Mineralization of Alkylbenzenes under Denitrifying Conditions.
PB93-229623/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/345**
Dissolved Organic Carbon and Sulfate Sorption by Spodosol Mineral Horizons.
PB93-229631/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/346**
Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.
PB93-229649/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/347**
Conservation and Sequestration of Carbon: The Potential of Forest and Agroforest Management Practices.
PB93-229656/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/348**
Forest Fires in Russia: Carbon Dioxide Emissions to the Atmosphere.
PB93-229664/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/349**
Reactions That Modify Chemistry in Lakes of the National Surface Water Survey.
PB93-229672/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/350**
Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.
PB93-229680/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/351**
Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-228575/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/352**
Molecular Size Exclusion by Soil Organic Materials Estimated from Their Swelling in Organic Solvents.
PB93-228583/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/353**
Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/354**
Strain Comparisons of DFP Neurotoxicity in Rats.
PB93-228609/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/355**
Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-228815/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/356**
Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/357**
Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-228831/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/358**
Predictors of Individual Differences in Acute Response to Ozone Exposure.
PB93-228849/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/359**
Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/360**
Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-228864/REB 93-04 PC **A02/MF A01**

**EPA/600/J-93/361**
Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.
PB93-228872/REB 93-04 PC **A03/MF A01**

**EPA/600/J-93/362**
Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-228880/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/363**
Rapid Efficient Production of Baculovirus Expression Vectors.
PB93-228898/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/364**
Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-228906/REB 93-04 PC **A01**/MF **A01**

**EPA/600/J-93/366**
EPA's Reassessment of Dioxin Risk: Directed Health Research.
PB93-228922/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/367**
Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/368**
Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.
PB93-228948/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/369**
Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/370**
Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/371**
Acute and Delayed Effects of Diisopropyl Fluorophosphate on Body Temperature, Heart Rate and Motor Activity in the Awake, Unrestrained Rat.
PB93-228971/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/372**
Dithiocarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.
PB93-228989/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/373**
Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/374**
Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/375**
Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC **A01**/MF **A01**

**EPA/600/J-93/376**
Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/377**
Evaluation of the Effects of Methanol during Early Pregnancy in the Rat.
PB93-231850/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/378**
Human Health Effects of Air Pollution.
PB93-231843/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/379**
Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.
PB93-231835/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/382**
Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/383**
Cholinesterases of Aquatic Animals.
PB93-236222/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/384**
Long-Term Survival and Plasmid Maintenance of 'Escherichia coli' in Marine Microcosms.
PB93-236230/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/385**
Microbial Trophic Interactions in Aquatic Microcosms Designed for Testing Genetically Engineered Microorganisms: A Field Comparison.
PB93-236248/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/386**
Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/388**
Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/389**
Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/390**
Recent Developments in Cleanup Technologies.
PB93-236289/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/391**
Spawning Periodicity of the Inland Silverside, 'Menidia beryllina' (Pisces: Atherinidae) in the Laboratory: Relationship to Lunar Cycles.
PB93-236297/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/392**
Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.
PB93-236305/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/394**
DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/395**
Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
PB93-236321/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/396**
Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/397**
Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.
PB93-236347/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/398**
Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/399**
Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.
PB93-236362/REB 93-04 PC **A04**/MF **A01**

**EPA/600/J-93/400**
Bitertanol, a Triazole Fungicide, Increases Operant Responding but Not Motor Activity.
PB93-236370/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/401**
Deposition of Sulfate Acid Aerosols in the Developing Human Lung.
PB93-236388/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/402**
Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/403**
Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/404**
Effects of Dopaminergic Drugs on Working and Reference Memory in Rats.
PB93-236412/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/405**
Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/406**
Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.
PB93-236438/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/407**
Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.
PB93-236446/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/408**
Inter-Regional Comparison of Patterns and Trends in Surface Water Acidification Across the United States.
PB93-236453/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/409**
Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/410**
Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/411**
Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/412**
Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

**EPA/600/J-93/413**
Evidence for Direct Effect of Magnetic Fields on Neurite Outgrowth.
PB93-236669/REB 93-04 PC **A02**/MF **A01**

**EPA/600/J-93/414**
Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03**/MF **A01**

**EPA/600/M-91/031**
Hazardous Waste Management.
PB93-116135/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-92/093A**
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 1. Sessions 1-3.
PB93-212843/REB 93-04 PC **A15**/MF **A03**

**EPA/600/R-92/093B**
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 2. Sessions 4 and 5.
PB93-212850/REB 93-04 PC **A20**/MF **A04**

**EPA/600/R-92/093C**
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 3. Sessions 6-8.
PB93-212868/REB 93-04 PC **A19**/MF **A04**

**EPA/600/R-92/121**
Methods for the Determination of Chemical Substances in Marine and Estuarine Environmental Samples.
PB93-182913/REB 93-01 PC **A05**/MF **A01**

**EPA/600/R-92/128**
Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies.
PB92-220532/REB 93-04 PC **A08**/MF **A02**

**EPA/600/R-92/131**
Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC **A02**/MF **A01**

**EPA/600/R-92/145**
AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
PB93-100113/REB 93-01 PC **A10**/MF **A03**

**EPA/600/R-92/159**
Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
PB93-101160/REB 93-01 PC **A06**/MF **A02**

**EPA/600/R-92/166**
Exploring the Effects of Vector to Raster and Raster to Vector Conversion.
PB93-122166/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-92/167**
Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-92/173**
Technology Assessment of Soil Vapor Extraction and Air Sparging.
PB93-100154/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-92/174**
Proceedings of the Symposium on Soil Venting. Held in Houston, Texas on April 29-May 1, 1991.
PB93-122323/REB 93-01 PC **A15**/MF **A03**

**EPA/600/R-92/175**
Opportunities for Pollution Prevention Research to Support the 33/50 Program.
PB93-107266/REB 93-01 PC **A06**/MF **A02**

**EPA/600/R-92/177**
Contribution to Indoor Ozone Levels of an Ozone Generator.
PB93-234557/REB 93-04 PC **A03**/MF **A01**

**EPA/600/R-92/191A**
Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
PB93-100907/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-92/191B**
Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-92/192**
Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
PB93-105518/REB 93-01 PC **A08**/MF **A02**

**EPA/600/R-92/194A**
Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. User's Guide. Volume 1. NGDC Key to Geophysical Records Documentation No. 26.
PB93-146082/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-92/194B**
Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. Documentation Manual, DISC-A. Volume 1. NGDC Key to Geophysical Records Documentation No. 27.
PB93-146090/REB 93-01 PC **A11**/MF **A03**

**EPA/600/R-92/196**
Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-92/197**
Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC **A05**/MF **A01**

**EPA/600/R-92/198**
Recommended Performance Standard of the Florida Radon Research Program.
PB93-122281/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-92/201**
Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
PB93-122307/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-92/202**
Survey of Data from the Continuous Sites of the 1990 Atlanta Ozone Precursor Study.
PB93-124618/REB 93-01 PC **A04**/MF **A01**

**EPA-600/R-92-203**
Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.
DE93014387/REB 93-04 PC **A03**/MF **A01**

**EPA/600/R-92/206A**
Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 1.
PB93-122331/REB 93-01 PC **A99**/MF **A06**

**EPA/600/R-92/206B**
Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 2.
PB93-122349/REB 93-01 PC **A99**/MF **A06**

**EPA/600/R-92/207**
Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-92/208**
Volatile Organic Sampling Train Soot Interference Report.
PB93-144145/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-92/209A**
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 1. Sessions P, 0, 1A, 2A, 3A, 4A, 6A, 6B, 9C and 10B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124170/REB 93-01 PC **A20**/MF **A04**

**EPA/600/R-92/209B**
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 2. Sessions 1B, 2B, 3B, 4B, 7A, 7B, 8A, 8B and 9B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124188/REB 93-01 PC **A21**/MF **A04**

**EPA/600/R-92/209C**
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 3. Sessions 1C, 2C, 3C, 4C, 6C, 7C, 8C, 9A, and 10A/C. Held in Tampa, Florida on April 16-19, 1991.
PB93-124196/REB 93-01 PC **A21**/MF **A04**

**EPA/600/R-92/210**
Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08**/MF **A02**

**EPA/600/R-92/214**
Development of Size-Specific Data from Particulate Control Technology Research Reports.
PB93-131456/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-92/215**
Interim Protocol for Testing the Effects of Microbial Pathogens on Subterranean Termites ('Isoptera: rhinotermitidae').
PB93-124634/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-92/216**
Environmental Monitoring and Assessment Program: Gulf Coast Salt Marsh Pilot Study.
PB93-122398/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-92/217**
General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-92/218**
Use of Expert System in a Water Utility.
PB93-123061/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-92/219**
Survey of Portable Analyzers for the Measurement of Gaseous Fugitive Emissions.
PB93-126589/REB 93-01 PC **A05**/MF **A01**

**EPA/600/R-92/221**
Application of a Data-Assimilating Prognostic Meteorological Model to Two Urban Areas.
PB93-126571/REB 93-01 PC **A05**/MF **A01**

**EPA/600/R-92/222**
Atmospheric Chemistry and Physical Fate of HCFCs and HFCs and Their Degradation Products.
PB93-131449/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-92/223**
3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
PB93-217669/REB 93-04 PC **A12**/MF **A03**

**EPA/600/R-92/224**
Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127601/REB 93-01 PC **A06**/MF **A02**

**EPA/600/R-92/225**
Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-92/226**
Life Cycle Design Guidance Manual. Environmental Requirements and the Product System.
PB93-164507/REB 93-04 PC **A09**/MF **A03**

**EPA/600/R-92/229**
Habitat Quality Assessment of Two Wetland Treatment Systems in Mississippi: A Pilot Study.
PB93-135614/REB 93-01 PC **A06**/MF **A02**

**EPA/600/R-92/230**
Quality Assurance Field Operations Report for the Pilot Study Evaluating the Habitat Value of Wetland Treatment Systems.
PB93-134682/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-92/231**
Quality Assurance Plan for 1991 Pilot Study of the Ecological Condition of Municipal Wastewater Constructed Wetland Treatment Systems.
PB93-134674/REB 93-01 PC **A05**/MF **A01**

**EPA/600/R-92/232**
Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC **A23**/MF **A04**

**EPA/600/R-92/234**
Guidelines for Mercury Measurements from Stationary Sources: Quality Assurance Handbook. Section 3.19. Volume 3.
PB93-131209/REB 93-01 PC **A08**/MF **A02**

**EPA/600/R-92/238**
Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC **A05**/MF **A02**

**EPA/600/R-92/239**
Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
PB93-135663/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-92/240**
Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

**EPA/600/R-92/241**
Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC **A05**/MF **A01**

**EPA/600/R-92/242**
Evaluation of Nitrogen Oxide Emissions Data from TVA Coal-Fired Boilers.
PB93-138865/REB 93-01 PC **A06**/MF **A02**

**EPA/600/R-92/243**
Relationship between Water Temperatures and Air Temperatures for Central U.S. Streams.
PB93-135655/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-92/244**
Water Temperature Characteristics of Lakes Subjected to Climate Change.
PB93-135648/REB 93-01 PC **A09**/MF **A02**

**EPA/600/R-92/245**
Life-Cycle Assessment: Inventory Guidelines and Principles.
PB93-139681/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-92/247**
LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-92/249**
Process for Regional Assessment of Wetland Risk.
PB93-146793/REB 93-01 PC **A09**/MF **A02**

**EPA/600/R-92/251**
On-Site Waste Ink Recycling: Technology Evaluation Report.
PB93-141026/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-93/004**
Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-93/006**
Analysis of Acid Precipitation Samples Collected by State Agencies. Sampling Period: January-December 1990.
PB93-144152/REB 93-01 PC **A12**/MF **A03**

**EPA/600/R-93/008**
Pollution Prevention Opportunity Assessment: USDA Beltsville Agricultural Research Center.
PB93-146843/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-93/009**
Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-93/011**
Quality Assurance and Quality Control in the Development and Application of Ground-Water Models.
PB93-178226/REB 93-01 PC **A08**/MF **A02**

**EPA/600/R-93/012A**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC **A07**/MF **A02**

**EPA/600/R-93/012B**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 1: Pages 1 through 662.
PB93-218246/REB 93-04 PC **A99**/MF **A06**

**EPA/600/R-93/012C**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 2: Pages 663 through 1389.
PB93-218253/REB 93-04 PC **A99**/MF **A06**

**EPA/600/R-93/014**
Methods for Analyzing Extreme Events Under Climate Change.
PB93-146827/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-93/015A**
Pollution Prevention Opportunity Assessment: Manufacturing and Fabrication Repair Laboratory at Sandia National Laboratories.
PB93-146868/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-93/015B**
Pollution Prevention Opportunity Assessment: Geochemistry Laboratory, Sandia National Laboratories.
PB93-146900/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-93/019**
Characterization of PM-10 Emissions from Antiskid Materials Applied to Ice- and Snow-Covered Roadways.
PB93-150209/REB 93-01 PC **A05**/MF **A01**

**EPA/600/R-93/022**
DNAPL Site Evaluation.
PB93-150217/REB 93-01 PC **A16**/MF **A03**

**EPA/600/R-93/023**
Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-93/024**
Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-93/033**
Environmental Monitoring Issues: Results of Workshops Held in July 1992 as Part of EPA's Eighth Annual Waste Testing and Quality Assurance Symposium.
PB93-216075/REB 93-04 PC **A12**/MF **A03**

**EPA/600/R-93/037**
Determination of the Strong Acidity of Atmospheric Fine-Particles (< 2.5 mum) Using Annular Denuder Technology. Standard Method, Enhanced Method.
PB93-178234/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-93/044**
Characterization of Emissions from the Simulated Open-Burning of Non-Metallic Automobile Shredder Residue.
PB93-172914/REB 93-01 PC **A05**/MF **A01**

**EPA/600/R-93/046**
PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
PB93-174027/REB 93-01 PC **A17**/MF **A04**

**EPA/600/R-93/052**
Proceedings of the Indoor Radon Modeling Workshop, Florida Radon Research Program. Held in Tampa, Florida on April 16-17, 1991.
PB93-172922/REB 93-01 PC **A09**/MF **A02**

**EPA/600/R-93/053**
Evaluation of Portable Multisorbent Air Samplers for Use with an Automated Multitube Analyzer.
PB93-172930/REB 93-01 PC **A05**/MF **A01**

**EPA/600/R-93/055**
Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202828/REB 93-01 PC **A08**/MF **A02**

**EPA/600/R-93/057**
Analysis of Atmospheric Deposition Samples from Easton, Pennsylvania.
PB93-181600/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-93/058A**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 1.
PB93-174761/REB 93-01 PC **A24**/MF **A04**

**EPA/600/R-93/058B**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 2.
PB93-174779/REB 93-01 PC **A25**/MF **A06**

**EPA/600/R-93/058C**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
PB93-174787/REB 93-01 PC **A99**/MF **A06**

**EPA/600/R-93/058D**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 2.
PB93-174795/REB 93-01 PC **A99**/MF **A06**

**EPA/600/R-93/058E**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 1.
PB93-174803/REB 93-01 PC **A99**/MF **A06**

Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 2.
PB93-174811/REB 93-01 PC **A99**/MF **A06**

**EPA/600/R-93/058G**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 4.
PB93-174829/REB 93-01 PC **A13**/MF **A03**

**EPA/600/R-93/063**
Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC **A06**/MF **A02**

**EPA/600/R-93/064A**
Proceedings: 1991 SO2 Control Symposium. Volume 1. Opening Session and Sessions 1-3.
PB93-196095/REB 93-01 PC **A19**/MF **A04**

**EPA/600/R-93/064B**
Proceedings: 1991 SO2 Control Symposium. Volume 2. Sessions 4 and 5A.
PB93-196103/REB 93-01 PC **A22**/MF **A04**

**EPA/600/R-93/064C**
Proceedings: 1991 SO2 Control Symposium. Volume 3. Sessions 5B and 6.
PB93-196111/REB 93-01 PC **A20**/MF **A04**

**EPA/600/R-93/064D**
Proceedings: 1991 SO2 Control Symposium. Volume 4. Session 7.
PB93-196129/REB 93-01 PC **A15**/MF **A03**

**EPA/600/R-93/064E**
Proceedings: 1991 SO2 Control Symposium. Volume 5. Session 8.
PB93-196137/REB 93-01 PC **A13**/MF **A03**

**EPA/600/R-93/065**
Dry Deposition Flux Calculations for the National Dry Deposition Network.
PB93-178242/REB 93-01 PC **A05**/MF **A02**

**EPA/600/R-93/066**
On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC **A09**/MF **A02**

**EPA/600/R-93/067A**
Economic Growth Analysis System: Reference Manual.
PB93-183408/REB 93-04 PC **A12**/MF **A03**

**EPA/600/R-93/067B**
Economic Growth Analysis System: User's Guide.
PB93-183416/REB 93-04 PC **A04**/MF **A01**

**EPA/600/R-93/070**
LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC **A05**/MF **A01**

**EPA/600/R-93/071**
Irrigated Wetlands of the Colorado Plateau: Information Synthesis and Habitat Evaluation Method.
PB93-186260/REB 93-01 PC **A05**/MF **A02**

**EPA/600/R-93/072**
Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC **A09**/MF **A02**

**EPA/600/R-93/073**
X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.
PB93-203156/REB 93-04 PC **A03**/MF **A01**

**EPA/600/R-93/074**
Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC **A07**/MF **A02**

**EPA/600/R-93/075**
Relationships between Ozone Precursor Levels and Response to Emissions Reductions: Analysis of Regional Oxidant Model Results for the Northeastern United States.
PB93-186294/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-93/078**
Experimental Investigation of PIC Formation in CFC-12 Incineration.
PB93-191294/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-93/080A**
Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 1. Technical Report and Appendices A-F.
PB93-191302/REB 93-01 PC **A13**/MF **A03**

**EPA/600/R-93/080B**
Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 2. Appendices G-N.
PB93-191310/REB 93-01 PC **A15**/MF **A03**

**EPA/600/R-93/081**
MULTIMED: The Multimedia Exposure Assessment Model for Evaluating the Land Disposal of Wastes-Model Theory.
PB93-186252/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-93/082**
Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
PB93-185536/REB 93-01 PC **A11**/MF **A03**

**EPA/600/R-93/083A**
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

**EPA/600/R-93/083B**
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

**EPA/600/R-93/083C**
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

**EPA/600/R-93/084**
Proceedings of the International Workshop on Carbon Cycling in Boreal Forest and Sub-Arctic Ecosystems: Biospheric Responses and Feedbacks to Global Climate Change.
PB93-205540/REB 93-04 PC **A13**/MF **A03**

**EPA/600/R-93/085**
Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.
PB93-221653/REB 93-04 PC **A07**/MF **A02**

**EPA/600/R-93/086**
Ink and Cleaner Waste Reduction Evaluation for Flexographic Printers.
PB93-191286/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-93/088**
Development of Sampling and Analytical Methods for the Measurement of Nitrous Oxide from Fossil Fuel Combustion Sources.
PB93-194330/REB 93-01 PC **A07**/MF **A02**

**EPA/600/R-93/090**
Control Technology Center FY92: A Summary of Program Accomplishments.
PB93-199230/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-93/091**
Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
PB93-199388/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-93/092**
Stress Cracking Behavior of HDPE Geomembranes and Its Prevention.
PB93-196616/REB 93-01 PC **A06**/MF **A02**

**EPA/600/R-93/093**
Forest Sector Carbon Budget of the United States: Carbon Pools and Flux under Alternative Policy Options.
PB93-196996/REB 93-01 PC **A10**/MF **A03**

**EPA/600/R-93/096**
Development of Residential Wood Consumption Estimation Models.
PB93-199248/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-93/097**
Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-196988/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-93/099**
Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC **A05**/MF **A01**

**EPA/600/R-93/101**
Field Test of a Generic Method for Halogenated Hydrocarbons.
PB93-212181/REB 93-04 PC **A13**/MF **A03**

**EPA/600/R-93/102**
Thermal Degradation Characteristics of Environmentally Sensitive Pesticide Products.
PB93-201127/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-93/105**
Design and Construction of Demonstration/Research Wetlands for Treatment of Dairy Farm Wastewater.
PB93-202836/REB 93-01 PC **A03**/MF **A01**

**EPA/600/R-93/106**
Information Management Guidelines for the Wetlands Research Program.
PB93-202644/REB 93-01 PC **A04**/MF **A01**

**EPA/600/R-93/108A**
Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC **A13**/MF **A03**

**EPA/600/R-93/113A**
Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203693/REB 93-04 PC **A07**/MF **A02**

**EPA/600/R-93/113B**
Chemical Shoreline Cleaning Agents for Oil Spills: Update State-of-the-Art on Mechanisms of Action and Factors Influencing Performance.
PB93-203701/REB 93-04 PC **A04**/MF **A01**

**EPA/600/R-93/114**
Mobile On-Site Recycling of Metalworking Fluids.
PB93-216562/REB 93-04 PC **A04**/MF **A01**

**EPA/600/R-93/115**
Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-214419/REB 93-04 PC **A05**/MF **A01**

**EPA/600/R-93/116**
Method for the Determination of Asbestos in Bulk Building Materials. (Test Method).
PB93-218576/REB 93-04 PC **A05**/MF **A02**

**EPA/600/R-93/117**
Habitat Quality Assessment of Two Wetland Treatment Systems in the Arid West: A Pilot Study.
PB93-222305/REB 93-04 PC **A06**/MF **A02**

**EPA/600/R-93/118**
Compilation of Ground-Water Models.
PB93-209401/REB 93-04 PC **A13**/MF **A03**

**EPA/600/R-93/119**
Outreach to Manufacturers of Lead Test Kits.
PB93-216570/REB 93-04 PC **A03**/MF **A01**

**EPA/600/R-93/120**
What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.
PB93-211985/REB 93-04 PC **A21**/MF **A04**

**EPA/600/R-93/123A**
Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
PB93-227163/REB 93-04 PC **A11**/MF **A03**

**EPA/600/R-93/123B**
Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
PB93-227171/REB 93-04 PC **A12**/MF **A03**

**EPA/600/R-93/124**
In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC **A12**/MF **A03**

**EPA/600/R-93/125**
Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
PB93-217784/REB 93-04 PC **A07**/MF **A02**

**EPA/600/R-93/126**
Global Climates: Past, Present, and Future. Activities for Integrated Science Education.
PB93-222313/REB 93-04 PC **A06**/MF **A02**

**EPA/600/R-93/128**
Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC **A07**/MF **A02**

**EPA/600/R-93/129**
Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.
PB93-216604/REB 93-04 PC **A06**/MF **A02**

**EPA/600/R-93/130**
Workshop Report: Identification of Performance Parameters for Portable X-ray Fluorescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.
PB93-216612/REB 93-04 PC **A05**/MF **A02**

**EPA/600/R-93/131**
Anaerobic Dehalogenation and Its Environmental Implications. Abstracts of 1992 American Society for Microbiology Conference. Held in Athens, Georgia on August 30-September 4, 1992.
PB93-217792/REB 93-04 PC **A04**/MF **A01**

**EPA/600/R-93/132**
Environmental Fate Constants for Organic Chemicals under Consideration for EPA's Hazardous Waste Identification Projects.
PB93-221646/REB 93-04 PC **A09**/MF **A02**

**EPA/600/R-93/133**
Risk Reduction Engineering Laboratory Site Remediation Technical Support Program: FY92 Annual Report.
PB93-217651/REB 93-04 PC **A03**/MF **A01**

**EPA/600/R-93/136**
Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.
PB93-222214/REB 93-04 PC **A10**/MF **A03**

**EPA/600/R-93/137A**
Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC **A10**/MF **A03**

**EPA/600/R-93/137B**
Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC **A15**/MF **A03**

**EPA/600/R-93/138**
Stream Indicator and Design Workshop.
PB93-222321/REB 93-04 PC **A05**/MF **A01**

**EPA/600/R-93/144**
Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
PB93-221638/REB 93-04 PC **A04**/MF **A01**

**EPA/600/R-93/145**
Genetic Damage In vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04**/MF **A01**

**EPA/600/R-93/146**
Effects of CO2 and Climate Change on Forest Trees.
PB93-222339/REB 93-04 PC **A07**/MF **A02**

**EPA/600/R-93/149**
Replacement of Hazardous Material in Wide Web Flexographic Printing Process.
PB93-229128/REB 93-04 PC **A05**/MF **A01**

**EPA/600/R-93/150**
Watts Nickel and Rinse Water Recovery via an Advanced Reverse Osmosis System.
PB93-229011/REB 93-04 PC **A05**/MF **A01**

**EPA/600/R-93/152**
Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.
PB93-218501/REB 93-04 PC **A07**/MF **A02**

**EPA/600/R-93/154**
Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC **A04**/MF **A01**

**EPA/600/R-93/155**
Evaluation of Three Cleaning Methods for Removing Asbestos from Carpet: Determination of Airborne Asbestos Concentrations Associated with Each Method.
PB93-218568/REB 93-04 PC **A05**/MF **A01**

**EPA/600/R-93/158**
Investigation of Possible Uses of Surplus CFC/Halon Chemicals.
PB93-229771/REB 93-04 PC **A07**/MF **A02**

**EPA/600/R-93/159**
Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
PB93-227551/REB 93-04 PC **A06**/MF **A02**

**EPA/600/R-93/160**
Recycling Nickel Electroplating Rinse Waters by Low Temperature Evaporation and Reverse Osmosis.
PB93-218865/REB 93-04 PC **A04**/MF **A01**

**EPA/600/R-93/161**
Initial Assessment of Emissions from Heat Setting Carpet Yarn.
PB93-229862/REB 93-04 PC **A04**/MF **A01**

**EPA/600/R-93/162**
Weatherability of Enhanced-Degradable Plastics.
PB93-229789/REB 93-04 PC **A14**/MF **A03**

**EPA/600/R-93/167**
Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.
PB93-229670/REB 93-04 PC **A25**/MF **A06**

**EPA/600/R-93/169**
Measurement of the Surface Permeability of Basement Concretes.
PB93-232114/REB 93-04 PC **A03**/MF **A01**

**EPA/600/R-93/172**
Use of Alternative Materials for Daily Cover at Municipal Solid Waste Landfills.
PB93-227197/REB 93-04 PC **A06**/MF **A02**

**EPA/600/R-93/178**
Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC **A06**/MF **A02**

**EPA/600/R-93/186**
Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.
PB93-234540/REB 93-04 PC **A04**/MF **A01**

**EPA/600/S3-88/001**
Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC **A02**/MF **A01**

**EPA/600/S4-88/009**
Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-228500/REB 93-04 PC **A02**/MF **A01**

**EPA/600/S4-88/012**
Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.
PB93-228492/REB 93-04 PC **A02**/MF **A01**

**EPA/600/S4-88/025**
Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).
PB93-222586/REB 93-04 PC **A01**/MF **A01**

**EPA/600/S4-88/028**
Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC **A02**/MF **A01**

**EPA/600/S7-88/005**
Clinton, New Jersey, Radon Mitigation Follow-Up and Long-Term Monitoring. Project Summary.
PB93-222594/REB 93-04 PC **A02**/MF **A01**

**EPA/600/S7-88/011**
Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.
PB93-222628/REB 93-04 PC **A01**/MF **A01**

**EPA/600/S7-88/019**
Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.
PB93-228468/REB 93-04 PC **A02**/MF **A01**

**EPA/600/S7-88/006**
Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-228450/REB 93-04 PC **A02**/MF **A01**

**EPA/600/S7-88/006A**
Evaluation of FGD Dry Injection Sorbents and Additives. Volume 1. Development of High Reactivity Sorbents. Project Summary.
PB93-228484/REB 93-04 PC **A02**/MF **A01**

**EPA/600/S8-88/065**
Industrial Boiler Furnace Sorbent Injection Algorithm Development.
PB93-222438/REB 93-04 PC **A01**/MF **A01**

**EPA/600/S8-88/071**
Advanced Utility Simulation Model. Project Summary.
PB93-222636/REB 93-04 PC **A02**/MF **A01**

**EPA/600/S8-88/084**
Preliminary Diagnostic Procedures for Radon Control. Project Summary.
PB93-222545/REB 93-04 PC **A01**/MF **A01**

**EPA/600/S8-88/085**
Guidelines for Stack Testing at Municipal Waste Combustion Facilities. Project Summary.
PB93-222610/REB 93-04 PC **A02**/MF **A01**

**EPA/600/S8-88.088**
Volatile Organic Compound Model Quality Assurance and Sensitivity Testing (Version 1.8).
PB93-223022/REB 93-04 PC **A01**/MF **A01**

**EPA/600/S8-88/091**
Industrial Boiler Low NOx Combustion Retrofit Cost Algorithm Development. Project Summary.
PB93-222578/REB 93-04 PC **A01**/MF **A01**

**EPA/600/S8-88/102**
Baseline Emissions Forecasts for Industrial Non-Boiler Sources. Project Summary.
PB93-222560/REB 93-04 PC **A01**/MF **A01**

**EPA/600/S8-88/104**
Projections of Regional Fuel Oil and Natural Gas Prices. Project Summary.
PB93-222552/REB 93-04 PC **A01**/MF **A01**

**EPA/600/S-92/024**
Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/028**
Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/029**
Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/030**
Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/031**
Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/032**
Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/033**
Waste Minimization Assessment for a Manufacturer Producing Printed Circuit Boards.
PB93-126621/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/034**
Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
PB93-123024/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/035**
Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
PB93-123016/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/036**
Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/037**
Waste Minimization Assessment for a Manufacturer of Penny Blanks and Zinc Products.
PB93-123107/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/039**
Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
PB93-123115/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/040**
Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
PB93-123123/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/041**
Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
PB93-123131/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/042**
Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
PB93-123149/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/043**
Waste Reduction Activities and Options for an Autobody Repair Facility.
PB93-123156/REB 93-01 PC **A01**/MF **A01**

**EPA/600/S-92/044**
Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
PB93-123164/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/045**
Waste Reduction Activities and Options for a Manufacturer of Artists Supply Paints.
PB93-123172/REB 93-01 PC **A01**/MF **A01**

**EPA/600/S-92/046**
Waste Reduction Activities and Options for a Manufacturer of Wire Stock Used for Production of Metal Items.
PB93-123180/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/047**
Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
PB93-123198/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/048**
Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
PB93-123206/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/049**
Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
PB93-123214/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/050**
Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
PB93-123222/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/051**
Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
PB93-123230/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/052**
Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
PB93-123248/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/053**
Waste Reduction Activities and Options for a Printing Plate Preparation Section of a Newspaper.
PB93-126563/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/054**
Waste Reduction Activities and Options for a Manufacturer of General Purpose Paints and Painting Supplies.
PB93-126316/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/055**
Waste Reduction Activities and Options for a Manufacturer of Fine Chemicals Using Batch Processes.
PB93-126308/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/056**
Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
PB93-126290/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/057**
Waste Reduction Activities and Options for a Manufacturer of Hardened Steel Gears.
PB93-126282/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/058**
Waste Reduction Activities and Options for a Scrap Metal Recovery Facility.
PB93-126266/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/059**
Waste Reduction Activities and Options for a Manufacturer of Electroplating Chemical Products.
PB93-126258/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/060**
Waste Reduction Activities and Options for a Manufacturer of Plastic Containers by Injection Molding.
PB93-126241/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/061**
Waste Reduction Activities and Options for a Fossil Fuel Fired Electrical Generating Station.
PB93-126233/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/062**
Waste Reduction Activities and Options for a Manufacturer of Commercial Dry Cleaning Equipment.
PB93-126225/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/063**
Waste Reduction Activities and Options for an Electrical Utility Transmission System Monitoring and Maintenance Facility.
PB93-126639/REB 93-01 PC **A02**/MF **A01**

**EPA/600/S-92/064**
Waste Reduction Activities and Options for a Manufacturer of Orthopedic Implants.
PB93-126217/REB 93-01 PC **A02**/MF **A01**

**EPA/600/X-93/062**
Summary of GIS Support to Superfund.
PB93-963506/REB 93-04 PC **A04**/MF **A01**

**EPA/620/R-92/002**
Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC **A11**/MF **A03**

**EPA/620/R-93/001**
Environmental Monitoring and Assessment Program: EMAP-Arid Colorado Plateau Pilot Study, 1992. Implementation Plan.
PB93-181618/REB 93-01 PC **A08**/MF **A02**

**EPA/620/R-93/005**
Sampling and Assessment Issues in Using Fish as Indicators of Ecological Condition in Lakes: A Workshop Report. (3rd Draft Report).
PB93-186278/REB 93-01 PC **A03**/MF **A01**

**EPA/620/R-93/006**
Virginian Province Demonstration Report. EMAP-Estuaries, 1990.
PB93-229854/REB 93-04 PC **A11**/MF **A03**

**EPA/620/R-93/008**
Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
PB93-202851/REB 93-04 PC **A06**/MF **A02**

**EPA/625/1-91/024**
Manual: Alternative Wastewater Collection Systems.
PB93-116259/REB 93-01 PC **A10**/MF **A03**

**EPA/625/4-91/030**
Seminar Publication. Medical and Institutional Waste Incineration: Regulations, Management, Technology, Emissions, and Operations.
PB93-116283/REB 93-01 PC **A03**/MF **A01**

**EPA/625/5-85/016**
Environmental Pollution Control Alternatives: Reducing Water Pollution Control Costs in the Electroplating Industry. (Revised).
PB93-122240/REB 93-01 PC **A04**/MF **A01**

**EPA/625/6-90/016A**
Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC **A08**/MF **A02**

**EPA/625/6-90/016B**
Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC **A07**/MF **A02**

**EPA/625/6-91/027**
Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC **A10**/MF **A03**

**EPA/625/6-91/028**
Handbook: Remediation of Contaminated Sediments.
PB93-116275/REB 93-01 PC **A04**/MF **A01**

**EPA/625/6-91/029**
Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04**/MF **A01**

**EPA/625/11-91/004**
User's Guide: Strategic Waste Minimization Initiative (SWAMI) Version 2.0: A Software Tool to Aid in Process Analysis for Pollution Prevention.
PB93-116291/REB 93-01 PC **A05**/MF **A01**

**EPA/625/R-92/003**
Organic Air Emissions from Waste Management Facilities.
PB93-215598/REB 93-04 PC **A07**/MF **A02**

**EPA/625/R-92/004**
Guidelines for Water Use.
PB93-222180/REB 93-04 PC **A12**/MF **A03**

**EPA/625/R-92/008**
Guides to Pollution Prevention: The Mechanical Equipment Repair Industry.
PB93-121317/REB 93-01 PC **A03**/MF **A01**

**EPA/625/R-92/009**
Guides to Pollution Prevention: Metal Casting and Heat Treating Industry.
PB93-127793/REB 93-01 PC **A05**/MF **A01**

**EPA/625/R-92/010**
Small Community Water and Wastewater Treatment.
PB93-215606/REB 93-04 PC **A05**/MF **A01**

**EPA/625/R-92/011**
Guides to Pollution Prevention: The Metal Finishing Industry.
PB93-100105/REB 93-04 PC **A04**/MF **A01**

**EPA/625/R-92/012**
Control of Air Emissions from Superfund Sites.
PB93-215614/REB 93-04 PC **A08**/MF **A02**

**EPA/625/R-92/014**
RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC **A05**/MF **A01**

**EPA/625/R-93/002**
Wellhead Protection: A Guide for Small Communities.
PB93-215580/REB 93-04 PC **A08**/MF **A02**

**EPA/630/R-92/001**
Framework for Ecological Risk Assessment.
PB93-102192/REB 93-01 PC **A04**/MF **A01**

**EPA/630/R-92/002**
Report on the Ecological Risk Assessment Guidelines Strategic Planning Workshop. Held in Miami, Florida on April 30-May 2, 1991.
PB93-102200/REB 93-01 PC **A05**/MF **A01**

**EPA/630/R-92/003**
Report of the Neurotoxicity Risk Assessment Guidelines Peer Review Workshop. Held in Washington, DC. on June 2-3, 1992.
PB93-146918/REB 93-01 PC **A08**/MF **A02**

**EPA/700/B-92/001**
Guide to Performing Reinspections under the Asbestos Hazard Emergency Response Act (AHERA).
PB93-128007/REB 93-01 PC **A06**/MF **A02**

**EPA/700/R-92/006**
Reactions of Potential Organic Water Contaminants with Aqueous Chlorine and Monochloramine.
PB93-175040/REB 93-01 PC **A04**/MF **A01**

**EPA/730/R-93/001**
Pesticide Reregistration Progress Report, April 1993.
PB93-226199/REB 93-04 PC **A03**/MF **A01**

**EPA/731/N-92/001**
PR Notice 92-1. Notice to Manufacturers, Formulators, Producers, and Registrants of Pesticide Products.
PB93-219467/REB 93-04 PC **A02**/MF **A01**

**EPA/731/N-92/002**
PR Notice 92-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219475/REB 93-04 PC **A01**/MF **A01**

**EPA/731/N-92/003**
PR Notice 92-3. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticide Products.
PB93-219483/REB 93-04 PC **A03**/MF **A01**

**EPA/731/N-92/004**
PR Notice 92-4. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219491/REB 93-04 PC **A01**/MF **A01**

**EPA/731/N-92/005**
PR Notice 92-5. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219509/REB 93-04 PC **A01**/MF **A01**

**EPA/733/K-92/001**
Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC **A03**/MF **A01**

**EPA/734/12-92/011**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC **A05**/MF **A01**

**EPA/734/R-92/001**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC **A10**/MF **A03**

**EPA/734/R-92/002**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC **A08**/MF **A02**

**EPA/734/R-92/003**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC **A08**/MF **A02**

**EPA/734/R-92/004**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC **A06**/MF **A02**

**EPA/734/R-92/005**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC **A99**/MF **E11**

**EPA/734/R-92/006**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC **A21**/MF **A04**

**EPA/734/R-92/007**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC **A07**/MF **A02**

**EPA/734/R-92/008**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC **A20**/MF **A04**

**EPA/734/R-92/009**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC **A06**/MF **A02**

**EPA/734/R-92/010**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC **A24**/MF **A04**

**EPA/737/F-90/009**
Pesticide Fact Sheet: GY-81/Enzone.
PB93-219848/REB 93-04 PC **A03**/MF **A01**

**EPA/737/F-92/003**
Pesticide Fact Sheet Number 239: Cimectacarb.
PB93-206753/REB 93-04 PC **A02**/MF **A01**

**EPA/737/F-93/001**
Pesticide Fact Sheet Number 240: Dimethenamid. SAN 582H/Frontier (Trade Name) Herbicide.
PB93-198695/REB 93-01 PC **A03**/MF **A01**

**EPA/737/F-93/002**
Pesticide Fact Sheet: 'Pseudomonas cepacia' Type Wisconsin.
PB93-206746/REB 93-04 PC **A02**/MF **A01**

**EPA/737/F-93/004**
Pesticide Fact Sheet: Streptomyces sp. Strain K61.
PB93-206761/REB 93-04 PC **A02**/MF **A01**

**EPA/737/F-93/005**
Pesticide Fact Sheet: Polyhedral Occlusion Bodies of the Nuclear Polyhedrosis Virus of 'Spodoptera exigua'.
PB93-206779/REB 93-01 PC **A02**/MF **A01**

**EPA/737/F-93/006**
Pesticide Fact Sheet: 'Metarhizium anisopliae' Strain ESF1.
PB93-206787/REB 93-01 PC **A01**/MF **A01**

**EPA/737/F-93/007**
Pesticide Fact Sheet: 1-Indole-3-Butanethioic Acid, S-Phenyl Ester.
PB93-219822/REB 93-04 PC **A02**/MF **A01**

**EPA/737/F-93/010**
Pesticide Fact Sheet: Glufosinate Ammonium.
PB93-219830/REB 93-04 PC **A03**/MF **A01**

**EPA/737/N-92/006**
PR Notice 92-6. Notice to Manufacturers, Producers, Formulators and Registrants of Pesticides.
PB93-219517/REB 93-04 PC **A01**/MF **A01**

**EPA/737/R-93/001**
Pesticide Reregistration Rejection Rate Analysis Residue Chemistry. Follow-up Guidance for Generating Storage Stability Data; Submission of Raw Data; Maximum Theoretical Concentration Factors; Flowchart Diagrams.
PB93-193696/REB 93-01 PC **A04**/MF **A01**

**EPA/738/B-93/001**
Pesticide Reregistration Rejection Rate Analysis Residue Chemistry/Environmental Fate Follow Up Guidance for Conducting Rotational Crop Studies.
PB93-194041/REB 93-01 PC **A03**/MF **A01**

**EPA/738/F-92/007**
RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC **A02**/MF **A01**

**EPA/738/F-92/008**
RED Facts: Sodium Hydroxide.
PB93-124683/REB 93-01 PC **A02**/MF **A01**

**EPA/738/F-92/009**
RED Facts: Streptomycin and Streptomycin Sulfate.
PB93-100378/REB 93-01 PC **A02**/MF **A01**

**EPA/738/F-92/011**
RED Facts: 'Nosema locustae'.
PB93-100352/REB 93-01 PC **A02**/MF **A01**

**EPA/738/F-92/013**
RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02**/MF **A01**

**EPA/738/F-92/014**
RED Facts: Oxalic Acid.
PB93-173953/REB 93-01 PC **A02**/MF **A01**

**EPA/738/F-93/001**
RED Facts: Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-232916/REB 93-04 PC **A02**/MF **A01**

**EPA/738/F-93/002**
RED Facts: Iron Salts.
PB93-198703/REB 93-01 PC **A02**/MF **A01**

**EPA/738/F-93/003**
Pesticide Fact Sheet: Arsenic Acid (H3AsO4).
PB93-198711/REB 93-01 PC **A02**/MF **A01**
RED Facts: 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-232908/REB 93-04 PC **A02**/MF **A01**

**EPA/738/F-93/005**
RED Facts: Silver.
PB93-232924/REB 93-04 PC **A02**/MF **A01**

**EPA/738/R-92/004**
Reregistration Eligibility Document (RED): Oxalic Acid.
PB93-169100/REB 93-01 PC **A06**/MF **A02**

**EPA/738/R-93/001**
Pesticide Reregistration Progress Report.
PB93-178994/REB 93-01 PC **A03**/MF **A01**

**EPA/738/R-93/002**
Reregistration Eligibility Document (RED) Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-234763/REB 93-04 PC **A07**/MF **A02**

**EPA/738/R-93/005**
Reregistration Eligibility Document (RED): Silver.
PB93-232973/REB 93-04 PC **A05**/MF **A02**

**EPA/738/R-93/007**
Reregistration Eligibility Document (RED) 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-234755/REB 93-04 PC **A07**/MF **A02**

**EPA/738/R-93/009**
Status of Pesticides in Reregistration and Special Review (Rainbow Report), June 1993.
PB93-230829/REB 93-04 PC **A17**/MF **A03**

**EPA/738/S-93/001**
Reregistration Eligibility Document (RED): Iron Salts.
PB93-200780/REB 93-01 PC **A05**/MF **A02**

**EPA/741/R-92/003**
Evaluation of Environmental Marketing Terms in the United States.
PB93-175784/REB 93-01 PC **A10**/MF **A03**

**EPA/744/R-93/001**
Determination of Rates of Reaction in the Gas-Phase in the Troposphere. Theory and Practice. 5. Rate of Indirect Photoreaction.
PB93-149334/REB 93-01 PC **A08**/MF **A02**

**EPA/745/F-93/002**
Toxics Release Inventory. Public Data Release. State Fact Sheets, 1991.
PB93-208668/REB 93-04 PC **A06**/MF **A02**

**EPA/745/K-93/001**
Toxic Chemical Release Inventory Reporting Form R and Instructions. Revised 1992 Version. Section 313 of the Emergency Planning and Community Right-to-Know Act.
PB93-194140/REB 93-01 PC **A06**/MF **A02**

**EPA/745/R-93/003**
Toxics Release Inventory: Public Release Data, 1991.
PB93-219988/REB 93-04 PC **A16**/MF **A03**

**EPA/747/R-92/003**
Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
PB93-105534/REB 93-01 PC **A04**/MF **A01**

**EPA/800/B-92/001**
Office of Water Environmental and Program Information Systems Compendium, FY 1992.
PB93-186203/REB 93-01 PC **A08**/MF **A02**

**EPA/800/K-93/001**
Public Health Action Agenda for the Gulf of Mexico: Frame Work for Action.
PB93-223428/REB 93-04 PC **A06**/MF **A02**

**EPA/800/K-93/002**
Marine Debris Action Agenda for the Gulf of Mexico: Framework for Action.
PB93-223469/REB 93-04 PC **A08**/MF **A02**

**EPA/800/R-93/001A**
Clean Water and the American Economy. Proceedings: Surface Water, Volume 1. Held on October 19-21, 1992.
PB93-202612/REB 93-01 PC **A14**/MF **A03**

**EPA/800/R-93/001B**
Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
PB93-202620/REB 93-01 PC **A07**/MF **A02**

**EPA/810/B-92/016**
Drinking Water Handbook for Public Officials.
PB93-226595/REB 93-04 PC **A04**/MF **A01**

**EPA/810/F-93/002**
Emergency Disinfection of Drinking Water.
PB93-223188/REB 93-04 PC **A01**/MF **A01**

**EPA/810/R-92/001**
EPA's Ground Water and Drinking Water Program: Making a Difference.
PB93-136612/REB 93-01 PC **A03**/MF **A01**

**EPA/811/B-92/001**
Water Treatment Plant Simulation Program, Version 1.21, User's Manual.
PB93-134948/REB 93-01 PC **A06**/MF **A02**

**EPA/811/B-92/002**
Lead and Copper Rule Guidance Manual. Volume 2. Corrosion Control Treatment.
PB93-101533/REB 93-01 PC **A10**/MF **A03**

**EPA/811/P-92/001**
Draft Ground-Water Disinfection Rule.
PB93-134351/REB 93-01 PC **A05**/MF **A01**

**EPA/811/R-92/001**
Simulation of Raw Water and Treatment Parameters in Support of the Disinfection By-Products Regulatory Impact Analysis.
PB93-134401/REB 93-01 PC **A03**/MF **A01**

**EPA/811/R-92/002**
Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

**EPA/811/R-92/003**
Occurrence Assessment for Disinfectants and Disinfection By-Products (Phase 6a) in Public Drinking Water.
PB93-134377/REB 93-01 PC **A04**/MF **A01**

**EPA/811/R-92/004**
Status Report on Analytical Methods to Support the Disinfectant/Disinfection By-Products Regulation.
PB93-134898/REB 93-01 PC **A03**/MF **A01**

**EPA/811/R-92/005**
Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC **A05**/MF **A01**

**EPA/811/R-92/006**
Status Report on the Development of Draft MCLGs for Disinfectants and By-Products.
PB93-134906/REB 93-01 PC **A05**/MF **A01**

**EPA/811/R-92/007**
Simulation of Microbial Occurrence, Exposure and Health Risks after Drinking Water Treatment Processes.
PB93-134393/REB 93-01 PC **A05**/MF **A02**

**EPA/811/R-92/008**
Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC **A07**/MF **A02**

**EPA/811/S-92/001**
Use of Microbial Risk Assessment in Setting U.S. Drinking Water Standards.
PB93-134930/REB 93-01 PC **A03**/MF **A01**

**EPA/811/S-92/002**
Technologies and Costs for Control of Disinfection By-Products: Executive Summary.
PB93-134922/REB 93-01 PC **A03**/MF **A01**

**EPA/812/B-92/002**
Lead in Drinking Water Regulation: Public Education Guidance (Guidance for Conducting a Community-Based Public Education Program on Lead in Drinking Water).
PB93-101079/REB 93-01 PC **A04**/MF **A01**

**EPA/812/B-92/004**
Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

Lead and Copper Monitoring Guidance for Water Systems Serving 101 to 500 Persons.
PB93-174522/REB 93-01 PC **A03**/MF **A01**

**EPA/812/B-92/005**
Lead and Copper Monitoring Guidance for Water Systems Serving 501 to 3,300 Persons.
PB93-174530/REB 93-01 PC **A03**/MF **A01**

**EPA/812/B-92/006**
Lead and Copper Monitoring Guidance for Water Systems Serving 3,301 to 10,000 Persons.
PB93-174548/REB 93-01 PC **A03**/MF **A01**

**EPA/812/B-92/007**
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 10,001 to 50,000 Persons.
PB93-174555/REB 93-01 PC **A04**/MF **A01**

**EPA/812/B-92/008**
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 50,001 to 100,000 Persons.
PB93-174514/REB 93-01 PC **A04**/MF **A01**

**EPA/812/B-92/009**
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving > 100,000 Persons.
PB93-174563/REB 93-01 PC **A04**/MF **A01**

**EPA/812/B-93/004**
Indian Primacy Procedures Handbook for the Public Water System Supervision (PWSS) Program and the Underground Injection Control (UIC) Program.
PB93-185585/REB 93-01 PC **A09**/MF **A02**

**EPA/812/B-93/005**
Tribal Water Utility Management.
PB93-190908/REB 93-01 PC **A09**/MF **A02**

**EPA/812/R-92/001**
Overview of Existing State Alternative Financing Programs: Financing Drinking Water System Capital Needs in the 1990's.
PB93-132637/REB 93-01 PC **A05**/MF **A01**

**EPA/812/R-92/003**
Guidance on Enforcement of the Requirements of the Surface Water Treatment Rule.
PB93-186633/REB 93-01 PC **A03**/MF **A01**

**EPA/812/R-93/002**
Institutional Solutions to Drinking Water Problems: Maine Case Studies.
PB93-180834/REB 93-01 PC **A03**/MF **A01**

**EPA/812/R-93/003**
Medium Systems That Failed to Conduct Required Initial Lead Tap Monitoring and Reporting.
PB93-196632/REB 93-01 PC **A03**/MF **A01**

**EPA/813/R-92/002**
Case Studies in Wellhead Protection: Ten Examples of Innovative Wellhead Protection Programs.
PB93-207363/REB 93-04 PC **A03**/MF **A01**

**EPA/813/R-93/001**
Guide for Cost-Effectiveness and Cost-Benefit Analysis of State and Local Ground Water Protection Programs.
PB93-207397/REB 93-04 PC **A06**/MF **A02**

**EPA/814/B-92/002**
Manual for the Certification of Laboratories Analyzing Drinking Water. Criteria and Procedures Quality Assurance (Third Edition).
PB93-145688/REB 93-01 PC **A03**/MF **A01**

**EPA/820/B-92/002**
Publications Office of Science and Technology: Catalog.
PB93-152577/REB 93-01 PC **A06**/MF **A02**

**EPA/821/B-92/001**
Environmental Monitoring Methods Index. Version 1.0 Software. User's Manual.
PB92-169648/REB 93-01 PC **A06**/MF **A02**

**EPA/821/B-93/001**
Guidance on Evaluation, Resolution, and Documentation of Analytical Problems Associated with Compliance Monitoring.
PB93-229847/REB 93-04 PC **A03**/MF **A01**

**EPA/821/R-92/007**
Proceedings of the Annual EPA Conference on Analysis of Pollutants in the Environment (15th). Held in Norfolk, Virginia on May 6-7, 1992.
PB93-152601/REB 93-01 PC **A99**/MF **A06**

**EPA/821/R-93/001**
Economic Benefits of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-168797/REB 93-01 PC **A08**/MF **A02**

**EPA/821/R-93/002**
Regulatory Impact Analysis of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-174613/REB 93-01 PC **A06**/MF **A02**

**EPA/821/R-93/004**
Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
PB93-173979/REB 93-01 PC **A22**/MF **A04**

**EPA/821/R-93/007**
Supplement to the Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics and Synthetic Fibers Point Source Category.
PB93-214336/REB 93-04 PC **A08**/MF **A02**

**EPA/821/R-93/008**
Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry.
PB93-214328/REB 93-04 PC **A03**/MF **A01**

**EPA/821/R-93/009**
Preliminary Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease.
PB93-214344/REB 93-04 PC **A05**/MF **A02**

**EPA/822/R-93/001B**
Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

**EPA/822/R-93/002**
Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

Technical Support Document for the Surface Disposal of Sewage Sludge.
PB93-110591/REB 93-01 PC **A15**/MF **A03**

**EPA/822/R-93/003**
Technical Support for the Incineration of Sewage Sludge.
PB93-110617/REB 93-01 PC **A11**/MF **A03**

**EPA/822/R-93/006**
Wildlife Criteria Portions of the Proposed Water Quality Guidance for the Great Lakes System.
PB93-227866/REB 93-04 PC **A05**/MF **A01**

**EPA/823/B-93/001**
Selecting Remediation Techniques for Contaminated Sediment.
PB93-216273/REB 93-04 PC **A10**/MF **A03**

**EPA/823/N-92/001**
Contaminated Sediments News: Number 5, April, 1992.
PB93-207413/REB 93-04 PC **A02**/MF **A01**

**EPA/823/R-92/004**
Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03**/MF **A01**

**EPA/823/R-92/005**
Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

**EPA/823/R-92/006**
Sediment Classification Methods Compendium.
PB93-115186/REB 93-01 PC **A11**/MF **A03**

**EPA/823/R-92/007**
Proceedings of the EPA's Contaminated Sediment Management Strategy Forums.
PB93-126399/REB 93-01 PC **A10**/MF **A03**

**EPA/823/R-92/008A**
National Study of Chemical Residues in Fish. Volume 1.
PB93-114981/REB 93-01 PC **E09**/MF **A01**

**EPA/823/R-92/008B**
National Study of Chemical Residues in Fish. Volume 2.
PB93-114999/REB 93-01 PC **E11**/MF **A04**

**EPA/823/R-92/009**
Proceedings of the National Conference (3rd): Water Quality Standards for the 21st Century. Held in Las Vegas, Nevada on August 31-September 3, 1992.
PB93-144210/REB 93-01 PC **A16**/MF **A03**

**EPA/823/R-93/001**
Proceedings: Tiered Testing Issues for Freshwater and Marine Sediments. Held in Washington, DC. on September 16-18, 1992.
PB93-152619/REB 93-01 PC **A22**/MF **A04**

**EPA/823/R-93/002**
Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1. Fish Sampling and Analysis.
PB93-237899/REB 93-04 PC **A16**/MF **A03**

**EPA/830/K-93/001**
Office of Wastewater Enforcement and Compliance (OWEC): Primer.
PB93-226736/REB 93-04 PC **A05**/MF **A01**

**EPA/830/R-93/001**
Office of Wastewater Enforcement and Compliance Strategic Plan.
PB93-223204/REB 93-04 PC **A03**/MF **A01**

**EPA/831/S-92/002**
Introduction to Water Quality-Based Toxics Control for the NPDES Program.
PB93-207967/REB 93-04 PC **A03**/MF **A01**

**EPA/832/B-92/001**
Municipal Water Pollution Prevention Bibliography: 1992, the Year of Clean Water. Celebration and Commitment.
PB93-141063/REB 93-01 PC **A03**/MF **A01**

**EPA/832/F-93/004**
Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.
PB93-212033/REB 93-04 PC **A01**/MF **A01**

**EPA/832/R-93/001**
Municipal Water Pollution Prevention Program, National MWPP Conference. Held in Washington, DC. on April 27-28, 1993.
PB93-231140/REB 93-04 PC **A03**/MF **A01**

**EPA/833/B-92/004**
U.S. EPA NPDES: Basic Permit Writers' Course. Workbook.
PB93-185619/REB 93-01 PC **A17**/MF **A03**

**EPA/833/B-93/003**
Training Manual for NPDES Permit Writers.
PB93-217644/REB 93-04 PC **A09**/MF **A02**

**EPA/833/F-93/002**
NPDES Storm Water Program. Question and Answer Document. Volume 1.
PB93-223410/REB 93-04 PC **A03**/MF **A01**

**EPA/833/K-93/001**
Urban Runoff Management Information/Education Products. Version 1.
PB93-190932/REB 93-01 PC **A09**/MF **A03**

**EPA/833/R-92/001**
Storm Water Management for Construction Activities. Developing Pollution Prevention Plans and Best Management Practices. Summary Guidance.
PB93-223550/REB 93-04 PC **A03**/MF **A01**

**EPA/833/Z-90/100**
National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges (40CFR Parts 122, 123, and 124 Final Rule).
PB93-226728/REB 93-04 PC **A06**/MF **A02**

**EPA/840/B-92/002**
Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters.
PB93-234672/REB 93-04 PC **A99**/MF **E08**

**EPA/840/B-93/001**
Xeriscape Landscaping: Preventing Pollution and Using Resources Efficiently.
PB93-210219/REB 93-04 PC **A03**/MF **A01**

**EPA/840/S-92/001**
Protecting the Nation's Wetlands, Oceans, and Watersheds: An Overview of Programs and Activities.
PB93-105609/REB 93-01 PC **A03**/MF **A01**

**EPA/841/B-87/110**
Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC **A04**/MF **A01**

**EPA/841/B-93/003**
Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance.
PB93-193795/REB 93-01 PC **A05**/MF **A01**

**EPA/841/K-92/001**
Quality of Our Nation's Water: 1990.
PB93-205904/REB 93-04 PC **A03**/MF **A01**

**EPA/841/N-92/003**
News Notes, Number 22: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-126183/REB 93-01 PC **A03**/MF **A01**

**EPA/841/N-92/005**
News-Notes Number 23: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-204006/REB 93-01 PC **A03**/MF **A01**

**EPA/841/R-92/004**
Proceedings of the National Citizens' Volunteer Water Monitoring Conference (3rd). Held in Annapolis, Maryland on March 29-April 2, 1992. Building Partnerships in the Year of Clean Water.
PB93-207108/REB 93-04 PC **A09**/MF **A02**

**EPA/841/R-93/001**
Commitment to Watershed Protection: A Review of the Clean Lakes Program.
PB93-210300/REB 93-04 PC **A04**/MF **A01**

**EPA/841/R-93/002**
Fish and Fisheries Management in Lakes and Reservoirs. Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-210375/REB 93-04 PC **A15**/MF **A03**

**EPA/841/R-93/003**
State and Local Funding of Nonpoint Source Control Programs.
PB93-228146/REB 93-04 PC **A09**/MF **A02**

**EPA/842/B-92/001**
Global Oceans Directory. A Compendium of Organizations Dedicated to Marine Conservation.
PB93-206555/REB 93-04 PC **A08**/MF **A02**

**EPA/842/B-92/002**
National Estuary Program Guidance. Comprehensive Conservation and Management Plans: Content and Approval Requirements.
PB93-217172/REB 93-04 PC **A03**/MF **A01**

**EPA/842/B-92/003**
Turning the Tide on Trash: A Learning Guide on Marine Debris.
PB93-216992/REB 93-04 PC **A05**/MF **A01**

**EPA/842/B-92/006**
Dredged Material Ocean Dumping Reference Document.
PB93-223568/REB 93-04 PC **A04**/MF **A01**

**EPA/842/B-92/007**
Guidance Manual for the Review of Permitted and Civil Works Projects for the Ocean Disposal of Dredged Material.
PB93-223048/REB 93-04 PC **A14**/MF **A03**

**EPA/842/B-92/009**
Summary of Implementation and Demonstration Projects in Bays and Estuaries.
PB93-194637/REB 93-01 PC **A07**/MF **A02**

**EPA/842/R-92/002**
Protecting Coastal and Wetlands Resources: A Guide for Local Governments.
PB93-105567/REB 93-01 PC **A09**/MF **A03**

**EPA/905/3-90/003**
Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

**EPA/905/9-89/003**
Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC **A07**/MF **A02**

**EPA/905/9-89/0087**
Proceedings of the 1989 Midwest Pollution Control Biologists Meeting. Held in Chicago, Illinois on February 14-17, 1989.
PB93-143691/REB 93-01 PC **A08**/MF **A02**

**EPA/905/9-91/001**
Northeast Indiana Conservation Tillage Demonstration Project. Final Report (1981-1985).
PB93-128056/REB 93-01 PC **A03**/MF **A01**

**EPA/905/9-91/006A**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
PB93-128015/REB 93-01 PC **A04**/MF **A01**

**EPA/905/9-91/006B**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC **A04**/MF **A01**

**EPA/905/9-91/006C**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
PB93-128031/REB 93-01 PC **A06**/MF **A02**

**EPA/905/9-91/007**
Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
PB93-128114/REB 93-01 PC **A04**/MF **A01**

**EPA/905/9-91/008**
Maumee River Basin Pilot Watershed Study. Volume 5. Continued Watershed Monitoring (1981-1985) and Rainulator Study - Detailed Data (1986).
PB93-128098/REB 93-01 PC **A10**/MF **A03**

**EPA/905/9-91/010**
Cost Effective Corn and Soybean Production Without Tillage: Fact or Fiction (May 1988).
PB93-157568/REB 93-01 PC **A03**/MF **A01**

**EPA/905/9-91/011**
Use of the Black Creek Database to Analyze Techniques for Estimating Nonpoint Source Loadings from Small Watersheds (May 1988).
PB93-128072/REB 93-01 PC **A03**/MF **A01**

**EPA/905/9-91/013**
Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

**EPA/905/9-91/021**
Pollution Prevention: Meeting the Environmental Challenges of the 1990s. Region 5 FY 91 Accomplishments.
PB93-128106/REB 93-01 PC **A04**/MF **A01**

**EPA/905/9-91/025**
Development of Index of Biotic Integrity Expectations for the Ecoregions of Indiana. I. Central Corn Belt Plain.
PB93-149383/REB 93-01 PC **A06**/MF **A02**

**EPA/905/R-92/003**
Proceedings of the Midwest Pollution Control Biologists Meeting, 1991. Environmental Indicators: Measurement and Assessment Endpoints. Held in Lincolnwood, Illinois on March 19-22, 1991.
PB93-145712/REB 93-01 PC **A06**/MF **A02**

**EPA/910/9-89/031A**
Commencement Bay Nearshore/Tideflats Feasibility Study. Executive Summary.
PB93-181220/REB 93-01 PC **A06**/MF **A02**

**EPA/910/9-89/031B**
Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
PB93-181238/REB 93-01 PC **A25**/MF **A06**

**EPA/910/9-89/031C**
Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 2. Appendices.
PB93-181246/REB 93-01 PC **A18**/MF **A04**

**EPA/910/9-89/032**
Commencement Bay Nearshore/Tideflats Feasibility Study. Development of Sediment Cleanup Goals.
PB93-181253/REB 93-01 PC **A05**/MF **A01**

**EPA/910/9-91/002**
Nutrients and Phytoplankton in Puget Sound.
PB93-119576/REB 93-01 PC **A08**/MF **A02**

**EPA/910/9-91/019**
Dynamic River Basin Water Quality Model.
PB93-190890/REB 93-01 PC **A05**/MF **A01**

**EPA/910/9-91/023**
Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC **A06**/MF **A02**

**EPA/910/9-91/027**
Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound.
PB93-122208/REB 93-01 PC **A09**/MF **A02**

**EPA/910/9-91/027-APP**
Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound, Appendices.
PB93-122216/REB 93-01 PC **A16**/MF **A03**

**EPA/910/9-91/035**
Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC **A14**/MF **A03**

**EPA/910/9-91/037**
Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC **A10**/MF **A03**

**EPA/910/9-91/050**
Potential Intertidal Habitat Restoration Sites in the Duwamish River Estuary.
PB93-122190/REB 93-01 PC **A05**/MF **A02**

**EPA/910/9-92/008**
Maritime Industrial Waste Project Reduction of Toxicant Pollution from the Maritime Industry in Puget Sound.
PB93-119568/REB 93-01 PC **A08**/MF **A02**

**EPA/910/9-92/012**
Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
PB93-143709/REB 93-01 PC **A08**/MF **A02**

**EPA/910/9-92/013**
Region 10 In-Stream Biological Monitoring Handbook: For Wadable Streams in the Pacific Northwest.
PB93-226611/REB 93-04 PC **A05**/MF **A01**

**EPA/910/9-92/019**
Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

**EPA/910/9-92/027**
Pollution Prevention Opportunity Assessment and Implementation Plan. For Simpson Tacoma Kraft Company, Tacoma, Washington.
PB93-145670/REB 93-01 PC **A05**/MF **A01**

**EPA/910/9-92/028**
Clean Water Act (Section 319): An Evaluation of Program Implementation in Region 10.
PB93-145654/REB 93-01 PC **A05**/MF **A01**

**EPA/910/9-92/029**
Consensus Method for Determining Groundwaters under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA).
PB93-180818/REB 93-01 PC **A04**/MF **A01**

**EPA/910/9-92/030**
Model Pollution Prevention Plan for the Kraft Segment of the Pulp and Paper Industry.
PB93-145605/REB 93-01 PC **A04**/MF **A01**

**EPA/910/9-92/031**
Pollution Prevention for the Kraft Pulp and Paper Industry.
PB93-145613/REB 93-01 PC **A04**/MF **A01**

**EPA/910/9-92/033**
Restoration Potential of Diked Estuarine Wetlands in Washington and Oregon. Phase 2: Identification of Candidate Sites in Puget Sound.
PB93-145597/REB 93-01 PC **A04**/MF **A01**

**EPA/910/R-93/006**
Clark-Fork-Pend Oreille Basin Water Quality Study: A Summary of Findings and a Management Plan.
PB93-208148/REB 93-04 PC **A08**/MF **A02**

**EPA/9360.7-06**
Guidance for Federal Facilities on Release Notification Requirements under CERCLA and SARA Title III.
PB93-963412/REB 93-01 PC **A03**/MF **A01**

**EPRI-TR-101054-VOL-1**
Proceedings: 1991 SO2 Control Symposium. Volume 1. Opening Session and Sessions 1-3.
PB93-196095/REB 93-01 PC **A19**/MF **A04**

**EPRI-TR-101054-VOL-2**
Proceedings: 1991 SO2 Control Symposium. Volume 2. Sessions 4 and 5A.
PB93-196103/REB 93-01 PC **A22**/MF **A04**

**EPRI-TR-101054-VOL-3**
Proceedings: 1991 SO2 Control Symposium. Volume 3. Sessions 5B and 6.
PB93-196111/REB 93-01 PC **A20**/MF **A04**

**EPRI-TR-101054-VOL-4**
Proceedings: 1991 SO2 Control Symposium. Volume 4. Session 7.
PB93-196129/REB 93-01 PC **A15**/MF **A03**

**EPRI-TR-101054-VOL-5**
Proceedings: 1991 SO2 Control Symposium. Volume 5. Session 8.
PB93-196137/REB 93-01 PC **A13**/MF **A03**

**ERLN/CONTRIB-1083**
Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC **A03**/MF **A01**

**ERLN-N126**
Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC **A03**/MF **A01**

**ERLN-N139**
Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03**/MF **A01**

**ERLN-N143**
Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC **A03**/MF **A01**

**ERLN-N144**
Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03**/MF **A01**

**ERLN-N175**
Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03**/MF **A01**

**ERLN-N183**
Taxonomic Level Sufficient for Assessing a Moderate Impact on Macrobenthic Communities in Puget Sound, Washington, USA.
PB93-185858/REB 93-01 PC **A02**/MF **A01**

**ERLN-N208**
Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-196988/REB 93-01 PC **A03**/MF **A01**

**ERLN-NX12**
Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC **A02**/MF **A01**

**ERLN-X187**
Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).
PB93-221836/REB 93-04 PC **A03/MF A01**

**ERLN-X188**
Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03/MF A01**

**ERLN-X192**
Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
PB93-185866/REB 93-01 PC **A02/MF A01**

**ERLN-X-193**
Stress Proteins in Aquatic Organisms: An Environmental Perspective.
PB93-199578/REB 93-01 PC **A03/MF A01**

**ERLN-X199**
Physiological Limitations on Phytoplankton Productivity in the Ocean.
PB93-204923/REB 93-01 PC **A02/MF A01**

**ERLN-X210**
Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03/MF A01**

**ERLN-1087**
DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03/MF A01**

**ERLN-1150**
Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC **A03/MF A01**

**ERLN-1173**
Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02/MF A01**

**ERLN-1187**
Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03/MF A01**

**ERLN-1191**
Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC **A03/MF A01**

**ERLN-1214**
Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC **A03/MF A01**

**ERLN-1228**
Chemically Induced Histopathology in Aquatic Invertebrates (Chapter 14).
PB93-222263/REB 93-04 PC **A03/MF A01**

**ERLN-1274**
Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC **A02/MF A01**

**ERLN-1277**
Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02/MF A01**

**ERLN-1281**
Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC **A02/MF A01**

**ERLN-1329**
Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC **A02/MF A01**

**ERLN-1331**
Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02/MF A01**

**ERLN-1332**
Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03/MF A01**

**ERLN-1340**
Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC **A03/MF A01**

**ERLN-1357**
Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04/MF A01**

**ERLN-1374**
Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03/MF A01**

**ERLN-1408**
Field and Laboratory Studies of Chemical Contamination and Environmentally Related Diseases in Fish and Molluscs of New England.
PB93-199438/REB 93-01 PC **A02/MF A01**

**ERLN-1413**
Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02/MF A01**

**ERLN-1416**
Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC **A02/MF A01**

**ERLN-1420**
Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC **A02/MF A01**

**ERLN-1421**
Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
PB93-229706/REB 93-04 PC **A02/MF A01**

**ERLN-1436**
Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC **A03/MF A01**

**ERLN-1438**
Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02/MF A01**

**ERLN-1447**
Physical and Chemical Parameters of Sediment Extraction and Fractionation That Influence Toxicity, as Evaluated by Microtox (Trade Name).
PB93-185882/REB 93-01 PC **A03/MF A01**

**ERLN-1504**
Application of the Ecotone Concept in Defining Nutrient Management Requirements for the Upper Potomac River Basin.
PB93-199560/REB 93-01 PC **A03/MF A01**

**ERNL-N087**
Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC **A02/MF A01**

**FHWA/MD-89/14**
Evaluation of Mitigation for Acid Aluminum Leachate from a Highway Fill in Garrett County, Maryland.
PB93-180321/REB 93-01 PC **A04/MF A01**

**GBNEP-6**
Proceedings: Galveston Bay Characterization Workshop. Held on February 21-23, 1991.
PB93-205672/REB 93-04 PC **A11/MF A03**

**GBNEP-12**
Shoreline Survey for Unpermitted Discharges to Galveston Bay.
PB93-205706/REB 93-04 PC **A03/MF A01**

**GBNEP-13**
Regulatory Effectiveness Study for the Armand Bayou Coastal Preserve.
PB93-205680/REB 93-04 PC **A06/MF A02**

**GBNEP-14**
Regulatory Effectiveness Study for the Christmas Bay Coastal Preserve.
PB93-205696/REB 93-04 PC **A09/MF A03**

**GBNEP-15**
Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1. Technical Report.
PB93-205722/REB 93-04 PC **A11/MF A03**

**GBNEP-16**
Wetland Plant Communities, Galveston Bay System.
PB93-205730/REB 93-04 PC **A07/MF A02**

**GBNEP-18**
Segmentation Development for Galveston Bay.
PB93-205748/REB 93-04 PC **A07/MF A02**

**GBNEP-19**
Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC **A20/MF A04**

**GBNEP-20**
Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16/MF A03**

**GBNEP-21**
Characterization of Selected Public Health Issues in Galveston Bay.
PB93-205771/REB 93-04 PC **A06/MF A02**

**GBNEP-22**
Ambient Water and Sediment Quality of Galveston Bay: Present Status and Historical Trends. Volume 1.
PB93-205789/REB 93-04 PC **A09/MF A03**

**GBNEP-24**
Environmental Management Inventory of Galveston Bay.
PB93-205797/REB 93-04 PC **A06/MF A02**

**GBNEP-25**
Recreational Fishery By-Catch in the Galveston Bay System.
PB93-205805/REB 93-04 PC **A06/MF A02**

**GL-05/91**
Northeast Indiana Conservation Tillage Demonstration Project. Final Report (1981-1985).
PB93-128056/REB 93-01 PC **A03/MF A01**

**GL-06A/91**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
PB93-128015/REB 93-01 PC **A04/MF A01**

**GL-06B/91**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC **A04/MF A01**

**GL-06C/91**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
PB93-128031/REB 93-01 PC **A06/MF A02**

**GL-09B/91**
Maumee River Basin Pilot Watershed Study. Volume 5. Continued Watershed Monitoring (1981-1985) and Rainulator Study - Detailed Data (1986).
PB93-128098/REB 93-01 PC **A10/MF A03**

**GL-011/91**
Cost Effective Corn and Soybean Production Without Tillage: Fact or Fiction (May 1988).
PB93-157568/REB 93-01 PC **A03/MF A01**

**GL-012-91**
Use of the Black Creek Database to Analyze Techniques for Estimating Nonpoint Source Loadings from Small Watersheds (May 1988).
PB93-128072/REB 93-01 PC **A03/MF A01**

**GL-014/91**
Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05/MF A01**

**GLNPO-01/91**
Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12/MF A03**

**GLNPO-06/91**
Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
PB93-128114/REB 93-01 PC **A04/MF A01**

**HEI/RR-92/49**
Mechanisms of Aldehyde-Induced Bronchial Reactivity: Role of Airway Epithelium.
PB93-179927/REB 93-01 PC **A04/MF A01**

**HEI/RR-92/50**
Role of Ozone in Tracheal Cell Transformation.
PB93-179935/REB 93-01 PC **A03/MF A01**

**HEI/RR-92/51**
Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
PB93-179950/REB 93-01 PC **A03/MF A01**

**HEI/RR-92/52**
Carbon Monoxide Exposure of Subjects with Documented Cardiac Arrhythmias.
PB93-179943/REB 93-01 PC **A03/MF A01**

**IEAP/WPC-92-224**
Water Quality in Illinois, 1990-1991.
PB93-210193/REB 93-04 PC **A03/MF A01**

**IEAPA/APC/92-058**
Illinois Annual Air Quality Report, 1991.
PB93-208775/REB 93-04 PC **A05/MF A01**

**IEPA/APC/93-004**
Illinois Annual Air Quality Report, 1992.
PB93-208759/REB 93-04 PC **A05/MF A01**

**IEPA/LPC/93-059**
Companies that Generate, Treat, Dispose or Recover Hazardous Waste. 1991 Annual Report.
PB93-216638/REB 93-04 PC **A15/MF A03**

**IEPA/WPC/91-210**
Lake Water Quality Assessment Program: Southern Illinois Lakes.
PB93-215929/REB 93-04 PC **A03/MF A01**

**IEPA/WPC-92-110C**
Volunteer Lake Monitoring Program, 1991. Volume 3. Northeastern Illinois Region.
PB93-113538/REB 93-01 PC **A07/MF A02**

**IEPA/WPC/92-110E**
Volunteer Lake Monitoring Program, 1991. Volume 5. East-Central Illinois Region.
PB93-102234/REB 93-01 PC **A04/MF A01**

**IEPA/WPC/92-114**
Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07/MF A02**

**IEPA/WPC/92-220**
Illinois Water Quality Management Plan.
PB93-138451/REB 93-01 PC **A07/MF A02**

**IEPA/WPC/93-061A**
Volunteer Lake Monitoring Program, 1992. Volume 1: Statewide Summary.
PB93-216927/REB 93-04 PC **A06/MF A02**

**IEPA/WPC/93-061B**
Volunteer Lake Monitoring Program, 1992. Volume 2: Northwestern Illinois Region.
PB93-217214/REB 93-04 PC **A04/MF A01**

**IEPA/WPC/93-061D**
Volunteer Lake Monitoring Program, 1992. Volume 4. West Central Illinois Region.
PB93-219111/REB 93-04 PC **A04/MF A01**

**IEPA/WPC/93-061E**
Volunteer Lake Monitoring Program, 1992. Volume 5. East-Central Illinois Region.
PB93-223162/REB 93-04 PC **A05/MF A01**

**IEPA/WPC-93/061F**
Volunteer Lake Monitoring Program, 1992. Volume 6. Southwestern Illinois Region.
PB93-234128/REB 93-04 PC **A03**/MF **A01**

**IEPA/WPC-93-063**
Biological and Water Quality Survey of Sugar Creek and Tributaries Crawford County, Illinois, August and September 1992.
PB93-217180/REB 93-04 PC **A04**/MF **A01**

**ISBN-0-16-036253-9**
Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC **A03**/MF **A01**

**ISBN-0-16-036286-5**
Public Health Action Agenda for the Gulf of Mexico: Frame Work for Action.
PB93-223428/REB 93-04 PC **A06**/MF **A02**

**ISBN-0-16-036287-3**
Marine Debris Action Agenda for the Gulf of Mexico: Framework for Action.
PB93-223469/REB 93-04 PC **A08**/MF **A02**

**ISBN-0-16-041702-3**
Greening of World Trade: A Report to EPA from the Trade and Environment Committee of the National Advisory Council for Environmental Policy and Technology.
PB93-176980/REB 93-01 PC **A11**/MF **A03**

**ISBN-0-16-041708-2**
Guide to Federal Water Quality Programs and Information: A Guide with Computer Software Developed by the Interagency Work Group on Water Quality.
PB93-186245/REB 93-01 PC **A09**/MF **A02**

**ISBN-0-16-0362645-2**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC **A10**/MF **A03**

**ISBN-0-309-0:4844-3**
Protecting Visibility in National Parks and Wilderness Areas.
PB93-186393/REB 93-01 PC **A20**/MF **A04**

**ISBN-0-309-03741-7**
Drinking Water and Health: Disinfectants and Disinfectant By-Products. Volume 7.
PB93-112290/REB 93-01 PC **A06**/MF **A02**

**ISBN-0-309-03937-7**
Biologic Markers in Reproductive Toxicology.
PB93-100980/REB 93-01 PC **A16**/MF **A04**

**ISBN-0-309-04078-7**
Biologic Markers of Air-Pollution Stress and Damage in Forests.
PB93-110187/REB 93-01 PC **A17**/MF **A03**

**ISBN-0-309-04736-6**
Multiple Chemical Sensitivities. Addendum to Biologic Markers in Immunotoxicology.
PB93-222990/REB 93-04 PC **A09**/MF **A03**

**ISBN-0-309-04749-8**
Sustainable Agriculture and the Environment in the Humid Tropics.
PB93-173920/REB 93-01 PC **A99**/MF **A06**

**ISBN-0-87371-450-4**
Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.
PB93-212769/REB 93-04 PC **A03**/MF **A01**

**JACKFAU-92-444-1**
Nonroad Mobile Source Sales and Attrition Study: Identification and Evaluation of Available Data Sources.
PB93-190098/REB 93-01 PC **A11**/MF **A03**

**LSU-HEPA-93-7**
Search for Radiative Neutrino Decay from Supernovae.
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

**MKS-92-74**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
DE93500872/REB 93-04 PC **A03**/MF **A01**

**MKS-93-83**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
DE93500877/REB 93-04 PC **A04**/MF **A01**

**N93-30052/3/REB**
Search for Radiative Neutrino Decay from Supernovae.
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

**NAS 1.26:193118**
Search for Radiative Neutrino Decay from Supernovae.
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

**NASA-CR-193118**
Search for Radiative Neutrino Decay from Supernovae.
N93-30052/3/REB 93-04 PC **A02**/MF **A01**

**NISTIR-4979**
Building and HVAC Characterization for Commercial Building Indoor Air Quality Investigations.
PB93-198844/REB 93-01 PC **A07**/MF **A02**

**NPS-D-752**
Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04**/MF **A01**

**NPS/NRWV/NRTR-92/10**
Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04**/MF **A01**

**NRT-1A**
Criteria for Review of Hazardous Materials Emergency Plans.
PB93-207348/REB 93-04 PC **A03**/MF **A01**

**NTSB/HAR-93/02**
National Transportation Safety Board Highway Accident Report: Charter Bus Loss of Control, Overturn, and Fire, Vernon, New Jersey, July 26, 1992.
PB93-916202/REB 93-04 PC **A05**/MF **A01**

**NUTEK-AVF-93-1**
Foerbraenning av sorterat industriavfall. Huvudrapport. (Incineration of sorted industrial wastes. Main report).
DE93500869/REB 93-04 PC **A03**/MF **A01**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
DE93500872/REB 93-04 PC **A03**/MF **A01**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
DE93500877/REB 93-04 PC **A04**/MF **A01**

**NYSERDA-92/04**
Town of Edinburg Landfill Reclamation Demonstration Project.
PB93-198976/REB 93-01 PC **A12**/MF **A03**

**NYSERDA-92-08-VOL-1**
Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 1.
PB93-198950/REB 93-01 PC **A17**/MF **A04**

**NYSERDA-92-08-VOL-2**
Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 2, Appendices.
PB93-198968/REB 93-01 PC **A07**/MF **A02**

**OECD-51**
Guiding Principles for Chemical Accident Prevention, Preparedness and Response.
PB93-217560/REB 93-04 PC **A07**/MF **A02**

**OHEA-C-073**
Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC **A04**/MF **A01**

**OHEA-C-073-001**
Evaluation of the Potential Carcinogenicity of Acetamide, N-Fluoren-2-yl (53-96-3).
PB93-181626/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-002**
Evaluation of the Potential Carcinogenicity of Acrylonitrile (107-13-1).
PB93-181634/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-003**
Evaluation of the Potential Carcinogenicity of Aldrin (309-00-2).
PB93-181642/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-004**
Evaluation of the Potential Carcinogenicity of Amitrole (61-82-5).
PB93-181659/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-005**
Evaluation of the Potential Carcinogenicity of Arsenic and Inorganic Arsenic Compounds.
PB93-181667/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-012**
Evaluation of the Potential Carcinogenicity of Cacodylic Acid (75-60-5).
PB93-184851/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-017**
Evaluation of the Potential Carcinogenicity of Diethylarsine (692-42-2).
PB93-184877/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-023**
Evaluation of the Potential Carcinogenicity of Asbestos (1332-21-4).
PB93-184885/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-025**
Evaluation of the Potential Carcinogenicity of Azaserine (115-02-6).
PB93-184901/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-027**
Evaluation of the Potential Carcinogenicity of Benz(c)acridine (225-51-4).
PB93-184927/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-028**
Evaluation of the Potential Carcinogenicity of Benz(a)anthracene (00056-55-3).
PB93-184935/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-029**
Evaluation of the Potential Carcinogenicity of Benzene (71-43-2).
PB93-184943/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-030**
Evaluation of the Potential Carcinogenicity of Benzidine and Its Salt (92-87-5).
PB93-184976/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-031**
Evaluation of the Potential Carcinogenicity of Benzo(b)fluoranthene (00205-99-2).
PB93-184984/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-032**
Evaluation of the Potential Carcinogenicity of Benzo(k)fluoranthene (207-08-9).
PB93-184992/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-033**
Evaluation of the Potential Carcinogenicity of Benzo(a)Pyrene (50-32-8).
PB93-185007/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-034**
Evaluation of the Potential Carcinogenicity of Benzotrichloride (97-07-7).
PB93-185015/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-035**
Evaluation of the Potential Carcinogenicity of Benzyl Chloride (100-44-7).
PB93-185023/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-036**
Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
PB93-185031/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-040**
Evaluation of the Potential Carcinogenicity of Alpha-Hexachlorocyclohexane (319-84-6).
PB93-185049/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-041**
Evaluation of the Potential Carcinogenicity of Beta-Hexachlorocyclohexane (319-85-7).
PB93-185056/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-042**
Evaluation of the Potential Carcinogenicity of Gamma-Hexachlorocyclohexane (Lindane) (58-89-9).
PB93-185064/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-043**
Evaluation of the Potential Carcinogenicity of Bis(2-Chloroethyl)Ether (111-44-4).
PB93-185072/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-044**
Evaluation of the Potential Carcinogenicity of Bis(Chloromethyl)Ether (542-88-1).
PB93-185080/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-045**
Evaluation of the Potential Carcinogenicity of Bis(2-Ethylhexyl)Phthalate (117-81-7).
PB93-185098/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-046**
Evaluation of the Potential Carcinogenicity of Cadmium (7740-43-9), Cadium Acetate (543-90-8), Cadmium Bromide (7789-42-6), Cadmium Chloride (10108-64-2).
PB93-185106/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-050**
Evaluation of the Potential Carcinogenicity of Carbon Tetrachloride (56-23-5).
PB93-185114/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-051**
Evaluation of the Potential Carcinogenicity of Chlorambucil (305-03-3).
PB93-185213/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-052**
Evaluation of the Potential Carcinogenicity of Chlordane (57-74-9).
PB93-185221/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-053**
Evaluation of the Potential Carcinogenicity of Chlornaphazine (494-03-1).
PB93-185239/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-054**
Evaluation of the Potential Carcinogenicity of Chloroform (67-66-3).
PB93-194249/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-055**
Evaluation of the Potential Carcinogenicity of Chloromethyl Methyl Ether (Technical Grade) (107-30-2).
PB93-185122/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-056**
Evaluation of the Potential Carcinogenicity of 4-Chloro-o-Toluidine Hydrochloride (3165-93-3).
PB93-185130/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-057**
Evaluation of the Potential Carcinogenicity of Chromium and Hexavalent Chromium Compounds.
PB93-185148/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-068**
Evaluation of the Potential Carcinogenicity of Chrysene (218-01-9).
PB93-185155/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-069**
Evaluation of the Potential Carcinogenicity of Coke Oven Emissions.
PB93-185163/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-070**
Evaluation of the Potential Carcinogenicity of Creosote (8001-58-9).
PB93-185171/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-072**
Evaluation of the Potential Carcinogenicity of Daunomycin (20830-81-3).
PB93-185197/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-073**
Evaluation of the Potential Carcinogenicity of DDD (72-54-8).
PB93-185205/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-074**
Evaluation of the Potential Carcinogenicity of DDE (72-55-9).
PB93-185247/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-075**
Evaluation of the Potential Carcinogenicity of DDT (50-29-3).
PB93-185254/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-076**
Evaluation of the Potential Carcinogenicity of Diallate (2303-16-4).
PB93-185262/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-077**
Evaluation of the Potential Carcinogenicity of Diaminotoluene (Mixed) (95-80-7).
PB93-185270/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-078**
Evaluation of the Potential Carcinogenicity of Dibenz(a,h)Anthracene (53-70-3).
PB93-185288/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-079**
Evaluation of the Potential Carcinogenicity of 1,2:7,8-Dibenzopyrene (189-55-9).
PB93-185296/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-080**
Evaluation of the Potential Carcinogenicity of 1,2-Dibromo-3-Chloropropane (96-12-8).
PB93-185304/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-081**
Evaluation of the Potential Carcinogenicity of 3,3'-Dichlorobenzidine (91-94-1).
PB93-194256/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-082**
Evaluation of the Potential Carcinogenicity of 1,2-Dichloroethane (107-06-2).
PB93-194264/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-084**
Evaluation of the Potential Carcinogenicity of Dieldrin (60-57-1).
PB93-194272/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-085**
Evaluation of the Potential Carcinogenicity of 1,2:3,4-Diepoxybutane (1464-53-5).
PB93-194280/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-086**
Evaluation of the Potential Carcinogenicity of 1,2-Diethylhydrazine (1615-80-1).
PB93-194298/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-087**
Evaluation of the Potential Carcinogenicity of Diethylstilbestrol (56-53-1).
PB93-194306/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-088**
Evaluation of the Potential Carcinogenicity of Dihydrosafrole (94-58-6).
PB93-185312/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-089**
Evaluation of the Potential Carcinogenicity of 3,3'-Dimethoxybenzidine (119-90-4).
PB93-194314/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-090**
Evaluation of the Potential Carcinogenicity of Dimethyl Sulfate (77-78-1).
PB93-194322/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-091**
Evaluation of the Potential Carcinogenicity of Dimethylaminoazobenzene (60-11-7).
PB93-185338/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-092**
Evaluation of the Potential Carcinogenicity of 7,12-Dimethylbenz(a)anthracene (57-97-6).
PB93-185346/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-093**
Evaluation of the Potential Carcinogenicity of 3,3'-Dimethylbenzidine (119-93-7).
PB93-185353/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-094**
Evaluation of the Potential Carcinogenicity of Dimethylcarbamoyl Chlo.
PB93-185361/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-095**
Evaluation of the Potential Carcinogenicity of 1,1 Dimethylhydrazine (57-14-7).
PB93-185379/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-096**
Evaluation of the Potential Carcinogenicity of 1,2-Dimethylhydrazine (540-73-8).
PB93-185387/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-097**
Evaluation of the Potential Carcinogenicity of Dinitrotoluene (Mixture) (25321-14-6).
PB93-185395/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-098**
Evaluation of the Potential Carcinogenicity of 2,4-Dinitrotoluene (121-14-2).
PB93-185403/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-099**
Evaluation of the Potential Carcinogenicity of 2,6-Dinitrotoluene (606-20-2).
PB93-185411/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-100**
Evaluation of the Potential Carcinogenicity of 1,4-Dioxane (123-91-1).
PB93-185429/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-101**
Evaluation of the Potential Carcinogenicity of 1,2-Diphenylhydrazine (122-66-7).
PB93-192326/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-102**
Evaluation of the Potential Carcinogenicity of Epichlorohydrin (106-89-8).
PB93-192334/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-103**
Evaluation of the Potential Carcinogenicity of Ethyl Carbamate (Urethane) (51-79-6).
PB93-192342/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-104**
Evaluation of the Potential Carcinogenicity of Ethyl 4,4'-Dichlorobenzilate (510-15-6).
PB93-192359/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-105**
Evaluation of the Potential Carcinogenicity of Ethylene Dibromide (106-93-4).
PB93-192367/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-106**
Evaluation of the Potential Carcinogenicity of Ethylene Oxide (75-21-8).
PB93-192375/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-107**
Evaluation of the Potential Carcinogenicity of Ethylenethiourea (96-45-7).
PB93-193589/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-108**
Evaluation of the Potential Carcinogenicity of Ethyl Methanesulfonate (62-50-0).
PB93-193597/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-109**
Evaluation of the Potential Carcinogenicity of Formaldehyde (50-00-0).
PB93-193605/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-110**
Evaluation of the Potential Carcinogenicity of Glycidylaldehyde (765-34-4).
PB93-193613/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-111**
Evaluation of the Potential Carcinogenicity of Heptachlor (76-44-8).
PB93-190478/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-112**
Evaluation of the Potential Carcinogenicity of Heptachlor Epoxide (1024-57-3).
PB93-190486/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-113**
Evaluation of the Potential Carcinogenicity of Hexachlorobenzene (118-74-1).
PB93-190494/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-114**
Evaluation of the Potential Carcinogenicity of Hexachlorobutadiene (87-68-3).
PB93-190502/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-115**
Evaluation of the Potential Carcinogenicity of Hexachloroethane (67-72-1).
PB93-190510/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-116**
Evaluation of the Potential Carcinogenicity of Hydrazine (302-01-2).
PB93-190528/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-117**
Evaluation of the Potential Carcinogenicity of Indeno(1,2,3-CD)Pyrene (193-39-5).
PB93-190536/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-118**
Evaluation of the Potential Carcinogenicity of Isosafrole (120-58-1).
PB93-190544/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-119**
Evaluation of the Potential Carcinogenicity of Kepone Chlordecone (143-50-0).
PB93-190569/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-120**
Evaluation of the Potential Carcinogenicity of Lasiocarpine (303-34-4).
PB93-190577/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-121**
Evaluation of the Potential Carcinogenicity of Melphalan (148-82-3).
PB93-196301/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-126**
Evaluation of the Potential Carcinogenicity of Methyl Chloride (74-87-3).
PB93-196319/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-129**
Evaluation of the Potential Carcinogenicity of 3-Methylcholanthrene (59-49-5).
PB93-196327/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-130**
Evaluation of the Potential Carcinogenicity of 4,4'-Methylenebis (1-Chloroaniline) (101-14-4).
PB93-196335/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-131**
Evaluation of the Potential Carcinogenicity of Methyl Iodide (74-88-4).
PB93-196343/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-132**
Evaluation of the Potential Carcinogenicity of N-Methyl-N'-Nitro-N-Nitrosoguanidine (70-25-7).
PB93-196350/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-133**
Evaluation of the Potential Carcinogenicity of Methylthiouracil (56-04-2).
PB93-196368/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-134**
Evaluation of the Potential Carcinogenicity of Mitomycin C (50-07-7).
PB93-196376/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-135**
Evaluation of the Potential Carcinogenicity of 1-Naphthylamine (134-32-7).
PB93-196384/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-136**
Evaluation of the Potential Carcinogenicity of 2-Naphthylamine (91-59-8).
PB93-196392/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-137**
Evaluation of the Potential Carcinogenicity of Nickel (7740-02-0).
PB93-196400/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-145**
Evaluation of the Potential Carcinogenicity of 2-Nitropropane (79-46-9).
PB93-196418/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-146**
Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Butylamine (924-16-3).
PB93-196426/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-147**
Evaluation of the Potential Carcinogenicity of N-Nitrosodiethanolamine (1116-54-7).
PB93-196434/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-148**
Evaluation of the Potential Carcinogenicity of N-Nitrosodiethylamine (55-18-5).
PB93-196442/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-149**
Evaluation of the Potential Carcinogenicity of N-Nitrosodimethylamine (62-75-9).
PB93-196459/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-150**
Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Propylamine (621-64-7).
PB93-196467/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-151**
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Ethylurea (759-73-9).
PB93-196475/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-152**
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurea (684-93-5).
PB93-196483/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-153**
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurethane (165-53-2).
PB93-196491/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-154**
Evaluation of the Potential Carcinogenicity of N-Nitrosomethylvinylamine (4549-40-0).
PB93-196509/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-155**
Evaluation of the Potential Carcinogenicity of N-Nitrosopiperidine (100-75-4).
PB93-196517/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-156**
Evaluation of the Potential Carcinogenicity of N-Nitrosopyrrolidine.
PB93-196525/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-157**
Evaluation of the Potential Carcinogenicity of 5-Nitro-O-Toluidine (99-55-8).
PB93-196533/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-158**
Evaluation of the Potential Carcinogenicity of Pentachloroethane (76-01-7).
PB93-185320/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-159**
Evaluation of the Potential Carcinogenicity of Pentachloronitrobenzene (82-68-8).
PB93-196541/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-160**
Evaluation of the Potential Carcinogenicity of Pentachlorophenol (87-86-5).
PB93-196558/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-161**
Evaluation of the Potential Carcinogenicity of Phenacetin (62-44-2).
PB93-196566/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-162**
Evaluation of the Potential Carcinogenicity of Polychlorinated Biphenyls (1336-36-3) Including Specific Aroclors.
PB93-196574/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-170**
Evaluation of the Potential Carcinogenicity of 1,3-Propane Sultone (1120-71-4).
PB93-196582/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-171**
Evaluation of the Potential Carcinogenicity of 1,2-Propylenimine (75-55-8).
PB93-196590/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-172**
Evaluation of the Potential Carcinogenicity Saccharin (81-07-2).
PB93-196608/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-173**
Evaluation of the Potential Carcinogenicity of Safrole (94-59-7).
PB93-201291/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-174**
Evaluation of the Potential Carcinogenicity of Selenium Sulfide (Selenium Disulfide) (7488-56-4).
PB93-201283/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-175**
Evaluation of the Potential Carcinogenicity of Streptozotocin (18883-66-4).
PB93-201275/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-176**
Evaluation of the Potential Carcinogenicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (1746-01-6).
PB93-201267/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-177**
Evaluation of the Potential Carcinogenicity of 1,1,1,2-Tetrachloroethane (630-20-6).
PB93-201259/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-178**
Evaluation of the Potential Carcinogenicity of 1,1,2,2-Tetrachloroethane (79-34-5).
PB93-201242/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-179**
Evaluation of the Potential Carcinogenicity of Tetrachloroethylene (127-18-4).
PB93-201234/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-180**
Evaluation of the Potential Carcinogenicity of Thioacetamide (62-55-5).
PB93-201226/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-181**
Evaluation of the Potential Carcinogenicity of Thiourea (62-56-6).
PB93-201218/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-182**
Evaluation of the Potential Carcinogenicity of o-Toluidine (95-53-4).
PB93-201200/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-183**
Evaluation of the Potential Carcinogenicity of p-Toluidine (106-49-0).
PB93-201192/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-184**
Evaluation of the Potential Carcinogenicity of o-Toluidine Hydrochloride (636-21-5).
PB93-202349/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-185**
Evaluation of the Potential Carcinogenicity of Toxaphene (8001-35-2).
PB93-202331/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-186**
Evaluation of the Potential Carcinogenicity of 1,1,2-Trichloroethane (79-00-5).
PB93-204584/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-187**
Evaluation of the Potential Carcinogenicity of Trichloroethylene (79-01-6).
PB93-202323/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-188**
Evaluation of the Potential Carcinogenicity of Trichlorophenol (Mixed) (2516-78-22).
PB93-202315/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-189**
Evaluation of the Potential Carcinogenicity of 2,4,5-Trichlorophenol (95-95-4).
PB93-202307/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-190**
Evaluation of the Potential Carcinogenicity of 2,4,6-Trichlorophenol (88-06-2).
PB93-202299/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-191**
Evaluation of the Potential Carcinogenicity of Tris(2,3-Dibromopropyl) Phosphate (126-72-7).
PB93-202281/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-192**
Evaluation of the Potential Carcinogenicity of Trypan Blue (72-57-1).
PB93-202273/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-193**
Evaluation of the Potential Carcinogenicity of Uracil Mustard (66-75-1).
PB93-202265/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-073-194**
Evaluation of the Potential Carcinogenicity of Vinyl Chloride (75-01-4).
PB93-202257/REB 93-01 PC **A03**/MF **A01**

**OHEA-C-462**
Armitage-Doll Two-Stage Model: Implications and Extension.
PB93-222842/REB 93-04 PC **A02**/MF **A01**

**OHEA-C-502**
Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.
PB93-222081/REB 93-04 PC **A03**/MF **A01**

**OHEA-E-325**
Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03**/MF **A01**

**OHEA-E-493**
Program to Analyze Aquifer Test Data and Check for Validity with the Jacob Method.
PB93-181154/REB 93-01 PC **A02**/MF **A01**

**OHEA-I-486-VOL-1**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 1. Disposition and Pharmacokinetics.
PB93-222651/REB 93-04 PC **A07**/MF **A02**

**OHEA-I-486-VOL-2**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 2. Mechanisms of Toxic Actions.
PB93-222669/REB 93-04 PC **A03**/MF **A01**

**OHEA-I-486-VOL-3**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 3. Acute, Subchronic, and Chronic Toxicity.
PB93-222677/REB 93-04 PC **A04**/MF **A01**

**OHEA-I-486-VOL-4**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 4. Immunotoxic Effects.
PB93-222685/REB 93-04 PC **A04**/MF **A01**

**OHEA-I-486-VOL-5**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.
PB93-222693/REB 93-04 PC **A06**/MF **A02**

**OHEA-I-486-VOL-6**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 6. Carcinogenicity of TCDD in Animals.
PB93-222701/REB 93-04 PC **A04**/MF **A01**

**OHEA-I-486-VOL-7**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 7. Epidemiology/Human Data.
PB93-222719/REB 93-04 PC **A07**/MF **A02**

**OHEA-I-486-VOL-8**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 8. Dose-Response Relationships.
PB93-222727/REB 93-04 PC **A11**/MF **A03**

**OHEA-R-469**
Developing Improved Strategies to Determine Male Reproductive Risk from Environmental Toxins.
PB93-167286/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-472**
Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC **A01**/MF **A01**

**OHEA-R-473**
Gene Expression during Oogenesis in Mice.
PB93-194389/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-474**
Gene Expression in Pre-Implantation Mammalian Embryos.
PB93-194397/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-475**
Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence In situ Hybridization.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-477**
Cytoplasmic Microtubular Dynamics and Chromatin Organization during Mammalian Oogenesis and Oocyte Maturation.
PB93-194413/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-478**
Maternal Age Effect: The Enigma of Down Syndrome and Other Trisomic Conditions.
PB93-194421/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-479**
Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-480**
Frequency and Nature of Specific-Locus Mutations Induced in Female Mice by Radiations and Chemicals: A Review.
PB93-194447/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-481**
ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC **A02**/MF **A01**

**OHEA-R-482**
Radiation- and Chemically-Induced Chromosome Aberrations in Mouse Oocytes: A Comparison with Effects in Males.
PB93-194462/REB 93-01 PC **A02**/MF **A01**

**OHEA-R-483**
Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-484**
Mutational Risks in Females: Genomic Imprinting and Maternal Molecules.
PB93-194488/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-485**
Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-495**
Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-496**
Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03**/MF **A01**

**OHEA-R-501**
Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC **A02**/MF **A01**

**OHEA-R-523**
Genetic Damage In vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04**/MF **A01**

**OPA-87-016**
America's Wetlands: Our Vital Link between Land and Water.
PB93-206399/REB 93-04 PC **A02**/MF **A01**

**ORNL/M-2426**
Literature review: Heat transfer through two-phase insulation systems consisting of powders in a continuous gas phase.
DE93014387/REB 93-04 PC **A03**/MF **A01**

**ORNL/PUB-2972**
Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
PB93-207561/REB 93-04 PC **A03**/MF **A01**

**ORP/TAD-79/2**
On-Board Corrosion Analysis of a Recovered Nuclear Waste Container.
PB93-202927/REB 93-01 PC **A03**/MF **A01**

**OSWER-DIRECTIVE-9010.02**
Guidance for Capacity Assurance Planning. Capacity Planning Pursuant to CERCLA Section 104(c)(9).
PB93-209898/REB 93-04 PC **A09**/MF **A02**

**OSWER DIRECTIVE-9380.3-10**
Guide for Conducting Treatability Studies under CERCLA.
PB93-126787/REB 93-01 PC **A05**/MF **A01**

**OSWER DIRECTIVE-9420.00-08**
RCRA Implementation Plan, FY 1993.
PB93-176956/REB 93-01 PC **A05**/MF **A02**

**OSWER-88-005**
Community Right-to-Know and Small Business: Understanding Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act of 1986.
PB93-207538/REB 93-04 PC **A03**/MF **A01**

**OSWER-91-006.1**
Successful Practices in Title III Implementation. Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Cameron County, Texas; Bucks County, Pennsylvania; Harford County, Maryland; Dallas County, Texas. Series 6, Number 7.
PB93-130086/REB 93-01 PC **A03**/MF **A01**

**OSWER-91-006.2**
Successful Practices in Title 3 Implementation Chemical Emergency Preparedness and Prevention Technical Assitance Bulletin. Series 6, Number 8.
PB93-126126/REB 93-01 PC **A03**/MF **A01**

**OSWER-9200.0-03F**
OSWER Superfund Telephone Directory.
PB92-963289/REB 93-01 PC **A03**/MF **A01**

**OSWER-9200.0-14-1**
Superfund Administrative Improvements. Executive Summary.
PB93-963294/REB 93-04 PC **A03**/MF **A01**

**OSWER-9200.1-12-3**
Superfund Progress: Fall/Winter 1992.
PB93-963254/REB 93-01 PC **A03**/MF **A01**

**OSWER-9200.1-12C**
Superfund Progress. Aficionado's Version. Progress as of September 30, 1992.
PB93-963255/REB 93-01 PC **A03**/MF **A01**

**OSWER-9200.1-14**
Superfund Reauthorization: NACEPT Subcommittee Handbook.
PB93-963298/REB 93-04 PC **A05**/MF **A02**

**OSWER-9200.2-15FS**
Overview of the Outyear Liability Model (OLM).
PB93-963259/REB 93-01 PC **A02**/MF **A01**

**OSWER-9200.3-01H-3**
Highlights: Superfund Program Management. Fiscal Year 1993.
PB93-963261/REB 93-01 PC **A03**/MF **A01**

**OSWER-9200.5-216I-VOL-7-NO-2**
Superfund Records of Decision Update. Volume 7, Number 2, November 1992.
PB93-963256/REB 93-01 PC **A02**/MF **A01**

**OSWER-9200.5-702B**
National Priorities List Sites: Alabama, 1992.
PB93-963201/REB 93-01
see individual report for order number and price

**OSWER-9200.5-703B**
National Priorities List Sites: Alaska, 1992.
PB93-963202/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-704B**
National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-705B**
National Priorities List Sites: Arkansas, 1992.
PB93-963205/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-706B**
National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC **A12**/MF **A03**

**OSWER-9200.5-707B**
National Priorities List Sites: Colorado, 1992.
PB93-963207/REB 93-01 PC **A05**/MF **A01**

**OSWER-9200.5-708B**
National Priorities List Sites: Connecticut, 1992.
PB93-963208/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-709B**
National Priorities List Sites: Delaware, 1992.
PB93-963209/REB 93-01 PC **A05**/MF **A01**

**OSWER-9200.5-710B**
National Priorities List Sites: Florida, 1992.
PB93-963210/REB 93-01 PC **A06**/MF **A02**

**OSWER-9200.5-711B**
National Priorities List Sites: Georgia, 1992.
PB93-963211/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-713B**
National Priorities List Sites: Idaho, 1992.
PB93-963212/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-714B**
National Priorities List Sites: Illinois, 1992.
PB93-963213/REB 93-01 PC **A06**/MF **A02**

**OSWER-9200.5-715B**
National Priorities List Sites: Indiana, 1992.
PB93-963214/REB 93-01 PC **A06**/MF **A02**

**OSWER-9200.5-716B**
National Priorities List Sites: Iowa, 1992.
PB93-963215/REB 93-01 PC **A05**/MF **A01**

**OSWER-9200.5-717B**
National Priorities List Sites: Kansas, 1992.
PB93-963216/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-718B**
National Priorities List Sites: Kentucky, 1992.
PB93-963217/REB 93-01 PC **A05**/MF **A01**

**OSWER-9200.5-719B**
National Priorities List Sites: Louisiana, 1992.
PB93-963218/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-720B**
National Priorities List Sites: Maine, 1992.
PB93-963219/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-721B**
National Priorities List Sites: Maryland, 1992.
PB93-963220/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-722B**
National Priorities List Sites: Massachusetts, 1992.
PB93-963221/REB 93-01 PC **A06**/MF **A02**

**OSWER-9200.5-723B**
National Priorities List Sites: Michigan, 1992.
PB93-963222/REB 93-01 PC **A10**/MF **A03**

**OSWER-9200.5-724B**
National Priorities List Sites: Minnesota, 1992.
PB93-963223/REB 93-01 PC **A07**/MF **A02**

**OSWER-9200.5-725B**
National Priorities List Sites: Mississippi, 1992.
PB93-963224/REB 93-01 PC **A03**/MF **A01**

**OSWER-9200.5-726B**
National Priorities List Sites: Missouri, 1992.
PB93-963225/REB 93-01 PC **A05**/MF **A02**

**OSWER-9200.5-727B**
National Priorities List Sites: Montana, 1992.
PB93-963226/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-728B**
National Priorities List Sites: Nebraska, 1992.
PB93-963227/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-729B**
National Priorities List Sites: New Hampshire, 1992.
PB93-963228/REB 93-01 PC **A05**/MF **A01**

**OSWER-9200.5-730B**
National Priorities List Sites: New Jersey, 1992.
PB93-963229/REB 93-01 PC **A14**/MF **A03**

**OSWER-9200.5-731B**
National Priorities List Sites: New Mexico, 1992.
PB93-963230/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-732B**
National Priorities List Sites: New York, 1992.
PB93-963231/REB 93-01 PC **A11**/MF **A03**

**OSWER-9200.5-733B**
National Priorities List Sites: North Carolina, 1992.
PB93-963232/REB 93-01 PC **A05**/MF **A01**

**OSWER-9200.5-734B**
National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-735B**
National Priorities List Sites: Ohio, 1992.
PB93-963234/REB 93-01 PC **A06**/MF **A02**

**OSWER-9200.5-736B**
National Priorities List Sites: Oklahoma, 1992.
PB93-963235/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-737B**
National Priorities List Sites: Oregon, 1992.
PB93-963236/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-738B**
National Priorities List Sites: Pennsylvania, 1992.
PB93-963237/REB 93-01 PC **A12**/MF **A03**

**OSWER-9200.5-739B**
National Priorities List Sites: Rhode Island, 1992.
PB93-963239/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-740B**
National Priorities List Sites: South Carolina, 1992.
PB93-963240/REB 93-01 PC **A05**/MF **A01**

**OSWER-9200.5-741B**
National Priorities List Sites: Tennessee, 1992.
PB93-963241/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-742B**
National Priorities List Sites: Texas, 1992.
PB93-963242/REB 93-01 PC **A06**/MF **A02**

**OSWER-9200.5-743B**
National Priorities List Sites: Utah, 1992.
PB93-963243/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-744B**
National Priorities List Sites: Vermont, 1992.
PB93-963244/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-745B**
National Priorities List Sites: Virginia, 1992.
PB93-963245/REB 93-01 PC **A05**/MF **A01**

**OSWER-9200.5-746B**
National Priorities List Sites: Washington, 1992.
PB93-963246/REB 93-01 PC **A08**/MF **A02**

**OSWER-9200.5-747B**
National Priorities List Sites: West Virginia, 1992.
PB93-963247/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-748B**
National Priorities List Sites: Wisconsin, 1992.
PB93-963248/REB 93-01 PC **A07**/MF **A02**

**OSWER-9200.5-749B**
National Priorities List Sites: Wyoming, 1992.
PB93-963249/REB 93-01 PC **A03**/MF **A01**

**OSWER-9200.5-750B**
National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC **A04**/MF **A01**

**OSWER-9200.5-751B**
National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC **A04**/MF **A01**

**OSWER-9202.1-02I-VOL-1-NO-2**
Smart Moves in Superfund - Regional Pilots and Initiatives. Volume 1, Number 2, September 1992.
PB93-963263/REB 93-01 PC **A01**/MF **A01**

**OSWER-9202.1-02I-VOL-1-NO-3**
Smart Moves in Superfund - Revitalization One Year Later. Volume 1, Number 3, January 1993.
PB93-963264/REB 93-01 PC **A01**/MF **A01**

**OSWER-9202.1-02I-VOL-2-NO-1**
Response Action Contractor Final Indemnification Guidelines. Volume 2, Number 1, March 1993.
PB93-963290/REB 93-01 PC **A01**/MF **A01**

**OSWER-9202.1-04**
Identification of a Senior Superfund Official for Addressing Special NPL Site-Related Issues.
PB93-963279/REB 93-01 PC **A01**/MF **A01**

**OSWER-9202.1-05**
Required Contracts Management Training for Regional Superfund Personnel.
PB93-963258/REB 93-01 PC **A01**/MF **A01**

**OSWER-9202.1-06**
Initiatives to Streamline the Alternative Remedial Contracting Strategy (ARCS) Contracts' Award Fee Process.
PB93-963275/REB 93-01 PC **A03**/MF **A01**

**OSWER-9202.1-07**
Superfund: Report of the EPA Superfund Revitalization Public Meeting Held on June 24, 1992. Volumes 1 and 2.
PB92-963288/REB 93-01 PC **A06**/MF **A02**

**OSWER-9202.1-09**
Guidance on Program Management Activities under ARCS.
PB93-963280/REB 93-01 PC **A03**/MF **A01**

**OSWER-9202.1-11**
Superfund: EPA/ICMA Superfund Revitalization Conference. Held in Chicago, Illinois on November 12-13, 1992.
PB93-963274/REB 93-01 PC **A04**/MF **A01**

**OSWER-9203.1-02I-VOL-1-NO-4**
Superfund Accelerated Cleanup Model (SACM). Volume 1, Number 4, November 1992.
PB92-963287/REB 93-01 PC **A01**/MF **A01**

**OSWER-9203.1-03**
Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP.
PB93-963252/REB 93-01 PC **A03**/MF **A01**

**OSWER-9203.1-03A**
Exercising Flexibility through the Superfund Accelerated Cleanup Model (SACM).
PB93-963253/REB 93-01 PC **A01**/MF **A01**

**OSWER-9203.1-06**
Guidance on Setting Priorities for NPL Candidate Sites.
PB93-963333/REB 93-01 PC **A02**/MF **A01**

**OSWER-9203.1-07I-VOL-1-NO-1**
HSED SACM Report. Volume 1, Number 1, January 1993.
PB93-963289/REB 93-01 PC **A01**/MF **A01**

**OSWER-9203.1-08**
Further Direction on Implementing the Superfund Accelerated Cleanup Model (SACM).
PB93-963291/REB 93-01 PC **A02**/MF **A01**

**OSWER-9203.1-10FS**
Superfund Accelerated Cleanup Model (SACM): Questions and Answers.
PB93-963286/REB 93-04 PC **A01**/MF **A01**

**OSWER-9203.1-11**
Superfund Accelerated Cleanup Model (SACM) Coordination Strategy.
PB94-963201/REB 93-04 PC **A01**/MF **A01**

**OSWER-9234.2-22FS**
ARARs Fact Sheet: Compliance with the Clean Air Act and Associated Air Quality Requirements.
PB92-963282/REB 93-01 PC **A03**/MF **A01**

**OSWER-9240.0-02B**
Extending the Tracking of Analytical Services to Potentially Responsible Party-Lead Superfund Sites (Supplemental Guidance on OSWER Directive 9240.0-2A).
PB93-963502/REB 93-01 PC **A03**/MF **A01**

**OSWER-9240.0-25**
Reassignment of CLP Transportation Functions.
PB93-963501/REB 93-01 PC **A01**/MF **A01**

**OSWER-9242.2-08FS**
Superfund Response Action Contracts.
PB93-963292/REB 93-01 PC **A01**/MF **A01**

**OSWER-9242.3-09**
Use of Time and Materials and Cost Reimbursement Subcontracts for Remedial Actions under the Alternative Remedial Contracting Strategy Contracts.
PB93-963282/REB 93-01 PC **A02**/MF **A01**

**OSWER-9242.6-12**
Mentor-Protege Program.
PB93-963251/REB 93-01 PC **A02**/MF **A01**

**OSWER-9242.6-13**
Performance Tracking under ARCS Contracts.
PB93-963276/REB 93-01 PC **A01**/MF **A01**

**OSWER-9285.0-01A**
OSWER Integrated Health and Safety Standard Operating Practices.
PB93-963401/REB 93-01 PC **A01**/MF **A01**

**OSWER-9285.3-03**
Field Certification Tracking System (FCTS). User's Guide. Version 2.1.
PB93-963415/REB 93-04 PC **A04**/MF **A01**

**OSWER-9285.4-06**
ATSDR Health Consultations under CERCLA.
PB93-963334/REB 93-01 PC **A01**/MF **A01**

**OSWER-9320.1-11**
Discussions with the Public Concerning NPL Listings.
PB93-963338/REB 93-01 PC **A03**/MF **A01**

**OSWER-9320.2-05**
Amendment to Historical Definitions of NPL Deletion Start and Completion Dates.
PB93-963278/REB 93-01 PC **A01**/MF **A01**

**OSWER-9320.2-06**
NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC **A01**/MF **A01**

**OSWER-9345.0-07**
Standard Document for Remedial Site Assessment Decisions.
PB93-963268/REB 93-01 PC **A01**/MF **A01**

**OSWER-9345.0-08**
PA Review Checklist.
PB93-963342/REB 93-04 PC **A03**/MF **A01**

**OSWER-9345.1-05**
Guidance for Performing Site Inspections under CERCLA.
PB92-963375/REB 93-01 PC **A11**/MF **A03**

**OSWER-9345.1-07**
Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC **A22**/MF **A04**

**OSWER-9345.4-02FS**
Guide to Community Involvement for Site Assessment Managers.
PB93-963348/REB 93-04 PC **A02**/MF **A01**

**OSWER-9345.4-03FS**
Site Assessment: Evaluating Risks at Superfund Sites.
PB93-963347/REB 93-04 PC **A02**/MF **A01**

**OSWER-9355.0-24A**
SARA '200' Remedial Action Starts Requirement.
PB93-963324/REB 93-01 PC **A01**/MF **A01**

**OSWER-9355.0-47FS**
Presumptive Remedies: Policy and Procedures.
PB93-963345/REB 93-04 PC **A02**/MF **A01**

**OSWER-9355.0-48FS**
Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites with Volatile Organic Compounds in Soils.
PB93-963346/REB 93-04 PC **A03**/MF **A01**

**OSWER-9355.0-49FS**
Presumptive Remedy for CERCLA Municipal Landfill Sites.
PB93-963339/REB 93-04 PC **A03**/MF **A01**

**OSWER-9355.3-17**
Compendium of ROD Language for FY 1993 Focus Areas.
PB93-963328/REB 93-01 PC **A04**/MF **A01**

**OSWER-9355.3-20**
Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis.
PB93-963297/REB 93-04 PC **A03**/MF **A01**

**OSWER-9355.7-03**
Permits and Permit 'Equivalency' Processes for CERCLA On-Site Response Actions.
PB93-963325/REB 93-01 PC **A02**/MF **A01**

**OSWER-9360.0-10**
Expedited Response Actions.
PB93-963410/REB 93-01 PC **A02**/MF **A01**

**OSWER-9360.0.13**
Guidance on Implementation of the 'Contribute to Remedial Performance' Provision.
PB93-963413/REB 93-04 PC **A02**/MF **A01**

**OSWER-9360.0-31FS**
Effect of OSHA's Bloodborne Pathogens Standard on Hazardous Waste Cleanup Activities.
PB93-963419/REB 93-04 PC **A02**/MF **A01**

**OSWER-9360.0-32**
Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA.
PB93-963402/REB 93-04 PC **A04**/MF **A01**

**OSWER-9360.0-34**
Determination of Imminent and Substantial Endangerment for Removal Actions.
PB93-963416/REB 93-04 PC **A01**/MF **A01**

**OSWER-9360.0-46FS**
Technology Selection Guide for Wood Treater Sites.
PB93-963329/REB 93-04 PC **A02**/MF **A01**

**OSWER-9360.2-04A**
Clarification of Delegation to Approve Consistency Exemptions at NPL Sites.
PB93-963281/REB 93-01 PC **A01**/MF **A01**

**OSWER-9360.3-02FS**
Consideration of ARARs during Removal Actions.
PB92-963410/REB 93-01 PC **A02**/MF **A01**

**OSWER-9360.6-09**
Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC **A09**/MF **A02**

**OSWER-9360.7-11**
Questions and Answers on Release Notification Requirements and Reportable Quantity Adjustments.
PB93-963411/REB 93-01 PC **A03**/MF **A01**

**OSWER-9360.8-06FS**
Facility Response Plans.
PB93-963408/REB 93-01 PC **A01**/MF **A01**

**OSWER-9360.8-17FS**
Personal Air Sampling and Air Monitoring Requirements under 29 CFR 1910.120.
PB93-963420/REB 93-04 PC **A03**/MF **A01**

**OSWER-9375.5-06A/FS**
Cost of Remedial Action Model.
PB93-963304/REB 93-04 PC **A01**/MF **A01**

**OSWER-9375.5-13FS**
Superfund: Qualified Disadvantaged Business Utilization in State Response.
PB92-963283/REB 93-01 PC **A01**/MF **A01**

**OSWER-9375.5-19**
Cost of Remedial Actions (CORA) Model: Overview and Applications.
PB93-963318/REB 93-04 PC **A03**/MF **A01**

**OSWER-9375.7-01**
Ensuring the Adequacy of Cost Share Provisions in Superfund State Contracts.
PB93-963336/REB 93-01 PC **A03**/MF **A01**

**OSWER-9375.7-02**
Obligation of Funds under Superfund State Contracts.
PB93-963326/REB 93-04 PC **A01**/MF **A01**

**OSWER-9834.17**
Guidance on CERCLA Settlements with De Micromis Waste Contributors.
PB93-963619/REB 93-04 PC **A03**/MF **A01**

**P-536**
Economic Impacts of RCRA Regulations on the Plating and Polishing Industry.
PB93-158988/REB 93-01 PC **A07**/MF **A02**

**PAPER-3994**
Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
PB93-205037/REB 93-04 PC **A02**/MF **A01**

**PAPER-4148**
Influence of Root Colonizing Bacteria on the Defense Responses of Bean.
PB93-205045/REB 93-04 PC **A03**/MF **A01**

**PAPER-4152**
Genetic Analysis of the aggA Locus Involved in Agglutination and Adherence of 'Pseudomonas putida', a Beneficial Fluorescent Pseudomonad.
PB93-205029/REB 93-04 PC **A03**/MF **A01**

**PAPER-4175**
Characterization of Catalase Activities in a Root-Colonizing Isolate of 'Pseudomonas putida' (Revised).
PB93-205052/REB 93-04 PC **A02**/MF **A01**

**PB92-131374/REB**
Index to the Monthly Hotline Report Questions (June 1982 to December 1991).
PB92-131374/REB 93-01 PC **A07**/MF **A02**

**PB92-169648/REB**
Environmental Monitoring Methods Index. Version 1.0 Software. User's Manual.
PB92-169648/REB 93-01 PC **A06**/MF **A02**

**PB92-220532/REB**
Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies.
PB92-220532/REB 93-04 PC **A08**/MF **A02**

**PB92-228519/REB**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Executive Summary (Revised May 1992).
PB92-228519/REB 93-01 PC **A03**/MF **A01**

**PB92-228527/REB**
Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Project Summary.
PB92-228527/REB 93-01 PC **A08**/MF **A02**

**PB92-228535/REB**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Yorktown Refinery Project Workplan.
PB92-228535/REB 93-01 PC **A08**/MF **A02**

**PB92-228543/REB**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Pollution Prevention Workshop.
PB92-228543/REB 93-01 PC **A12**/MF **A03**

**PB92-228550/REB**
Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown Refinery. Refinery Release Inventory.
PB92-228550/REB 93-01 PC **A12**/MF **A03**

**PB92-228568/REB**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Solid Waste Data.
PB92-228568/REB 93-01 PC **A05**/MF **A01**

**PB92-228576/REB**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Groundwater and Soil Data.
PB92-228576/REB 93-01 PC **A12**/MF **A03**

**PB92-228584/REB**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Surface Water Data.
PB92-228584/REB 93-01 PC **A08**/MF **A02**

**PB92-228592/REB**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Measurements of Hydrocarbon Emissions and Ambient Air Concentrations at the Amoco Yorktown Refinery. Air Quality Data. Volume 1.
PB92-228592/REB 93-01 PC **A12**/MF **A03**

**PB92-228600/REB**
Amoco-U.S. EPA Pollution Prevention Project, Yorktown, Virginia. Air Quality Data. Volume 2.
PB92-228600/REB 93-04 PC **A16**/MF **A03**

**PB92-228618/REB**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Project Peer Review. Report of the Peer Review Committee of the Amoco/EPA Pollution Prevention Project at the Yorktown, Virginia Refinery.
PB92-228618/REB 93-01 PC **A10**/MF **A03**

**PB92-228634/REB**
Amoco/Environmental Protection Agency Pollution Prevention Project, Yorktown, Virginia. Ecological Impacts of the Yorktown Refinery on the York River Estuarine Environment.
PB92-228634/REB 93-01 PC **A05**/MF **A01**

**PB92-228642/REB**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Public Perceptions. Report of Observations, Thoughtleader Interviews and Focus Groups Yorktown Refinery Public Perception Study.
PB92-228642/REB 93-01 PC **A99**/MF **A06**

**PB92-963282/REB**
ARARs Fact Sheet: Compliance with the Clean Air Act and Associated Air Quality Requirements.
PB92-963282/REB 93-01 PC **A03**/MF **A01**

**PB92-963283/REB**
Superfund: Qualified Disadvantaged Business Utilization in State Response.
PB92-963283/REB 93-01 PC **A01**/MF **A01**

**PB92-963287/REB**
Superfund Accelerated Cleanup Model (SACM). Volume 1, Number 4, November 1992.
PB92-963287/REB 93-01 PC **A01**/MF **A01**

**PB92-963288/REB**
Superfund: Report of the EPA Superfund Revitalization Public Meeting Held on June 24, 1992. Volumes 1 and 2.
PB92-963288/REB 93-01 PC **A06**/MF **A02**

**PB92-963289/REB**
OSWER Superfund Telephone Directory.
PB92-963289/REB 93-01 PC **A03**/MF **A01**

**PB92-963375/REB**
Guidance for Performing Site Inspections under CERCLA.
PB92-963375/REB 93-01 PC **A11**/MF **A03**

**PB92-963377/REB**
Hazard Ranking System Guidance Manual.
PB92-963377/REB 93-01 PC **A22**/MF **A04**

**PB92-963410/REB**
Consideration of ARARs during Removal Actions.
PB92-963410/REB 93-01 PC **A02**/MF **A01**

**PB92-963421/REB**
Superfund Emergency Response Actions: A Summary of Federally-Funded Removals. Sixth Annual Report, Fiscal Year 1991.
PB92-963421/REB 93-01 PC **A09**/MF **A02**

**PB92-963618/REB**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Valley of the Drums, Bullitt County, Kentucky).
PB92-963618/REB 93-01 PC **A02**/MF **A01**

**PB92-963627/REB**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (American Thermostat Corporation, New York).
PB92-963627/REB 93-01 PC **A02**/MF **A01**

**PB92-963628/REB**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Wide Beach Section of Brant, New York).
PB92-963628/REB 93-01 PC **A02**/MF **A01**

**PB92-963629/REB**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Krysowaty Farm, Hillsborough, New Jersey).
PB92-963629/REB 93-01 PC **A02**/MF **A01**

**PB92-963630/REB**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Fall 1992. (Ciba-Geigy Corporation, McIntosh, Alabama).
PB92-963630/REB 93-01 PC **A02**/MF **A01**

**PB93-100071/REB**
Environmental Monitoring and Assessment Program: Agroecosystem Monitoring and Research Strategy.
PB93-100071/REB 93-04 PC **A12**/MF **A03**

**PB93-100105/REB**
Guides to Pollution Prevention: The Metal Finishing Industry.
PB93-100105/REB 93-04 PC **A04**/MF **A01**

**PB93-100113/REB**
AutoMOUSE: An Improvement to the MOUSE Computerized Uncertainty Analysis System Operational Manual.
PB93-100113/REB 93-01 PC **A10**/MF **A03**

**PB93-100121/REB**
Demonstration of a Trial Excavation at the McColl Superfund Site.
PB93-100121/REB 93-01 PC **A04**/MF **A01**

**PB93-100139/REB**
Arid Ecosystems Strategic Monitoring Plan, 1991. Environmental Monitoring and Assessment Program.
PB93-100139/REB 93-01 PC **A13**/MF **A03**

**PB93-100147/REB**
Synoptic Approach to Cumulative Impact Assessment. A Proposed Methodology.
PB93-100147/REB 93-01 PC **A07**/MF **A02**

**PB93-100154/REB**
Technology Assessment of Soil Vapor Extraction and Air Sparging.
PB93-100154/REB 93-01 PC **A04**/MF **A01**

**PB93-100261/REB**
Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, June 1992. Record and Data Element Description.
PB93-100261/REB 93-01 PC **A03**/MF **A01**

**PB93-100311/REB**
RED Facts: Capsaicin.
PB93-100311/REB 93-01 PC **A02**/MF **A01**

**PB93-100345/REB**
RED Facts: Ethylene.
PB93-100345/REB 93-01 PC **A02**/MF **A01**

**PB93-100352/REB**
RED Facts: 'Nosema locustae'.
PB93-100352/REB 93-01 PC **A02**/MF **A01**

**PB93-100360/REB**
Reregistration Eligibility Document (RED) 'Nosema locustae'.
PB93-100360/REB 93-01 PC **A07**/MF **A02**

**PB93-100378/REB**
RED Facts: Streptomycin and Streptomycin Sulfate.
PB93-100378/REB 93-01 PC **A02**/MF **A01**

**PB93-100386/REB**
Reregistration Eligibility Document (RED): Streptomycin and Streptomycin Sulfate.
PB93-100386/REB 93-01 PC **A09**/MF **A02**

**PB93-100865/REB**
Evaluation of Terrestrial Indicators for Use in Ecological Assessments at Hazardous Waste Sites.
PB93-100865/REB 93-01 PC **A12**/MF **A03**

**PB93-100907/REB**
Guidance for Research House Studies of the Florida Radon Research Program. Volume 1. Research Plan.
PB93-100907/REB 93-01 PC **A07**/MF **A02**

**PB93-100915/REB**
Guidance for Research House Studies of the Florida Radon Research Program. Volume 2. Model-Backed Experimental Protocol for Determining Radon Resistance of Buildings.
PB93-100915/REB 93-01 PC **A04**/MF **A01**

**PB93-100980/REB**
Biologic Markers in Reproductive Toxicology.
PB93-100980/REB 93-01 PC **A18**/MF **A04**

**PB93-101079/REB**
Lead in Drinking Water Regulation: Public Education Guidance (Guidance for Conducting a Community-Based Public Education Program on Lead in Drinking Water).
PB93-101079/REB 93-01 PC **A04**/MF **A01**

**PB93-101111/REB**
Wellhead Protection Programs: Tools for Local Governments.
PB93-101111/REB 93-01 PC **A04**/MF **A01**

**PB93-101152/REB**
Carver-Greenfield Process (Trade Name) Dehydro-Tech Corporation. Applications Analysis Report.
PB93-101152/REB 93-01 PC **A03**/MF **A01**

**PB93-101160/REB**
Surface-Coating-Free Materials Workshop Summary Report. Held in San Diego, CA. on July 17-19, 1991.
PB93-101160/REB 93-01 PC **A06**/MF **A02**

**PB93-101434/REB**
Reregistration Eligibility Document (RED): Capsaicin. (List D, Case 4018).
PB93-101434/REB 93-01 PC **A06**/MF **A02**

**PB93-101533/REB**
Lead and Copper Rule Guidance Manual. Volume 2. Corrosion Control Treatment.
PB93-101533/REB 93-01 PC **A10**/MF **A03**

**PB93-101640/REB**
RED Facts: Zinc Salts.
PB93-101640/REB 93-01 PC **A02**/MF **A01**

**PB93-101657/REB**
Reregistration Eligibility Document (RED) Zinc Salts.
PB93-101657/REB 93-01 PC **A11**/MF **A03**

**PB93-101665/REB**
RED Facts: Soap Salts.
PB93-101665/REB 93-01 PC **A02**/MF **A01**

**PB93-101673/REB**
Reregistration Eligibility Document (RED) Soap Salts.
PB93-101673/REB 93-01 PC **A13**/MF **A03**

**PB93-102192/REB**
Framework for Ecological Risk Assessment.
PB93-102192/REB 93-01 PC **A04**/MF **A01**

**PB93-102200/REB**
Report on the Ecological Risk Assessment Guidelines Strategic Planning Workshop. Held in Miami, Florida on April 30-May 2, 1991.
PB93-102200/REB 93-01 PC **A05**/MF **A01**

**PB93-102234/REB**
Volunteer Lake Monitoring Program, 1991. Volume 5. East-Central Illinois Region.
PB93-102234/REB 93-01 PC **A04**/MF **A01**

**PB93-105518/REB**
Emission Test Report. OMSS Field Test on Carbon Injection for Mercury Control.
PB93-105518/REB 93-01 PC **A06**/MF **A02**

**PB93-105534/REB**
Laboratory Method to Determine the Retention of Liquids on the Surface of Hands.
PB93-105534/REB 93-01 PC **A04**/MF **A01**

**PB93-105542/REB**
Evaluation of Two Methods for the Measurement of Mercury Emissions in Exhaust Gases from a Municipal Waste Combustor.
PB93-105542/REB 93-01 PC **A05**/MF **A01**

**PB93-105559/REB**
Evaluation of CO Intersection Modeling Techniques Using a New York City Database.
PB93-105559/REB 93-01 PC **A10**/MF **A03**

**PB93-105567/REB**
Protecting Coastal and Wetlands Resources: A Guide for Local Governments.
PB93-105567/REB 93-01 PC **A09**/MF **A03**

**PB93-105575/REB**
Engineering Bulletin: Slurry Walls.
PB93-105575/REB 93-01 PC **A02**/MF **A01**

**PB93-105583/REB**
Engineering Bulletin: Pyrolysis Treatment.
PB93-105583/REB 93-01 PC **A02**/MF **A01**

**PB93-105591/REB**
Engineering Bulletin: Technology Preselection Data Requirements.
PB93-105591/REB 93-01 PC **A02**/MF **A01**

**PB93-105609/REB**
Protecting the Nation's Wetlands, Oceans, and Watersheds: An Overview of Programs and Activities.
PB93-105609/REB 93-01 PC **A03**/MF **A01**

**PB93-105617/REB**
Literature Survey of Innovative Technologies for Hazardous Waste Site Remediation, 1987-1991.
PB93-105617/REB 93-01 PC **A03**/MF **A01**

**PB93-105625/REB**
Technical Guidance Document: Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems.
PB93-105625/REB 93-01 PC **A05**/MF **A02**

**PB93-106623/REB**
Combustion Area Sources: Data Sources.
PB93-106623/REB 93-01 PC **A05**/MF **A01**

**PB93-106631/REB**
32P-Postlabeling in Studies of PAH Activation.
PB93-106631/REB 93-01 PC **A03**/MF **A01**

**PB93-106649/REB**
Digital Topographic Approach to Modeling: The Distribution of Precipitation in Mountainous Terrain.
PB93-106649/REB 93-01 PC **A03**/MF **A01**

**PB93-106656/REB**
Glossary for Avian Conservation Biology.
PB93-106656/REB 93-01 PC **A03**/MF **A01**

**PB93-106664/REB**
Air Toxics: The Research Challenge of the 1990 Clean Air Act Amendments.
PB93-106664/REB 93-01 PC **A02**/MF **A01**

**PB93-106672/REB**
Results of U.S. EPA Research Waste Combustion Residues.
PB93-106672/REB 93-01 PC **A03**/MF **A01**

**PB93-106680/REB**
Technical Issues on Long-Term Performance of Solidified/Stabilized Waste Forms.
PB93-106680/REB 93-01 PC **A03**/MF **A01**

**PB93-106698/REB**
Landfill Containment and Cover Systems.
PB93-106698/REB 93-01 PC **A03**/MF **A01**

**PB93-106706/REB**
FLEX: An Expert System for Reviewing the Chemical Resistance of Flexible Membrane Liners for Waste Management.
PB93-106706/REB 93-01 PC **A03**/MF **A01**

**PB93-106714/REB**
Resistance of Membranes in Cover Systems to Root Penetration by Grass and Trees.
PB93-106714/REB 93-01 PC **A02**/MF **A01**

**PB93-106722/REB**
Landfill Containment Systems Regulations.
PB93-106722/REB 93-01 PC **A03**/MF **A01**

**PB93-106730/REB**
Use of Ecoregions in Biological Monitoring.
PB93-106730/REB 93-01 PC **A03**/MF **A01**

**PB93-106748/REB**
EMAP and Other Tools for Measuring Biodiversity, Habitat Conditions, and Environmental Trends.
PB93-106748/REB 93-01 PC **A03**/MF **A01**

**PB93-106763/REB**
Asymmetric Loss Function for Superfund Remediation Decisions.
PB93-106763/REB 93-01 PC **A02**/MF **A01**

**PB93-106771/REB**
Modeling of Indoor Air Quality for a Personal Computer.
PB93-106771/REB 93-01 PC **A03**/MF **A01**

**PB93-106789/REB**
Validation of Source and Sink Models: Problems and Possible Solutions.
PB93-106789/REB 93-01 PC **A03**/MF **A01**

**PB93-106797/REB**
ASHRAE Standard 62: Ventilation for Acceptable Indoor Air Quality.
PB93-106797/REB 93-01 PC **A03**/MF **A01**

**PB93-106805/REB**
Fluorinated Ethers: A New Series of CFC Substitutes.
PB93-106805/REB 93-01 PC **A03**/MF **A01**

**PB93-106813/REB**
Fluroinated Ethers: A New Family of Halons.
PB93-106813/REB 93-01 PC **A03**/MF **A01**

**PB93-106821/REB**
Thermodynamic Performance Limit and Evaporator Design Considerations for NARM-Based Domestic Refrigerator-Freeze Systems.
PB93-106821/REB 93-01 PC **A03**/MF **A01**

**PB93-106839/REB**
Use of Surface-Coating-Free Materials for Reduction of Volatile Organic Compound Emissions from Coating Operations.
PB93-106839/REB 93-01 PC **A03**/MF **A01**

**PB93-106847/REB**
On-Line Measurement of Nitrous Oxide from Combustion Sources by Automated Gas Chromatography.
PB93-106847/REB 93-01 PC **A03**/MF **A01**

**PB93-106854/REB**
Technologies Options for Acid Rain Control.
PB93-106854/REB 93-01 PC **A03**/MF **A01**

**PB93-106862/REB**
Microbial Transformation of Selected Organic Chemicals in Natural Aquatic Systems.
PB93-106862/REB 93-01 PC **A03**/MF **A01**

**PB93-106870/REB**
Sources and Sinks of Radiatively Important Trace Gases in the Biosphere.
PB93-106870/REB 93-01 PC **A03**/MF **A01**

**PB93-106888/REB**
STREAM: An Exposure Assessment Methodology for Agricultural Pesticide Runoff.
PB93-106888/REB 93-01 PC **A03**/MF **A01**

**PB93-106896/REB**
Effect of Molecular Oxygen on the Scaleup of GAC Adsorbers.
PB93-106896/REB 93-01 PC **A03**/MF **A01**

**PB93-106904/REB**
Effect of Aerosolization on Subsequent Bacterial Survival.
PB93-106904/REB 93-01 PC **A02**/MF **A01**

**PB93-106912/REB**
Biodiversity and Management of Natural Resources: The Issues.
PB93-106912/REB 93-01 PC **A01**/MF **A01**

**PB93-106920/REB**
Modelling Epicodic Acidification of Surface Waters: The State of Science.
PB93-106920/REB 93-01 PC **A03**/MF **A01**

**PB93-106938/REB**
Mathematical Model of Plant Uptake and Translocation of Organic Chemicals: Development of the Model.
PB93-106938/REB 93-01 PC **A02**/MF **A01**

**PB93-106946/REB**
Mathematical Model of Plant Uptake and Translocations of Organic Chemicals: Application to Experiments.
PB93-106946/REB 93-01 PC **A03**/MF **A01**

**PB93-106953/REB**
Introduction to Nonpoint Source Pollution and Wetland Mitigation.
PB93-106953/REB 93-01 PC **A03**/MF **A01**

**PB93-106961/REB**
Forest Management in Russia: Challenges and Opportunities in the Era of Perestroika.
PB93-106961/REB 93-01 PC **A02**/MF **A01**

**PB93-106979/REB**
Developmental Toxicity of Inhaled Methanol in the CD-1 Mouse, with Application of Quantitative Dose-Response Modeling for Estimation of Benchmark Doses.
PB93-106979/REB 93-01 PC **A03**/MF **A01**

**PB93-106987/REB**
Technology for Reduction of CO2 Emissions from the Transportation Sector.
PB93-106987/REB 93-01 PC **A02**/MF **A01**

**PB93-106995/REB**
Decision Model for Biomarkers of Exposure.
PB93-106995/REB 93-01 PC **A03**/MF **A01**

**PB93-107001/REB**
Global Inventory of Volatile Organic Compound Emissions from Anthropogenic Sources.
PB93-107001/REB 93-01 PC **A03**/MF **A01**

**PB93-107019/REB**
Airborne Particle Sizes and Sources Found in Indoor Air.
PB93-107019/REB 93-01 PC **A03**/MF **A01**

**PB93-107027/REB**
Modeling of the Fast Organic Emissions from a Wood-Finishing Product: Floor Wax.
PB93-107027/REB 93-01 PC **A02**/MF **A01**

**PB93-107035/REB**
Evaluation of Para-Dichlorobenzene Emissions from Solid Moth Repellant as a Source of Indoor Air Pollution.
PB93-107035/REB 93-01 PC **A02**/MF **A01**

**PB93-107043/REB**
Summary of the 1991 EPRI/EPA/DOE SO2 Control Symposium.
PB93-107043/REB 93-01 PC **A02**/MF **A01**

**PB93-107050/REB**
Large-Scale Natural Gradient Tracer Test in Sand and Gravel, Cape Cod, Massachusetts 3, Hydraulic Conductivity Variability and Calculated Macrodispersivities.
PB93-107050/REB 93-01 PC **A03**/MF **A01**

**PB93-107068/REB**
Significance and Characteristics of the Personal Activity Cloud on Exposure Assessment Measurements for Indoor Contaminants.
PB93-107068/REB 93-01 PC **A03**/MF **A01**

**PB93-107076/REB**
CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 1. Technical Formulations.
PB93-107076/REB 93-01 PC **A03**/MF **A01**

**PB93-107084/REB**
CTDMPLUS: A Dispersion Model for Sources Near Complex Topography. Part 2. Performance Characteristics.
PB93-107084/REB 93-01 PC **A03**/MF **A01**

**PB93-107092/REB**
Measurement and Distribution of Radon and Radon Progeny: An Overview of Indoor Radon Risk Reduction in the United States.
PB93-107092/REB 93-01 PC **A02**/MF **A01**

**PB93-107100/REB**
Ninety-Day Toxicity Study of Sodium Monochloroacetate in Sprague-Dawley Rats.
PB93-107100/REB 93-01 PC **A03**/MF **A01**

**PB93-107118/REB**
Ninety-Day Toxicity Study of Chloral Hydrate in the Sprague-Dawley Rat.
PB93-107118/REB 93-01 PC **A03**/MF **A01**

**PB93-107134/REB**
Macromolecular Adduction by Trichloroacetonitrile in the Fischer 344 Rat Following Oral Gavage.
PB93-107134/REB 93-01 PC **A03**/MF **A01**

**PB93-107142/REB**
Dermal Penetration of ((14)C)Captan in Young and Adult Rats.
PB93-107142/REB 93-01 PC **A03**/MF **A01**

**PB93-107159/REB**
Thermal Influences on Nervous System Function.
PB93-107159/REB 93-01 PC **A03**/MF **A01**

**PB93-107167/REB**
In vitro Embryotoxicity of a Series of Para-Substituted Phenols: Structure, Activity, and Correlation with in vivo Data.
PB93-107167/REB 93-01 PC **A03**/MF **A01**

**PB93-107175/REB**
Genotoxicity of 2,4,5-Trichlorophenoxyacetic Acid Biodegradation Products in the 'Salmonella' Reversion and Lambda Prophage-Induction Bioassays.
PB93-107175/REB 93-01 PC **A02**/MF **A01**

**PB93-107183/REB**
Metabolism and Disposition of Inorganic Arsenic in Laboratory Animals and Humans.
PB93-107183/REB 93-01 PC **A02**/MF **A01**

**PB93-107191/REB**
Age-Related Changes in Disposition and Metabolism of Benzene in Male C57BL/6N Mice.
PB93-107191/REB 93-01 PC **A02**/MF **A01**

**PB93-107209/REB**
Comparison of the D1-Dopamine Agonists SKF-38393 and A-68930 in Neonatal 6-Hydroxydopamine-Lesioned Rats: Behavioral Effects and Industion of c-fos-Like Immunoreactivity.
PB93-107209/REB 93-01 PC **A03**/MF **A01**

**PB93-107217/REB**
Mechanisms Underlying Somatosensory Cortical Dynamics: 1. In vivo Studies.
PB93-107217/REB 93-01 PC **A03**/MF **A01**

**PB93-107225/REB**
Mechanisms Underlying Somatosensory Cortical Dynamics: 2. In vitro Studies.
PB93-107225/REB 93-01 PC **A03**/MF **A01**

**PB93-107233/REB**
Animal Models for Assessing the Neurobehavioral Impact of Airborne Pollutants.
PB93-107233/REB 93-01 PC **A03**/MF **A01**

**PB93-107241/REB**
Using Isotherms to Predict GAC's Capacity for Synthetic Organics.
PB93-107241/REB 93-01 PC **A02**/MF **A01**

**PB93-107258/REB**
Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

**PB93-107266/REB**
Opportunities for Pollution Prevention Research to Support the 33/50 Program.
PB93-107266/REB 93-01 PC **A06**/MF **A02**

**PB93-107282/REB**
EPA Pesticide RED FACTS Sheets: Indole-3-Butyric Acid.
PB93-107282/REB 93-01 PC **A02**/MF **A01**

**PB93-108322/REB**
PA-Score (Preliminary Assessment Score) User's Manual and Tutorial. Version 2.1.
PB93-108322/REB 93-01 PC **A05**/MF **A01**

**PB93-110187/REB**
Biologic Markers of Air-Pollution Stress and Damage in Forests.
PB93-110187/REB 93-01 PC **A17**/MF **A03**

**PB93-110575/REB**
Technical Support Document for Land Application of Sewage Sludge. Volume 1.
PB93-110575/REB 93-01 PC **A99**/MF **A06**

**PB93-110583/REB**
Technical Support Document for Land Application of Sewage Sludge. Volume 2.
PB93-110583/REB 93-01 PC **A99**/MF **E11**

**PB93-110591/REB**
Technical Support Document for the Surface Disposal of Sewage Sludge.
PB93-110591/REB 93-01 PC **A15**/MF **A03**

**PB93-110617/REB**
Technical Support for the Incineration of Sewage Sludge.
PB93-110617/REB 93-01 PC **A11**/MF **A03**

**PB93-111029/REB**
Public Access: A How To Guide.
PB93-111029/REB 93-01 PC **A09**/MF **A03**

**PB93-111052/REB**
Technology Needs and Emerging Technologies (Joint Environmental Restoration and Waste Management Activities).
PB93-111052/REB 93-01 PC **A10**/MF **A03**

**PB93-111185/REB**
Test Car List, 1992. Passenger Cars.
PB93-111185/REB 93-01 PC **A05**/MF **A01**

**PB93-111193/REB**
Fuel Economy Guide, 1992. 3-Number.
PB93-111193/REB 93-01 PC **A04**/MF **A01**

**PB93-111201/REB**
Fuel Economy Guide, 1992. 6-Number.
PB93-111201/REB 93-01 PC **A04**/MF **A01**

**PB93-111219/REB**
Federal Certification Test Results for 1992 Model Year. Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines.
PB93-111219/REB 93-01 PC **A13**/MF **A03**

**PB93-111540/REB**
Human Health Risk Assessment for the Use and Disposal of Sewage Sludge: Benefits of Regulation.
PB93-111540/REB 93-04 PC **A14**/MF **A03**

**PB93-111706/REB**
Oil and Hazardous Materials Technical Assistance Data System, (OHM-TADS) Fields and Their Definitions. Users' Guide.
PB93-111706/REB 93-01 PC **A03**/MF **A01**

**PB93-112290/REB**
Drinking Water and Health: Disinfectants and Disinfectant By-Products. Volume 7.
PB93-112290/REB 93-01 PC **A06**/MF **A02**

**PB93-112357/REB**
Susceptibility and Status of Gulf of Mexico Estuaries to Nutrient Discharges. Strategic Assessment of Near Coastal Waters.
PB93-112357/REB 93-01 PC **A03**/MF **A01**

**PB93-112506/REB**
Living Resources Subcommittee: Annual Summary.
PB93-112506/REB 93-01 PC **A03**/MF **A01**

**PB93-112704/REB**
Waterfowl Workgroup Living Resources Subcommittee: Annual Progress Report.
PB93-112704/REB 93-01 PC **A03**/MF **A01**

**PB93-113538/REB**
Volunteer Lake Monitoring Program, 1991. Volume 3. Northeastern Illinois Region.
PB93-113538/REB 93-01 PC **A07**/MF **A02**

**PB93-114585/REB**
Chesapeake Bay Striped Bass Fishery Management Plan: Chesapeake Bay Program. Annual Progress Report (April 1992).
PB93-114585/REB 93-01 PC **A03**/MF **A01**

**PB93-114981/REB**
National Study of Chemical Residues in Fish. Volume 1.
PB93-114981/REB 93-01 PC **E09**/MF **A01**

**PB93-114999/REB**
National Study of Chemical Residues in Fish. Volume 2.
PB93-114999/REB 93-01 PC **E11**/MF **A04**

**PB93-115160/REB**
Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 1.
PB93-115160/REB 93-01 PC **A09**/MF **A02**

**PB93-115178/REB**
Technology Evaluation Report of Retech's Plasma Centrifugal Furnace. Volume 2.
PB93-115178/REB 93-01 PC **A15**/MF **A03**

**PB93-115186/REB**
Sediment Classification Methods Compendium.
PB93-115186/REB 93-01 PC **A11**/MF **A03**

**PB93-115806/REB**
Application and Calibration of Pressure Instruments, Flowmeters, and Flow Control Devices.
PB93-115806/REB 93-01 PC **A05**/MF **A01**

**PB93-115814/REB**
Citizen's Guide to Ground-Water Protection.
PB93-115814/REB 93-01 PC **A03**/MF **A01**

**PB93-115822/REB**
Delineation of Wellhead Protection Areas in Fractured Rocks.
PB93-115822/REB 93-01 PC **A08**/MF **A02**

**PB93-115830/REB**
Economic Assessment of Reducing Fluoride in Drinking Water.
PB93-115830/REB 93-01 PC **A05**/MF **A01**

**PB93-115855/REB**
Florida Small Systems Compliance Project.
PB93-115855/REB 93-01 PC **A04**/MF **A01**

**PB93-115863/REB**
Managing Ground Water Contamination Sources in Wellhead Protection Areas: A Priority Setting Approach.
PB93-115863/REB 93-01 PC **A12**/MF **A03**

**PB93-115871/REB**
Sanitary Survey Training: Instructor's Guide for Inspectors of Small Water Systems.
PB93-115871/REB 93-01 PC **A05**/MF **A01**

**PB93-115889/REB**
Sanitary Survey Training: Instructor's Guide for Sanitarians of Micronesia.
PB93-115889/REB 93-01 PC **A09**/MF **A02**

**PB93-115897/REB**
Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells.
PB93-115897/REB 93-01 PC **A04**/MF **A01**

**PB93-115905/REB**
Underground Injection Control Program.
PB93-115905/REB 93-01 PC **A03**/MF **A01**

**PB93-115913/REB**
Wellhead Protection Strategies for Confined-Aquifer Settings.
PB93-115913/REB 93-01 PC **A05**/MF **A01**

**PB93-115921/REB**
Why do Wellhead Protection. Issues and Answers in Protecting Public Drinking Water Supply Systems.
PB93-115921/REB 93-01 PC **A03**/MF **A01**

**PB93-115939/REB**
General Information on Applying for Registration of Pesticides in the United States.
PB93-115939/REB 93-01 PC **A08**/MF **A02**

**PB93-115954/REB**
Protecting the Environment: A Research Strategy for the 1990s.
PB93-115954/REB 93-01 PC **A04**/MF **A01**

**PB93-115970/REB**
National Pesticide Survey: Glossary.
PB93-115970/REB 93-01 PC **A02**/MF **A01**

**PB93-115988/REB**
National Pesticide Survey: Project Summary.
PB93-115988/REB 93-01 PC **A03**/MF **A01**

**PB93-115996/REB**
National Pesticide Survey: Summary Results of EPA's National Survey of Pesticides in Drinking Water Wells.
PB93-115996/REB 93-01 PC **A03**/MF **A01**

**PB93-116002/REB**
National Pesticide Survey: Survey Design.
PB93-116002/REB 93-01 PC **A02**/MF **A01**

**PB93-116010/REB**
National Pesticide Survey: Survey Analytes.
PB93-116010/REB 93-01 PC **A03**/MF **A01**

**PB93-116028/REB**
Assessing the Environmental Consumer Market.
PB93-116028/REB 93-01 PC **A03**/MF **A01**

**PB93-116069/REB**
Compendium of Federal Financial Assistance Programs: Targeting Programs for State and Local Ground-Water Protection.
PB93-116069/REB 93-01 PC **A06**/MF **A02**

**PB93-116077/REB**
Saving Bays and Estuaries: A Primer for Establishing and Managing Estuary Programs. Appendices G, H, and I.
PB93-116077/REB 93-01 PC **A05**/MF **A02**

**PB93-116085/REB**
Federal Insecticide, Fungicide, and Rodenticide Act as Amended.
PB93-116085/REB 93-01 PC **A05**/MF **A01**

**PB93-116093/REB**
Superfund Innovative Technology Evaluation (SITE) Program.
PB93-116093/REB 93-01 PC **A03**/MF **A01**

**PB93-116127/REB**
Toxic Chemical Release Inventory Magnetic Media Submission Instructions. Section 313 of the Emergency Planning and Community Right-to-Know Act (Revised 1990 Version).
PB93-116127/REB 93-01 PC **A03**/MF **A01**

**PB93-116135/REB**
Hazardous Waste Management.
PB93-116135/REB 93-01 PC **A03**/MF **A01**

**PB93-116143/REB**
Bioremediation of Hazardous Wastes.
PB93-116143/REB 93-01 PC **A04**/MF **A01**

**PB93-116150/REB**
Environmental Monitoring and Assessment Program: 1990 Project Descriptors.
PB93-116150/REB 93-01 PC **A04**/MF **A01**

**PB93-116168/REB**
Strategy for Environmental Health Research at EPA.
PB93-116168/REB 93-01 PC **A06**/MF **A02**

**PB93-116176/REB**
Near Coastal Program Plan for 1991: Estuaries.
PB93-116176/REB 93-01 PC **A12**/MF **A03**

**PB93-116226/REB**
Research to Improve Health Risk Assessments (RIHRA) Program.
PB93-116226/REB 93-01 PC **A06**/MF **A02**

**PB93-116234/REB**
Handbook: Design and Installation of a Home Radon Reduction System-Sub-Slab Depressurization Systems in Low-Permeability Soils.
PB93-116234/REB 93-01 PC **A04**/MF **A01**

**PB93-116259/REB**
Manual: Alternative Wastewater Collection Systems.
PB93-116259/REB 93-01 PC **A10**/MF **A03**

**PB93-116267/REB**
Handbook: Optimizing Water Treatment Plant Performance Using the Composite Correction Program.
PB93-116267/REB 93-01 PC **A10**/MF **A03**

**PB93-116275/REB**
Handbook: Remediation of Contaminated Sediments.
PB93-116275/REB 93-01 PC **A04**/MF **A01**

**PB93-116283/REB**
Seminar Publication. Medical and Institutional Waste Incineration: Regulations, Management, Technology, Emissions, and Operations.
PB93-116283/REB 93-01 PC **A03**/MF **A01**

**PB93-116291/REB**
User's Guide: Strategic Waste Minimization Initiative (SWAMI) Version 2.0: A Software Tool to Aid in Process Analysis for Pollution Prevention.
PB93-116291/REB 93-01 PC **A05**/MF **A01**

**PB93-116572/REB**
Implementation Plan for Removing Impediments to Migratory Fishes in the Chesapeake Bay Watershed (January-December 1991).
PB93-116572/REB 93-01 PC **A03**/MF **A01**

**PB93-116580/REB**
Living Resources Monitoring Plan: Annual Progress Report.
PB93-116580/REB 93-01 PC **A03**/MF **A01**

# NTIS ORDER/REPORT NUMBER INDEX

**PB93-116978/REB**
Health Advisory for Diphenylamine (DPA).
PB93-116978/REB 93-01 PC **A05**/MF **A01**

**PB93-116986/REB**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for p-Chlorophenyl Methyl Sulfide, -Sulfoxide, and -Sulfone (PCPMS, PCPMSO, and PCPMSO2).
PB93-116986/REB 93-01 PC **A05**/MF **A01**

**PB93-116994/REB**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Tetranitromethane (TNM).
PB93-116994/REB 93-01 PC **A03**/MF **A01**

**PB93-117000/REB**
Data Deficiencies, Problem Areas, and Recommendations for Additional Database Development for Diethylene Glycol Dinitrate (DEGDN).
PB93-117000/REB 93-01 PC **A03**/MF **A01**

**PB93-117018/REB**
Health Advisory for Dimethyl Methylphosphonate (DMMP).
PB93-117018/REB 93-01 PC **A05**/MF **A01**

**PB93-117026/REB**
Health Advisory for 1,4-Dithiane.
PB93-117026/REB 93-01 PC **A04**/MF **A01**

**PB93-119568/REB**
Maritime Industrial Waste Project Reduction of Toxicant Pollution from the Maritime Industry in Puget Sound.
PB93-119568/REB 93-01 PC **A08**/MF **A02**

**PB93-119576/REB**
Nutrients and Phytoplankton in Puget Sound.
PB93-119576/REB 93-01 PC **A08**/MF **A02**

**PB93-119816/REB**
Bioventing Approach to Remediate a Gasoline Contaminated Subsurface.
PB93-119816/REB 93-01 PC **A02**/MF **A01**

**PB93-119824/REB**
Biomass Burning and the Production of Methane.
PB93-119824/REB 93-01 PC **A03**/MF **A01**

**PB93-119832/REB**
Physiological and Nonspecific Biomarkers.
PB93-119832/REB 93-01 PC **A05**/MF **A01**

**PB93-119840/REB**
Modeling Individual Exposure from Indoor Sources.
PB93-119840/REB 93-01 PC **A03**/MF **A01**

**PB93-119857/REB**
Critical Evaluation of Treatment Technologies with Particular Reference to Pump-and-Treat Systems.
PB93-119857/REB 93-01 PC **A03**/MF **A01**

**PB93-119865/REB**
Survey of Protocols for Conducting Indoor Air Quality Investigations in Large Buildings.
PB93-119865/REB 93-01 PC **A03**/MF **A01**

**PB93-119873/REB**
Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-119873/REB 93-01 PC **A02**/MF **A01**

**PB93-119881/REB**
Simulating the Effects of Upstream Turbulence on Dispersion Around a Building.
PB93-119881/REB 93-01 PC **A03**/MF **A01**

**PB93-119899/REB**
Pilot Study to Evaluate Methods for the Assessment of Exposure of Small Children to Pesticides in the Residential Environment.
PB93-119899/REB 93-01 PC **A03**/MF **A01**

**PB93-119907/REB**
Development of a Laboratory Method for Estimation of Hydrogen Chloride Emission Potential of Incinerator Feed Materials.
PB93-119907/REB 93-01 PC **A03**/MF **A01**

**PB93-120871/REB**
Laboratory Simulation of Turbulent Convection Over an Urban Heat Island.
PB93-120871/REB 93-01 PC **A02**/MF **A01**

**PB93-120889/REB**
Development of an Improved Urban Airshed Modeling System.
PB93-120889/REB 93-01 PC **A03**/MF **A01**

**PB93-120897/REB**
Stagnation Diffusion Observed in a Deeply Pooling Valley during STAGMAP.
PB93-120897/REB 93-01 PC **A02**/MF **A01**

**PB93-120905/REB**
Model Calculations of the Annual Atmospheric Deposition of Toxic Metals to Lake Michigan.
PB93-120905/REB 93-01 PC **A03**/MF **A01**

**PB93-120913/REB**
Multizonal Mass Balance Modeling of Benzene Dispersion in a Private Residence.
PB93-120913/REB 93-01 PC **A02**/MF **A01**

**PB93-120921/REB**
Comparison of Modeled Concentration Profiles Using Site-Specific and Constant-Condition Meteorological Data for the ISCLT and PAL Models.
PB93-120921/REB 93-01 PC **A02**/MF **A01**

**PB93-120939/REB**
Study of the Effects of Acidic Pollutants on Automotive Finishes.
PB93-120939/REB 93-01 PC **A02**/MF **A01**

**PB93-120947/REB**
Design of the Clean Air Act Deposition Monitoring Network.
PB93-120947/REB 93-01 PC **A03**/MF **A01**

**PB93-120954/REB**
Atmospheric Deposition of Toxic Metals to Lake Michigan: Preliminary Annual Model Calculations.
PB93-120954/REB 93-01 PC **E02**/MF **A01**

**PB93-120962/REB**
Physical Damage Formation on Automotive Finishes Due to Acidic Reagent Exposure.
PB93-120962/REB 93-01 PC **A02**/MF **A01**

**PB93-120970/REB**
Effect of Specimen Size and Orientation on the Atmospheric Corrosion of Galvanized Steel.
PB93-120970/REB 93-01 PC **A02**/MF **A01**

**PB93-120988/REB**
Passive Sampling Device as a Simple Tool for Assessing Ecological Change: An Extended Monitoring Study in Ambient Air.
PB93-120988/REB 93-01 PC **A02**/MF **A01**

**PB93-120996/REB**
Removal of CaCO3 Extender in Residential Coatings by Atmospheric Acidic Deposition.
PB93-120996/REB 93-01 PC **A02**/MF **A01**

**PB93-121002/REB**
Atmospheric Mercury Measurements: Recent Observations in the Great Lakes Basin.
PB93-121002/REB 93-01 PC **A02**/MF **A01**

**PB93-121010/REB**
Evaluation of Portable X-ray Fluorescence Spectrometer for Measurement of Lead in Paint, Soil and Dust.
PB93-121010/REB 93-01 PC **A03**/MF **A01**

**PB93-121028/REB**
Lake Michigan Urban Air Toxics Study: Design and Overview.
PB93-121028/REB 93-01 PC **A02**/MF **A01**

**PB93-121036/REB**
Geographical Distribution and Source Type Analysis of Toxic Metal Emissions.
PB93-121036/REB 93-01 PC **A02**/MF **A01**

**PB93-121044/REB**
Time-Course and Sensitivity of Muconic Acid as a Biomarker for Human Environmental Exposure to Benzene.
PB93-121044/REB 93-01 PC **A02**/MF **A01**

**PB93-121051/REB**
Evaluation of Commercially-Available Portable Gas Chromatographs.
PB93-121051/REB 93-01 PC **A02**/MF **A01**

**PB93-121069/REB**
Atmospheric Acidity Measurements during the Lake Michigan Urban Air Toxics Study.
PB93-121069/REB 93-01 PC **A02**/MF **A01**

**PB93-121077/REB**
Evaluation of a Sorbent-Based Preconcentrated for Analysis of VOCs in Air Using Gas Chromatography-Atomic Emission Detection.
PB93-121077/REB 93-01 PC **A02**/MF **A01**

**PB93-121085/REB**
Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-121085/REB 93-01 PC **A02**/MF **A01**

**PB93-121093/REB**
Proceedings of the EPA/A and WMA International Symposium (1992), Measurement of Toxic and Related Air Pollutants. Held in Durham, North Carolina on May 4-9, 1992.
PB93-121093/REB 93-01 PC **A01**/MF **A01**

**PB93-121101/REB**
Formaldehyde-Contaminated Fog Effects on Plant Growth.
PB93-121101/REB 93-01 PC **A02**/MF **A01**

**PB93-121119/REB**
Sustaining Soil Quality by Protecting the Soil Resource.
PB93-121119/REB 93-01 PC **A03**/MF **A01**

**PB93-121127/REB**
Multicomponent Aerosol Dynamic of the Pb-O2 System in a Bench Scale Flame Incinerator.
PB93-121127/REB 93-01 PC **A03**/MF **A01**

**PB93-121135/REB**
Characterization of 'Pseudomonas putida' Mutants Unable to Catabolize Benzoate: Cloning and Characterization of 'Pseudomonas' Genes Involved in Benzoate Catabolism and Isolation of a Chromosomal DNA Fragment Able to Substitute for xylS in Activation of the TOL Lower-Pathway Promoter.
PB93-121135/REB 93-01 PC **A03**/MF **A01**

**PB93-121143/REB**
Fate of 'Bacillus sphaericus' and 'Bacillus thuringiensis' Serovar 'Israelensis' in the Aquatic Environment.
PB93-121143/REB 93-01 PC **A02**/MF **A01**

**PB93-121150/REB**
Use of Inoculation in Bioremediation.
PB93-121150/REB 93-01 PC **A03**/MF **A01**

**PB93-121168/REB**
Effect of Inoculation on the Biodegradation of Weathered Prudhoe Bay Crude Oil.
PB93-121168/REB 93-01 PC **A02**/MF **A01**

**PB93-121176/REB**
Determination of Plasmid DNA Concentration Maintained by Nonculturable 'Escherichia coli' in Marine Microcosms.
PB93-121176/REB 93-01 PC **A02**/MF **A01**

**PB93-121184/REB**
DAPI Staining of Natural Bacterioplankton with 4',6-Diamidino-2Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequencest.
PB93-121184/REB 93-01 PC **A02**/MF **A01**

**PB93-121192/REB**
Adenocarcinoma of the Retinal Pigment Epithelium in the Guppy 'Poecilia reticulata' Peters.
PB93-121192/REB 93-01 PC **A02**/MF **A01**

**PB93-121200/REB**
Application of DNA Probes to Analysis of Bacteriophage Distribution Patterns in the Environment.
PB93-121200/REB 93-01 PC **A02**/MF **A01**

**PB93-121218/REB**
UAF Radiorespirometric Protocol for Assessing Hydrocarbon Mineralization Potential in Environmental Samples.
PB93-121218/REB 93-01 PC **A02**/MF **A01**

**PB93-121226/REB**
Bioremediation as a Technology: Experiences with the Exxon Valdez Oil Spill.
PB93-121226/REB 93-01 PC **A03**/MF **A01**

**PB93-121234/REB**
Pneumatic Pumping Test for Soil Vacuum Extraction.
PB93-121234/REB 93-01 PC **A02**/MF **A01**

**PB93-121242/REB**
Inhibition of Alkylbenzene Biodegradation under Denitrifying Conditions by Using Acetylene Block Technique.
PB93-121242/REB 93-01 PC **A02**/MF **A01**

**PB93-121259/REB**
Indoor (222)Rn in Tennessee Valley Houses: Seasonal, Building, and Geological Factors.
PB93-121259/REB 93-01 PC **A02**/MF **A01**

**PB93-121267/REB**
Surface Waters Component of the Environmental Monitoring and Assessment Program (EMAP): An Overview.
PB93-121267/REB 93-01 PC **A02**/MF **A01**

**PB93-121275/REB**
Comparative Response of Nestling European Starlings and Red-Winged Blackbirds to an Oral Administration of Either Dimethoate or Chlorpyrifos.
PB93-121275/REB 93-01 PC **A02**/MF **A01**

**PB93-121283/REB**
Mechanisms of Episodic Acidification in Low-Order Streams in Maine, USA.
PB93-121283/REB 93-01 PC **A02**/MF **A01**

**PB93-121291/REB**
MAGIC Simulation of Surface Water Acidification at, and First Year Results from the Bear Brook Watershed Manipulation, Maine, USA.
PB93-121291/REB 93-01 PC **A02**/MF **A01**

**PB93-121309/REB**
Effect of Glyphosate and Nitrapyrin on Selected Bacterial Populations in Continuous-Flow Culture.
PB93-121309/REB 93-01 PC **A02**/MF **A01**

**PB93-121317/REB**
Guides to Pollution Prevention: The Mechanical Equipment Repair Industry.
PB93-121317/REB 93-01 PC **A03**/MF **A01**

**PB93-121325/REB**
Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Quick Reference Fact Sheet.
PB93-121325/REB 93-01 PC **A02**/MF **A01**

**PB93-121333/REB**
Selection of Control Technologies for Remediation of Lead Battery Recycling Sites. (Engineering Bulletin).
PB93-121333/REB 93-01 PC **A03**/MF **A01**

**PB93-121341/REB**
Superfund Engineering Issue: Considerations for Evaluating the Impact of Metals Partitioning during the Incineration of Contaminated Soils from Superfund Sites.
PB93-121341/REB 93-01 PC **A03**/MF **A01**

**PB93-121812/REB**
Estuarine Habitat Assessment Protocol.
PB93-121812/REB 93-01 PC **A10**/MF **A03**

**PB93-121820/REB**
Toxic Contaminants in Puget Sound Wildlife: Literature Review and Recommendations for Research and Monitoring.
PB93-121820/REB 93-01 PC **A06**/MF **A02**

**PB93-122166/REB**
Exploring the Effects of Vector to Raster and Raster to Vector Conversion.
PB93-122166/REB 93-01 PC **A04**/MF **A01**

**PB93-122174/REB**
Trends in Nitrogen in the Chesapeake Bay, 1984-1990.
PB93-122174/REB 93-01 PC **A04**/MF **A01**

**PB93-122182/REB**
Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans.
PB93-122182/REB 93-01 PC **A03**/MF **A01**

**PB93-122190/REB**
Potential Intertidal Habitat Restoration Sites in the Duwamish River Estuary.
PB93-122190/REB 93-01 PC **A05**/MF **A02**

**PB93-122208/REB**
Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound.
PB93-122208/REB 93-01 PC **A09**/MF **A02**

**PB93-122216/REB**
Evaluation of the Atmospheric Deposition of Toxic Contaminants to Puget Sound, Appendices.
PB93-122216/REB 93-01 PC **A16**/MF **A03**

**PB93-122224/REB**
Technical Information Document for Residential Wood Combustion Best Available Control Measures.
PB93-122224/REB 93-01 PC **A05**/MF **A01**

**PB93-122240/REB**
Environmental Pollution Control Alternatives: Reducing Water Pollution Control Costs in the Electroplating Industry. (Revised).
PB93-122240/REB 93-01 PC **A04**/MF **A01**

**PB93-122257/REB**
Assessing Potential Indoor Air Impacts for Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-122257/REB 93-01 PC **A09**/MF **A03**

**PB93-122265/REB**
Prescribed Burning Background Document and Technical Information Document for Prescribed Burning Best Available Control Measures.
PB93-122265/REB 93-01 PC **A15**/MF **A03**

**PB93-122273/REB**
Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures.
PB93-122273/REB 93-01 PC **A09**/MF **A03**

**PB93-122281/REB**
Recommended Performance Standard of the Florida Radon Research Program.
PB93-122281/REB 93-01 PC **A03**/MF **A01**

**PB93-122299/REB**
Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

**PB93-122307/REB**
Alternate VOC Control Technique Options for Small Rotogravure and Flexography Facilities.
PB93-122307/REB 93-01 PC **A03**/MF **A01**

**PB93-122315/REB**
Babcock and Wilcox Cyclone Furnace Vitrification Technology: Applications Analysis Report.
PB93-122315/REB 93-01 PC **A03**/MF **A01**

**PB93-122323/REB**
Proceedings of the Symposium on Soil Venting. Held in Houston, Texas on April 29-May 1, 1991.
PB93-122323/REB 93-01 PC **A15**/MF **A03**

**PB93-122331/REB**
Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 1.
PB93-122331/REB 93-01 PC **A99**/MF **A06**

**PB93-122349/REB**
Proceedings of the 1991 U.S. Environmental Protection Agency/Air and Waste Management Association International Symposium: Measurement of Toxic and Related Air Pollutants. Volume 2.
PB93-122349/REB 93-01 PC **A99**/MF **A06**

**PB93-122356/REB**
Guidance on the Adjusted Base Year Emissions Inventory and the 1996 Target for the 15 Percent Rate of Progress Plans.
PB93-122356/REB 93-01 PC **A04**/MF **A01**

**PB93-122364/REB**
State Air Pollution Control Programs: A Profile Report.
PB93-122364/REB 93-01 PC **A03**/MF **A01**

**PB93-122380/REB**
User's Guide for the Urban Airshed Model. Volume 4. User's Manual for the Emissions Preprocessor System 2.0. Part A: Core FORTRAN System. Part B: Interface and Emission Display System.
PB93-122380/REB 93-01 PC **A99**/MF **A06**

**PB93-122398/REB**
Environmental Monitoring and Assessment Program: Gulf Coast Salt Marsh Pilot Study.
PB93-122398/REB 93-01 PC **A03**/MF **A01**

**PB93-122406/REB**
Drinking Water Toxicity Profiles.
PB93-122406/REB 93-01 PC **A09**/MF **A02**

**PB93-122422/REB**
User's Manual for the BLIS BBS.
PB93-122422/REB 93-01 PC **A07**/MF **A02**

**PB93-122430/REB**
Information Technology Architecture.
PB93-122430/REB 93-01 PC **A03**/MF **A01**

**PB93-122448/REB**
Calciners and Dryers in Mineral Industries: Background Information for Promulgated Standards.
PB93-122448/REB 93-01 PC **A04**/MF **A01**

**PB93-122455/REB**
Enabling Document for New Source Performance Standards for Calciners and Dryers in Mineral Industries.
PB93-122455/REB 93-01 PC **A04**/MF **A01**

**PB93-123016/REB**
Waste Minimization Assessment for a Manufacturer of Sheet Metal Components.
PB93-123016/REB 93-01 PC **A02**/MF **A01**

**PB93-123024/REB**
Waste Minimization Assessment for a Manufacturer of Custom Molded Plastic Products.
PB93-123024/REB 93-01 PC **A02**/MF **A01**

**PB93-123032/REB**
Waste Minimization Assessment for a Manufacturer of Injection-Molded Car and Truck Mirrors.
PB93-123032/REB 93-01 PC **A02**/MF **A01**

**PB93-123040/REB**
Waste Minimization Assessment for a Manufacturer of Machined Parts.
PB93-123040/REB 93-01 PC **A02**/MF **A01**

**PB93-123057/REB**
Waste Minimization Assessment for a Manufacturer of Finished Metal Components.
PB93-123057/REB 93-01 PC **A02**/MF **A01**

**PB93-123065/REB**
Waste Minimization Assessment for a Manufacturer of Cutting and Welding Equipment.
PB93-123065/REB 93-01 PC **A02**/MF **A01**

**PB93-123073/REB**
Waste Minimization Assessment for a Manufacturer of Industrial Coatings.
PB93-123073/REB 93-01 PC **A02**/MF **A01**

**PB93-123081/REB**
Use of Expert System in a Water Utility.
PB93-123081/REB 93-01 PC **A04**/MF **A01**

**PB93-123099/REB**
Waste Minimization Assessment for a Manufacturer of Silicon-Controlled Rectifiers and Schottky Rectifiers.
PB93-123099/REB 93-01 PC **A02**/MF **A01**

**PB93-123107/REB**
Waste Minimization Assessment for a Manufacturer of Penny Blanks and Zinc Products.
PB93-123107/REB 93-01 PC **A02**/MF **A01**

**PB93-123115/REB**
Waste Reduction Activities and Options for a Manufacturer of Finished Leather.
PB93-123115/REB 93-01 PC **A02**/MF **A01**

**PB93-123123/REB**
Waste Reduction Activities and Options for a Manufacturer of Paints Primarily for Metal Finishing.
PB93-123123/REB 93-01 PC **A02**/MF **A01**

**PB93-123131/REB**
Waste Reduction Activities and Options for a Manufacturer of Writing Instruments.
PB93-123131/REB 93-01 PC **A02**/MF **A01**

**PB93-123149/REB**
Waste Reduction Activities and Options for a Manufacturer of Room Air Conditioning Units and Humidifiers.
PB93-123149/REB 93-01 PC **A02**/MF **A01**

**PB93-123156/REB**
Waste Reduction Activities and Options for an Autobody Repair Facility.
PB93-123156/REB 93-01 PC **A01**/MF **A01**

**PB93-123164/REB**
Waste Reduction Activities and Options for a Fabricator and Finisher of Steel Computer Cabinets.
PB93-123164/REB 93-01 PC **A02**/MF **A01**

**PB93-123172/REB**
Waste Reduction Activities and Options for a Manufacturer of Artists Supply Paints.
PB93-123172/REB 93-01 PC **A01**/MF **A01**

**PB93-123180/REB**
Waste Reduction Activities and Options for a Manufacturer of Wire Stock Used for Production of Metal Items.
PB93-123180/REB 93-01 PC **A02**/MF **A01**

**PB93-123198/REB**
Waste Reduction Activities and Options for a Manufacturer of Commercial Refrigeration Units.
PB93-123198/REB 93-01 PC **A02**/MF **A01**

**PB93-123206/REB**
Waste Reduction Activities and Options for a Transporter of Bulk Plastic Pellets.
PB93-123206/REB 93-01 PC **A02**/MF **A01**

**PB93-123214/REB**
Waste Reduction Activities and Options for a Manufacturer of Electroplated Wire.
PB93-123214/REB 93-01 PC **A02**/MF **A01**

**PB93-123222/REB**
Waste Reduction Activities and Options for a Manufacturer of Systems to Produce Semiconductors.
PB93-123222/REB 93-01 PC **A02**/MF **A01**

**PB93-123230/REB**
Waste Reduction Activities and Options for a Remanufacturer of Automobile Radiators.
PB93-123230/REB 93-01 PC **A02**/MF **A01**

**PB93-123248/REB**
Waste Reduction Activities and Options for a Manufacturer of Fire Retardant Plastic Pellets and Hot Melt Adhesives.
PB93-123248/REB 93-01 PC **A02**/MF **A01**

**PB93-124162/REB**
Proceedings: International Conference on Municipal Waste Combustion (2nd). Held in Tampa, Florida on April 16-19, 1991.
PB93-124162/REB 93-01 PC **E99**/MF **E99**

**PB93-124170/REB**
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 1. Sessions P, 0, 1A, 2A, 3A, 4A, 6A, 6B, 9C and 10B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124170/REB 93-01 PC **A20**/MF **A04**

**PB93-124188/REB**
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 2. Sessions 1B, 2B, 3B, 4B, 7A, 7B, 8A, 8B and 9B. Held in Tampa, Florida on April 16-19, 1991.
PB93-124188/REB 93-01 PC **A21**/MF **A04**

**PB93-124196/REB**
Proceedings: International Conference on Municipal Waste Combustion (2nd). Volume 3. Sessions 1C, 2C, 3C, 4C, 6C, 7C, 8C, 9A, and 10A/C. Held in Tampa, Florida on April 16-19, 1991.
PB93-124196/REB 93-01 PC **A21**/MF **A04**

**PB93-124618/REB**
Survey of Data from the Continuous Sites of the 1990 Atlanta Ozone Precursor Study.
PB93-124618/REB 93-01 PC **A04**/MF **A01**

**PB93-124626/REB**
General Circulation Model Output for Forest Climate Change Research and Applications.
PB93-124626/REB 93-01 PC **A04**/MF **A01**

**PB93-124634/REB**
Interim Protocol for Testing the Effects of Microbial Pathogens on Subterranean Termites ('Isoptera: rhinotermitidae').
PB93-124634/REB 93-01 PC **A03**/MF **A01**

**PB93-124667/REB**
Carbon Disulfide Emission Control Options.
PB93-124667/REB 93-01 PC **A03**/MF **A01**

**PB93-124675/REB**
Proceedings of National Integrated Pest Management Forum. Held in Arlington, VA., on June 17-19, 1992.
PB93-124675/REB 93-01 PC **A07**/MF **A02**

**PB93-124683/REB**
RED Facts: Sodium Hydroxide.
PB93-124683/REB 93-01 PC **A02**/MF **A01**

**PB93-124691/REB**
Reregistration Eligibility Document (RED): Sodium Hydroxide.
PB93-124691/REB 93-01 PC **A07**/MF **A02**

**PB93-124998/REB**
Financing Models for Environmental Protection: Helping Communities Meet Their Environmental Goals.
PB93-124998/REB 93-01 PC **A05**/MF **A01**

**PB93-126126/REB**
Successful Practices in Title 3 Implementation Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Series 6, Number 8.
PB93-126126/REB 93-01 PC **A03**/MF **A01**

**PB93-126175/REB**
Bioremediation: An Information Update on Applying Bioremediation to Site Cleanup.
PB93-126175/REB 93-01 PC **A03**/MF **A01**

**PB93-126183/REB**
News Notes, Number 22: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-126183/REB 93-01 PC **A03**/MF **A01**

**PB93-126217/REB**
Waste Reduction Activities and Options for a Manufacturer of Orthopedic Implants.
PB93-126217/REB 93-01 PC **A02**/MF **A01**

**PB93-126225/REB**
Waste Reduction Activities and Options for a Manufacturer of Commercial Dry Cleaning Equipment.
PB93-126225/REB 93-01 PC **A02**/MF **A01**

**PB93-126233/REB**
Waste Reduction Activities and Options for a Fossil Fuel Fired Electrical Generating Station.
PB93-126233/REB 93-01 PC **A02**/MF **A01**

**PB93-126241/REB**
Waste Reduction Activities and Options for a Manufacturer of Plastic Containers by Injection Molding.
PB93-126241/REB 93-01 PC **A02**/MF **A01**

**PB93-126258/REB**
Waste Reduction Activities and Options for a Manufacturer of Electroplating Chemical Products.
PB93-126258/REB 93-01 PC **A02**/MF **A01**

**PB93-126266/REB**
Waste Reduction Activities and Options for a Scrap Metal Recovery Facility.
PB93-126266/REB 93-01 PC **A02**/MF **A01**

**PB93-126282/REB**
Waste Reduction Activities and Options for a Manufacturer of Hardened Steel Gears.
PB93-126282/REB 93-01 PC **A02**/MF **A01**

**PB93-126290/REB**
Waste Reduction Activities and Options for a Laminator of Paper and Cardboard Packages.
PB93-126290/REB 93-01 PC **A02**/MF **A01**

**PB93-126308/REB**
Waste Reduction Activities and Options for a Manufacturer of Fine Chemicals Using Batch Processes.
PB93-126308/REB 93-01 PC **A02**/MF **A01**

**PB93-126316/REB**
Waste Reduction Activities and Options for a Manufacturer of General Purpose Paints and Painting Supplies.
PB93-126316/REB 93-01 PC **A02**/MF **A01**

**PB93-126399/REB**
Proceedings of the EPA's Contaminated Sediment Management Strategy Forums.
PB93-126399/REB 93-01 PC **A10**/MF **A03**

**PB93-126407/REB**
Guide for Conducting Contaminant Source Inventories for Public Drinking Water Supplies. Technical Assistance Document.
PB93-126407/REB 93-01 PC **A06**/MF **A02**

**PB93-126563/REB**
Waste Reduction Activities and Options for a Printing Plate Preparation Section of a Newspaper.
PB93-126563/REB 93-01 PC **A02**/MF **A01**

**PB93-126571/REB**
Application of a Data-Assimilating Prognostic Meteorological Model to Two Urban Areas.
PB93-126571/REB 93-01 PC **A05**/MF **A01**

**PB93-126589/REB**
Survey of Portable Analyzers for the Measurement of Gaseous Fugitive Emissions.
PB93-126589/REB 93-01 PC **A05**/MF **A01**

**PB93-126597/REB**
Guide for Conducting Treatability Studies under CERCLA: Thermal Desorption Remedy Selection. Interim Guidance.
PB93-126597/REB 93-01 PC **A03**/MF **A01**

**PB93-126613/REB**
Superfund Innovative Technology Evaluation Program: Progress and Accomplishments Fiscal Year 1991. A 5th Report to Congress.
PB93-126613/REB 93-01 PC **A05**/MF **A01**

**PB93-126621/REB**
Waste Minimization Assessment for a Manufacturer Producing Printed Circuit Boards.
PB93-126621/REB 93-01 PC **A02**/MF **A01**

**PB93-126639/REB**
Waste Reduction Activities and Options for an Electrical Utility Transmission System Monitoring and Maintenance Facility.
PB93-126639/REB 93-01 PC **A02**/MF **A01**

**PB93-126787/REB**
Guide for Conducting Treatability Studies under CERCLA.
PB93-126787/REB 93-01 PC **A05**/MF **A01**

**PB93-127793/REB**
Guides to Pollution Prevention: Metal Casting and Heat Treating Industry.
PB93-127793/REB 93-01 PC **A05**/MF **A01**

**PB93-127801/REB**
Review and Evaluation of Current Methods and User Needs for Other Stationary Combustion Sources.
PB93-127801/REB 93-01 PC **A06**/MF **A02**

**PB93-128007/REB**
Guide to Performing Reinspections under the Asbestos Hazard Emergency Response Act (AHERA).
PB93-128007/REB 93-01 PC **A06**/MF **A02**

**PB93-128015/REB**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 1. Delivery of Phosphorus to Lake Ontario from Cultivated Mucklands in Oak Orchard Creek Watershed.
PB93-128015/REB 93-01 PC **A04**/MF **A01**

**PB93-128023/REB**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 2. Fertilizer Trials on Organic Soils in the Lake Ontario Drainage Basin.
PB93-128023/REB 93-01 PC **A04**/MF **A01**

**PB93-128031/REB**
Agricultural NPS Control of Phosphorus in the New York State, Lake Ontario Basin. Volume 3. The Influence of Tillage on Phosphorus Losses from Manured Cropland.
PB93-128031/REB 93-01 PC **A06**/MF **A02**

**PB93-128049/REB**
Effects of No-Till and Fall Plowing on Pesticide Movement in Runoff and Tile Drainage.
PB93-128049/REB 93-01 PC **A05**/MF **A01**

**PB93-128056/REB**
Northeast Indiana Conservation Tillage Demonstration Project. Final Report (1981-1985).
PB93-128056/REB 93-01 PC **A03**/MF **A01**

**PB93-128064/REB**
Overview of Strategic Planning at the Environmental Protection Agency.
PB93-128064/REB 93-01 PC **A03**/MF **A01**

**PB93-128072/REB**
Use of the Black Creek Database to Analyze Techniques for Estimating Nonpoint Source Loadings from Small Watersheds (May 1988).
PB93-128072/REB 93-01 PC **A03**/MF **A01**

**PB93-128080/REB**
Phytoplankton and Zooplankton in Lakes Erie, Huron, and Michigan: 1985. Volume 1. Interpretive Report.
PB93-128080/REB 93-01 PC **A12**/MF **A03**

**PB93-128098/REB**
Maumee River Basin Pilot Watershed Study. Volume 5. Continued Watershed Monitoring (1981-1985) and Rainulator Study - Detailed Data (1986).
PB93-128098/REB 93-01 PC **A10**/MF **A03**

**PB93-128106/REB**
Pollution Prevention: Meeting the Environmental Challenges of the 1990s. Region 5 FY 91 Accomplishments.
PB93-128106/REB 93-01 PC **A04**/MF **A01**

**PB93-128114/REB**
Otter Creek Watershed Conservation Tillage Demonstration Project (October 1987).
PB93-128114/REB 93-01 PC **A04**/MF **A01**

**PB93-128122/REB**
State Sludge Management Program Guidance Manual.
PB93-128122/REB 93-01 PC **A06**/MF **A02**

**PB93-129724/REB**
Enforcement Four-Year Strategic Plan: Enhanced Environmental Enforcement for the 1990's.
PB93-129724/REB 93-01 PC **A05**/MF **A01**

**PB93-129732/REB**
Handbook: Ground Water. Volume 1. Ground Water and Contamination.
PB93-129732/REB 93-01 PC **A08**/MF **A02**

**PB93-129740/REB**
Handbook: Ground Water. Volume 2. Methodology.
PB93-129740/REB 93-01 PC **A07**/MF **A02**

**PB93-130086/REB**
Successful Practices in Title III Implementation. Chemical Emergency Preparedness and Prevention Technical Assistance Bulletin. Cameron County, Texas; Bucks County, Pennsylvania; Harford County, Maryland; Dallas County, Texas. Series 6, Number 7.
PB93-130086/REB 93-01 PC **A03**/MF **A01**

**PB93-130094/REB**
U.S. Environmental Protection Agency Advisory Committees Charters, Rosters and Accomplishments.
PB93-130094/REB 93-01 PC **A05**/MF **A01**

**PB93-130383**
Simplified Cycle Simulation Model for the Performance Rating of Refrigerants and Refrigerant Mixtures.
PB93-130383 93-01 Not available NTIS

**PB93-130441/REB**
Pesticide Fact Sheet Number 236: Pyridate.
PB93-130441/REB 93-01 PC **A03**/MF **A01**

**PB93-131191/REB**
Analysis of Commercial Nitric Oxide Protocol Gases: A Quality Assurance Audit.
PB93-131191/REB 93-01 PC **A03**/MF **A01**

**PB93-131209/REB**
Guidelines for Mercury Measurements from Stationary Sources: Quality Assurance Handbook. Section 3.19. Volume 3.
PB93-131209/REB 93-01 PC **A08**/MF **A02**

**PB93-131217/REB**
Pathobiology of Marine and Estuarine Organisms.
PB93-131217/REB 93-01 PC **A23**/MF **A04**

**PB93-131431/REB**
SITE-Emerging Technologies: Laser Induced Photochemical Oxidative Destruction of Toxic Organics in Leachates and Groundwaters.
PB93-131431/REB 93-01 PC **A04**/MF **A01**

**PB93-131449/REB**
Atmospheric Chemistry and Physical Fate of HCFCs and HFCs and Their Degradation Products.
PB93-131449/REB 93-01 PC **A03**/MF **A01**

**PB93-131456/REB**
Development of Size-Specific Data from Particulate Control Technology Research Reports.
PB93-131456/REB 93-01 PC **A03**/MF **A01**

**PB93-131464/REB**
Evaluation of Source Term Initial Conditions for Modeling Leachate Migration from Landfills.
PB93-131464/REB 93-01 PC **A04**/MF **A01**

**PB93-131472/REB**
Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User's Guide.
PB93-131472/REB 93-01 PC **A05**/MF **A02**

**PB93-131480/REB**
Behavior of Metals in Soils.
PB93-131480/REB 93-01 PC **A03**/MF **A01**

**PB93-131498/REB**
Guidelines for Estimating and Applying Rule Effectiveness for Ozone CO State Implementation Plan Base Year Inventories.
PB93-131498/REB 93-01 PC **A05**/MF **A01**

**PB93-131506/REB**
Laboratory Testing of Commercially Available Power Frequency Magnetic Field Survey Meters.
PB93-131506/REB 93-01 PC **A15**/MF **A03**

**PB93-131514/REB**
Column Vapor Extraction Experiments on Gasoline Contaminated Soil.
PB93-131514/REB 93-01 PC **A03**/MF **A01**

**PB93-131522/REB**
Some Emerging Issues in Watershed Management-Landscape Patterns, Species Conservation, and Climate Change.
PB93-131522/REB 93-01 PC **A03**/MF **A01**

**PB93-131530/REB**
Household Exposures to Benzene from Showering with Gasoline-Contaminated Ground Water.
PB93-131530/REB 93-01 PC **A02**/MF **A01**

**PB93-131548/REB**
Comparing the Accuracy of Equation Formats for Modeling Microbial Population Decay Rates.
PB93-131548/REB 93-01 PC **A03**/MF **A01**

**PB93-131555/REB**
Application of Isotherms for Predictions of GAC Performance: A Preliminary Analysis.
PB93-131555/REB 93-01 PC **A03**/MF **A01**

**PB93-131563/REB**
Design for Total Organics Removal at Cincinnati.
PB93-131563/REB 93-01 PC **A03**/MF **A01**

**PB93-131571/REB**
Field Experiences VOC and Pesticide Removal Using GAC Suffolk County, New York.
PB93-131571/REB 93-01 PC **A03**/MF **A01**

**PB93-131589/REB**
Reburn Technology for Boiler NOx Control.
PB93-131589/REB 93-01 PC **A03**/MF **A01**

**PB93-131597/REB**
Characterization of Environmental Chambers for Evaluating Microbial Growth on Building Materials.
PB93-131597/REB 93-01 PC **A03**/MF **A01**

**PB93-131605/REB**
Dry Flue Gas Cleaning Processes for Achieving Air Pollutant Emissions Requirements.
PB93-131605/REB 93-01 PC **A03**/MF **A01**

**PB93-131613/REB**
Development of Good Combustion Practice for Municipal Waste Combustors.
PB93-131613/REB 93-01 PC **A03**/MF **A01**

**PB93-131621/REB**
Evaluating Materials for Healthy Buildings.
PB93-131621/REB 93-01 PC **A03**/MF **A01**

**PB93-131639/REB**
Applications of Pulse Combustion in Industrial and Incineration Processes.
PB93-131639/REB 93-01 PC **A03**/MF **A01**

**PB93-131647/REB**
Analysis of IAQ Control Options and the Effects of Sources and Sinks.
PB93-131647/REB 93-01 PC **A02**/MF **A01**

**PB93-131654/REB**
Emission Rates of Mercury from Latex Paints.
PB93-131654/REB 93-01 PC **A02**/MF **A01**

**PB93-131662/REB**
Design of New Schools and Other Large Buildings Which Are Radon Resistant and Easy to Mitigate.
PB93-131662/REB 93-01 PC **A03**/MF **A01**

**PB93-131670/REB**
Opportunities for the Use of Geosynthetics in Waste Management Facilities.
PB93-131670/REB 93-01 PC **A03**/MF **A01**

**PB93-131688/REB**
Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchanges.
PB93-131688/REB 93-01 PC **A03**/MF **A01**

**PB93-131696/REB**
Acidic Gases and Aerosols in the Eastern and Western United States.
PB93-131696/REB 93-01 PC **A03**/MF **A01**

**PB93-131704/REB**
Innovative Sensing Techniques for Monitoring and Measuring Selected Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons in Stack Gas.
PB93-131704/REB 93-01 PC **A03**/MF **A01**

**PB93-131712/REB**
Comparison of Aerosol Acidity in Urban and Semi-Rural Environments.
PB93-131712/REB 93-01 PC **A03**/MF **A01**

**PB93-131720/REB**
Inventory of Methane Losses from the Natural Gas Industry.
PB93-131720/REB 93-01 PC **A03**/MF **A01**

**PB93-131738/REB**
Experimental Examination of Integrated Soil Vapor Extraction Techniques.
PB93-131738/REB 93-01 PC **A03**/MF **A01**

**PB93-131746/REB**
Hydraulic Conductivity of Three Geosynthetic Clay Liners.
PB93-131746/REB 93-01 PC **A02**/MF **A01**

**PB93-131753/REB**
Constructed Wetland Design: the First Generation.
PB93-131753/REB 93-01 PC **A02**/MF **A01**

**PB93-131761/REB**
Transmission Electron Microscope Observations of Airborne Asbestos Structures during the Removal of Vinyl Asbestos Tiles and Mastic Adhesive.
PB93-131761/REB 93-01 PC **A02**/MF **A01**

**PB93-131779/REB**
Rapid Measurement of Aqueous Hydroxyl Radical Concentrations in Steady-State HO Flux Systems.
PB93-131779/REB 93-01 PC **A03**/MF **A01**

**PB93-131787/REB**
Chemical Stabilization of Mixed Organic and Metal Compounds. EPA SITE Program Demonstration of the Silicate Technology Corporation Process.
PB93-131787/REB 93-01 PC **A02**/MF **A01**

**PB93-131795/REB**
Solvent Extraction Processes: A Survey of Systems in the SITE Program.
PB93-131795/REB 93-01 PC **A02**/MF **A01**

**PB93-131803/REB**
Performance of an Aquatic Multispecies System in Evaluating the Effects of a Model Microbial Pest Control Agent on Nontarget Organisms.
PB93-131803/REB 93-01 PC **A03**/MF **A01**

**PB93-131811/REB**
Effects of 'Beauveria bassiana' on Embryos of the Inland Silverside Fish ('Menidia beryllina').
PB93-131811/REB 93-01 PC **A02**/MF **A01**

**PB93-131829/REB**
Periphyton Photosynthesis as an Indicator of Effluent Toxicity: Relationship to Effects on Animal Test Species.
PB93-131829/REB 93-01 PC **A02**/MF **A01**

**PB93-131837/REB**
Comparison of the Effects of Drilling Fluid on Macrobenthic Invertebrates Associated with the Seagrass, 'Thalassia testudinum', in the Laboratory and Field.
PB93-131837/REB 93-01 PC **A03**/MF **A01**

**PB93-131845/REB**
Exact Peak Capturing and Oscillation-Free Scheme to Solve Advection-Dispersion Transport Equations.
PB93-131845/REB 93-01 PC **A03**/MF **A01**

**PB93-131852/REB**
Effect of Sulfur Dioxide on the Formation Mechanism of Polychlorinated Dibenzodioxin and Dibenzofuran in Municipal Waste Combustors.
PB93-131852/REB 93-01 PC **A02**/MF **A01**

**PB93-131860/REB**
Reaction Kinetics of Ca-Based Sorbents with HC1.
PB93-131860/REB 93-01 PC **A03**/MF **A01**

**PB93-131878/REB**
Techniques for the Fabrication of Geomembrane Filled Seams.
PB93-131878/REB 93-01 PC **A03**/MF **A01**

**PB93-131977/REB**
Proceedings: Interagency Symposium (2nd) on Stabilization of Soils and Other Materials. Held in Metairie, Louisiana on November 2-5, 1992.
PB93-131977/REB 93-01 PC **A17**/MF **A04**

**PB93-132587/REB**
Annual Report of National Park Marine Debris Monitoring Program: 1991 Marine Debris Surveys with Summary of Data from 1988 to 1991.
PB93-132587/REB 93-01 PC **A04**/MF **A01**

**PB93-132637/REB**
Overview of Existing State Alternative Financing Programs: Financing Drinking Water System Capital Needs in the 1990's.
PB93-132637/REB 93-01 PC **A05**/MF **A01**

**PB93-133387/REB**
Innovative Treatment Technologies: Semi-Annual Status Report (Fourth Edition).
PB93-133387/REB 93-01 PC **A05**/MF **A01**

**PB93-134096/REB**
Methods for Assessing Exposure to Chemical Substances. Volume 11. Methodology for Estimating the Migration of Additives and Impurities from Polymeric Materials.
PB93-134096/REB 93-01 PC **A09**/MF **A02**

**PB93-134344/REB**
Analysis of Potential Trade-Offs in Regulation of Disinfection By-Products.
PB93-134344/REB 93-01 PC **A07**/MF **A02**

**PB93-134351/REB**
Draft Ground-Water Disinfection Rule.
PB93-134351/REB 93-01 PC **A05**/MF **A01**

**PB93-134369/REB**
Framework for Decision Making: An EPA Perspective.
PB93-134369/REB 93-01 PC **A05**/MF **A01**

**PB93-134377/REB**
Occurrence Assessment for Disinfectants and Disinfection By-Products (Phase 6a) in Public Drinking Water.
PB93-134377/REB 93-01 PC **A04**/MF **A01**

**PB93-134385/REB**
Simulation of Compliance Choices for the Disinfection By-Products Regulatory Impact Analysis.
PB93-134385/REB 93-01 PC **A03**/MF **A01**

**PB93-134393/REB**
Simulation of Microbial Occurrence, Exposure and Health Risks after Drinking Water Treatment Processes.
PB93-134393/REB 93-01 PC **A05**/MF **A02**

**PB93-134401/REB**
Simulation of Raw Water and Treatment Parameters in Support of the Disinfection By-Products Regulatory Impact Analysis.
PB93-134401/REB 93-01 PC **A03**/MF **A01**

**PB93-134419/REB**
Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders.
PB93-134419/REB 93-01 PC**$29.00**/MF **A04**

**PB93-134674/REB**
Quality Assurance Plan for 1991 Pilot Study of the Ecological Condition of Municipal Wastewater Constructed Wetland Treatment Systems.
PB93-134674/REB 93-01 PC **A05**/MF **A01**

**PB93-134682/REB**
Quality Assurance Field Operations Report for the Pilot Study Evaluating the Habitat Value of Wetland Treatment Systems.
PB93-134682/REB 93-01 PC **A04**/MF **A01**

**PB93-134872/REB**
User's Guide to Flexible Membrane Liner Advisory Expert System: Flex Version 3.0.
PB93-134872/REB 93-01 PC **A03**/MF **A01**

**PB93-134898/REB**
Status Report on Analytical Methods to Support the Disinfectant/Disinfection By-Products Regulation.
PB93-134898/REB 93-01 PC **A03**/MF **A01**

**PB93-134906/REB**
Status Report on the Development of Draft MCLGs for Disinfectants and By-Products.
PB93-134906/REB 93-01 PC **A05**/MF **A01**

**PB93-134914/REB**
Status Report on Development of Regulations for Disinfectants and Disinfection By-Products.
PB93-134914/REB 93-01 PC **A03**/MF **A01**

**PB93-134922/REB**
Technologies and Costs for Control of Disinfection By-Products: Executive Summary.
PB93-134922/REB 93-01 PC **A03**/MF **A01**

**PB93-134930/REB**
Use of Microbial Risk Assessment in Setting U.S. Drinking Water Standards.
PB93-134930/REB 93-01 PC **A03**/MF **A01**

**PB93-134948/REB**
Water Treatment Plant Simulation Program, Version 1.21, User's Manual.
PB93-134948/REB 93-01 PC **A06**/MF **A02**

**PB93-135614/REB**
Habitat Quality Assessment of Two Wetland Treatment Systems in Mississippi: A Pilot Study.
PB93-135614/REB 93-01 PC **A06**/MF **A02**

**PB93-135622/REB**
Effects of UV-B and Global Climate Change on Rice: First Annual Program Progress Report.
PB93-135622/REB 93-01 PC **A05**/MF **A01**

**PB93-135630/REB**
Arctic Contaminants Research Program: Research Plan.
PB93-135630/REB 93-01 PC **A08**/MF **A02**

**PB93-135648/REB**
Water Temperature Characteristics of Lakes Subjected to Climate Change.
PB93-135648/REB 93-01 PC **A09**/MF **A02**

**PB93-135655/REB**
Relationship between Water Temperatures and Air Temperatures for Central U.S. Streams.
PB93-135655/REB 93-01 PC **A07**/MF **A02**

**PB93-135663/REB**
Revised Emissions Estimation Methodologies for Industrial, Residential, and Electric Utility Stationary Combustion Sources.
PB93-135663/REB 93-01 PC **A07**/MF **A02**

**PB93-135671/REB**
Effects of Repeated Ammonium Sulfate Applications on Soil Leachate Chemistry on the Fernow Experimental Forest in West Virginia, USA.
PB93-135671/REB 93-01 PC **A01**/MF **A01**

**PB93-135689/REB**
Trace Organic Contaminants in Anthropogenically Acidified Surface Waters.
PB93-135689/REB 93-01 PC **A03**/MF **A01**

**PB93-135697/REB**
Rice Field Inventory Using AVHRR Data.
PB93-135697/REB 93-01 PC **A03**/MF **A01**

**PB93-135705/REB**
Sampling, Characterizing and Mapping Contaminated Sediments in River Harbors.
PB93-135705/REB 93-01 PC **A02**/MF **A01**

**PB93-135713/REB**
Transformation of Carbon Tetrachloride in the Presence of Sulfide, Biotite, and Vermiculite.
PB93-135713/REB 93-01 PC **A02**/MF **A01**

**PB93-135721/REB**
Recent Sulfur Enrichment in the Sediments of Little Rock Lake, Wisconsin.
PB93-135721/REB 93-01 PC **A03**/MF **A01**

**PB93-135739/REB**
Pathogenicity of 'Salmonella pullorum' in Northern Bobwhite Quail and Mallard Ducks.
PB93-135739/REB 93-01 PC **A03**/MF **A01**

**PB93-135747/REB**
Environmental Monitoring and Assessment Program, EMAP-Surface Waters: A Northeast Lakes Pilot.
PB93-135747/REB 93-01 PC **A03**/MF **A01**

**PB93-135754/REB**
Comparison of Episodic Acidification in Canada, Europe and the United States.
PB93-135754/REB 93-01 PC **A03**/MF **A01**

**PB93-135762/REB**
Who Will Speak for Biodiversity.
PB93-135762/REB 93-01 PC **A01**/MF **A01**

**PB93-136364/REB**
Restoration of the Anacostia River.
PB93-136364/REB 93-01 PC **A05**/MF **A01**

**PB93-136521/REB**
Strategic Assessment of Near Coastal Waters: Northeast Case Study.
PB93-136521/REB 93-01 PC **A06**/MF **A02**

**PB93-136612/REB**
EPA's Ground Water and Drinking Water Program: Making a Difference.
PB93-136612/REB 93-01 PC **A03**/MF **A01**

**PB93-136620/REB**
Health Advisory for Zinc Chloride.
PB93-136620/REB 93-01 PC **A05**/MF **A01**

**PB93-136893/REB**
Chesapeake Bay Program Annual Progress Report, Wetlands Workgroup, December 1991.
PB93-136893/REB 93-01 PC **A03**/MF **A01**

**PB93-136901/REB**
Susceptibility of East Coast Estuaries to Nutrient Discharges: Albemarle/Pamlico Sound to Biscayne Bay.
PB93-136901/REB 93-01 PC **A03**/MF **A01**

**PB93-136927/REB**
Susceptibility of East Coast Estuaries to Nutrient Discharges: Passamaquoddy Bay to Chesapeake Bay.
PB93-136927/REB 93-01 PC **A03**/MF **A01**

**PB93-138147/REB**
OAQS Control Cost Manual (Fourth Edition), Supplement 2.
PB93-138147/REB 93-01 PC **A04**/MF **A01**

**PB93-138154/REB**
Air/Superfund National Technical Guidance Study Series: Applicability of Open Path Monitors for Superfund.
PB93-138154/REB 93-01 PC **A07**/MF **A02**

**PB93-138451/REB**
Illinois Water Quality Management Plan.
PB93-138451/REB 93-01 PC **A07**/MF **A02**

**PB93-138865/REB**
Evaluation of Nitrogen Oxide Emissions Data from TVA Coal-Fired Boilers.
PB93-138865/REB 93-01 PC **A06**/MF **A02**

**PB93-139350/REB**
RCRA Ground-Water Monitoring: Draft Technical Guidance.
PB93-139350/REB 93-01 PC **A10**/MF **A03**

**PB93-139681/REB**
Life-Cycle Assessment: Inventory Guidelines and Principles.
PB93-139681/REB 93-01 PC **A07**/MF **A02**

**PB93-141026/REB**
On-Site Waste Ink Recycling: Technology Evaluation Report.
PB93-141026/REB 93-01 PC **A04**/MF **A01**

**PB93-141034/REB**
Pilot-Scale Incineration of Contaminated Sludges from the Bofors-Nobel Superfund Site.
PB93-141034/REB 93-01 PC **A17**/MF **A03**

**PB93-141042/REB**
Formation and Control of Combustion Pollutants from Gasoline-Fueled Spark-Ignition Motor Vehicle Engines. (Revised November 1992).
PB93-141042/REB 93-01 PC **A04**/MF **A01**

**PB93-141059/REB**
Evaluation of an Emitec Resistively Heated Metal Monolith Catalytic Converter on Two M100 Neat Methanol-Fueled Vehicles.
PB93-141059/REB 93-01 PC **A03**/MF **A01**

**PB93-141067/REB**
Quality Assurance Project Plan: 1991 EMAP Wetlands Southeastern Pilot Study.
PB93-141067/REB 93-01 PC **A11**/MF **A03**

**PB93-141083/REB**
Municipal Water Pollution Prevention Bibliography: 1992, the Year of Clean Water. Celebration and Commitment.
PB93-141083/REB 93-01 PC **A03**/MF **A01**

**PB93-141109/REB**
Small Systems Meet Superfund Challenge with Point-of-Entry Treatment Units.
PB93-141109/REB 93-01 PC **A02**/MF **A01**

**PB93-141117/REB**
Advacate-Low-Cost Process for SO2 Control.
PB93-141117/REB 93-01 PC **A02**/MF **A01**

**PB93-141125/REB**
Soil-Mediated Effects of Atmospheric Deposition on Eastern U.S. Spruce-Fir Forests.
PB93-141125/REB 93-01 PC **A03**/MF **A01**

**PB93-141133/REB**
Characterization of Eastern U.S. Spruce-Fir Soils.
PB93-141133/REB 93-01 PC **A03**/MF **A01**

**PB93-141141/REB**
Influence of Elevated CO2 and Temperature on Wetland Rice Root Dynamics.
PB93-141141/REB 93-01 PC **A02**/MF **A01**

**PB93-141158/REB**
Effects of CO2 and Temperature on Five Rice Cultivars.
PB93-141158/REB 93-01 PC **A02**/MF **A01**

**PB93-141166/REB**
Organic Acidity in Maine (U.S.A.) Lakes and in HUMEX Lake Skjervatjern (Norway).
PB93-141166/REB 93-01 PC **A02**/MF **A01**

**PB93-141174/REB**
Biological Sinks for Nitrogen Additions to a Forested Catchment.
PB93-141174/REB 93-01 PC **A02**/MF **A01**

**PB93-141182/REB**
Mineral Dissolution Rates: A Comparison of Laboratory and Field Studies.
PB93-141182/REB 93-01 PC **A01**/MF **A01**

**PB93-141190/REB**
Quantification of Nitro- and Hydroxylated Nitro-Aromatic/Polycyclic Aromatic Hydrocarbons in Selected Ambient Air Daytime Winter Samples.
PB93-141190/REB 93-01 PC **A03**/MF **A01**

**PB93-141208/REB**
Generation of Mutagenic Transformation Products during the Irradiation of Simulated Urban Atmospheres.
PB93-141208/REB 93-01 PC **A03**/MF **A01**

**PB93-141216/REB**
V(D)J Recombinase-Mediated Deletion of the 'hprt' Gene in T-Lymphocytes from Adult Humans.
PB93-141216/REB 93-01 PC **A02**/MF **A01**

**PB93-141224/REB**
Large Deletions are Tolerated at the 'hprt' Locus of In vivo Derived Human T-Lymphocytes.
PB93-141224/REB 93-01 PC **A02**/MF **A01**

**PB93-141232/REB**
Attenuation of Alcohol Consumption by MDMA (Ecstasy) in Two Strains of Alcohol-Preferring Rats.
PB93-141232/REB 93-01 PC **A02**/MF **A01**

**PB93-141240/REB**
Subacute Ethanol Consumption Reverses p-Xylene-Induced Decreases in Axonal Transport.
PB93-141240/REB 93-01 PC **A03**/MF **A01**

**PB93-141257/REB**
Synergistic and Antagonistic Effects on Genotoxicity of Chemicals Commonly Found in Hazardous Waste Sites.
PB93-141257/REB 93-01 PC **A02**/MF **A01**

**PB93-141265/REB**
Paraoxon Toxicity Is Not Potentiated by Prior Reduction in Blood Acetylcholinesterase.
PB93-141265/REB 93-01 PC **A02**/MF **A01**

**PB93-141273/REB**
Photo-Oxidation of Automobile Emissions: Measurements of the Transformation Products and Their Mutagenic Activity.
PB93-141273/REB 93-01 PC **A03**/MF **A01**

**PB93-141281/REB**
Direct Effects of Ethane Dimethanesulphonate on Epididymal Function in Adult Rats. An In vitro Demonstration.
PB93-141281/REB 93-01 PC **A03**/MF **A01**

**PB93-141299/REB**
Improved Method for Screening cDNA Expression Libraries for DNA-Binding Proteins.
PB93-141299/REB 93-01 PC **A01**/MF **A01**

**PB93-141307/REB**
Review of the Literature on Potential Reproductive and Developmental Toxicity of Electric and Magnetic Fields.
PB93-141307/REB 93-01 PC **A03**/MF **A01**

**PB93-141315/REB**
Olfactory Evoked Responses to Odorous Stimuli of Different Intensities.
PB93-141315/REB 93-01 PC **A02**/MF **A01**

**PB93-141323/REB**
Effect of a Base-Catalyzed Dechlorination Process on the Genotoxicity of PCB-Contaminated Soil.
PB93-141323/REB 93-01 PC **A02**/MF **A01**

**PB93-141331/REB**
Health Effects of Arsenic in Drinking Water: Research Needs.
PB93-141331/REB 93-01 PC **A02**/MF **A01**

**PB93-141349/REB**
Glutamate Neurotoxicity in the Developing Rat Cochlea is Antagonized by Kynurenic Acid and MK-801.
PB93-141349/REB 93-01 PC **A02**/MF **A01**

**PB93-141356/REB**
Dermal Absorption of Chemicals: Effect of Application of Chemicals as a Solid, Aqueous Paste, Suspension, or in Volatile Vehicle.
PB93-141356/REB 93-01 PC **A03**/MF **A01**

**PB93-141364/REB**
Analysis of X-ray-Induced HPRT Mutations in CHO Cells: Insertion and Deletions.
PB93-141364/REB 93-01 PC **A03**/MF **A01**

**PB93-141372/REB**
DNA Adducts and Induction of Sister Chromatid Exchanges in the Rat Following Benzo(b)-Fluoranthene Administration.
PB93-141372/REB 93-01 PC **A02**/MF **A01**

**PB93-141380/REB**
Application of the 'Tradescantia micronucleus' Assay for the Genetic Evaluation of Chemical Mixtures in Soil and Aqueous Media.
PB93-141380/REB 93-01 PC **A02**/MF **A01**

**PB93-141398/REB**
PCR Primers Specific for Detection of a Rat Repetitive Sequence.
PB93-141398/REB 93-01 PC **A01**/MF **A01**

**PB93-141406/REB**
Behavioral Development Following Daily Episodes of Mother-Infant Separation in the Rat.
PB93-141406/REB 93-01 PC **A01**/MF **A01**

**PB93-141414/REB**
Mechanisms of TCDD-Induction of Cleft Palate: Insights from In vivo and In vitro Approaches.
PB93-141414/REB 93-01 PC **A02**/MF **A01**

**PB93-141422/REB**
Hepatotoxic Interactions of Ethanol with Allyl Alcohol or Carbon Tetrachloride in Rats.
PB93-141422/REB 93-01 PC **A03**/MF **A01**

**PB93-141430/REB**
Correlation between Chemical Suppression of Natural Killer Cell Activity in Mice and Susceptibility to Cytomegalovirus: Rationale for Applying Murine Cytomegalovirus as a Host Resistance Model and for Interpreting Immunotoxicity Testing in Terms of Risk of Disease.
PB93-141430/REB 93-01 PC **A03**/MF **A01**

**PB93-141448/REB**
Micronuclei and Other Nuclear Anomalies in Buccal Smears: A Field Test in Snuff Users.
PB93-141448/REB 93-01 PC **A03**/MF **A01**

**PB93-141455/REB**
Micronuclei and Other Nuclear Anomalies in Buccal Smears: Methods Development.
PB93-141455/REB 93-01 PC **A03**/MF **A01**

**PB93-141463/REB**
Application of a Wheat Seedling Assay for Detecting Aneuploidy Induced by N-Ethyl-N-Nitrosourea and 4-Nitroquinoline-1-Oxide.
PB93-141463/REB 93-01 PC **A02**/MF **A01**

**PB93-141471/REB**
In vitro Mammalian Mutagenesis as a Model for Genetic Lesions in Human Cancer.
PB93-141471/REB 93-01 PC **A02**/MF **A01**

**PB93-141489/REB**
Mutagenicity of Organic Emissions from Unvented Kerosene Heaters in a Chamber Study.
PB93-141489/REB 93-01 PC **A03**/MF **A01**

**PB93-141497/REB**
Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport.
PB93-141497/REB 93-01 PC **A02**/MF **A01**

**PB93-141505/REB**
Cell Density and Non-Equilibrium Sorption Effects on Bacterial Dispersal in Groundwater Microcosms.
PB93-141505/REB 93-01 PC **A03**/MF **A01**

**PB93-141513/REB**
Applied Geologic, Microbiological, and Engineering Constraints for In-situ BTEX Bioremediation.
PB93-141513/REB 93-01 PC **A03**/MF **A01**

**PB93-141521/REB**
Chemistry of Dissolved Organic Carbon and Organic Acids in Two Streams Draining Forested Watersheds.
PB93-141521/REB 93-01 PC **A02**/MF **A01**

**PB93-141539/REB**
Kinetics of Chemical Weathering in B Horizon Spodosol Fraction.
PB93-141539/REB 93-01 PC **A02**/MF **A01**

**PB93-141547/REB**
Recovery of the Highly Acidified Clearwater Lake Watershed, Ontario, Canada, Simulated with the IL WAS Model.
PB93-141547/REB 93-01 PC **A03**/MF **A01**

**PB93-141554/REB**
Air-Drying and Pretreatment Effects on Soil Sulfate Sorption.
PB93-141554/REB 93-01 PC **A02**/MF **A01**

**PB93-141562/REB**
Stable Sulfur Isotopes of Sulfate in Precipitation and Stream Solutions in a Northern Hardwood Watershed.
PB93-141562/REB 93-01 PC **A02**/MF **A01**

**PB93-141570/REB**
Characterizing the Distribution of Observed Precipitation and Runoff over the Continental United States.
PB93-141570/REB 93-01 PC **A03**/MF **A01**

**PB93-141687/REB**
PR Notice 87-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-141687/REB 93-01 PC **A03**/MF **A01**

**PB93-141695/REB**
PR Notice 87-4. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-141695/REB 93-01 PC **A03**/MF **A01**

**PB93-142016/REB**
Evaluation and Costing of NOx Controls for Existing Utility Boilers in the NESCAUM Region.
PB93-142016/REB 93-01 PC **A18**/MF **A04**

**PB93-142107/REB**
Federal Policies and Technological Problem-Solving.
PB93-142107/REB 93-01 PC **A03**/MF **A01**

**PB93-142115/REB**
Novel Approach for Gathering Data on Solvent Cleaning.
PB93-142115/REB 93-01 PC **A02**/MF **A01**

**PB93-142420/REB**
Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC **A03**/MF **A01**

**PB93-143691/REB**
Proceedings of the 1989 Midwest Pollution Control Biologists Meeting. Held in Chicago, Illinois on February 14-17, 1989.
PB93-143691/REB 93-01 PC **A08**/MF **A02**

**PB93-143709/REB**
Restoration of the Salmon River Salt Marshes: Retrospect and Prospect.
PB93-143709/REB 93-01 PC **A08**/MF **A02**

**PB93-143717/REB**
Proceedings of the National Workshop on Biological Criteria (1st). Held in Lincolnwood, Illinois on December 2-4, 1987.
PB93-143717/REB 93-01 PC **A07**/MF **A02**

**PB93-143741/REB**
Subjective-Probability-Based Scenarios for Uncertain Input Parameters: Stratospheric Ozone Depletion, December 1990.
PB93-143741/REB 93-01 PC **A03**/MF **A01**

**PB93-143972/REB**
Regulatory Impact Analysis for the National Emissions Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Seven Other Processes.
PB93-143972/REB 93-01 PC **A09**/MF **A02**

**PB93-143980/REB**
OSWER Source Book. Volume 1. Training and Technology Transfer Resources, 1992-1993.
PB93-143980/REB 93-01 PC **A10**/MF **A03**

**PB93-143998/REB**
National Air Quality and Emissions Trends Report, 1991.
PB93-143998/REB 93-01 PC **A07**/MF **A02**

**PB93-144004/REB**
PR Notices 86-1 through 86-5.
PB93-144004/REB 93-01 PC **E99**/MF **E99**

**PB93-144012/REB**
PR Notice 86-1. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144012/REB 93-01 PC **A01**/MF **A01**

**PB93-144020/REB**
PR Notice 86-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticides.
PB93-144020/REB 93-01 PC **A01**/MF **A01**

**PB93-144038/REB**
PR Notice 86-3. Notice to Producers, Registrants, and Formulators.
PB93-144038/REB 93-01 PC **A01**/MF **A01**

**PB93-144046/REB**
PR Notice 86-4. Notice to Registrants of Pesticides, and Applicants for Pesticide Registration.
PB93-144046/REB 93-01 PC **A02**/MF **A01**

**PB93-144053/REB**
PR Notice 86-5. Notice to Producers, Formulators, Distributors and Registrants.
PB93-144053/REB 93-01 PC **A03**/MF **A01**

**PB93-144061/REB**
PR Notice 87-2. Notice to Procedures, Registrants, and Formulators.
PB93-144061/REB 93-01 PC **A01**/MF **A01**

**PB93-144079/REB**
PR Notice 87-3. Notice to Manufacturers, Formulators, Distributors and Registrants of Pesticide Products.
PB93-144079/REB 93-01 PC **A01**/MF **A01**

**PB93-144087/REB**
PR Notice 87-5. Notice to Manufacturers, Formulators and Registrants of Pesticides.
PB93-144087/REB 93-01 PC **A03**/MF **A01**

**PB93-144095/REB**
PR Notice 87-6. Notice to Manufacturers, Formulators, Procedures, and Registrants of Pesticide Products.
PB93-144095/REB 93-01 PC **A02**/MF **A01**

**PB93-144111/REB**
Synopses of Federal Demonstrations of Innovative Site Remediation Technologies.
PB93-144111/REB 93-01 PC **A11**/MF **A03**

**PB93-144129/REB**
OSWER Source Book. Volume 2. Training and Technology Transfer Resources, 1992-1993.
PB93-144129/REB 93-01 PC **A11**/MF **A03**

**PB93-144137/REB**
Evaluation of POHC and PIC Screening Methods.
PB93-144137/REB 93-01 PC **A04**/MF **A01**

**PB93-144145/REB**
Volatile Organic Sampling Train Soot Interference Report.
PB93-144145/REB 93-01 PC **A04**/MF **A01**

**PB93-144152/REB**
Analysis of Acid Precipitation Samples Collected by State Agencies. Sampling Period: January-December 1990.
PB93-144152/REB 93-01 PC **A12**/MF **A03**

**PB93-144202/REB**
Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 4: Critical Review of Coastal Embayment and Estuarine Waste Load Allocation Modeling.
PB93-144202/REB 93-01 PC **A05**/MF **A01**

**PB93-144210/REB**
Proceedings of the National Conference (3rd): Water Quality Standards for the 21st Century. Held in Las Vegas, Nevada on August 31-September 3, 1992.
PB93-144210/REB 93-01 PC **A16**/MF **A03**

**PB93-144277/REB**
Effects of Livestock Wastes on Small Illinois Streams: Lower Kaskaskia River Basin and Upper Little Wabash River Basins, Summer 1991.
PB93-144277/REB 93-01 PC **A07**/MF **A02**

**PB93-144350/REB**
Evaluation of Resistively Heated Fuel Injection Technology to Reduce Cold Start Emissions and Assist Starting/Driveaway of a Methanol-Fueled Vehicle.
PB93-144350/REB 93-01 PC **A03**/MF **A01**

**PB93-144368/REB**
Pesticide Fact Sheet Number 20.2: Amitrole.
PB93-144368/REB 93-01 PC **A02**/MF **A01**

**PB93-144376/REB**
Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine to Operation on Gaseous 2H2/CO Fuel. Interim Report 4.
PB93-144376/REB 93-01 PC **A03**/MF **A01**

**PB93-145589/REB**
Technologies and Options for UST Corrective Actions: Overview of Current Practice.
PB93-145589/REB 93-01 PC **A05**/MF **A01**

**PB93-145597/REB**
Restoration Potential of Diked Estuarine Wetlands in Washington and Oregon. Phase 2: Identification of Candidate Sites in Puget Sound.
PB93-145597/REB 93-01 PC **A04**/MF **A01**

**PB93-145605/REB**
Model Pollution Prevention Plan for the Kraft Segment of the Pulp and Paper Industry.
PB93-145605/REB 93-01 PC **A04**/MF **A01**

**PB93-145613/REB**
Pollution Prevention for the Kraft Pulp and Paper Industry.
PB93-145613/REB 93-01 PC **A04**/MF **A01**

**PB93-145621/REB**
Babcock and Wilcox Cyclone Furnace Vitrification. Technology Demonstration Summary.
PB93-145621/REB 93-01 PC **A02**/MF **A01**

**PB93-145639/REB**
Horsehead Resource Development Company, Inc., Flame Reactor Technology. Technology Demonstration Summary.
PB93-145639/REB 93-01 PC **A02**/MF **A01**

**PB93-145654/REB**
Clean Water Act (Section 319): An Evaluation of Program Implementation in Region 10.
PB93-145654/REB 93-01 PC **A05**/MF **A01**

**PB93-145662/REB**
Guidelines for Developing Risk-Based Cleanup Levels at RCRA Sites in Region 10.
PB93-145662/REB 93-01 PC **A04**/MF **A01**

**PB93-145670/REB**
Pollution Prevention Opportunity Assessment and Implementation Plan. For Simpson Tacoma Kraft Company, Tacoma, Washington.
PB93-145670/REB 93-01 PC **A05**/MF **A01**

**PB93-145688/REB**
Manual for the Certification of Laboratories Analyzing Drinking Water. Criteria and Procedures Quality Assurance (Third Edition).
PB93-145688/REB 93-01 PC **A03**/MF **A01**

**PB93-145704/REB**
Technical Guidance Manual for Performing Waste Load Allocations. Book 3: Estuaries. Part 3. Use of Mixing Zone Models in Estuarine Waste Load Allocations.
PB93-145704/REB 93-01 PC **A03**/MF **A01**

**PB93-145712/REB**
Proceedings of the Midwest Pollution Control Biologists Meeting, 1991. Environmental Indicators: Measurement and Assessment Endpoints. Held in Lincolnwood, Illinois on March 19-22, 1991.
PB93-145712/REB 93-01 PC **A06**/MF **A02**

**PB93-146082/REB**
Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. User's Guide. Volume 1. NGDC Key to Geophysical Records Documentation No. 26.
PB93-146082/REB 93-01 PC **A07**/MF **A02**

**PB93-146090/REB**
Global Ecosystems Database. Version 1.0 (on CD-ROM). EPA Global Climate Research Program. NOAA/NGDC Global Change Database Program. Documentation Manual, DISC-A. Volume 1. NGDC Key to Geophysical Records Documentation No. 27.
PB93-146090/REB 93-01 PC **A11**/MF **A03**

**PB93-146108/REB**
PR Notice 87-7. Notice to Producers, Formulators and Registrants of Pesticides.
PB93-146108/REB 93-01 PC **A02**/MF **A01**

**PB93-146348/REB**
Review of EPA's Environmental Monitoring and Assessment Program (EMAP). Interim Report.
PB93-146348/REB 93-01 PC **A03**/MF **A01**

**PB93-146462/REB**
Motor Vehicle-Related Air Toxics Study.
PB93-146462/REB 93-01 PC **A24**/MF **A04**

**PB93-146793/REB**
Process for Regional Assessment of Wetland Risk.
PB93-146793/REB 93-01 PC **A09**/MF **A02**

**PB93-146827/REB**
Methods for Analyzing Extreme Events Under Climate Change.
PB93-146827/REB 93-01 PC **A03**/MF **A01**

**PB93-146835/REB**
Basic Concepts of Contaminant Sorption.
PB93-146835/REB 93-01 PC **A01**/MF **A01**

**PB93-146843/REB**
Pollution Prevention Opportunity Assessment: USDA Beltsville Agricultural Research Center.
PB93-146843/REB 93-01 PC **A04**/MF **A01**

**PB93-146850/REB**
In-situ Bioremediation of Ground Water.
PB93-146850/REB 93-01 PC **A01**/MF **A01**

**PB93-146868/REB**
Pollution Prevention Opportunity Assessment: Manufacturing and Fabrication Repair Laboratory at Sandia National Laboratories.
PB93-146868/REB 93-01 PC **A03**/MF **A01**

**PB93-146900/REB**
Pollution Prevention Opportunity Assessment: Geochemistry Laboratory, Sandia National Laboratories.
PB93-146900/REB 93-01 PC **A03**/MF **A01**

**PB93-146918/REB**
Report of the Neurotoxicity Risk Assessment Guidelines Peer Review Workshop. Held in Washington, DC. on June 2-3, 1992.
PB93-146918/REB 93-01 PC **A08**/MF **A02**

**PB93-146991/REB**
Advanced Insulations for Refrigerator/Freezers: The Potential for New Shell Design Incorporating Polymer Barrier Construction.
PB93-146991/REB 93-01 PC **A03**/MF **A01**

**PB93-147007/REB**
Enabling Document for Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants.
PB93-147007/REB 93-01 PC **A07**/MF **A02**

**PB93-147015/REB**
PR Notice 87-8. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-147015/REB 93-01 PC **A02**/MF **A01**

**PB93-148252/REB**
Missouri Chlordane Exposure Study: A Report on Persons Who Consumed Chlordane-Contaminated Fish.
PB93-148252/REB 93-01 PC **A08**/MF **A02**

**PB93-149151/REB**
PR Notice 87-9. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149151/REB 93-01 PC **A01**/MF **A01**

**PB93-149169/REB**
PR Notice 87-10. Notice to Pesticide Applicants, Registrants and Petitioners.
PB93-149169/REB 93-01 PC **A01**/MF **A01**

**PB93-149177/REB**
Aerosol Acidity Characterization of Large Metropolitan Areas: Pilot and Planning for Philadelphia.
PB93-149177/REB 93-01 PC **A03**/MF **A01**

**PB93-149185/REB**
Vertical Diffusion in Small Stratified Lake: Data and Error Analysis.
PB93-149185/REB 93-01 PC **A03**/MF **A01**

**PB93-149193/REB**
Bioremediation.
PB93-149193/REB 93-01 PC **A03**/MF **A01**

**PB93-149201/REB**
Comparison of Ground-Water Sampling Devices Based on Equilibration of Water Quality Indicator Parameters.
PB93-149201/REB 93-01 PC **A03**/MF **A01**

**PB93-149219/REB**
U.S. EPA's QA/QC Program for Waste Management Facilities. Proceedings of the GRI Seminar (6th), MQC/MQA and CQC/COA of Geosynthetics. Held in Philadelphia, Pennsylvania on December 10-11, 1992.
PB93-149219/REB 93-01 PC **A02**/MF **A01**

**PB93-149227/REB**
Potential for Joint Research between EPA and the U.S. Army.
PB93-149227/REB 93-01 PC **A03**/MF **A01**

**PB93-149235/REB**
Development of Genetically Enhanced Baculovirus Pesticides (Chapter 5).
PB93-149235/REB 93-01 PC **A02**/MF **A01**

**PB93-149243/REB**
Ecologically Acceptable Strategy for the Use of Genetically Engineered Baculovirus Pesticides.
PB93-149243/REB 93-01 PC **A02**/MF **A01**

**PB93-149250/REB**
Uncertainties in Countrywide Forest Biomass Estimates.
PB93-149250/REB 93-01 PC **A03**/MF **A01**

**PB93-149268/REB**
Role of Soil Organic Acids in Mineral Weathering Processes (Chapter 6).
PB93-149268/REB 93-01 PC **A04**/MF **A01**

**PB93-149276/REB**
Isolation and Purification of Bacterial DNA from Soil.
PB93-149276/REB 93-01 PC **A04**/MF **A01**

**PB93-149334/REB**
Determination of Rates of Reaction in the Gas-Phase in the Troposphere. Theory and Practice. 5. Rate of Indirect Photoreaction.
PB93-149334/REB 93-01 PC **A08**/MF **A02**

**PB93-149383/REB**
Development of Index of Biotic Integrity Expectations for the Ecoregions of Indiana. I. Central Corn Belt Plain.
PB93-149383/REB 93-01 PC **A06**/MF **A02**

**PB93-149425/REB**
National Emission Standards for Hazardous Air Pollutants Compliance Extensions for Early Reductions: Background Information for Promulgated Standards.
PB93-149425/REB 93-01 PC **A08**/MF **A02**

**PB93-149664/REB**
PR Notice 87-11. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticides.
PB93-149664/REB 93-01 PC **A01**/MF **A01**

**PB93-149680/REB**
Pesticide Fact Sheet Number 20.1: Amitrole.
PB93-149680/REB 93-01 PC **A02**/MF **A01**

**PB93-149748/REB**
Watershed Manipulation Project: Field Implementation Plan for 1990-1992.
PB93-149748/REB 93-01 PC **A04**/MF **A01**

**PB93-149755/REB**
Episodic Response Project-Northern Appalachian Plateau: Site Description and Methodology.
PB93-149755/REB 93-01 PC **A04**/MF **A01**

**PB93-149854/REB**
Surfactants and Subsurface Remediation.
PB93-149854/REB 93-01 PC **A02**/MF **A01**

**PB93-149862/REB**
Collection and Chemical Analysis of Lichens for Biomonitoring.
PB93-149862/REB 93-01 PC **A03**/MF **A01**

**PB93-149904/REB**
Protection of Pome Fruits, March 1985-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149904/REB 93-01 PC **A13**/MF **A03**

**PB93-149912/REB**
Methylbromide and Its Alternatives as Fumigants, 1979-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149912/REB 93-01 PC **A09**/MF **A03**

**PB93-150100/REB**
Characterization of Organic Emission from a Wood Finishing Product-Wood Stain.
PB93-150100/REB 93-01 PC **A02**/MF **A01**

**PB93-150118/REB**
Pilot-Scale Evlauation of an Incinerability Ranking System for Hazardous Organic Compounds.
PB93-150118/REB 93-01 PC **A02**/MF **A01**

**PB93-150126/REB**
Comparative Resistance of 'Escherichia coli' and Enterococci to Chlorination.
PB93-150126/REB 93-01 PC **A03**/MF **A01**

**PB93-150134/REB**
Removal of Beryllium from Drinking Water by Chemical Coagulation and Lime Softening.
PB93-150134/REB 93-01 PC **A03**/MF **A01**

**PB93-150142/REB**
Extraction and Recovery of Lead Species from Soil.
PB93-150142/REB 93-01 PC **A02**/MF **A01**

**PB93-150159/REB**
Control Technology: 1992 Update of U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Emerging Technology Program.
PB93-150159/REB 93-01 PC **A03**/MF **A01**

**PB93-150167/REB**
Role of Nitrate in the Acidification of Streams in the Catskill Mountains of New York.
PB93-150167/REB 93-01 PC **A03**/MF **A01**

**PB93-150175/REB**
Genetically Engineered Baculoviruses as Agents for Pest Control.
PB93-150175/REB 93-01 PC **A03**/MF **A01**

**PB93-150191/REB**
Sorption of Toxic Organic Compounds on Wastewater Solids: Mechanism and Modeling.
PB93-150191/REB 93-01 PC **A02**/MF **A01**

**PB93-150209/REB**
Characterization of PM-10 Emissions from Antiskid Materials Applied to Ice- and Snow-Covered Roadways.
PB93-150209/REB 93-01 PC **A05**/MF **A01**

**PB93-150217/REB**
DNAPL Site Evaluation.
PB93-150217/REB 93-01 PC **A16**/MF **A03**

**PB93-150258/REB**
Control Techniques for Volatile Organic Compound Emissions from Stationary Sources, December 1992.
PB93-150258/REB 93-01 PC **A20**/MF **A04**

**PB93-150290/REB**
Highlights of the EPA Innovative Regulatory Strategies Workshop: Market-Based Incentives and other Innovations for Air Pollution Control. Summary of Workshop Discussion Sessions. Held in Washington, DC. on January 15-17, 1992.
PB93-150290/REB 93-01 PC **A05**/MF **A01**

**PB93-152577/REB**
Publications Office of Science and Technology: Catalog.
PB93-152577/REB 93-01 PC **A06**/MF **A02**

**PB93-152601/REB**
Proceedings of the Annual EPA Conference on Analysis of Pollutants in the Environment (15th). Held in Norfolk, Virginia on May 6-7, 1992.
PB93-152601/REB 93-01 PC **A99**/MF **A06**

**PB93-152619/REB**
Proceedings: Tiered Testing Issues for Freshwater and Marine Sediments. Held in Washington, DC. on September 16-18, 1992.
PB93-152619/REB 93-01 PC **A22**/MF **A04**

**PB93-154680/REB**
Great Lakes Water Quality Initiative Criteria Documents for the Protection of Human Health (February 1993 Draft).
PB93-154680/REB 93-01 PC **A09**/MF **A03**

**PB93-154698/REB**
Great Lakes Water Quality Initiative Technical Support Document for Human Health Criteria and Values (January 1993 Draft).
PB93-154698/REB 93-01 PC **A05**/MF **A01**

**PB93-154722/REB**
Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife (PROPOSED): DDT, Mercury 2,3,7,8-TCDD and PCBs.
PB93-154722/REB 93-01 PC **A04**/MF **A01**

**PB93-154730/REB**
Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Guidance.
PB93-154730/REB 93-01 PC **A10**/MF **A03**

**PB93-154748/REB**
Regulatory Impact Analysis of the Proposed Great Lakes Water Quality Guidance.
PB93-154748/REB 93-01 PC **A09**/MF **A02**

**PB93-155166/REB**
Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, January 1993, Documentation.
PB93-155166/REB 93-01 PC **A03**/MF **A01**

**PB93-156040/REB**
Modification of Point Counts for Surveying Cropland Birds.
PB93-156040/REB 93-01 PC **A03**/MF **A01**

**PB93-156057/REB**
Evaluating Point Count versus Territory Mapping in Cropland Birds.
PB93-156057/REB 93-01 PC **A03**/MF **A01**

**PB93-156107/REB**
Cost Effectiveness Analysis of Effluent Guidelines and Standards for the Aluminum Forming Category.
PB93-156107/REB 93-01 PC **A03**/MF **A01**

**PB93-156495/REB**
Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants.
PB93-156495/REB 93-01 PC **A04**/MF **A01**

**PB93-156503/REB**
Economic Analysis of the Phosphate Subcategory of the Fertilizer Manufacturing Industry: Louisiana Phosphoric Acid Plants, July 1986.
PB93-156503/REB 93-01 PC **A05**/MF **A01**

**PB93-156552/REB**
Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1A. National Impacts Assessment.
PB93-156552/REB 93-01 PC **A06**/MF **A02**

**PB93-156560/REB**
Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1B. Control Technologies.
PB93-156560/REB 93-01 PC **A13**/MF **A03**

**PB93-156578/REB**
Hazardous Air Pollutant Emissions from Process Units in the Synthetic Organic Chemical Manufacturing Industry: Background Information for Proposed Standards. Volume 1C. Model Emission Sources.
PB93-156578/REB 93-01 PC **A11**/MF **A03**

**PB93-156586/REB**
Alternative Control Techniques Document. NOx Emissions from Stationary Gas Turbines.
PB93-156586/REB 93-01 PC **A11**/MF **A03**

**PB93-157105/REB**
Compilation of Air Pollutant Emission Factors. Volume 1. Stationary Point and Area Sources. Supplement E.
PB93-157105/REB 93-01 PC **A10**/MF **A03**

**PB93-157550/REB**
LNAPL Distribution and Hydrocarbon Vapor Transport in the Capillary Fringe.
PB93-157550/REB 93-01 PC **A07**/MF **A02**

**PB93-157568/REB**
Cost Effective Corn and Soybean Production Without Tillage: Fact or Fiction (May 1988).
PB93-157568/REB 93-01 PC **A03**/MF **A01**

**PB93-157923/REB**
Construction, Monitoring, and Performance of Two Soil Liners. Project Summary.
PB93-157923/REB 93-01 PC **A02**/MF **A01**

**PB93-157931/REB**
Method 524. Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry.
PB93-157931/REB 93-01 PC **A03**/MF **A01**

**PB93-158968/REB**
Economic Impacts of RCRA Regulations on the Plating and Polishing Industry.
PB93-158968/REB 93-01 PC **A07**/MF **A02**

**PB93-159572/REB**
Inside the Hotline: A Compilation of 1992 Monthly Hotline Reports.
PB93-159572/REB 93-01 PC **A05**/MF **A01**

**PB93-163236/REB**
Geostatistical Environmental Assessment Software: User's Guide. GEO-EAS 1.2.1.
PB93-163236/REB 93-01 PC **A07**/MF **A02**

**PB93-163251/REB**
ASSESS User's Guide.
PB93-163251/REB 93-01 PC **A03**/MF **A01**

**PB93-163285/REB**
Geophysics Advisor Expert System, Version 2.0.
PB93-163285/REB 93-01 PC **A03**/MF **A01**

**PB93-163715/REB**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. National Summary.
PB93-163715/REB 93-01 PC **A10**/MF **A03**

**PB93-163723/REB**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
PB93-163723/REB 93-01 PC **A06**/MF **A02**

**PB93-163731/REB**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 2 (New York, New Jersey).
PB93-163731/REB 93-01 PC **A06**/MF **A02**

**PB93-163749/REB**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 3 (Delaware, Maryland, Pennsylvania, Virginia, West Virginia).
PB93-163749/REB 93-01 PC **A06**/MF **A02**

**PB93-163756/REB**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Volumes 1 and 2.
PB93-163756/REB 93-01 PC **A99**/MF **E11**

**PB93-163764/REB**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin).
PB93-163764/REB 93-01 PC **A21**/MF **A04**

**PB93-163772/REB**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas).
PB93-163772/REB 93-01 PC **A07**/MF **A02**

**PB93-163780/REB**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 7 (Iowa, Kansas, Missouri, Nebraska).
PB93-163780/REB 93-01 PC **A20**/MF **A04**

**PB93-163798/REB**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming).
PB93-163798/REB 93-01 PC **A06**/MF **A02**

**PB93-163806/REB**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 9 (Arizona, California, Hawaii, Nevada).
PB93-163806/REB 93-01 PC **A24**/MF **A04**

**PB93-163814/REB**
Pesticides in Ground Water Database: A Compilation of Monitoring Studies, 1971-1991. Region 10 (Alaska, Idaho, Oregon, Washington).
PB93-163814/REB 93-01 PC **A05**/MF **A01**

**PB93-164507/REB**
Life Cycle Design Guidance Manual. Environmental Requirements and the Product System.
PB93-164507/REB 93-04 PC **A09**/MF **A03**

**PB93-164515/REB**
Proposed Water Quality Guidance for the Great Lakes System.
PB93-164515/REB 93-01 PC **A14**/MF **A03**

**PB93-164523/REB**
Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines. Federal Certification Test Results for 1993 Model Year.
PB93-164523/REB 93-01 PC **A15**/MF **A03**

**PB93-164531/REB**
Test Car List, 1993. Passenger Cars.
PB93-164531/REB 93-01 PC **A05**/MF **A02**

**PB93-167096/REB**
General Public Notification for Public Water Systems.
PB93-167096/REB 93-01 PC **A05**/MF **A01**

**PB93-167187/REB**
Photochemical Conversion of Solar Energy in the Environment.
PB93-167187/REB 93-01 PC **A03**/MF **A01**

**PB93-167286/REB**
Developing Improved Strategies to Determine Male Reproductive Risk from Environmental Toxins.
PB93-167286/REB 93-01 PC **A03**/MF **A01**

**PB93-167492/REB**
Air Quality Criteria for Carbon Monoxide.
PB93-167492/REB 93-01 PC **A99**/MF **A06**

**PB93-167732/REB**
Economic Analysis of Proposed Effluent Guidelines: Soap and Detergent Industry, August 1973.
PB93-167732/REB 93-01 PC **A07**/MF **A02**

**PB93-167740/REB**
Economic Analysis of Interim Final Effluent Guidelines for the Gum and Wood Chemicals Industry, Group 2.
PB93-167740/REB 93-01 PC **A04**/MF **A01**

**PB93-167757/REB**
Economic Analysis of Pretreatment Standards: The Secondary Copper and Aluminum Subcategories of the Nonferrous Metals Manufacturing Point Source Category.
PB93-167757/REB 93-01 PC **A07**/MF **A02**

**PB93-167765/REB**
Economic Analysis of Effluent Guidelines: Mineral Mining and Processing Industry.
PB93-167765/REB 93-01 PC **A14**/MF **A03**

**PB93-167773/REB**
Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Plastics Molding and Forming Industry.
PB93-167773/REB 93-01 PC **A05**/MF **A01**

**PB93-167781/REB**
Economic Impact Analysis of Effluent Limitations and Standards for the Nonferrous Metals Smelting and Refining Industry. Phase 2.
PB93-167781/REB 93-01 PC **A09**/MF **A03**

**PB93-168797/REB**
Economic Benefits of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-168797/REB 93-01 PC **A06**/MF **A02**

**PB93-168805/REB**
Estimation of the Cost of Using Chemical Protective Clothing.
PB93-168805/REB 93-01 PC **A03**/MF **A01**

**PB93-168813/REB**
Evaluation of Portable Gas Chromatographs.
PB93-168813/REB 93-01 PC **A03**/MF **A01**

**PB93-168821/REB**
Measurement of Volatile Organic Compounds during Start-Up of Bioremediation of French Limited Superfund Site in Crosby Texas Using Wind Dependent Whole-Air Sampling.
PB93-168821/REB 93-01 PC **A03**/MF **A01**

**PB93-168839/REB**
Analysis of Protocol Gases: An On-Going Quality Assurance Audit.
PB93-168839/REB 93-01 PC **A02**/MF **A01**

**PB93-168847/REB**
Effects of Kraft Mill Effluent on the Sexuality of Fishes: An Environmental Early Warning.
PB93-168847/REB 93-01 PC **A03**/MF **A01**

**PB93-168862/REB**
Research and Information Needs Related to Nonpoint Source Pollution and Wetlands in the Watershed: An EPA Perspective.
PB93-168862/REB 93-01 PC **A02**/MF **A01**

**PB93-168870/REB**
Precollege Education: A Vital Component if Sustainable Agriculture is to Take Root.
PB93-168870/REB 93-01 PC **A03**/MF **A01**

**PB93-168904/REB**
EPA Bibliography on Surface Contamination.
PB93-168904/REB 93-01 PC **A02**/MF **A01**

**PB93-168912/REB**
Infection Intensity of 'Perkinsus marinus' Disease in 'Crassostrea virginica' (Gmelin, 1791) from the Gulf of Mexico Maintained under Different Laboratory Conditions.
PB93-168912/REB 93-01 PC **A02**/MF **A01**

**PB93-168920/REB**
Toxicological Assessment of Biodegraded Pentachlorophenol: Microtox (Trade Name) and Fish Embryos.
PB93-168920/REB 93-01 PC **A02**/MF **A01**

**PB93-168938/REB**
Bacterial Metabolism of Naphthalene: Construction and Use of Recombinant Bacteria to Study Ring Cleavage of 1,2-Dihydroxynaphthalene and Subsequent Reactions.
PB93-168938/REB 93-01 PC **A03**

**PB93-168946/REB**
Sequence, Genomic Organization of the EcoRI-A Fragment of 'Autographa californica' Nuclear Polyhedrosis Virus, and Identification of a Viral-Encoded Protein Resembling the Outer Capsid Protein VP8 of Rotavirus.
PB93-168946/REB 93-01 PC **A02**

**PB93-168953/REB**
Annual Cycle of Blood Chemistry Parameters in Striped Mullet ('Mugil cephalus' L.) and Pinfish ('Lagodon rhomboides' L.) from the Gulf of Mexico.
PB93-168953/REB 93-01 PC **A03**/MF **A01**

**PB93-168961/REB**
Effects of Chemical Contaminants on Blood Chemistry of Teleost Fish: A Bibliography and Synopsis of Selected Effects.
PB93-168961/REB 93-01 PC **A03**/MF **A01**

**PB93-168979/REB**
Effect of Short-Term Exposure to Three Chemicals on the Blood Chemistry of the Pinfish 'Lagodon rhomboides'.
PB93-168979/REB 93-01 PC **A02**/MF **A01**

**PB93-168987/REB**
Genus- and Group-Specific Hybridization Probes for Determinative and Environmental Studies of Sulfate-Reducing Bacteria.
PB93-168987/REB 93-01 PC **A02**/MF **A01**

**PB93-168995/REB**
Fate of 'Bacillus sphaericus' 2362 Spores in Nontarget Invertebrates.
PB93-168995/REB 93-01 PC **A02**/MF **A01**

**PB93-169001/REB**
Use of a Novel Plasmid to Monitor the Fate of a Genetically Engineered 'Pseudomonas putida' Strain.
PB93-169001/REB 93-01 PC **A02**/MF **A01**

**PB93-169019/REB**
Extreme Clonal Diversity and Divergence in Populations of a Selfing Hermaphroditic Fish.
PB93-169019/REB 93-01 PC **A02**/MF **A01**

**PB93-169027/REB**
Selection of a 'Pseudomonas cepacia' Strain Constitutive for the Degradation of Trichloroethylene.
PB93-169027/REB 93-01 PC **A02**/MF **A01**

**PB93-169035/REB**
Systemic Hexamitid (Protozoa: Diplomonadida) Infection in Seawater Pen-Reared Chinook Salmon 'Oncorhynchus tshawytscha'.
PB93-169035/REB 93-01 PC **A03**/MF **A01**

**PB93-169043/REB**
Occurrence of Agglutinins in the Pallial Cavity Mucus of Oysters.
PB93-169043/REB 93-01 PC **A03**/MF **A01**

**PB93-169050/REB**
Evaluation of Sampling Strategies to Characterize Dissolved Oxygen Conditions in Northern Gulf of Mexico Estuaries.
PB93-169050/REB 93-01 PC **A03**/MF **A01**

**PB93-169068/REB**
Conjugal Gene Transfer to Aquatic Bacteria Detected by the Generation of a New Phenotype.
PB93-169068/REB 93-01 PC **A02**/MF **A01**

**PB93-169076/REB**
Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium 'Nitrosomonas europaea'.
PB93-169076/REB 93-01 PC **A02**/MF **A01**

**PB93-169084/REB**
Feasibility of Including Fugitive PM-10 Emissions Estimates in the EPA Emissions Trends Report.
PB93-169084/REB 93-01 PC **A03**/MF **A01**

**PB93-169100/REB**
Reregistration Eligibility Document (RED): Oxalic Acid.
PB93-169100/REB 93-01 PC **A06**/MF **A02**

**PB93-169126/REB**
Contingency Analysis Modeling for Superfund Sites and Other Sources.
PB93-169126/REB 93-01 PC **A13**/MF **A03**

**PB93-169134/REB**
Regional Nonpoint Source Program Summary.
PB93-169134/REB 93-01 PC **A14**/MF **A03**

**PB93-169340/REB**
Fuel Economy Guide, 1993. 3-Number.
PB93-169340/REB 93-01 PC **A04**/MF **A01**

**PB93-169357/REB**
Fuel Economy Guide, 1993. 6 Number.
PB93-169357/REB 93-01 PC **A04**/MF **A01**

**PB93-169365/REB**
Petitions to Delist Hazardous Wastes: A Guidance Manual. Second Edition.
PB93-169365/REB 93-01 PC **A08**/MF **A02**

**PB93-169845/REB**
Markets for Recovered Glass.
PB93-169845/REB 93-01 PC **A03**/MF **A01**

**PB93-170116/REB**
Proceedings of the National United States Environmental Protection Agency Conference on Household Hazardous Waste Management (7th). Held in Minneapolis, Minnesota on December 8-12, 1992.
PB93-170116/REB 93-01 PC **A99**/MF **A06**

**PB93-170132/REB**
Markets for Recovered Aluminum.
PB93-170132/REB 93-01 PC **A03**/MF **A01**

**PB93-172914/REB**
Characterization of Emissions from the Simulated Open-Burning of Non-Metallic Automobile Shredder Residue.
PB93-172914/REB 93-01 PC **A05**/MF **A01**

**PB93-172922/REB**
Proceedings of the Indoor Radon Modeling Workshop, Florida Radon Research Program. Held in Tampa, Florida on April 16-17, 1991.
PB93-172922/REB 93-01 PC **A09**/MF **A02**

**PB93-172930/REB**
Evaluation of Portable Multisorbent Air Samplers for Use with an Automated Multitube Analyzer.
PB93-172930/REB 93-01 PC **A05**/MF **A01**

**PB93-172948/REB**
Applications Analysis Report: Silicate Technology Corporation's Solidification/Stabilization Technology for Organic and Inorganic Contaminants in Soils.
PB93-172948/REB 93-01 PC **A07**/MF **A02**

**PB93-173060/REB**
Assessing Potential Exposures from Routine Use of VOC-Contaminated Groundwater.
PB93-173060/REB 93-01 PC **A02**/MF **A01**

**PB93-173078/REB**
Evaluation of Emissions from Masonry Heaters and Masonry Fireplaces in Homes.
PB93-173078/REB 93-01 PC **A03**/MF **A01**

**PB93-173094/REB**
Technological Options for Acid Rain Control.
PB93-173094/REB 93-01 PC **A03**/MF **A01**

**PB93-173102/REB**
Physical Properties of Fluorinated Propane and Butane Derivatives as Alternative Refrigerants.
PB93-173102/REB 93-01 PC **A03**/MF **A01**

**PB93-173110/REB**
Using a Neural Network to Estimate Solvent Consumption.
PB93-173110/REB 93-01 PC **A02**/MF **A01**

**PB93-173128/REB**
Development of a Field Test Method for the Determination of Lead in Paint and Paint-Contaminated Dust and Soil.
PB93-173128/REB 93-01 PC **A03**/MF **A01**

**PB93-173136/REB**
Agricultural Pesticide Emissions Associated with Common Crops in the United States.
PB93-173136/REB 93-01 PC **A03**/MF **A01**

**PB93-173144/REB**
R-245ca: A Potential Far-Term Alternative for R-11.
PB93-173144/REB 93-01 PC **A02**/MF **A01**

**PB93-173151/REB**
Development of Source Testing, Analytical, and Mutagenicity Bioassay Procedures for Evaluating Emissions from Municipal and Hospital Waste Combustors.
PB93-173151/REB 93-01 PC **A02**/MF **A01**

**PB93-173169/REB**
Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans: Removal from Flue Gas and Distribution in Ash/Residue of a Refuse-Derived Fuel Combustor.
PB93-173169/REB 93-01 PC **A02**/MF **A01**

**PB93-173177/REB**
Indoor Radon Reduction in Crawl-Space Houses: A Review of Alternative Approaches.
PB93-173177/REB 93-01 PC **A03**/MF **A01**

**PB93-173664/REB**
Simulation of Nonazeotropic Refrigerant Mixtures for Use in a Dual-Circuit Refrigerator/Freezer with Countercurrent Heat Exchangers.
PB93-173664/REB 93-01 PC **A02**/MF **A01**

**PB93-173672/REB**
Corona Destruction: An Innovative Control Technology for VOCs and Air Toxics.
PB93-173672/REB 93-01 PC **A02**/MF **A01**

**PB93-173680/REB**
Chemical Characterization of Indoor Air of Homes from Communes in Xuan Wei, China, with High Lung Cancer Mortality Rate.
PB93-173680/REB 93-01 PC **A03**/MF **A01**

**PB93-173698/REB**
Accumulation of Polychlorinated Organic Contaminants from Sediment by Three Benthic Marine Species.
PB93-173698/REB 93-01 PC **A02**/MF **A01**

**PB93-173706/REB**
Vertical Profiles of Toxicity, Organic Carbon, and Chemical Contaminants in Sediment Cores from the Palos Verdes Shelf and Santa Monica Bay, California.
PB93-173706/REB 93-01 PC **A03**/MF **A01**

**PB93-173714/REB**
Temporal Changes in the Benthos along a Pollution Gradient: Discriminating the Effects of Natural Phenomena from Sewage-Industrial Wastewater Effects.
PB93-173714/REB 93-01 PC **A03**/MF **A01**

**PB93-173722/REB**
Effect of the Distribution System on Drinking-Water Quality.
PB93-173722/REB 93-01 PC **A03**/MF **A01**

**PB93-173730/REB**
Pollution Prevention for Cleaner Air: EPA's Air and Energy Engineering Research Laboratory.
PB93-173730/REB 93-01 PC **A03**/MF **A01**

**PB93-173920/REB**
Sustainable Agriculture and the Environment in the Humid Tropics.
PB93-173920/REB 93-01 PC **A99**/MF **A06**

**PB93-173953/REB**
RED Facts: Oxalic Acid.
PB93-173953/REB 93-01 PC **A02**/MF **A01**

**PB93-173961/REB**
Commercial Marine Vessel Contributions to Emission Inventories.
PB93-173961/REB 93-01 PC **A07**/MF **A02**

**PB93-173979/REB**
Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards of Performance for the Offshore Oil and Gas Industry.
PB93-173979/REB 93-01 PC **A22**/MF **A04**

**PB93-173987/REB**
Air/Superfund National Technical Guidance Study Series. Volume 1. Overview of Air Pathway Assessments for Superfund Sites (Revised).
PB93-173987/REB 93-01 PC **A05**/MF **A01**

**PB93-173995/REB**
Air/Superfund National Technical Guidance Study Series. Air Emissions from Area Sources: Estimating Soil and Soil-Gas Sample Number Requirements.
PB93-173995/REB 93-01 PC **A04**/MF **A01**

**PB93-174027/REB**
PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: User's Manual for Release 2.0.
PB93-174027/REB 93-01 PC **A17**/MF **A04**

**PB93-174332/REB**
Methodology to Estimate Nonroad Equipment Populations by Nonattainment Areas.
PB93-174332/REB 93-01 PC **A05**/MF **A01**

**PB93-174464/REB**
Recalculation of Screening Level Concentrations for Nonpolar Organic Contaminants in Marine Sediments.
PB93-174464/REB 93-01 PC **A03**/MF **A01**

**PB93-174472/REB**
Regulatory Applications of Sediment Criteria.
PB93-174472/REB 93-01 PC **A03**/MF **A01**

**PB93-174506/REB**
Summary of the 1987 Carver-Greenfield Sludge Drying Technology Workshop: Problems and Solutions. Held in Los Angeles, California on March 10-11, 1987.
PB93-174506/REB 93-01 PC **A04**/MF **A01**

**PB93-174514/REB**
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 50,001 to 100,000 Persons.
PB93-174514/REB 93-01 PC **A04**/MF **A01**

**PB93-174522/REB**
Lead and Copper Monitoring Guidance for Water Systems Serving 101 to 500 Persons.
PB93-174522/REB 93-01 PC **A03**/MF **A01**

**PB93-174530/REB**
Lead and Copper Monitoring Guidance for Water Systems Serving 501 to 3,300 Persons.
PB93-174530/REB 93-01 PC **A03**/MF **A01**

**PB93-174548/REB**
Lead and Copper Monitoring Guidance for Water Systems Serving 3,301 to 10,000 Persons.
PB93-174548/REB 93-01 PC **A03**/MF **A01**

**PB93-174555/REB**
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving 10,001 to 50,000 Persons.
PB93-174555/REB 93-01 PC **A04**/MF **A01**

**PB93-174563/REB**
Monitoring Requirements for Lead and Copper Rules: Water Systems Serving > 100,000 Persons.
PB93-174563/REB 93-01 PC **A04**/MF **A01**

**PB93-174613/REB**
Regulatory Impact Analysis of Final Effluent Limitations Guidelines and Standards for the Offshore Oil and Gas Industry.
PB93-174613/REB 93-01 PC **A06**/MF **A02**

**PB93-174753/REB**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991.
PB93-174753/REB 93-01 PC **E99**/MF **E99**

**PB93-174761/REB**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 1.
PB93-174761/REB 93-01 PC **A24**/MF **A04**

**PB93-174779/REB**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 1. Part 2.
PB93-174779/REB 93-01 PC **A25**/MF **A06**

**PB93-174787/REB**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 1.
PB93-174787/REB 93-01 PC **A99**/MF **A06**

**PB93-174795/REB**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 2. Part 2.
PB93-174795/REB 93-01 PC **A99**/MF **A06**

**PB93-174803/REB**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 1.
PB93-174803/REB 93-01 PC **A99**/MF **A06**

**PB93-174811/REB**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 3. Part 2.
PB93-174811/REB 93-01 PC **A99**/MF **A06**

**PB93-174829/REB**
Solar World Congress: Proceedings of the Biennial Congress of the International Solar Energy Society. Held in Denver, Colorado on August 19-23, 1991. Volume 4.
PB93-174829/REB 93-01 PC **A13**/MF **A03**

**PB93-175040/REB**
Reactions of Potential Organic Water Contaminants with Aqueous Chlorine and Monochloramine.
PB93-175040/REB 93-01 PC **A04**/MF **A01**

**PB93-175479/REB**
What to Do Before You 'Nuke' Your Multiple Hearth Furnace: Practical Tips and Techniques for Improving Operation, Reducing Emissions and Meeting the Regulations.
PB93-175479/REB 93-01 PC **A03**/MF **A01**

**PB93-175487/REB**
Emissions from Sludge Incinerators with Venturi and Tray Scrubbers and Wet Electrostatic Precipitators: Metals, Chromium and Nickel Compounds, and Organics.
PB93-175487/REB 93-01 PC **A03**/MF **A01**

**PB93-175495/REB**
Continuous Monitoring of Total Hydrocarbon Emissions from Sludge Incinerators.
PB93-175495/REB 93-01 PC **A03**/MF **A01**

**PB93-175503/REB**
Atmospheric Releases of Hexavalent Chromium from Hard Chromium Plating Operations.
PB93-175503/REB 93-01 PC **A03**/MF **A01**

**PB93-175511/REB**
Simulation of Performance of Chlorine-Free Fluorinated Ethers and Fluorinated Hydrocarbons to Replace CFC-11 and CFC-114 in Chillers.
PB93-175511/REB 93-01 PC **A03**/MF **A01**

**PB93-175529/REB**
Alternate Performance Standard Project: Interpreting the Post-Construction Test.
PB93-175529/REB 93-01 PC **A03**/MF **A01**

**PB93-175537/REB**
Laboratory Studies on the Stability and Transport of Inorganic Colloids Through Natural Aquifer Material (Chapter 49).
PB93-175537/REB 93-01 PC **A02**/MF **A01**

**PB93-175545/REB**
Performance and Cost Evaluation of Bioremediation Techniques for Fuel Spills.
PB93-175545/REB 93-01 PC **A02**/MF **A01**

**PB93-175552/REB**
Immunoassay for p-Nitrophenol in Urine (Chapter XX).
PB93-175552/REB 93-01 PC **A03**/MF **A01**

**PB93-175560/REB**
Characterizing Material Sources and Sinks: Current Approaches (Part 2. Chemical and Physical Characterization).
PB93-175560/REB 93-01 PC **A03**/MF **A01**

**PB93-175578/REB**
Modeling Indoor Concentrations and Exposures.
PB93-175578/REB 93-01 PC **A03**/MF **A01**

**PB93-175586/REB**
Acute Effects of Ozone on Heart Rate and Body Temperature in the Unanesthetized, Unrestrained Rat Maintained at Different Ambient Temperatures.
PB93-175586/REB 93-01 PC **A03**/MF **A01**

**PB93-175594/REB**
International Validation of a Neurobehavioral Screening Battery: The IPCS/WHO Collaborative Study.
PB93-175594/REB 93-01 PC **A02**

**PB93-175602/REB**
Characterization of Disulfoton-Induced Behavioral and Neurochemical Effects Following Repeated Exposure.
PB93-175602/REB 93-01 PC **A02**/MF **A01**

**PB93-175610/REB**
Summary of Workshop III: Evoked Potentials.
PB93-175610/REB 93-01 PC **A01**/MF **A01**

**PB93-175628/REB**
Importance of Experimenter-Blind Procedure in Neurotoxicology (Mini-Review).
PB93-175628/REB 93-01 PC **A02**/MF **A01**

**PB93-175636/REB**
Genetic Toxicology of Putative Nongenotoxic Carcinogens.
PB93-175636/REB 93-01 PC **A03**/MF **A01**

**PB93-175644/REB**
Relationship between Serum Cholinesterase Activity and the Change in Body Temperature and Motor Activity in the Rat: A Dose-Response Study of Diisopropyl Fluorophosphate.
PB93-175644/REB 93-01 PC **A02**/MF **A01**

**PB93-175651/REB**
Supernatants from Ultraviolet-Irradiated Keratinocytes Decrease the Resistance and Delayed-Type Hypersensitivity Response to 'Mycobacterium bovis' Bacillus Calmette-Guerin in Mice and Impair the Phagocytic Ability of Macrophages.
PB93-175651/REB 93-01 PC **A03**/MF **A01**

**PB93-175669/REB**
Olfactory Toxicity of Beta,Beta'-Iminodipropionitrile in the Rat.
PB93-175669/REB 93-01 PC **A02**/MF **A01**

**PB93-175677/REB**
Interleukin-8 Expression in Normal Nasal Epithelium and Its Modulation by Infection with Respiratory Syncytial Virus and Cytokines Tumor Necrosis Factor, Interleukin-1, and Interleukin-6.
PB93-175677/REB 93-01 PC **A02**/MF **A01**

**PB93-175685/REB**
Comparative Ability of Various PCBs, PCDFs, and TCDD to Induce Cytochrome P450 1A1 and 1A2 Activity Following 4 Weeks of Treatment (Short Communication).
PB93-175685/REB 93-01 PC **A02**/MF **A01**

**PB93-175693/REB**
Near-Lifetime Exposure of the Rat to a Simulated Urban Profile of Nitrogen Dioxide: Pulmonary Function Evaluation.
PB93-175693/REB 93-01 PC **A02**/MF **A01**

**PB93-175701/REB**
Acute Effects of Ethanol on Pattern Reversal and Flash-Evoked Potentials in Rats and the Relationship to Body Temperature.
PB93-175701/REB 93-01 PC **A03**/MF **A01**

**PB93-175719/REB**
Differential Hepatotoxicity and Cytochrome P450 Responses of Fischer-344 Rats to the Three Isomers of Dichlorobenzene.
PB93-175719/REB 93-01 PC **A02**/MF **A01**

**PB93-175727/REB**
Twenty-Four Hour Rhythms of Selected Ambient Temperature in Rat and Hamster.
PB93-175727/REB 93-01 PC **A02**/MF **A01**

**PB93-175735/REB**
Anomalous Phosphorylated Neurofilament Aggregations in Central and Peripheral Axons of Hens Treated with Tri-Ortho-Cresyl Phosphate (TOCP).
PB93-175735/REB 93-01 PC **A02**/MF **A01**

**PB93-175743/REB**
Use of Analytically Defined Estimates of Aerosol Respirable Fraction to Predict Lung Deposition Patterns.
PB93-175743/REB 93-01 PC **A02**/MF **A01**

**PB93-175750/REB**
Effects of Prenatal Administration of Azo Dyes on Testicular Development in the Mouse: A Structure Activity Profile of Dyes Derived from Benzidine, Dimethylbenzidine, or Dimethoxybenzidine.
PB93-175750/REB 93-01 PC **A02**/MF **A01**

**PB93-175768/REB**
Endpoints of Spermatotoxicity in the Rat After Short Duration Exposures to Fourteen Reproductive Toxicants.
PB93-175768/REB 93-01 PC **A03**/MF **A01**

**PB93-175776/REB**
Procedures for Identifying Reasonably Available Control Technology for Stationary Sources of PM-10.
PB93-175776/REB 93-01 PC **A08**/MF **A02**

**PB93-175784/REB**
Evaluation of Environmental Marketing Terms in the United States.
PB93-175784/REB 93-01 PC **A10**/MF **A03**

**PB93-176956/REB**
RCRA Implementation Plan, FY 1993.
PB93-176956/REB 93-01 PC **A05**/MF **A02**

**PB93-176980/REB**
Greening of World Trade: A Report to EPA from the Trade and Environment Committee of the National Advisory Council for Environmental Policy and Technology.
PB93-176980/REB 93-01 PC **A11**/MF **A03**

**PB93-177178/REB**
Site Enforcement Tracking System (SETS): PRP Listing by Site for Region 4.
PB93-177178/REB 93-01 PC **A99**

**PB93-178226/REB**
Quality Assurance and Quality Control in the Development and Application of Ground-Water Models.
PB93-178226/REB 93-01 PC **A06**/MF **A02**

**PB93-178234/REB**
Determination of the Strong Acidity of Atmospheric Fine-Particles (< 2.5 mum) Using Annular Denuder Technology. Standard Method, Enhanced Method.
PB93-178234/REB 93-01 PC **A07**/MF **A02**

**PB93-178242/REB**
Dry Deposition Flux Calculations for the National Dry Deposition Network.
PB93-178242/REB 93-01 PC **A05**/MF **A02**

**PB93-178259/REB**
On-Site Engineering Report of the Slurry-Phase Biological Reactor for Pilot-Scale Testing on Contaminated Soil.
PB93-178259/REB 93-01 PC **A09**/MF **A02**

**PB93-178994/REB**
Pesticide Reregistration Progress Report.
PB93-178994/REB 93-01 PC **A03**/MF **A01**

**PB93-179000/REB**
Marine and Estuarine Protection: Programs and Activities.
PB93-179000/REB 93-01 PC **A03**/MF **A01**

**PB93-179885/REB**
LDCRS Flow from Double-Lined Landfills and Surface Impoundments.
PB93-179885/REB 93-01 PC **A05**/MF **A01**

**PB93-179927/REB**
Mechanisms of Aldehyde-Induced Bronchial Reactivity: Role of Airway Epithelium.
PB93-179927/REB 93-01 PC **A04**/MF **A01**

**PB93-179935/REB**
Role of Ozone in Tracheal Cell Transformation.
PB93-179935/REB 93-01 PC **A03**/MF **A01**

**PB93-179943/REB**
Carbon Monoxide Exposure of Subjects with Documented Cardiac Arrhythmias.
PB93-179943/REB 93-01 PC **A03**/MF **A01**

**PB93-179950/REB**
Effects of Formaldehyde on Xenotransplanted Human Respiratory Epithelium.
PB93-179950/REB 93-01 PC **A03**/MF **A01**

**PB93-180321/REB**
Evaluation of Mitigation for Acid Aluminum Leachate from a Highway Fill in Garrett County, Maryland.
PB93-180321/REB 93-01 PC **A04**/MF **A01**

**PB93-180818/REB**
Consensus Method for Determining Groundwaters under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA).
PB93-180818/REB 93-01 PC **A04**/MF **A01**

**PB93-180826/REB**
Alternative Control Technology Document: Carbon Reactivation Processes.
PB93-180826/REB 93-01 PC **A06**/MF **A02**

**PB93-180834/REB**
Institutional Solutions to Drinking Water Problems: Maine Case Studies.
PB93-180834/REB 93-01 PC **A03**/MF **A01**

**PB93-180842/REB**
Restructuring Manual: A Training Manual for State Drinking Water Personnel as They Meet the Challenges of the 1986 Safe Drinking Water Act Amendments.
PB93-180842/REB 93-01 PC **A04**/MF **A01**

**PB93-180859/REB**
Spray Characteristics of Two Types of Fuel Injectors.
PB93-180859/REB 93-01 PC **A03**/MF **A01**

**PB93-180867/REB**
National Public Water System Supervision Program. FY 1992 Compliance Report.
PB93-180867/REB 93-01 PC **A04**/MF **A01**

**PB93-180875/REB**
Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
PB93-180875/REB 93-01 PC **A06**/MF **A02**

**PB93-180883/REB**
Measurement of Biogenic Emissions from Corn.
PB93-180883/REB 93-01 PC **A02**/MF **A01**

**PB93-180891/REB**
Evaluation of VOST and SemiVOST Methods for Halogenated Compounds in the Clean Air Act Amendments Title III. Validation Study at Fossil Fuel Plant.
PB93-180891/REB 93-01 PC **A03**/MF **A01**

**PB93-180909/REB**
Air Filter Particle-Size Efficiency Testing for Diameters Greater Than 1 mu m.
PB93-180909/REB 93-01 PC **A02**/MF **A01**

**PB93-180917/REB**
Sorption and Reemission of Formaldehyde by Gypsum Wallboard.
PB93-180917/REB 93-01 PC **A03**/MF **A01**

**PB93-180925/REB**
Regional Modeling Analysis of the Dependencies of Atmospheric Oxidants to Perturbations in NOx and Hydrocarbon Emissions.
PB93-180925/REB 93-01 PC **A02**/MF **A01**

**PB93-180933/REB**
Air Emissions Testing.
PB93-180933/REB 93-01 PC **A02**/MF **A01**

**PB93-180941/REB**
Mite Antigen Concentrations in House Dust and the Occurrence of Wheezing in Children with Dust Mite Allergy.
PB93-180941/REB 93-01 PC **A02**/MF **A01**

**PB93-180958/REB**
Protecting Confidentiality in Establishment Surveys.
PB93-180958/REB 93-01 PC **A03**/MF **A01**

**PB93-180966/REB**
Visual Inspection and AHERA Clearance at Asbestos Abatement Sites.
PB93-180966/REB 93-01 PC **A03**/MF **A01**

**PB93-180974/REB**
Analysis of DNA Strand Breaks Induced in Rodent Liver In vivo, Hepatocytes in Primary Culture, and a Human Cell Line by Chlorinated Acetic Acids and Chlorinated Acetaldehydes.
PB93-180974/REB 93-01 PC **A03**/MF **A01**

**PB93-180982/REB**
Distribution of Cardiac Output during Diurnal Changes of Activity in Rats.
PB93-180982/REB 93-01 PC **A02**/MF **A01**

**PB93-180990/REB**
Physiological Pharmacokinetic Modeling of Inhaled Trichloroethylene in Rats.
PB93-180990/REB 93-01 PC **A03**/MF **A01**

**PB93-181006/REB**
Cytokine (Tumor Necrosis Factor, IL-6, and IL-8) Production by Respiratory Syncytial Virus-Infected Human Alveolar Macrophages.
PB93-181006/REB 93-01 PC **A02**/MF **A01**

**PB93-181014/REB**
Electrophoresis Gel Buffer Recirculator for under Twenty Dollars.
PB93-181014/REB 93-01 PC **A01**/MF **A01**

**PB93-181022/REB**
Steroidogenic Assessment Using Ovary Culture in Cycling Rats: Effects of Bis(2-Diethylhexyl) Phthalate on Ovarian Steroid Production.
PB93-181022/REB 93-01 PC **A03**/MF **A01**

**PB93-181030/REB**
Effect of Methoxychlor on Ovarian Steroidogenesis: Role in Early Pregnancy Loss.
PB93-181030/REB 93-01 PC **A02**/MF **A01**

**PB93-181048/REB**
DNA Isolation from Small Tissue Samples Using Salt and Spermine.
PB93-181048/REB 93-01 PC **A01**/MF **A01**

**PB93-181055/REB**
Time-Dependent Changes of Markers Associated with Inflammation in the Lungs of Humans Exposed to Ambient Levels of Ozone.
PB93-181055/REB 93-01 PC **A02**/MF **A01**

**PB93-181063/REB**
Breakage and Binding of DNA by Reaction Products of Hypochlorous Acid with Aniline, 1-Napthylamine, or 1-Naphthol.
PB93-181063/REB 93-01 PC **A03**/MF **A01**

**PB93-181071/REB**
Gonadal Effects of Fetal Exposure to the Azo Dye Congo Red in Mice: Infertility in Female but Not Male Offspring.
PB93-181071/REB 93-01 PC **A03**/MF **A01**

**PB93-181089/REB**
Human Upper Respiratory Tract Responses to Inhaled Pollutants with Emphasis on Nasal Lavage.
PB93-181089/REB 93-01 PC **A02**/MF **A01**

**PB93-181097/REB**
Extrapolation Modeling of Aerosol Deposition in Human and Laboratory Rat Lungs.
PB93-181097/REB 93-01 PC **A03**/MF **A01**

**PB93-181105/REB**
Comments on Recent Data for Particle Deposition in Human Nasal Passages.
PB93-181105/REB 93-01 PC **A02**/MF **A01**

**PB93-181113/REB**
EPA Priorities for Biologic Markers Research in Environmental Health.
PB93-181113/REB 93-01 PC **A02**/MF **A01**

**PB93-181121/REB**
Interspecies Modeling of Inhaled Particle Deposition Patterns.
PB93-181121/REB 93-01 PC **A03**/MF **A01**

**PB93-181139/REB**
Repeated Maternal Separation in the Neonatal Rat: Cellular Mechanisms Contributing to Brain Growth Sparing.
PB93-181139/REB 93-01 PC **A03**/MF **A01**

**PB93-181147/REB**
Competition Potentials of Environmentally Applied Bacteria with Human Fecal Microbiota.
PB93-181147/REB 93-01 PC **A02**/MF **A01**

**PB93-181154/REB**
Program to Analyze Aquifer Test Data and Check for Validity with the Jacob Method.
PB93-181154/REB 93-01 PC **A02**/MF **A01**

**PB93-181162/REB**
Contaminated Marine Sediments: Water Column and Interstitial Toxic Effects.
PB93-181162/REB 93-01 PC **A03**/MF **A01**

**PB93-181170/REB**
Passive Sampling of Groundwater Monitoring Wells without Purging: Multilevel Well Chemistry and Tracer Disappearance.
PB93-181170/REB 93-01 PC **A03**/MF **A01**

**PB93-181188/REB**
Soil Sorption of Volatile and Semivolatile Organic Compounds in a Mixture.
PB93-181188/REB 93-01 PC **A02**/MF **A01**

**PB93-181196/REB**
Aerobic Soil Microcosms for Long-Term Biodegradation of Hydrocarbon Vapors.
PB93-181196/REB 93-01 PC **A03**/MF **A01**

**PB93-181204/REB**
Hydrocarbon Vapor Diffusion in Intact Core Sleeves.
PB93-181204/REB 93-01 PC **A03**/MF **A01**

**PB93-181212/REB**
Determination of Carboxylic Acids by Ion-Exclusion Chromatography with Non-Suppressed Conductivity and Optical Detectors.
PB93-181212/REB 93-01 PC **A02**/MF **A01**

**PB93-181220/REB**
Commencement Bay Nearshore/Tideflats Feasibility Study. Executive Summary.
PB93-181220/REB 93-01 PC **A06**/MF **A02**

**PB93-181238/REB**
Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
PB93-181238/REB 93-01 PC **A25**/MF **A06**

**PB93-181246/REB**
Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 2. Appendices.
PB93-181246/REB 93-01 PC **A18**/MF **A04**

**PB93-181253/REB**
Commencement Bay Nearshore/Tideflats Feasibility Study. Development of Sediment Cleanup Goals.
PB93-181253/REB 93-01 PC **A05**/MF **A01**

**PB93-181592/REB**
Methodologies for Estimating Air Emissions from Three Non-Traditional Source Categories: Oil Spills, Petroleum Vessel Loading and Unloading, and Cooling Towers.
PB93-181592/REB 93-01 PC **A06**/MF **A02**

**PB93-181600/REB**
Analysis of Atmospheric Deposition Samples from Easton, Pennsylvania.
PB93-181600/REB 93-01 PC **A04**/MF **A01**

**PB93-181618/REB**
Environmental Monitoring and Assessment Program: EMAP-Arid Colorado Plateau Pilot Study, 1992. Implementation Plan.
PB93-181618/REB 93-01 PC **A08**/MF **A02**

**PB93-181626/REB**
Evaluation of the Potential Carcinogenicity of Acetamide, N-Fluoren-2-yl (53-96-3).
PB93-181626/REB 93-01 PC **A03**/MF **A01**

**PB93-181634/REB**
Evaluation of the Potential Carcinogenicity of Acrylonitrile (107-13-1).
PB93-181634/REB 93-01 PC **A03**/MF **A01**

**PB93-181642/REB**
Evaluation of the Potential Carcinogenicity of Aldrin (309-00-2).
PB93-181642/REB 93-01 PC **A03**/MF **A01**

**PB93-181659/REB**
Evaluation of the Potential Carcinogenicity of Amitrole (61-82-5).
PB93-181659/REB 93-01 PC **A03**/MF **A01**

**PB93-181667/REB**
Evaluation of the Potential Carcinogenicity of Arsenic and Inorganic Arsenic Compounds.
PB93-181667/REB 93-01 PC **A03**/MF **A01**

**PB93-182913/REB**
Methods for the Determination of Chemical Substances in Marine and Estuarine Environmental Samples.
PB93-182913/REB 93-01 PC **A05**/MF **A01**

**PB93-183002/REB**
Federal Register, Volume 58, No. 72. Part 2. Environmental Protection Agency, 40 CFR Parts 122 et al. Water Quality Guidance for the Great Lakes System and Correction; Proposed Rules.
PB93-183002/REB 93-01 PC **A11**/MF **A03**

**PB93-183283/REB**
Guidelines for MACT Determinations under Section 112(j) (Proposal).
PB93-183283/REB 93-04 PC **A08**/MF **A02**

**PB93-183408/REB**
Economic Growth Analysis System: Reference Manual.
PB93-183408/REB 93-04 PC **A12**/MF **A03**

**PB93-183416/REB**
Economic Growth Analysis System: User's Guide.
PB93-183416/REB 93-04 PC **A04**/MF **A01**

**PB93-183440/REB**
Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-183440/REB 93-04 PC **A05**/MF **A01**

**PB93-183499/REB**
Instruction Manual for the Resource Conservation and Recovery Information System (RCRIS) Extract Data Tapes.
PB93-183499/REB 93-04 PC **A03**/MF **A01**

**PB93-183713/REB**
Maya Forest: Key Issues and Recommendations for Action: A Workshop Report. Held in Flores, Guatemala on February 8-9, 1993.
PB93-183713/REB 93-04 PC **A03**/MF **A01**

**PB93-184455/REB**
Video Teleconference on Emergency Planning for Potable Water Suppliers. Held on October 30-31, 1985.
PB93-184455/REB 93-01 PC **A10**/MF **A03**

**PB93-184620/REB**
Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants.
PB93-184620/REB 93-01 PC **A03**/MF **A01**

**PB93-184844/REB**
TSCA Confidential Business Information Security Manual.
PB93-184844/REB 93-01 PC **A07**/MF **A02**

**PB93-184851/REB**
Evaluation of the Potential Carcinogenicity of Cacodylic Acid (75-60-5).
PB93-184851/REB 93-01 PC **A03**/MF **A01**

**PB93-184869/REB**
Evaluation of the Potential Carcinogenicity of Dichlorophenylarsine (696-28-6).
PB93-184869/REB 93-01 PC **A03**/MF **A01**

**PB93-184877/REB**
Evaluation of the Potential Carcinogenicity of Diethylarsine (692-42-2).
PB93-184877/REB 93-01 PC **A03**/MF **A01**

**PB93-184885/REB**
Evaluation of the Potential Carcinogenicity of Asbestos (1332-21-4).
PB93-184885/REB 93-01 PC **A03**/MF **A01**

**PB93-184893/REB**
Evaluation of the Potential Carcinogenicity of Auramine (492-80-8).
PB93-184893/REB 93-01 PC **A03**/MF **A01**

**PB93-184901/REB**
Evaluation of the Potential Carcinogenicity of Azaserine (115-02-6).
PB93-184901/REB 93-01 PC **A03**/MF **A01**

**PB93-184919/REB**
Evaluation of the Potential Carcinogenicity of Aziridine (151-56-4).
PB93-184919/REB 93-01 PC **A03**/MF **A01**

**PB93-184927/REB**
Evaluation of the Potential Carcinogenicity of Benz(c)acridine (225-51-4).
PB93-184927/REB 93-01 PC **A03**/MF **A01**

**PB93-184935/REB**
Evaluation of the Potential Carcinogenicity of Benz(a)anthracene (00056-55-3).
PB93-184935/REB 93-01 PC **A03**/MF **A01**

**PB93-184943/REB**
Evaluation of the Potential Carcinogenicity of Benzene (71-43-2).
PB93-184943/REB 93-01 PC **A03**/MF **A01**

**PB93-184976/REB**
Evaluation of the Potential Carcinogenicity of Benzidine and Its Salt (92-87-5).
PB93-184976/REB 93-01 PC **A03**/MF **A01**

**PB93-184984/REB**
Evaluation of the Potential Carcinogenicity of Benzo(b)fluoranthene (00205-99-2).
PB93-184984/REB 93-01 PC **A03**/MF **A01**

**PB93-184992/REB**
Evaluation of the Potential Carcinogenicity of Benzo(k)fluoranthene (207-08-9).
PB93-184992/REB 93-01 PC **A03**/MF **A01**

**PB93-185007/REB**
Evaluation of the Potential Carcinogenicity of Benzo(a)Pyrene (50-32-8).
PB93-185007/REB 93-01 PC **A03**/MF **A01**

**PB93-185015/REB**
Evaluation of the Potential Carcinogenicity of Benzotrichloride (97-07-7).
PB93-185015/REB 93-01 PC **A03**/MF **A01**

**PB93-185023/REB**
Evaluation of the Potential Carcinogenicity of Benzyl Chloride (100-44-7).
PB93-185023/REB 93-01 PC **A03**/MF **A01**

**PB93-185031/REB**
Evaluation of the Potential Carcinogenicity of Beryllium (7440-41-7), Beryllium Chloride (7787-47-5), Beryllium Fluoride (7787-49-7), and Beryllium Nitrate (13597-99-4).
PB93-185031/REB 93-01 PC **A03**/MF **A01**

**PB93-185049/REB**
Evaluation of the Potential Carcinogenicity of Alpha-Hexachlorocyclohexane (319-84-6).
PB93-185049/REB 93-01 PC **A03**/MF **A01**

**PB93-185056/REB**
Evaluation of the Potential Carcinogenicity of Beta-Hexachlorocyclohexane (319-85-7).
PB93-185056/REB 93-01 PC **A03**/MF **A01**

**PB93-185064/REB**
Evaluation of the Potential Carcinogenicity of Gamma-Hexachlorocyclohexane (Lindane) (58-89-9).
PB93-185064/REB 93-01 PC **A03**/MF **A01**

**PB93-185072/REB**
Evaluation of the Potential Carcinogenicity of Bis(2-Chloroethyl)Ether (111-44-4).
PB93-185072/REB 93-01 PC **A03**/MF **A01**

**PB93-185080/REB**
Evaluation of the Potential Carcinogenicity of Bis(Chloromethyl)Ether (542-88-1).
PB93-185080/REB 93-01 PC **A03**/MF **A01**

**PB93-185098/REB**
Evaluation of the Potential Carcinogenicity of Bis(2-Ethylhexyl)Phthalate (117-81-7).
PB93-185098/REB 93-01 PC **A03**/MF **A01**

**PB93-185106/REB**
Evaluation of the Potential Carcinogenicity of Cadmium (7740-43-9), Cadium Acetate (543-90-8), Cadmium Bromide (7789-42-6), Cadmium Chloride (10108-64-2).
PB93-185106/REB 93-01 PC **A03**/MF **A01**

**PB93-185114/REB**
Evaluation of the Potential Carcinogenicity of Carbon Tetrachloride (56-23-5).
PB93-185114/REB 93-01 PC **A03**/MF **A01**

**PB93-185122/REB**
Evaluation of the Potential Carcinogenicity of Chloromethyl Methyl Ether (Technical Grade) (107-30-2).
PB93-185122/REB 93-01 PC **A03**/MF **A01**

**PB93-185130/REB**
Evaluation of the Potential Carcinogenicity of 4-Chloro-o-Toluidine Hydrochloride (3165-93-3).
PB93-185130/REB 93-01 PC **A03**/MF **A01**

**PB93-185148/REB**
Evaluation of the Potential Carcinogenicity of Chromium and Hexavalent Chromium Compounds.
PB93-185148/REB 93-01 PC **A03**/MF **A01**

**PB93-185155/REB**
Evaluation of the Potential Carcinogenicity of Chrysene (218-01-9).
PB93-185155/REB 93-01 PC **A03**/MF **A01**

**PB93-185163/REB**
Evaluation of the Potential Carcinogenicity of Coke Oven Emissions.
PB93-185163/REB 93-01 PC **A03**/MF **A01**

**PB93-185171/REB**
Evaluation of the Potential Carcinogenicity of Creosote (8001-58-9).
PB93-185171/REB 93-01 PC **A03**/MF **A01**

**PB93-185189/REB**
Evaluation of the Potential Carcinogenicity of Cyclophosphamide (50-18-0).
PB93-185189/REB 93-01 PC **A03**/MF **A01**

**PB93-185197/REB**
Evaluation of the Potential Carcinogenicity of Daunomycin (20830-81-3).
PB93-185197/REB 93-01 PC **A03**/MF **A01**

**PB93-185205/REB**
Evaluation of the Potential Carcinogenicity of DDD (72-54-8).
PB93-185205/REB 93-01 PC **A03**/MF **A01**

**PB93-185213/REB**
Evaluation of the Potential Carcinogenicity of Chlorambucil (305-03-3).
PB93-185213/REB 93-01 PC **A03**/MF **A01**

**PB93-185221/REB**
Evaluation of the Potential Carcinogenicity of Chlordane (57-74-9).
PB93-185221/REB 93-01 PC **A03**/MF **A01**

**PB93-185239/REB**
Evaluation of the Potential Carcinogenicity of Chlornaphazine (494-03-1).
PB93-185239/REB 93-01 PC **A03**/MF **A01**

**PB93-185247/REB**
Evaluation of the Potential Carcinogenicity of DDE (72-55-9).
PB93-185247/REB 93-01 PC **A03**/MF **A01**

**PB93-185254/REB**
Evaluation of the Potential Carcinogenicity of DDT (50-29-3).
PB93-185254/REB 93-01 PC **A03**/MF **A01**

**PB93-185262/REB**
Evaluation of the Potential Carcinogenicity of Diallate (2303-16-4).
PB93-185262/REB 93-01 PC **A03**/MF **A01**

**PB93-185270/REB**
Evaluation of the Potential Carcinogenicity of Diaminotoluene (Mixed) (95-80-7).
PB93-185270/REB 93-01 PC **A03**/MF **A01**

**PB93-185288/REB**
Evaluation of the Potential Carcinogenicity of Dibenz(a,h)Anthracene (53-70-3).
PB93-185288/REB 93-01 PC **A03**/MF **A01**

**PB93-185296/REB**
Evaluation of the Potential Carcinogenicity of 1,2:7,8-Dibenzopyrene (189-55-9).
PB93-185296/REB 93-01 PC **A03**/MF **A01**

**PB93-185304/REB**
Evaluation of the Potential Carcinogenicity of 1,2-Dibromo-3-Chloropropane (96-12-8).
PB93-185304/REB 93-01 PC **A03**/MF **A01**

**PB93-185312/REB**
Evaluation of the Potential Carcinogenicity of Dihydrosafrole (94-58-6).
PB93-185312/REB 93-01 PC **A03**/MF **A01**

**PB93-185320/REB**
Evaluation of the Potential Carcinogenicity of Pentachloroethane (76-01-7).
PB93-185320/REB 93-01 PC **A03**/MF **A01**

**PB93-185338/REB**
Evaluation of the Potential Carcinogenicity of Dimethylaminoazobenzene (60-11-7).
PB93-185338/REB 93-01 PC **A03**/MF **A01**

**PB93-185346/REB**
Evaluation of the Potential Carcinogenicity of 7,12-Dimethylbenz(a)anthracene (57-97-6).
PB93-185346/REB 93-01 PC **A03**/MF **A01**

**PB93-185353/REB**
Evaluation of the Potential Carcinogenicity of 3,3'-Dimethylbenzidine (119-93-7).
PB93-185353/REB 93-01 PC **A03**/MF **A01**

**PB93-185361/REB**
Evaluation of the Potential Carcinogenicity of Dimethylcarbamoyl Chlo.
PB93-185361/REB 93-01 PC **A03**/MF **A01**

**PB93-185379/REB**
Evaluation of the Potential Carcinogenicity of 1,1 Dimethylhydrazine (57-14-7).
PB93-185379/REB 93-01 PC **A03**/MF **A01**

**PB93-185387/REB**
Evaluation of the Potential Carcinogenicity of 1,2-Dimethylhydrazine (540-73-8).
PB93-185387/REB 93-01 PC **A03**/MF **A01**

**PB93-185395/REB**
Evaluation of the Potential Carcinogenicity of Dinitrotoluene (Mixture) (25321-14-6).
PB93-185395/REB 93-01 PC **A03**/MF **A01**

**PB93-185403/REB**
Evaluation of the Potential Carcinogenicity of 2,4-Dinitrotoluene (121-14-2).
PB93-185403/REB 93-01 PC **A03**/MF **A01**

**PB93-185411/REB**
Evaluation of the Potential Carcinogenicity of 2,6-Dinitrotoluene (606-20-2).
PB93-185411/REB 93-01 PC **A03**/MF **A01**

**PB93-185429/REB**
Evaluation of the Potential Carcinogenicity of 1,4-Dioxane (123-91-1).
PB93-185429/REB 93-01 PC **A03**/MF **A01**

**PB93-185536/REB**
Subtitle D Landfill Application Manual for the Multimedia Exposure Assessment Model (MULTIMED).
PB93-185536/REB 93-01 PC **A11**/MF **A03**

**PB93-185551/REB**
Environmental Characteristics of EPA, NRC, and DOE Sites Contaminated with Radioactive Substances.
PB93-185551/REB 93-01 PC **A05**/MF **A01**

**PB93-185577/REB**
Study of Highway Vehicle Emission Inventory Procedures for Selected Urban Areas.
PB93-185577/REB 93-01 PC **A04**/MF **A01**

**PB93-185585/REB**
Indian Primacy Procedures Handbook for the Public Water System Supervision (PWSS) Program and the Underground Injection Control (UIC) Program.
PB93-185585/REB 93-01 PC **A09**/MF **A02**

**PB93-185601/REB**
Learning Guide for State/Local Drinking Water Agreements.
PB93-185601/REB 93-01 PC **A07**/MF **A02**

**PB93-185619/REB**
U.S. EPA NPDES: Basic Permit Writers' Course. Workbook.
PB93-185619/REB 93-01 PC **A17**/MF **A03**

**PB93-185700/REB**
Field-Deployable Monitors for Volatile Organic Compounds in Air. (Essential Capabilities of a Portable Gas Chromatograph).
PB93-185700/REB 93-01 PC **A03**/MF **A01**

**PB93-185718/REB**
Statistical Problems Arising from Environmental Issues.
PB93-185718/REB 93-01 PC **A01**/MF **A01**

**PB93-185726/REB**
Source Apportionment of Air Pollution in China: Extending the Usefulness of Receptor Modeling by Combining Multivariate and Chemical Mass Balance Models.
PB93-185726/REB 93-01 PC **A03**/MF **A01**

**PB93-185734/REB**
Multiple Metals Stack Emission Measurement Methodology for Stationary Sources, Current Status.
PB93-185734/REB 93-01 PC **A02**/MF **A01**

**PB93-185742/REB**
Biomass Combustion in Gas-Turbine-Based Systems.
PB93-185742/REB 93-01 PC **A02**/MF **A01**

**PB93-185759/REB**
Combined Use of Ion Exchange Resins and Granular Activated Carbon for the Control of Organic Matter and Disinfection By-Products.
PB93-185759/REB 93-01 PC **A03**/MF **A01**

**PB93-185767/REB**
Planning and Progress of EPA's Pollution Prevention Research Program.
PB93-185767/REB 93-01 PC **A02**/MF **A01**

**PB93-185775/REB**
Characteristics of Non-Petroleum Underground Storage Tanks.
PB93-185775/REB 93-01 PC **A03**/MF **A01**

**PB93-185783/REB**
Location of Leaks in Pressurized Petroleum Pipelines by Means of Passive-Acoustic Sensing Methods.
PB93-185783/REB 93-01 PC **A03**/MF **A01**

**PB93-185791/REB**
Reclamation of Urban Stormwater.
PB93-185791/REB 93-01 PC **A03**/MF **A01**

**PB93-185809/REB**
Program for Providing Engineering Technical Assistance to Site Remediation Managers.
PB93-185809/REB 93-01 PC **A02**/MF **A01**

**PB93-185817/REB**
Development and Application of Borehole Flowmeters for Environmental Assessment.
PB93-185817/REB 93-01 PC **A03**/MF **A01**

**PB93-185825/REB**
Status and Applications of Echinoid ('Phylum echinodermata') Toxicity Test Methods.
PB93-185825/REB 93-01 PC **A03**/MF **A01**

**PB93-185833/REB**
Estuarine Component of the US E.P.A.'s Environmental Monitoring and Assessment Program.
PB93-185833/REB 93-01 PC **A03**/MF **A01**

**PB93-185841/REB**
Changes in Nucleic Acids over the Molt Cycle in Relation to Food Availability and Temperature in 'Homarus americanus' Postlarvae.
PB93-185841/REB 93-01 PC **A03**/MF **A01**

**PB93-185858/REB**
Taxonomic Level Sufficient for Assessing a Moderate Impact on Macrobenthic Communities in Puget Sound, Washington, USA.
PB93-185858/REB 93-01 PC **A02**/MF **A01**

**PB93-185866/REB**
Persistence of the Heat-Shock Response Over Time in a Common 'Mytilus' Mussel.
PB93-185866/REB 93-01 PC **A02**/MF **A01**

**PB93-185874/REB**
Influence of Organic Matter Quality on the Toxicity and Partitioning of Sediment-Associated Fluoranthene.
PB93-185874/REB 93-01 PC **A03**/MF **A01**

**PB93-185882/REB**
Physical and Chemical Parameters of Sediment Extraction and Fractionation That Influence Toxicity, as Evaluated by Microtox (Trade Name).
PB93-185882/REB 93-01 PC **A03**/MF **A01**

**PB93-185890/REB**
VIRTUS, a Model of Virus Transport in Unsaturated Soils.
PB93-185890/REB 93-01 PC **A02**/MF **A01**

**PB93-185908/REB**
New Approaches to Estimation of Solid-Waste Quantity and Composition.
PB93-185908/REB 93-01 PC **A02**/MF **A01**

**PB93-185916/REB**
Incineration of Hazardous Waste: A Critical Review Update.
PB93-185916/REB 93-01 PC **A03**/MF **A01**

**PB93-185924/REB**
Determining Beryllium in Drinking Water by Graphite Furnace Atomic Absorption Spectroscopy.
PB93-185924/REB 93-01 PC **A02**/MF **A01**

**PB93-185932/REB**
Identifying Escherichia Species with Biochemical Test Kits and Standard Bacteriological Tests.
PB93-185932/REB 93-01 PC **A01**/MF **A01**

**PB93-185957/REB**
Storm and Combined Sewer Overflow: An Overview of EPA's Research Program.
PB93-185957/REB 93-01 PC **A03**/MF **A01**

**PB93-186096/REB**
Supplement to the OCPSF Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category.
PB93-186096/REB 93-04 PC **A11**/MF **A03**

**PB93-186104/REB**
Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry Using Revised Compliance Costs. (Revised January 1992).
PB93-186104/REB 93-01 PC **A03**/MF **A01**

**PB93-186112/REB**
Guidance Manual for POTW Pretreatment Program Development.
PB93-186112/REB 93-01 PC **A14**/MF **A03**

**PB93-186203/REB**
Office of Water Environmental and Program Information Systems Compendium, FY 1992.
PB93-186203/REB 93-01 PC **A08**/MF **A02**

**PB93-186211/REB**
Alternative Control Techniques Document-NOx Emissions from Process Heaters.
PB93-186211/REB 93-01 PC **A10**/MF **A03**

**PB93-186245/REB**
Guide to Federal Water Quality Programs and Information: A Guide with Computer Software Developed by the Interagency Work Group on Water Quality.
PB93-186245/REB 93-01 PC **A09**/MF **A02**

**PB93-186252/REB**
MULTIMED: The Multimedia Exposure Assessment Model for Evaluating the Land Disposal of Wastes-Model Theory.
PB93-186252/REB 93-01 PC **A07**/MF **A02**

**PB93-186260/REB**
Irrigated Wetlands of the Colorado Plateau: Information Synthesis and Habitat Evaluation Method.
PB93-186260/REB 93-01 PC **A05**/MF **A02**

**PB93-186278/REB**
Sampling and Assessment Issues in Using Fish as Indicators of Ecological Condition in Lakes: A Workshop Report. (3rd Draft Report).
PB93-186278/REB 93-01 PC **A03**/MF **A01**

**PB93-186294/REB**
Relationships between Ozone Precursor Levels and Response to Emissions Reductions: Analysis of Regional Oxidant Model Results for the Northeastern United States.
PB93-186294/REB 93-01 PC **A07**/MF **A02**

**PB93-186393/REB**
Protecting Visibility in National Parks and Wilderness Areas.
PB93-186393/REB 93-01 PC **A20**/MF **A04**

**PB93-186476/REB**
Guidance for Growth Factors, Projections, and Control Strategies for the 15 Percent Rate-of-Progress Plans.
PB93-186476/REB 93-01 PC **A09**/MF **A03**

**PB93-186633/REB**
Guidance on Enforcement of the Requirements of the Surface Water Treatment Rule.
PB93-186633/REB 93-01 PC **A03**/MF **A01**

**PB93-186641/REB**
Surface Water Treatment Rule. Implementation Manual (Including Appendix D).
PB93-186641/REB 93-01 PC **A07**/MF **A02**

**PB93-186658/REB**
Total Coliform Rule: Implementation Manual (Including Appendix D).
PB93-186658/REB 93-01 PC **A05**/MF **A02**

**PB93-186807/REB**
Air/Superfund National Technical Guidance Study Series. Models for Estimating Air Emission Rates from Superfund Remedial Actions.
PB93-186807/REB 93-01 PC **A08**/MF **A02**

**PB93-188233/REB**
User's Manual for the Plume Visibility Model PLUVUE II (Revised).
PB93-188233/REB 93-01 PC **A06**/MF **A02**

**PB93-190098/REB**
Nonroad Mobile Source Sales and Attrition Study: Identification and Evaluation of Available Data Sources.
PB93-190098/REB 93-01 PC **A11**/MF **A03**

**PB93-190478/REB**
Evaluation of the Potential Carcinogenicity of Heptachlor (76-44-8).
PB93-190478/REB 93-01 PC **A03**/MF **A01**

**PB93-190486/REB**
Evaluation of the Potential Carcinogenicity of Heptachlor Epoxide (1024-57-3).
PB93-190486/REB 93-01 PC **A03**/MF **A01**

**PB93-190494/REB**
Evaluation of the Potential Carcinogenicity of Hexachlorobenzene (118-74-1).
PB93-190494/REB 93-01 PC **A03**/MF **A01**

**PB93-190502/REB**
Evaluation of the Potential Carcinogenicity of Hexachlorobutadiene (87-68-3).
PB93-190502/REB 93-01 PC **A03**/MF **A01**

**PB93-190510/REB**
Evaluation of the Potential Carcinogenicity of Hexachloroethane (67-72-1).
PB93-190510/REB 93-01 PC **A03**/MF **A01**

**PB93-190528/REB**
Evaluation of the Potential Carcinogenicity of Hydrazine (302-01-2).
PB93-190528/REB 93-01 PC **A03**/MF **A01**

**PB93-190536/REB**
Evaluation of the Potential Carcinogenicity of Indeno(1,2,3-CD)Pyrene (193-39-5).
PB93-190536/REB 93-01 PC **A03**/MF **A01**

**PB93-190544/REB**
Evaluation of the Potential Carcinogenicity of Isosafrole (120-58-1).
PB93-190544/REB 93-01 PC **A03**/MF **A01**

**PB93-190569/REB**
Evaluation of the Potential Carcinogenicity of Kepone Chlordecone (143-50-0).
PB93-190569/REB 93-01 PC **A03**/MF **A01**

**PB93-190577/REB**
Evaluation of the Potential Carcinogenicity of Lasiocarpine (303-34-4).
PB93-190577/REB 93-01 PC **A03**/MF **A01**

**PB93-190890/REB**
Dynamic River Basin Water Quality Model.
PB93-190890/REB 93-01 PC **A05**/MF **A01**

**PB93-190908/REB**
Tribal Water Utility Management.
PB93-190908/REB 93-01 PC **A09**/MF **A02**

**PB93-190932/REB**
Urban Runoff Management Information/Education Products. Version 1.
PB93-190932/REB 93-01 PC **A09**/MF **A03**

**PB93-191120/REB**
Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and Chincoteague Bay, 1991.
PB93-191120/REB 93-01 PC **A13**/MF **A03**

**PB93-191179/REB**
Oligohaline Areas in Tampa Bay Tributaries: Spatial Extent and Species Lists.
PB93-191179/REB 93-01 PC **A03**/MF **A01**

**PB93-191187/REB**
Review of Tampa Bay Information for Interim Nutrient Budgets and Historical Loadings of Bay Segments.
PB93-191187/REB 93-01 PC **A03**/MF **A01**

**PB93-191211/REB**
Database of Benthic Sampling Locations in Tampa Bay.
PB93-191211/REB 93-01 PC **A05**/MF **A01**

**PB93-191229/REB**
Distribution of Selected Fish Species in Tampa Bay.
PB93-191229/REB 93-01 PC **A04**/MF **A01**

**PB93-191237/REB**
Framework for Characterization. (Revised Final Report March 1992).
PB93-191237/REB 93-01 PC **A04**/MF **A01**

**PB93-191286/REB**
Ink and Cleaner Waste Reduction Evaluation for Flexographic Printers.
PB93-191286/REB 93-01 PC **A03**/MF **A01**

**PB93-191294/REB**
Experimental Investigation of PIC Formation in CFC-12 Incineration.
PB93-191294/REB 93-01 PC **A07**/MF **A02**

**PB93-191302/REB**
Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 1. Technical Report and Appendices A-F.
PB93-191302/REB 93-01 PC **A13**/MF **A03**

**PB93-191310/REB**
Kress Indirect Dry Cooling System, Bethlehem Steel's Coke Plant Demonstration at Sparrows Point, Maryland. Volume 2. Appendices G-N.
PB93-191310/REB 93-01 PC **A15**/MF **A03**

**PB93-191328/REB**
Spatiotemporal Variability of Non-Urban Ozone Concentrations Over the Eastern United States and Its Potential Replication by Satellite Data.
PB93-191328/REB 93-01 PC **A03**/MF **A01**

**PB93-191336/REB**
Bioremediation Treatability Trials Using Nutrient Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191336/REB 93-01 PC **A03**/MF **A01**

**PB93-191344/REB**
Nutrient Movement through Beach Media: Problems and Field Results Application to Enhance Cleanup of Oil Contaminated Shoreline.
PB93-191344/REB 93-01 PC **A03**/MF **A01**

**PB93-191351/REB**
Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191351/REB 93-01 PC **A02**/MF **A01**

**PB93-191369/REB**
Biological Oxidations of Organic Compounds by Enzymes from a White Rot Fungus.
PB93-191369/REB 93-01 PC **A02**/MF **A01**

**PB93-191377/REB**
Evaluation of Three Oil Spill Laboratory Dispersant Effectiveness Tests.
PB93-191377/REB 93-01 PC **A02**/MF **A01**

**PB93-191385/REB**
Discussion: Response to Internal Reviews of My Paper, 1993 Census Bureau Annual Research Conference.
PB93-191385/REB 93-01 PC **A02**/MF **A01**

**PB93-191393/REB**
Methodology to Apportion Ambient Air Measurements to Investigate Potential Effects on Air Quality Near Waste Incinerators.
PB93-191393/REB 93-01 PC **A03**/MF **A01**

**PB93-191401/REB**
Source Apportionment of Fine and Coarse Particles in Southern Ontario, Canada.
PB93-191401/REB 93-01 PC **A03**/MF **A01**

**PB93-191419/REB**
Using Method 301 to Validate Sampling and Analytical Methods for Selected CAAA Compounds.
PB93-191419/REB 93-01 PC **A03**/MF **A01**

**PB93-191427/REB**
Two New Gas Standards Programs at the National Institute of Standards and Technology.
PB93-191427/REB 93-01 PC **A02**/MF **A01**

**PB93-191443/REB**
Comparison of Systematic and Random Sampling for Estimating the Accuracy of Maps Generated from Remotely Sensed Data.
PB93-191443/REB 93-01 PC **A02**/MF **A01**

**PB93-191450/REB**
Effects of Pentachlorophenol-Contaminated Food Organisms on Toxicity and Bioaccumulation in the Frog 'Xenopus laevis'.
PB93-191450/REB 93-01 PC **A02**/MF **A01**

**PB93-191468/REB**
Methane Emissions from Wetland Rice Areas of Asia.
PB93-191468/REB 93-01 PC **A03**/MF **A01**

**PB93-191476/REB**
Does Prey Preference Affect Habitat Choice in Antarctic Seabirds.
PB93-191476/REB 93-01 PC **A03**/MF **A01**

**PB93-191484/REB**
Equilibrium Analysis of Carbon Pools and Fluxes of Forest Biomes in the Former Soviet Union.
PB93-191484/REB 93-01 PC **A02**/MF **A01**

**PB93-191492/REB**
Integrating Sustainable Agriculture, Ecology, and Environmental Policy. Conference Proceedings.
PB93-191492/REB 93-01 PC **A02**/MF **A01**

**PB93-191500/REB**
Conservation Tillage Impacts on National Soil and Atmospheric Carbon Levels.
PB93-191500/REB 93-01 PC **A03**/MF **A01**

**PB93-191518/REB**
Future Context of Sustainable Agriculture: Planning for Uncertainty.
PB93-191518/REB 93-01 PC **A03**/MF **A01**

**PB93-191526/REB**
Impacts of Climate Change on Rice Yield: A Comparison of Four Model Performances.
PB93-191526/REB 93-01 PC **A03**/MF **A01**

**PB93-191534/REB**
Potential Bias from Non-Continuous Monitoring of Ambient Ozone Concentrations for Characterizing Hourly and Daily 7- and 12-Hour Average Concentrations.
PB93-191534/REB 93-01 PC **A02**/MF **A01**

**PB93-191542/REB**
Biodegradation of 2,4,5-Trichlorophenoxyacetic Acid in Liquid Culture and in Soil by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191542/REB 93-01 PC **A02**/MF **A01**

**PB93-191559/REB**
Biodegradation of Pentachlorophenol by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191559/REB 93-01 PC **A02**/MF **A01**

**PB93-191567/REB**
Effects of Culture Parameters on DDT (1,1,1-Trichloro-2,2-BIS(4-Chlorophenyl)Ethane) Biodegradation by 'Phanerochaete chrysosporium'.
PB93-191567/REB 93-01 PC **A03**/MF **A01**

**PB93-191575/REB**
Oxidation of Persistent Environmental Pollutants by a White Rot Fungus.
PB93-191575/REB 93-01 PC **A02**/MF **A01**

**PB93-191583/REB**
Biodegradation of Environmental Pollutants by the White Rot Fungus 'Phanerochaete chrysosporium': Involvement of the Lignin Degrading System.
PB93-191583/REB 93-01 PC **A02**/MF **A01**

**PB93-191591/REB**
Biodegradation of Polycyclic Aromatic Hydrocarbons by 'Phanerochaete chrysosporium'.
PB93-191591/REB 93-01 PC **A02**/MF **A01**

**PB93-191609/REB**
Biodegradation of Crystal Violet by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191609/REB 93-01 PC **A02**/MF **A01**

**PB93-191617/REB**
Biodegradation of DDT (1,1,1-Trichloro-2,2-Bis(4-Chlorophenyl)Ethane) by the White Rot Fungus 'Phanerochaete chrysosporium'.
PB93-191617/REB 93-01 PC **A02**/MF **A01**

**PB93-191625/REB**
Evaluation of the Bioremediation of a Contaminated Soil with Phytotoxicity Tests.
PB93-191625/REB 93-01 PC **A03**/MF **A01**

**PB93-191633/REB**
Data Management Strategy for the Tampa Bay National Estuary Program: Recommendations and Implementation Plan.
PB93-191633/REB 93-01 PC **A09**/MF **A03**

**PB93-191666/REB**
Compendium of Current Monitoring Programs in Tampa Bay and Its Watershed.
PB93-191666/REB 93-01 PC **A05**/MF **A01**

**PB93-192326/REB**
Evaluation of the Potential Carcinogenicity of 1,2-Diphenylhydrazine (122-66-7).
PB93-192326/REB 93-01 PC **A03**/MF **A01**

**PB93-192334/REB**
Evaluation of the Potential Carcinogenicity of Epichlorohydrin (106-89-8).
PB93-192334/REB 93-01 PC **A03**/MF **A01**

**PB93-192342/REB**
Evaluation of the Potential Carcinogenicity of Ethyl Carbamate (Urethane) (51-79-6).
PB93-192342/REB 93-01 PC **A03**/MF **A01**

**PB93-192359/REB**
Evaluation of the Potential Carcinogenicity of Ethyl 4,4'-Dichlorobenzilate (510-15-6).
PB93-192359/REB 93-01 PC **A03**/MF **A01**

**PB93-192367/REB**
Evaluation of the Potential Carcinogenicity of Ethylene Dibromide (106-93-4).
PB93-192367/REB 93-01 PC **A03**/MF **A01**

**PB93-192375/REB**
Evaluation of the Potential Carcinogenicity of Ethylene Oxide (75-21-8).
PB93-192375/REB 93-01 PC **A03**/MF **A01**

**PB93-192631/REB**
Aquatic Toxicity Information Retrieval Data Base: A Technical Support Document. (Revised July 1992).
PB93-192631/REB 93-04 PC **A03**/MF **A01**

**PB93-192656/REB**
Resource Conservation and Recovery Information System (RCRIS) Data Element Dictionary.
PB93-192656/REB 93-04 PC **A24**/MF **A04**

**PB93-192698/REB**
PREscore Software: Users Manual and Tutorial Version 2.0.
PB93-192698/REB 93-04 PC **A05**/MF **A01**

**PB93-192748/REB**
PRELIM Version 4.0 Users Guide. Documentation for the EPA Computer Program for Development of Local Discharge Limitations under the Pretreatment Program. Data Tape Documentation.
PB93-192748/REB 93-04 PC **A05**/MF **A01**

**PB93-192755/REB**
Toxic Chemical Release Inventory System Tape Specifications GPO/NTIS Format. Data Tape Documentation.
PB93-192755/REB 93-04 PC **A05**/MF **A01**

**PB93-193225/REB**
Hazardous Waste Management Planning Needs and Practices: A Review of Several State Agency Approaches.
PB93-193225/REB 93-04 PC **A04**/MF **A01**

**PB93-193589/REB**
Evaluation of the Potential Carcinogenicity of Ethylenethiourea (96-45-7).
PB93-193589/REB 93-01 PC **A03**/MF **A01**

**PB93-193597/REB**
Evaluation of the Potential Carcinogenicity of Ethyl Methanesulfonate (62-50-0).
PB93-193597/REB 93-01 PC **A03**/MF **A01**

**PB93-193605/REB**
Evaluation of the Potential Carcinogenicity of Formaldehyde (50-00-0).
PB93-193605/REB 93-01 PC **A03**/MF **A01**

**PB93-193613/REB**
Evaluation of the Potential Carcinogenicity of Glycidylaldehyde (765-34-4).
PB93-193613/REB 93-01 PC **A03**/MF **A01**

**PB93-193696/REB**
Pesticide Reregistration Rejection Rate Analysis Residue Chemistry. Follow-up Guidance for Generating Storage Stability Data; Submission of Raw Data; Maximum Theoretical Concentration Factors; Flowchart Diagrams.
PB93-193696/REB 93-01 PC **A04**/MF **A01**

**PB93-193704/REB**
Online Guided Tour of the Cleanup Information Bulletin Board System. (CLU-IN: Cleanup Information Bulletin Board).
PB93-193704/REB 93-01 PC **A03**/MF **A01**

**PB93-193738/REB**
Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Atmospheric Deposition of Critical Issue Forum. Held in Annapolis, Maryland on November 5, 1992.
PB93-193738/REB 93-01 PC **A03**/MF **A01**

**PB93-193746/REB**
Fact Sheet: National Primary Drinking Water Regulations for Lead and Copper.
PB93-193746/REB 93-01 PC **A03**/MF **A01**

**PB93-193753/REB**
Estuary Program Primer. National Estuary Program.
PB93-193753/REB 93-01 PC **A06**/MF **A02**

**PB93-193761/REB**
Baseline Point Source Load Inventory, 1985. 1991 Reevaluation Report No. 2.
PB93-193761/REB 93-01 PC **A03**/MF **A01**

**PB93-193787/REB**
Phase II Fact Sheet: National Primary Drinking Water Regulations for 38 Inorganic and Synthetic Organic Chemicals.
PB93-193787/REB 93-01 PC **A03**/MF **A01**

**PB93-193795/REB**
Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance.
PB93-193795/REB 93-01 PC **A05**/MF **A01**

**PB93-193902/REB**
Glass Markets Information System: Application Records.
PB93-193902/REB 93-01 PC **A21**/MF **A04**

**PB93-193910/REB**
VOC/HAP Emissions from Marine Vessel Loading Operations. Technical Support Document for Proposed Standards.
PB93-193910/REB 93-01 PC **A13**/MF **A03**

**PB93-194017/REB**
Proceedings of the Chesapeake Bay Program Toxics Subcommittee Sponsored Chesapeake Bay Contaminated Sediments Critical Issue Forum. Held in Annapolis, Maryland on December 10, 1992.
PB93-194017/REB 93-01 PC **A03**/MF **A01**

**PB93-194033/REB**
Drinking Water Regulations under the Safe Drinking Water Act.
PB93-194033/REB 93-01 PC **A03**/MF **A01**

**PB93-194041/REB**
Pesticide Reregistration Rejection Rate Analysis Residue Chemistry/Environmental Fate Follow Up Guidance for Conducting Rotational Crop Studies.
PB93-194041/REB 93-01 PC **A03**/MF **A01**

**PB93-194058/REB**
Radionuclides in Drinking Water. National Primary Drinking Water Regulations for Radionuclides. Proposed Rules.
PB93-194058/REB 93-01 PC **A03**/MF **A01**

**PB93-194066/REB**
Issues and Approaches to Improving Transportation Modeling for Air Quality Analysis.
PB93-194066/REB 93-01 PC **A05**/MF **A02**

**PB93-194140/REB**
Toxic Chemical Release Inventory Reporting Form R and Instructions. Revised 1992 Version. Section 313 of the Emergency Planning and Community Right-to-Know Act.
PB93-194140/REB 93-01 PC **A06**/MF **A02**

**PB93-194157/REB**
Assessment of Sediment Toxicity to Marine Benthos. (Chapter 9).
PB93-194157/REB 93-01 PC **A03**/MF **A01**

**PB93-194165/REB**
Coprocessing of Fossil Fuels and Biomass for CO2 Emission Reduction in the Transportation Sector.
PB93-194165/REB 93-01 PC **A02**/MF **A01**

**PB93-194173/REB**
EPA'S QA Program on the Suppliers of Protocol Gases.
PB93-194173/REB 93-01 PC **A02**/MF **A01**

**PB93-194181/REB**
Metal Corrosion Coupon Contamination, Corrosion Study Design, and Interpretation Problems.
PB93-194181/REB 93-01 PC **A03**/MF **A01**

**PB93-194199/REB**
EPA's Life Cycle Methodology: Guidelines for Use in Development of Packaging.
PB93-194199/REB 93-01 PC **A03**/MF **A01**

**PB93-194207/REB**
Life Cycle Analysis (Video Conference Paper).
PB93-194207/REB 93-01 PC **A02**/MF **A01**

**PB93-194215/REB**
Evaluation of Laboratory Tests to Determine the Effectiveness of Chemical Surface Washing Agents.
PB93-194215/REB 93-01 PC **A02**/MF **A01**

**PB93-194223/REB**
Role of Fungal Ligninolytic Enzymes in Pollutant Degradation.
PB93-194223/REB 93-01 PC **A03**/MF **A01**

**PB93-194231/REB**
In-situ Bioventing: Two U.S. EPA and Air Force Sponsored Field Studies.
PB93-194231/REB 93-01 PC **A03**/MF **A01**

**PB93-194249/REB**
Evaluation of the Potential Carcinogenicity of Chloroform (67-66-3).
PB93-194249/REB 93-01 PC **A03**/MF **A01**

**PB93-194256/REB**
Evaluation of the Potential Carcinogenicity of 3,3'-Dichlorobenzidine (91-94-1).
PB93-194256/REB 93-01 PC **A03**/MF **A01**

**PB93-194264/REB**
Evaluation of the Potential Carcinogenicity of 1,2-Dichloroethane (107-06-2).
PB93-194264/REB 93-01 PC **A03**/MF **A01**

**PB93-194272/REB**
Evaluation of the Potential Carcinogenicity of Dieldrin (60-57-1).
PB93-194272/REB 93-01 PC **A03**/MF **A01**

**PB93-194280/REB**
Evaluation of the Potential Carcinogenicity of 1,2:3,4-Diepoxybutane (1464-53-5).
PB93-194280/REB 93-01 PC **A03**/MF **A01**

**PB93-194298/REB**
Evaluation of the Potential Carcinogenicity of 1,2-Diethylhydrazine (1615-80-1).
PB93-194298/REB 93-01 PC **A03**/MF **A01**

**PB93-194306/REB**
Evaluation of the Potential Carcinogenicity of Diethylstilbestrol (56-53-1).
PB93-194306/REB 93-01 PC **A03**/MF **A01**

**PB93-194314/REB**
Evaluation of the Potential Carcinogenicity of 3,3'-Dimethoxybenzidine (119-90-4).
PB93-194314/REB 93-01 PC **A03**/MF **A01**

**PB93-194322/REB**
Evaluation of the Potential Carcinogenicity of Dimethyl Sulfate (77-78-1).
PB93-194322/REB 93-01 PC **A03**/MF **A01**

**PB93-194330/REB**
Development of Sampling and Analytical Methods for the Measurement of Nitrous Oxide from Fossil Fuel Combustion Sources.
PB93-194330/REB 93-01 PC **A07**/MF **A02**

**PB93-194355/REB**
Methods for the Analysis of Carpet Samples for Asbestos.
PB93-194355/REB 93-01 PC **A02**/MF **A01**

**PB93-194363/REB**
Comparison of the Efficiency of Polycarbonate and Mixed Cellulose Ester Filters for Use in the Filtration of Water Samples.
PB93-194363/REB 93-01 PC **A02**/MF **A01**

**PB93-194371/REB**
Editorial Introduction (to Female Germ Cells: Biology and Genetic Risk).
PB93-194371/REB 93-01 PC **A01**/MF **A01**

**PB93-194389/REB**
Gene Expression during Oogenesis in Mice.
PB93-194389/REB 93-01 PC **A03**/MF **A01**

**PB93-194397/REB**
Gene Expression in Pre-Implantation Mammalian Embryos.
PB93-194397/REB 93-01 PC **A03**/MF **A01**

**PB93-194405/REB**
Spatial Distribution of Sperm-Derived Chromatin in Zygotes Determined by Fluorescence In situ Hybridization.
PB93-194405/REB 93-01 PC **A03**/MF **A01**

**PB93-194413/REB**
Cytoplasmic Microtubular Dynamics and Chromatin Organization during Mammalian Oogenesis and Oocyte Maturation.
PB93-194413/REB 93-01 PC **A03**/MF **A01**

**PB93-194421/REB**
Maternal Age Effect: The Enigma of Down Syndrome and Other Trisomic Conditions.
PB93-194421/REB 93-01 PC **A03**/MF **A01**

**PB93-194439/REB**
Organization of the Ovarian Follicle and Events in the Biology: Oogenesis, Ovulation or Atresia.
PB93-194439/REB 93-01 PC **A03**/MF **A01**

**PB93-194447/REB**
Frequency and Nature of Specific-Locus Mutations Induced in Female Mice by Radiations and Chemicals: A Review.
PB93-194447/REB 93-01 PC **A03**/MF **A01**

**PB93-194454/REB**
ENU Mutagenesis in the Mouse Electrophoretic Specific-Locus Test. 2. Mutational Studies of Mature Oocytes.
PB93-194454/REB 93-01 PC **A02**/MF **A01**

**PB93-194462/REB**
Radiation- and Chemically-Induced Chromosome Aberrations in Mouse Oocytes: A Comparison with Effects in Males.
PB93-194462/REB 93-01 PC **A02**/MF **A01**

**PB93-194470/REB**
Bleomycin: Female-Specific Dominant Lethal Effects in Mice.
PB93-194470/REB 93-01 PC **A03**/MF **A01**

**PB93-194488/REB**
Mutational Risks in Females: Genomic Imprinting and Maternal Molecules.
PB93-194488/REB 93-01 PC **A03**/MF **A01**

**PB93-194496/REB**
Developmental Anomalies Derived from Exposure of Zygotes and First-Cleavage Embryos to Mutagens.
PB93-194496/REB 93-01 PC **A03**/MF **A01**

**PB93-194504/REB**
Bioassay-Directed Fractionation of Organic Contaminants in an Estuarine Sediment Using the New Mutagenic Bioassay, Mutatox (Trade Name).
PB93-194504/REB 93-01 PC **A02**/MF **A01**

**PB93-194512/REB**
Histopathologic Lesions in Sea Otters Exposed to Crude Oil.
PB93-194512/REB 93-01 PC **A03**/MF **A01**

**PB93-194520/REB**
Skeletal Development Following Heat Exposure in the Rat.
PB93-194520/REB 93-01 PC **A03**/MF **A01**

**PB93-194538/REB**
Embryonic Development in vitro Following Short-Duration Exposure to Heat.
PB93-194538/REB 93-01 PC **A03**/MF **A01**

**PB93-194546/REB**
Slowing the Waste Behemoth: Source Reduction is Overshadowed by Recycling's Success.
PB93-194546/REB 93-01 PC **A02**/MF **A01**

**PB93-194637/REB**
Summary of Implementation and Demonstration Projects in Bays and Estuaries.
PB93-194637/REB 93-01 PC **A07**/MF **A02**

**PB93-194694/REB**
Design of a Basinwide Monitoring Program for the Tampa Bay Estuary.
PB93-194694/REB 93-01 PC **A05**/MF **A01**

**PB93-196012/REB**
Synthesis of Basic Life Histories of Tampa Bay Species.
PB93-196012/REB 93-01 PC **A12**/MF **A03**

**PB93-196020/REB**
Development of a Chronic Sediment Toxicity Test for Marine Benthic Amphipods.
PB93-196020/REB 93-01 PC **A11**/MF **A03**

**PB93-196087/REB**
Proceedings: 1991 SO2 Control Symposium. Held in Washington, DC. on December 3-6, 1991.
PB93-196087/REB 93-01 PC **E99**/MF **E99**

**PB93-196095/REB**
Proceedings: 1991 SO2 Control Symposium. Volume 1. Opening Session and Sessions 1-3.
PB93-196095/REB 93-01 PC **A19**/MF **A04**

**PB93-196103/REB**
Proceedings: 1991 SO2 Control Symposium. Volume 2. Sessions 4 and 5A.
PB93-196103/REB 93-01 PC **A22**/MF **A04**

**PB93-196111/REB**
Proceedings: 1991 SO2 Control Symposium. Volume 3. Sessions 5B and 6.
PB93-196111/REB 93-01 PC **A20**/MF **A04**

**PB93-196129/REB**
Proceedings: 1991 SO2 Control Symposium. Volume 4. Session 7.
PB93-196129/REB 93-01 PC **A15**/MF **A03**

**PB93-196137/REB**
Proceedings: 1991 SO2 Control Symposium. Volume 5. Session 8.
PB93-196137/REB 93-01 PC **A13**/MF **A03**

**PB93-196186/REB**
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Held in Minneapolis, Minnesota on September 22-25, 1992.
PB93-196186/REB 93-01 PC **E99**/MF **E99**

**PB93-196194/REB**
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 1. Symposium Oral Papers Opening Session and Technical Sessions 1 through 6.
PB93-196194/REB 93-01 PC **A24**/MF **A04**

**PB93-196202/REB**
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 2. Symposium Oral Papers, Technical Sessions 7 through 12.
PB93-196202/REB 93-01 PC **A24**/MF **A04**

**PB93-196210/REB**
Proceedings: The 1992 International Symposium on Radon and Radon Reduction Technology (4th). Volume 3. Symposium Poster Papers, Poster Sessions - All Sessions.
PB93-196210/REB 93-01 PC **A25**/MF **A06**

**PB93-196301/REB**
Evaluation of the Potential Carcinogenicity of Melphalan (148-82-3).
PB93-196301/REB 93-01 PC **A03**/MF **A01**

**PB93-196319/REB**
Evaluation of the Potential Carcinogenicity of Methyl Chloride (74-87-3).
PB93-196319/REB 93-01 PC **A03**/MF **A01**

**PB93-196327/REB**
Evaluation of the Potential Carcinogenicity of 3-Methylcholanthrene (59-49-5).
PB93-196327/REB 93-01 PC **A03**/MF **A01**

**PB93-196335/REB**
Evaluation of the Potential Carcinogenicity of 4,4'-Methylenebis (1-Chloroaniline) (101-14-4).
PB93-196335/REB 93-01 PC **A03**/MF **A01**

**PB93-196343/REB**
Evaluation of the Potential Carcinogenicity of Methyl Iodide (74-88-4).
PB93-196343/REB 93-01 PC **A03**/MF **A01**

**PB93-196350/REB**
Evaluation of the Potential Carcinogenicity of N-Methyl-N'-Nitro-N-Nitrosoguanidine (70-25-7).
PB93-196350/REB 93-01 PC **A03**/MF **A01**

**PB93-196368/REB**
Evaluation of the Potential Carcinogenicity of Methylthiouracil (56-04-2).
PB93-196368/REB 93-01 PC **A03**/MF **A01**

**PB93-196376/REB**
Evaluation of the Potential Carcinogenicity of Mitomycin C (50-07-7).
PB93-196376/REB 93-01 PC **A03**/MF **A01**

**PB93-196384/REB**
Evaluation of the Potential Carcinogenicity of 1-Naphthylamine (134-32-7).
PB93-196384/REB 93-01 PC **A03**/MF **A01**

**PB93-196392/REB**
Evaluation of the Potential Carcinogenicity of 2-Naphthylamine (91-59-8).
PB93-196392/REB 93-01 PC **A03**/MF **A01**

**PB93-196400/REB**
Evaluation of the Potential Carcinogenicity of Nickel (7740-02-0).
PB93-196400/REB 93-01 PC **A03**/MF **A01**

**PB93-196418/REB**
Evaluation of the Potential Carcinogenicity of 2-Nitropropane (79-46-9).
PB93-196418/REB 93-01 PC **A03**/MF **A01**

**PB93-196426/REB**
Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Butylamine (924-16-3).
PB93-196426/REB 93-01 PC **A03**/MF **A01**

**PB93-196434/REB**
Evaluation of the Potential Carcinogenicity of N-Nitrosodiethanolamine (1116-54-7).
PB93-196434/REB 93-01 PC **A03**/MF **A01**

**PB93-196442/REB**
Evaluation of the Potential Carcinogenicity of N-Nitrosodiethylamine (55-18-5).
PB93-196442/REB 93-01 PC **A03**/MF **A01**

**PB93-196459/REB**
Evaluation of the Potential Carcinogenicity of N-Nitrosodimethylamine (62-75-9).
PB93-196459/REB 93-01 PC **A03**/MF **A01**

**PB93-196467/REB**
Evaluation of the Potential Carcinogenicity of N-Nitrosodi-n-Propylamine (621-64-7).
PB93-196467/REB 93-01 PC **A03**/MF **A01**

**PB93-196475/REB**
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Ethylurea (759-73-9).
PB93-196475/REB 93-01 PC **A03**/MF **A01**

**PB93-196483/REB**
Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurea (684-93-5).
PB93-196483/REB 93-01 PC **A03**/MF **A01**

**PB93-196491/REB**
*Evaluation of the Potential Carcinogenicity of N-Nitroso-N-Methylurethane (165-53-2).*
PB93-196491/REB 93-01 PC **A03**/MF **A01**

**PB93-196509/REB**
Evaluation of the Potential Carcinogenicity of N-Nitroso-methylvinylamine (4549-40-0).
PB93-196509/REB 93-01 PC **A03**/MF **A01**

**PB93-196517/REB**
Evaluation of the Potential Carcinogenicity of N-Nitrosopiperidine (100-75-4).
PB93-196517/REB 93-01 PC **A03**/MF **A01**

**PB93-196525/REB**
Evaluation of the Potential Carcinogenicity of N-Nitrosopyrrolidine.
PB93-196525/REB 93-01 PC **A03**/MF **A01**

**PB93-196533/REB**
Evaluation of the Potential Carcinogenicity of 5-Nitro-O-Toluidine (99-55-8).
PB93-196533/REB 93-01 PC **A03**/MF **A01**

**PB93-196541/REB**
Evaluation of the Potential Carcinogenicity of Pentachloronitrobenzene (82-68-8).
PB93-196541/REB 93-01 PC **A03**/MF **A01**

**PB93-196558/REB**
Evaluation of the Potential Carcinogenicity of Pentachlorophenol (87-86-5).
PB93-196558/REB 93-01 PC **A03**/MF **A01**

**PB93-196566/REB**
*Evaluation of the Potential Carcinogenicity of Phenacetin (62-44-2).*
PB93-196566/REB 93-01 PC **A03**/MF **A01**

**PB93-196574/REB**
Evaluation of the Potential Carcinogenicity of Polychlorinated Biphenyls *(1336-36-3) Including Specific Aroclors.*
PB93-196574/REB 93-01 PC **A03**/MF **A01**

**PB93-196582/REB**
Evaluation of the Potential Carcinogenicity of 1,3-Propane Sultone (1120-71-4).
PB93-196582/REB 93-01 PC **A03**/MF **A01**

**PB93-196590/REB**
Evaluation of the Potential Carcinogenicity of 1,2-Propylenimine (75-55-8).
PB93-196590/REB 93-01 PC **A03**/MF **A01**

**PB93-196608/REB**
Evaluation of the Potential Carcinogenicity Saccharin (81-07-2).
PB93-196608/REB 93-01 PC **A03**/MF **A01**

**PB93-196616/REB**
Stress Cracking Behavior of HDPE Geomembranes and Its Prevention.
PB93-196616/REB 93-01 PC **A06**/MF **A02**

**PB93-196624/REB**
Directory of OAQPS Information Services, May 1993.
PB93-196624/REB 93-01 PC **A03**/MF **A01**

**PB93-196632/REB**
Medium Systems That Failed to Conduct Required Initial *Lead Tap Monitoring and Reporting.*
PB93-196632/REB 93-01 PC **A03**/MF **A01**

**PB93-196665/REB**
Chesapeake Bay Submerged Aquatic Vegetation Habitat Requirements and Restoration Targets: A Technical Synthesis.
PB93-196665/REB 93-01 PC **A12**/MF **A03**

**PB93-196988/REB**
Sea Urchin ('Strongylocentrotus purpuratus') Fertilization Test Method.
PB93-196988/REB 93-01 PC **A03**/MF **A01**

**PB93-196996/REB**
Forest Sector Carbon Budget of the United States: Carbon Pools and Flux under Alternative *Policy Options.*
PB93-196996/REB 93-01 PC **A10**/MF **A03**

**PB93-197887/REB**
Glass Markets Information System; Application Summary Reports.
PB93-197887/REB 93-01 PC **A05**/MF **A01**

**PB93-197903/REB**
Federal Test Procedure Review Project: Status Report.
PB93-197903/REB 93-01 PC **A03**/MF **A01**

**PB93-197929/REB**
*Conversion of Methanol-Fueled 16-Valve, 4-Cylinder Engine* to Operation on Gaseous 2H2/CO Fuel - Final Report.
PB93-197929/REB 93-01 PC **A03**/MF **A01**

**PB93-198695/REB**
Pesticide Fact Sheet Number 240: Dimethenamid. SAN 582H/Frontier (Trade Name) Herbicide.
PB93-198695/REB 93-01 PC **A03**/MF **A01**

**PB93-198703/REB**
RED Facts: Iron Salts.
PB93-198703/REB 93-01 PC **A02**/MF **A01**

**PB93-198711/REB**
Pesticide Fact Sheet: Arsenic Acid (H3AsO4).
PB93-198711/REB 93-01 PC **A02**/MF **A01**

**PB93-198844/REB**
Building and HVAC Characterization for Commercial Building Indoor Air Quality Investigations.
PB93-198844/REB 93-01 PC **A07**/MF **A02**

**PB93-198950/REB**
Wood Products in the Waste Stream: *Characterization and* Combustion Emissions. Volume 1.
PB93-198950/REB 93-01 PC **A17**/MF **A04**

**PB93-198968/REB**
Wood Products in the Waste Stream: Characterization and Combustion Emissions. Volume 2, Appendices.
PB93-198968/REB 93-01 PC **A07**/MF **A02**

**PB93-198976/REB**
Town of Edinburg Landfill Reclamation Demonstration *Project.*
PB93-198976/REB 93-01 PC **A12**/MF **A03**

**PB93-199107/REB**
Guide to Effective Inspection Reports for Air Pollution Violations. Stationary Source Compliance Training Series.
PB93-199107/REB 93-01 PC **A04**/MF **A01**

**PB93-199115/REB**
Reporting and Recordkeeping Requirements for Waste Disposal: A Field Guide.
PB93-199115/REB 93-01 PC **A03**/MF **A01**

**PB93-199123/REB**
Benzene Equipment Leak Inspection Manual.
PB93-199123/REB 93-01 PC **A06**/MF **A02**

**PB93-199131/REB**
Alternative Control Technology Document: Control of VOC Emissions from the Application of Agricultural Pesticides.
PB93-199131/REB 93-01 PC **A12**/MF **A03**

**PB93-199214/REB**
Air/Superfund National Technical Guidance Study Series. Volume 4. Guidance for Ambient Air Monitoring at Superfund Sites (Revised).
PB93-199214/REB 93-01 PC **A08**/MF **A02**

**PB93-199222/REB**
*Air/Superfund National Technical Guidance Study Series:* Compilation of Information on Real-Time Air Monitoring for Use at Superfund Sites.
PB93-199222/REB 93-04 PC **A05**/MF **A02**

**PB93-199230/REB**
Control Technology Center FY92: A Summary of Program Accomplishments.
PB93-199230/REB 93-01 PC **A03**/MF **A01**

**PB93-199248/REB**
Development of Residential Wood Consumption Estimation Models.
PB93-199248/REB 93-01 PC **A04**/MF **A01**

**PB93-199255/REB**
*Light-Duty Automotive Technology and Fuel Economy* Trends through 1993.
PB93-199255/REB 93-01 PC **A06**/MF **A02**

**PB93-199263/REB**
Recommended Quality Assurance Procedures for Opacity Continuous Emission Monitoring Systems.
PB93-199263/REB 93-01 PC **A05**/MF **A01**

**PB93-199297/REB**
Standards of Performance for New Stationary Sources. Volume 1. Introduction, Summary and Standards: A Compilation as of December 31, 1985.
PB93-199297/REB 93-01 PC **A08**/MF **A02**

**PB93-199321/REB**
*Background Information Document to Support NESHAPS* Rulemaking on Nuclear Power Reactors.
PB93-199321/REB 93-01 PC **A14**/MF **A03**

**PB93-199339/REB**
Compliance Data System Quality Assurance Manual, June 1984.
PB93-199339/REB 93-01 PC **A10**/MF **A03**

**PB93-199347/REB**
Summary of Factors Affecting *Compliance by Ferrous* Foundaries. Volume 1. Text.
PB93-199347/REB 93-01 PC **A05**/MF **A02**

**PB93-199354/REB**
Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC **A07**/MF **A02**

**PB93-199362/REB**
Guide to the Asbestos NESHAP as Revised November 1990.
PB93-199362/REB 93-01 PC **A04**/MF **A01**

**PB93-199370/REB**
*Guideline for Graphic Arts Calculations.*
PB93-199370/REB 93-01 PC **A05**/MF **A01**

**PB93-199388/REB**
Recommended Foundation Barrier Construction Standard of the Florida Radon Research Program.
PB93-199388/REB 93-01 PC **A03**/MF **A01**

**PB93-199396/REB**
Parameters Affecting the Measurement of Hydraulic Conductivity for Solidified/Stabilized Wastes.
PB93-199396/REB 93-01 PC **A05**/MF **A01**

**PB93-199404/REB**
Screening Methodology for Assessing Leaking UST Sites and Clean Up Technologies.
PB93-199404/REB 93-01 PC **A03**/MF **A01**

**PB93-199412/REB**
Statistical Procedures for Corrosion Studies.
PB93-199412/REB 93-01 PC **A03**/MF **A01**

**PB93-199420/REB**
Corrosion Control *Principles and Strategies for Reducing* Lead and Copper in Drinking Water Systems.
PB93-199420/REB 93-01 PC **A03**/MF **A01**

**PB93-199438/REB**
Field and Laboratory Studies of Chemical Contamination and Environmentally Related Diseases in Fish and Molluscs of New England.
PB93-199438/REB 93-01 PC **A02**/MF **A01**

**PB93-199446/REB**
Statistical Evaluation of the EMAP-Wetlands Classification.
PB93-199446/REB 93-01 PC **A03**/MF **A01**

**PB93-199453/REB**
Soil Biology and Ecology.
PB93-199453/REB 93-01 PC **A03**/MF **A01**

**PB93-199461/REB**
Quantitative Estimates of Soil in Normal Children between the Ages of 2 and 7 Years: Population-Based Estimates Using Aluminum, Silicon, and Titanium as Soil Tracer Elements.
PB93-199461/REB 93-01 PC **A03**/MF **A01**

**PB93-199487/REB**
Transport of Low-Level Radioactive Soil at Deep-Ocean Disposal Site.
PB93-199487/REB 93-01 PC **A03**/MF **A01**

**PB93-199495/REB**
Broad-Based Environmental Life Cycle Assessment.
PB93-199495/REB 93-01 PC **A02**/MF **A01**

**PB93-199503/REB**
Ring Fission of Anthracene by a Eukaryota.
PB93-199503/REB 93-01 PC **A02**/MF **A01**

**PB93-199511/REB**
Oxidative Degradation of Phenanthrene by the Ligninolytic Fungus 'Phanerochaete chrysosposium'.
PB93-199511/REB 93-01 PC **A02**/MF **A01**

**PB93-199529/REB**
Lignin Degradation and Lignin Peroxidase Production in *Cultures of 'Phanerochaete chrysosporium' Immobilized on* Porous Ceramic Supports.
PB93-199529/REB 93-01 PC **A02**/MF **A01**

**PB93-199537/REB**
Asbestos Release during Building Demolition Activities.
PB93-199537/REB 93-01 PC **A02**/MF **A01**

**PB93-199545/REB**
Chronic Effects of Ultraviolet-B Radiation on Growth and Cell Volume of 'Phaeodactylum tricornutum' (Bacillariophyceae).
PB93-199545/REB 93-01 PC **A02**/MF **A01**

**PB93-199552/REB**
Comparison of Methods for Collecting Interstitial Water for Trace Organic Compounds and Metals Analyses.
PB93-199552/REB 93-01 PC **A02**/MF **A01**

**PB93-199560/REB**
Application of the Ecotone Concept in Defining Nutrient Management Requirements for the Upper Potomac River Basin.
PB93-199560/REB 93-01 PC **A03**/MF **A01**

**PB93-199578/REB**
Stress Proteins in Aquatic Organisms: An Environmental Perspective.
PB93-199578/REB 93-01 PC **A03**/MF **A01**

**PB93-199586/REB**
Watershed Nitrogen and Phosphorus Balance: The Upper Potomac River Basin.
PB93-199586/REB 93-01 PC **A03**/MF **A01**

**PB93-199594/REB**
Cytochrome P450E (P450IA) Induction and Inhibition in Winter Flounder by 3,3',4,4'-Tetrachlorobiphenyl: *Comparison of Response in Fish from Georges Bank and Narragan*sett Bay.
PB93-199594/REB 93-01 PC **A03**/MF **A01**

**PB93-199602/REB**
Empirical Model of Vehicle Emissions.
PB93-199602/REB 93-01 PC **A02**/MF **A01**

**PB93-199610/REB**
Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility.
PB93-199610/REB 93-01 PC **A03**/MF **A01**

**PB93-199628/REB**
Contemporary Issues in Toxicology: A New Frontier in Understanding the Mechanisms of Developmental Abnormalities.
PB93-199628/REB 93-01 PC **A02**/MF **A01**

**PB93-199636/REB**
Modeling the Hydrogeochemical Response of a Stream to Acid Deposition Using the Enhanced Trickle-Down Model.
PB93-199636/REB 93-01 PC **A02**/MF **A01**

**PB93-199644/REB**
Glucocorticoid Effects on Natural and Humoral Immunity in Mallards.
PB93-199644/REB 93-01 PC **A03**/MF **A01**

**PB93-199651/REB**
Bacillus thuringiensis var. kurstaki Affects a Beneficial Insect, the Cinnabar Moth (Lepidoptera: Arctidae).
PB93-199651/REB 93-01 PC **A02**/MF **A01**

**PB93-199669/REB**
Expanding Global Forest Management: An 'Easy First' Proposal.
PB93-199669/REB 93-01 PC **A02**/MF **A01**

**PB93-199677/REB**
Quantification of Germ-Cell Risk Associated with the Induction of Heritable Translocations.
PB93-199677/REB 93-01 PC **A03**/MF **A01**

**PB93-200335/REB**
Structure and Performance of the Health Effects Institute.
PB93-200335/REB 93-01 PC **A08**/MF **A02**

**PB93-200517/REB**
National List of Asbestos Landfills.
PB93-200517/REB 93-01 PC **A10**/MF **A03**

**PB93-200525/REB**
Guidance on the Relationship between the 15 Percent Rate-of-Progress Plans and Other Provisions of the Clean Air Act.
PB93-200525/REB 93-01 PC **A04**/MF **A01**

**PB93-200541/REB**
Risk Communication About Chemicals in Your Community. Facilitator's Manual and Guide.
PB93-200541/REB 93-01 PC **A05**/MF **A02**

**PB93-200640/REB**
Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or Inhalable Particulate Data (Draft).
PB93-200640/REB 93-01 PC **A04**/MF **A01**

**PB93-200673/REB**
Low-Level and NARM Radioactive Wastes. Draft Environmental Impact Statement for Proposed Rules. Volume 1. Background Information Document.
PB93-200673/REB 93-01 PC **A99**/MF **A06**

**PB93-200780/REB**
Reregistration Eligibility Document (RED): Iron Salts.
PB93-200780/REB 93-01 PC **A05**/MF **A02**

**PB93-200798/REB**
Aeros Manual Series. Volume 5. Aeros Manual of Codes. Update Number 9.
PB93-200798/REB 93-01 PC **A10**/MF **A03**

**PB93-200806/REB**
Toxic and Hazardous Chemicals, Title III and Communities: An Outreach Manual for Community Groups.
PB93-200806/REB 93-01 PC **A06**/MF **A02**

**PB93-200814/REB**
Pesticide Safety and Training Materials Catalog (Catalogo de Materiales Educativos y Proteccion Sobre Pesticidas).
PB93-200814/REB 93-01 PC **A07**/MF **A02**

**PB93-200897/REB**
Managing Nonpoint Source Pollution. Final Report to Congress on Section 319 of the Clean Water Act (1989).
PB93-200897/REB 93-01 PC **A10**/MF **A03**

**PB93-200905/REB**
Always a River: Supplemental Environmental Education Curriculum on the Ohio River and Water Grades K-12.
PB93-200905/REB 93-01 PC **A14**/MF **A03**

**PB93-200913/REB**
Air/Superfund National Technical Guidance Study Series: Evaluation of Short-Term Air Action Levels for Superfund Sites.
PB93-200913/REB 93-01 PC **A14**/MF **A03**

**PB93-201127/REB**
Thermal Degradation Characteristics of Environmentally Sensitive Pesticide Products.
PB93-201127/REB 93-01 PC **A04**/MF **A01**

**PB93-201192/REB**
Evaluation of the Potential Carcinogenicity of p-Toluidine (106-49-0).
PB93-201192/REB 93-01 PC **A03**/MF **A01**

**PB93-201200/REB**
Evaluation of the Potential Carcinogenicity of o-Toluidine (95-53-4).
PB93-201200/REB 93-01 PC **A03**/MF **A01**

**PB93-201218/REB**
Evaluation of the Potential Carcinogenicity of Thiourea (62-56-6).
PB93-201218/REB 93-01 PC **A03**/MF **A01**

**PB93-201226/REB**
Evaluation of the Potential Carcinogenicity of Thioacetamide (62-55-5).
PB93-201226/REB 93-01 PC **A03**/MF **A01**

**PB93-201234/REB**
Evaluation of the Potential Carcinogenicity of Tetrachloroethylene (127-18-4).
PB93-201234/REB 93-01 PC **A03**/MF **A01**

**PB93-201242/REB**
Evaluation of the Potential Carcinogenicity of 1,1,2,2-Tetrachloroethene (79-34-5).
PB93-201242/REB 93-01 PC **A03**/MF **A01**

**PB93-201259/REB**
Evaluation of the Potential Carcinogenicity of 1,1,1,2-Tetrachloroethane (630-20-6).
PB93-201259/REB 93-01 PC **A03**/MF **A01**

**PB93-201267/REB**
Evaluation of the Potential Carcinogenicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (1746-01-6).
PB93-201267/REB 93-01 PC **A03**/MF **A01**

**PB93-201275/REB**
Evaluation of the Potential Carcinogenicity of Streptozotocin (18883-66-4).
PB93-201275/REB 93-01 PC **A03**/MF **A01**

**PB93-201283/REB**
Evaluation of the Potential Carcinogenicity of Selenium Sulfide (Selenium Disulfide) (7488-56-4).
PB93-201283/REB 93-01 PC **A03**/MF **A01**

**PB93-201291/REB**
Evaluation of the Potential Carcinogenicity of Safrole (94-59-7).
PB93-201291/REB 93-01 PC **A03**/MF **A01**

**PB93-202257/REB**
Evaluation of the Potential Carcinogenicity of Vinyl Chloride (75-01-4).
PB93-202257/REB 93-01 PC **A03**/MF **A01**

**PB93-202265/REB**
Evaluation of the Potential Carcinogenicity of Uracil Mustard (66-75-1).
PB93-202265/REB 93-01 PC **A03**/MF **A01**

**PB93-202273/REB**
Evaluation of the Potential Carcinogenicity of Trypan Blue (72-57-1).
PB93-202273/REB 93-01 PC **A03**/MF **A01**

**PB93-202281/REB**
Evaluation of the Potential Carcinogenicity of Tris(2,3-Dibromopropyl) Phosphate (126-72-7).
PB93-202281/REB 93-01 PC **A03**/MF **A01**

**PB93-202299/REB**
Evaluation of the Potential Carcinogenicity of 2,4,6-Trichlorophenol (88-06-2).
PB93-202299/REB 93-01 PC **A03**/MF **A01**

**PB93-202307/REB**
Evaluation of the Potential Carcinogenicity of 2,4,5-Trichlorophenol (95-95-4).
PB93-202307/REB 93-01 PC **A03**/MF **A01**

**PB93-202315/REB**
Evaluation of the Potential Carcinogenicity of Trichlorophenol (Mixed) (2516-78-22).
PB93-202315/REB 93-01 PC **A03**/MF **A01**

**PB93-202323/REB**
Evaluation of the Potential Carcinogenicity of Trichloroethylene (79-01-6).
PB93-202323/REB 93-01 PC **A03**/MF **A01**

**PB93-202331/REB**
Evaluation of the Potential Carcinogenicity of Toxaphene (8001-35-2).
PB93-202331/REB 93-01 PC **A03**/MF **A01**

**PB93-202349/REB**
Evaluation of the Potential Carcinogenicity of o-Toluidine Hydrochloride (636-21-5).
PB93-202349/REB 93-01 PC **A03**/MF **A01**

**PB93-202570/REB**
Compendium of Methods for Marine and Estuarine Environmental Studies.
PB93-202570/REB 93-01 PC **A10**/MF **A03**

**PB93-202596/REB**
Volunteer Water Monitoring: A Guide for State Managers.
PB93-202596/REB 93-01 PC **A05**/MF **A01**

**PB93-202604/REB**
Ambient Aquatic Life Water Quality Criteria for Silver.
PB93-202604/REB 93-01 PC **A06**/MF **A02**

**PB93-202612/REB**
Clean Water and the American Economy. Proceedings: Surface Water. Volume 1. Held on October 19-21, 1992.
PB93-202612/REB 93-01 PC **A14**/MF **A03**

**PB93-202620/REB**
Clean Water and the American Economy. Proceedings: Ground Water. Volume 2. Held on October 19-21, 1992.
PB93-202620/REB 93-01 PC **A07**/MF **A02**

**PB93-202745/REB**
Guidance Manual for Control of Slug Loadings to POTWs.
PB93-202745/REB 93-01 PC **A08**/MF **A02**

**PB93-202752/REB**
Ambient Aquatic Life Water Quality Criteria for Di-2-Ethylhexyl Phthalate.
PB93-202752/REB 93-01 PC **A03**/MF **A01**

**PB93-202760/REB**
Ambient Aquatic Life Water Quality Criteria for Hexachlorobenzene.
PB93-202760/REB 93-01 PC **A03**/MF **A01**

**PB93-202778/REB**
Ambient Aquatic Life Water Quality Criteria for Antimony (III).
PB93-202778/REB 93-01 PC **A03**/MF **A01**

**PB93-202802/REB**
Drinking Water Training Resources Directory: A National Training Coalition Directory of Current Training Materials. First Edition.
PB93-202802/REB 93-01 PC **A07**/MF **AC2**

**PB93-202828/REB**
Interim Report on Data and Methods for Assessment of 2,3,7,8-Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife.
PB93-202828/REB 93-01 PC **A06**/MF **A02**

**PB93-202836/REB**
Design and Construction of Demonstration/Research Wetlands for Treatment of Dairy Farm Wastewater.
PB93-202836/REB 93-01 PC **A03**/MF **A01**

**PB93-202844/REB**
Information Management Guidelines for the Wetlands Research Program.
PB93-202844/REB 93-01 PC **A04**/MF **A01**

**PB93-202851/REB**
Evaluation of EMAP-Wetlands Sampling Design Using National Wetlands Inventory Data.
PB93-202851/REB 93-04 PC **A06**/MF **A02**

**PB93-202927/REB**
On-Board Corrosion Analysis of a Recovered Nuclear Waste Container.
PB93-202927/REB 93-01 PC **A03**/MF **A01**

**PB93-202935/REB**
Preliminary Data Summary for the Pulp, Paper and Paperboard Point Source Category.
PB93-202935/REB 93-01 PC **A04**/MF **A01**

**PB93-203156/REB**
X-ray Fluorescence Survey of Lead Contaminated Residential Soils in Leadville, Colorado: A Case Study.
PB93-203156/REB 93-04 PC **A03**/MF **A01**

**PB93-203693/REB**
Chemical Shoreline Cleaning Agents: Evaluation of Two Laboratory Procedures for Estimating Performance.
PB93-203693/REB 93-04 PC **A07**/MF **A02**

**PB93-203701/REB**
Chemical Shoreline Cleaning Agents for Oil Spills: Update State-of-the-Art on Mechanisms of Action and Factors Influencing Performance.
PB93-203701/REB 93-04 PC **A04**/MF **A01**

**PB93-203909/REB**
Radon/Radon Progeny Measurement Proficiency Program: Cumulative Proficiency Report (Revised September 1987).
PB93-203909/REB 93-04 PC **A03**/MF **A01**

**PB93-203917/REB**
Identification of Cost Factors for the Ocean Disposal Alternative for Low-Level Radioactive Waste.
PB93-203917/REB 93-04 PC **A03**/MF **A01**

**PB93-203974/REB**
Fate of Priority Pollutants in Publicly Owned Treatment Works. Pilot Study.
PB93-203974/REB 93-04 PC **A03**/MF **A01**

**PB93-203982/REB**
Monitoring Lake and Reservoir Restoration: Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-203982/REB 93-01 PC **A08**/MF **A02**

**PB93-203990/REB**
Economic Impact Analysis of Proposed Effluent Limitations and Standards for the Gold Placer Mining Industry.
PB93-203990/REB 93-04 PC **A07**/MF **A02**

**PB93-204006/REB**
News-Notes Number 23: The Condition of the Environment and the Control of Nonpoint Sources of Water Pollution.
PB93-204006/REB 93-01 PC **A03**/MF **A01**

**PB93-204030/REB**
News-Notes Number 21: The Condition of the Environment and the Nonpoint Sources of Water Pollution.
PB93-204030/REB 93-01 PC **A03**/MF **A01**

**PB93-204048/REB**
Preliminary Investigation of Uncombusted Auto Fuel Vapor Dispersion within a Residential Garage Microenvironment.
PB93-204048/REB 93-04 PC **A02**/MF **A01**

**PB93-204055/REB**
Development and Validation of a Source Test Method for 2,4-Toluene Diisocyanate.
PB93-204055/REB 93-01 PC **A03**/MF **A01**

**PB93-204063/REB**
Near Real-Time GC Analysis of Volatile Organic Compounds Using an On-Line Micro-Trap.
PB93-204063/REB 93-01 PC **A02**/MF **A01**

**PB93-204071/REB**
Indoor Concentration Modeling of Aerosol Strong Acidity.
PB93-204071/REB 93-01 PC **A02**/MF **A01**

**PB93-204089/REB**
Receptor Modeling of Volatile Hydrocarbons Measured in the 1990 Atlanta Ozone Precursor Study.
PB93-204089/REB 93-04 PC **A03**/MF **A01**

**PB93-204097/REB**
Setting an Agenda for Research in the Federal Statistical System: Needs for Statistical Disclosure Limitation Procedures.
PB93-204097/REB 93-04 PC **A03**/MF **A01**

**PB93-204105/REB**
Methodology for Determination of Polycyclic Aromatic Hydrocarbons and Other Semivolatile Organic Compounds in House Dust.
PB93-204105/REB 93-04 PC **A02**/MF **A01**

**PB93-204113/REB**
Importance of Fish Diseases: An Overview.
PB93-204113/REB 93-01 PC **A03**/MF **A01**

**PB93-204121/REB**
Determination of Nine Haloacetic Acids in Finished Drinking Water.
PB93-204121/REB 93-01 PC **A03**/MF **A01**

**PB93-204139/REB**
Microbial Degradation of Synthetic Chlorinated Compounds: Evolutionary Implications (Chapter 8).
PB93-204139/REB 93-01 PC **A03**/MF **A01**

**PB93-204147/REB**
Biodegradation of Chlorinated Organic Compounds by 'Phanerochaete chrysosporium', a Wood-Rotting Fungus.
PB93-204147/REB 93-01 PC **A03**/MF **A01**

**PB93-204154/REB**
Mineralization of Recalcitrant Environmental Pollutants by a White Rot Fungus. Proceedings of the National Conference on Hazardous Wastes and Hazardous Materials. Held in Washington, DC. on March 16-18, 1987.
PB93-204154/REB 93-01 PC **A02**/MF **A01**

**PB93-204162/REB**
Recruitment of tft and clc Biodegradative Pathway Genes: Modes of Evolution.
PB93-204162/REB 93-01 PC **A03**/MF **A01**

**PB93-204170/REB**
Observations on the State of Marine Disease Studies (Chapter 18).
PB93-204170/REB 93-01 PC **A03**/MF **A01**

**PB93-204584/REB**
Evaluation of the Potential Carcinogenicity of 1,1,2-Trichloroethane (79-00-5).
PB93-204584/REB 93-01 PC **A03**/MF **A01**

**PB93-204923/REB**
Physiological Limitations on Phytoplankton Productivity in the Ocean.
PB93-204923/REB 93-01 PC **A02**/MF **A01**

**PB93-204931/REB**
Iron-Induced Changes in Light Harvesting and Photochemical Energy Conversion Processes in Eukaryotic Marine Algae.
PB93-204931/REB 93-01 PC **A03**/MF **A01**

**PB93-204949/REB**
Effect of Selected Inhibitors on Cadmium, Nickel, and Benzo(a)pyrene Uptake into Brown Cells of 'Mercenaria mercenaria'.
PB93-204949/REB 93-04 PC **A02**/MF **A01**

**PB93-204956/REB**
Observations on the Effect of Dissolved Oxygen and Temperature on Respiration Rates of the Bay Scallop, 'Argopecten irradians'.
PB93-204956/REB 93-01 PC **A02**/MF **A01**

**PB93-204964/REB**
Partitioning of Polychlorinated Biphenyl Congeners in the Seawater of New Bedford Harbor, Massachusetts.
PB93-204964/REB 93-04 PC **A02**/MF **A01**

**PB93-204972/REB**
Cloning and Characterization of a Chromosomal DNA Region Required for Growth on 2,4,5-T by 'Pseudomonas cepacia' AC1100.
PB93-204972/REB 93-04 PC **A03**/MF **A01**

**PB93-204980/REB**
Humic Acid Effects on Uptake of Hexachlorobenzene and Hexachlorobiphenyl by Sheepshead Minnows in Static Sediment/Water Systems.
PB93-204980/REB 93-01 PC **A03**/MF **A01**

**PB93-204998/REB**
Interlaboratory Comparison of the Early Life-Stage Toxicity Test Using Sheepshead Minnows ('Cyprinodon variegatus').
PB93-204998/REB 93-04 PC **A03**/MF **A01**

**PB93-205003/REB**
Strategy Using Bioreactors and Specially Selected Microorganisms for Bioremediation of Groundwater Contaminated with Creosote and Pentachlorophenol.
PB93-205003/REB 93-01 PC **A02**/MF **A01**

**PB93-205011/REB**
Influence of Solid Surface, Adhesive Ability, and Inoculum Size on Bacterial Colonization in Microcosm Studies.
PB93-205011/REB 93-04 PC **A02**/MF **A01**

**PB93-205029/REB**
Genetic Analysis of the aggA Locus Involved in Agglutination and Adherence of 'Pseudomonas putida', a Beneficial Fluorescent Pseudomonad.
PB93-205029/REB 93-04 PC **A03**/MF **A01**

**PB93-205037/REB**
Catalase and Superoxide Dismutase of Root-Colonizing Saprophytic Fluorescent Pseudomonads.
PB93-205037/REB 93-04 PC **A02**/MF **A01**

**PB93-205045/REB**
Influence of Root Colonizing Bacteria on the Defense Responses of Bean.
PB93-205045/REB 93-04 PC **A03**/MF **A01**

**PB93-205052/REB**
Characterization of Catalase Activities in a Root-Colonizing Isolate of 'Pseudomonas putida' (Revised).
PB93-205052/REB 93-04 PC **A02**/MF **A01**

**PB93-205060/REB**
Isolation and Diversity of Actinomycetes in the Chesapeake Bay.
PB93-205060/REB 93-01 PC **A02**/MF **A01**

**PB93-205078/REB**
Use of Autoradiography to Assess Viability of 'Helicobacter pylori' in Water.
PB93-205078/REB 93-04 PC **A02**/MF **A01**

**PB93-205086/REB**
Benthic Distribution of Sewage Sludge Indicated by 'Clostridium perfringens' at a Deep-Ocean Dump Site.
PB93-205086/REB 93-04 PC **A01**/MF **A01**

**PB93-205094/REB**
Method for Quantifying the Prediction Uncertainties Associated with Water Quality Models.
PB93-205094/REB 93-01 PC **A03**/MF **A01**

**PB93-205102/REB**
Formation of Carbon Monoxide from the Photodegration of Terrestrial Dissolved Organic Carbon in Natural Waters.
PB93-205102/REB 93-04 PC **A02**/MF **A01**

**PB93-205110/REB**
FATE, the Environmental Fate Constants Information Database.
PB93-205110/REB 93-04 PC **A02**/MF **A01**

**PB93-205128/REB**
Possible Influence of Hydrogen Concentration on Microbial Methane Stable Hydrogen Isotopic Composition.
PB93-205128/REB 93-04 PC **A03**/MF **A01**

**PB93-205136/REB**
Modeling Contaminant Propagation in Drinking-Water Distribution Systems.
PB93-205136/REB 93-04 PC **A03**/MF **A01**

**PB93-205144/REB**
Alternating Current Electrocoagulation for Superfund Site Remediation.
PB93-205144/REB 93-04 PC **A02**/MF **A01**

**PB93-205169/REB**
Molecular Basis of Biodegradation of Chloroaromatic Compounds.
PB93-205169/REB 93-04 PC **A03**/MF **A01**

**PB93-205177/REB**
Repeated Sequences Including RS1100 'Pseudomonas cepacia' AC1100 Function as IS Elements.
PB93-205177/REB 93-04 PC **A02**/MF **A01**

**PB93-205185/REB**
Degradation of the Chlorinated Phenoxyacetate Herbicides 2,4-Dichlorophenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid by Pure and Mixed Bacterial Cultures.
PB93-205185/REB 93-04 PC **A02**/MF **A01**

**PB93-205383/REB**
Emerging Technology Report: Destruction of Organic Contaminants in Air Using Advanced Ultraviolet Flashlamps.
PB93-205383/REB 93-04 PC **A03**/MF **A01**

**PB93-205508/REB**
Technical Background Document for the Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study.
PB93-205508/REB 93-04 PC **A99**/MF **A06**

**PB93-205532/REB**
Technology Evaluation Report: Pilot-Scale Demonstration of a Slurry-Phase Biological Reactor for Creosote-Contaminated Soil. Volume 1.
PB93-205532/REB 93-04 PC **A09**/MF **A02**

**PB93-205540/REB**
Proceedings of the International Workshop on Carbon Cycling in Boreal Forest and Sub-Arctic Ecosystems: Biospheric Responses and Feedbacks to Global Climate Change.
PB93-205540/REB 93-04 PC **A13**/MF **A03**

**PB93-205557/REB**
Characterization of the Organic Emissions from the Thermal Destruction of CFCs.
PB93-205557/REB 93-04 PC **A10**/MF **A03**

**PB93-205581/REB**
Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions.
PB93-205581/REB 93-04 PC **A06**/MF **A02**

**PB93-205672/REB**
Proceedings: Galveston Bay Characterization Workshop. Held on February 21-23, 1991.
PB93-205672/REB 93-04 PC **A11**/MF **A03**

**PB93-205680/REB**
Regulatory Effectiveness Study for the Armand Bayou Coastal Preserve.
PB93-205680/REB 93-04 PC **A08**/MF **A02**

**PB93-205698/REB**
Regulatory Effectiveness Study for the Christmas Bay Coastal Preserve.
PB93-205698/REB 93-04 PC **A09**/MF **A03**

**PB93-205706/REB**
Shoreline Survey for Unpermitted Discharges to Galveston Bay.
PB93-205706/REB 93-04 PC **A03**/MF **A01**

**PB93-205722/REB**
Characterization of Non-Point Sources and Loadings to Galveston Bay. Volume 1. Technical Report.
PB93-205722/REB 93-04 PC **A11**/MF **A03**

**PB93-205730/REB**
Wetland Plant Communities, Galveston Bay System.
PB93-205730/REB 93-04 PC **A07**/MF **A02**

**PB93-205748/REB**
Segmentation Development for Galveston Bay.
PB93-205748/REB 93-04 PC **A07**/MF **A02**

**PB93-205755/REB**
Status and Trends of Selected Living Resources in the Galveston Bay System.
PB93-205755/REB 93-04 PC **A20**/MF **A04**

**PB93-205763/REB**
Toxic Contaminant Characterization of Aquatic Organisms in Galveston Bay: A Pilot Study.
PB93-205763/REB 93-04 PC **A16**/MF **A03**

**PB93-205771/REB**
Characterization of Selected Public Health Issues in Galveston Bay.
PB93-205771/REB 93-04 PC **A08**/MF **A02**

**PB93-205789/REB**
Ambient Water and Sediment Quality of Galveston Bay: Present Status and Historical Trends. Volume 1.
PB93-205789/REB 93-04 PC **A09**/MF **A03**

**PB93-205797/REB**
Environmental Management Inventory of Galveston Bay.
PB93-205797/REB 93-04 PC **A06**/MF **A02**

**PB93-205805/REB**
Recreational Fishery By-Catch in the Galveston Bay System.
PB93-205805/REB 93-04 PC **A06**/MF **A02**

**PB93-205847/REB**
Emergency Planning and Community Right-to-Know Act: Section 313 Release Reporting Requirements (August 1991).
PB93-205847/REB 93-04 PC **A03**/MF **A01**

**PB93-205854/REB**
Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (1991).
PB93-205854/REB 93-04 PC **A03**/MF **A01**

**PB93-205862/REB**
Abstract Proceedings: Superfund Technical Support Project General Meeting. Held in Athens, Georgia on December 3-6, 1990.
PB93-205862/REB 93-04 PC **A03**/MF **A01**

**PB93-205870/REB**
Understanding Bioremediation: A Guidebook for Citizens.
PB93-205870/REB 93-04 PC **A03**/MF **A01**

**PB93-205888/REB**
Guide to Using Chesapeake Bay Program Water Quality Monitoring Data.
PB93-205888/REB 93-04 PC **A07**/MF **A02**

**PB93-205896/REB**
Pesticide Reregistration, March 1991.
PB93-205896/REB 93-04 PC **A03**/MF **A01**

**PB93-205904/REB**
Quality of Our Nation's Water: 1990.
PB93-205904/REB 93-04 PC **A03**/MF **A01**

**PB93-205961/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Monofilament Fiber Manufacturing.
PB93-205961/REB 93-04 PC **A02**/MF **A01**

**PB93-205979/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Printing Operations.
PB93-205979/REB 93-04 PC **A02**/MF **A01**

**PB93-205987/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electrodeposition of Organic Coatings.
PB93-205987/REB 93-04 PC **A02**/MF **A01**

**PB93-205995/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Spray Application of Organic Coatings.
PB93-205995/REB 93-04 PC **A02**/MF **A01**

**PB93-206001/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Semiconductor Manufacturing.
PB93-206001/REB 93-04 PC **A02**/MF **A01**

**PB93-206019/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Formulation of Aqueous Solutions.
PB93-206019/REB 93-04 PC **A02**/MF **A01**

**PB93-206027/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Electroplating Operations.
PB93-206027/REB 93-04 PC **A02**/MF **A01**

**PB93-206035/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Textile Dyeing.
PB93-206035/REB 93-04 PC **A02**/MF **A01**

**PB93-206043/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Presswood and Laminated Wood Products Manufacturing.
PB93-206043/REB 93-04 PC **A02**/MF **A01**

**PB93-206050/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Roller, Knife, and Gravure Coating Operations.
PB93-206050/REB 93-04 PC **A03**/MF **A01**

**PB93-206068/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Paper and Paperboard Production.
PB93-206068/REB 93-04 PC **A03**/MF **A01**

**PB93-206076/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Leather Tanning and Finishing.
PB93-206076/REB 93-04 PC **A03**/MF **A01**

**PB93-206084/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Wood Preserving Operations.
PB93-206084/REB 93-04 PC **A03**/MF **A01**

**PB93-206092/REB**
Title III Section 313 Release Reporting Guidance: Estimating Chemical Releases from Rubber Production and Compounding.
PB93-206092/REB 93-04 PC **A03**/MF **A01**

**PB93-206209/REB**
Superfund: Environmental Progress.
PB93-206209/REB 93-04 PC **A03**/MF **A01**

**PB93-206340/REB**
Bioremediation in the Field: Number 1, November 1990.
PB93-206340/REB 93-04 PC **A03**/MF **A01**

**PB93-206399/REB**
America's Wetlands: Our Vital Link between Land and Water.
PB93-206399/REB 93-04 PC **A02**/MF **A01**

**PB93-206449/REB**
Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances.
PB93-206449/REB 93-04 PC **A06**/MF **A02**

**PB93-206472/REB**
Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards, and Pretreatment Standards for the Paint Formulating Point Source Category.
PB93-206472/REB 93-04 PC **A21**/MF **A04**

# NTIS ORDER/REPORT NUMBER INDEX

**PB93-206480/REB**
Treatability Studies for the Inorganic Chemicals Manufacturing Point Source Category.
PB93-206480/REB 93-04 PC **A11**/MF **A03**

**PB93-206498/REB**
Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 1.
PB93-206498/REB 93-04 PC **A24**/MF **A04**

**PB93-206506/REB**
Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Metal Molding and Casting (Foundries). Point Source Category. Volume 2.
PB93-206506/REB 93-04 PC **A22**/MF **A04**

**PB93-206514/REB**
Development Document for Effluent Limitations Guidelines and Standards for the Porcelain Enameling. Point Source Category.
PB93-206514/REB 93-04 PC **A21**/MF **A04**

**PB93-206522/REB**
Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category (Proposed).
PB93-206522/REB 93-04 PC **A23**/MF **A04**

**PB93-206530/REB**
Development Document for Effluent Limitations Guidelines New Source Performance Standards and Pretreatment Standards for the Inorganic Chemicals Manufacturing Point Source Category, Phase 2 (Proposed).
PB93-206530/REB 93-04 PC **A24**/MF **A04**

**PB93-206548/REB**
Proposed Revisions to Ocean Dumping Criteria: Final Environmental Impact Statement. Volume 2.
PB93-206548/REB 93-04 PC **A99**/MF **A06**

**PB93-206555/REB**
Global Oceans Directory. A Compendium of Organizations Dedicated to Marine Conservation.
PB93-206555/REB 93-04 PC **A06**/MF **A02**

**PB93-206563/REB**
National Air Toxics Information Clearinghouse: Ongoing Research and Regulatory Development Projects, July 1992.
PB93-206563/REB 93-04 PC **A14**/MF **A03**

**PB93-206571/REB**
National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Index, 1992.
PB93-206571/REB 93-04 PC **A99**/MF **A06**

**PB93-206589/REB**
National Air Toxics Information Clearinghouse: NATICH Data Base Report of Federal, State, Local and EPA Air Toxics Activities.
PB93-206589/REB 93-04 PC **A99**/MF **E06**

**PB93-206597/REB**
Cold Starting an Alcohol-Fueled Engine with Ultrasonic Fuel Atomization.
PB93-206597/REB 93-04 PC **A03**/MF **A01**

**PB93-206605/REB**
Pesticide Reregistration Progress Report, October 1991.
PB93-206605/REB 93-04 PC **A03**/MF **A01**

**PB93-206746/REB**
Pesticide Fact Sheet: 'Pseudomonas cepacia' Type Wisconsin.
PB93-206746/REB 93-04 PC **A02**/MF **A01**

**PB93-206753/REB**
Pesticide Fact Sheet Number 239: Cimectacarb.
PB93-206753/REB 93-04 PC **A02**/MF **A01**

**PB93-206761/REB**
Pesticide Fact Sheet: Streptomyces sp. Strain K61.
PB93-206761/REB 93-04 PC **A02**/MF **A01**

**PB93-206779/REB**
Pesticide Fact Sheet: Polyhedral Occlusion Bodies of the Nuclear Polyhedrosis Virus of 'Spodoptera exigua'.
PB93-206779/REB 93-01 PC **A02**/MF **A01**

**PB93-206787/REB**
Pesticide Fact Sheet: 'Metarhizium anisopliae' Strain ESF1.
PB93-206787/REB 93-01 PC **A01**/MF **A01**

**PB93-206969/REB**
Development Document for Effluent Limitations Guidelines and Standards for the Pharmaceuticals Manufacturing. Point Source Category.
PB93-206969/REB 93-04 PC **A04**/MF **A01**

**PB93-206977/REB**
INSEA User's Manual Environmental Performance Model of Incineration at Sea Operations.
PB93-206977/REB 93-04 PC **A07**/MF **A02**

**PB93-206993/REB**
Proceeding of the Workshop on the Sea-Surface Microlayer in Relation to Ocean Disposal. Held in Airlie, Virginia on December 18-19, 1985.
PB93-206993/REB 93-04 PC **A06**/MF **A02**

**PB93-207108/REB**
Proceedings of the National Citizens' Volunteer Water Monitoring Conference (3rd). Held in Annapolis, Maryland on March 29-April 2, 1992. Building Partnerships in the Year of Clean Water.
PB93-207108/REB 93-04 PC **A09**/MF **A02**

**PB93-207348/REB**
Criteria for Review of Hazardous Materials Emergency Plans.
PB93-207348/REB 93-04 PC **A03**/MF **A01**

**PB93-207363/REB**
Case Studies in Wellhead Protection: Ten Examples of Innovative Wellhead Protection Programs.
PB93-207363/REB 93-04 PC **A03**/MF **A01**

**PB93-207397/REB**
Guide for Cost-Effectiveness and Cost-Benefit Analysis of State and Local Ground Water Protection Programs.
PB93-207397/REB 93-04 PC **A06**/MF **A02**

**PB93-207405/REB**
Role and Function of Forest Buffers in the Chesapeake Bay Basin for Nonpoint Source Management.
PB93-207405/REB 93-04 PC **A03**/MF **A01**

**PB93-207413/REB**
Contaminated Sediments News: Number 5, April, 1992.
PB93-207413/REB 93-04 PC **A02**/MF **A01**

**PB93-207447/REB**
Environmental Chamber Studies of Maximum Incremental Reactivities of Volatile Organic Compounds.
PB93-207447/REB 93-04 PC **A11**/MF **A03**

**PB93-207488/REB**
Report to Congress on Implementation of Section 403(c) of the Federal Water Pollution Control Act.
PB93-207488/REB 93-04 PC **A07**/MF **A02**

**PB93-207496/REB**
National Directory of Citizen Volunteer Environmental Monitoring Programs (Third Edition).
PB93-207496/REB 93-04 PC **A03**/MF **A01**

**PB93-207504/REB**
Ground-Water Modeling Compendium. Model Fact Sheets, Descriptions, Applications and Assessment Framework.
PB93-207504/REB 93-04 PC **A08**/MF **A02**

**PB93-207520/REB**
Locating and Estimating Air Emissions from Sources of Styrene.
PB93-207520/REB 93-04 PC **A08**/MF **A02**

**PB93-207538/REB**
Community Right-to-Know and Small Business: Understanding Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act of 1986.
PB93-207538/REB 93-04 PC **A03**/MF **A01**

**PB93-207546/REB**
Portraits of Our Coastal Waters. Supplement to the National Water Quality Inventory. Report from the EPA Regions.
PB93-207546/REB 93-04 PC **A03**/MF **A01**

**PB93-207553/REB**
International Evaluation of In-situ Biorestoration of Contaminated Soil and Groundwater (September 1990)--Translation.
PB93-207553/REB 93-04 PC **A03**/MF **A01**

**PB93-207561/REB**
Linking Estuarine Water Quality and Impacts on Living Resources: Shrinking Striped Bass Habitat in Chesapeake Bay and Albermarle Sound.
PB93-207561/REB 93-04 PC **A03**/MF **A01**

**PB93-207579/REB**
Locating and Estimating Air Emissions from Sources of Methylene Chloride.
PB93-207579/REB 93-04 PC **A10**/MF **A03**

**PB93-207652/REB**
National Air Toxics Information Clearinghouse: Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics. Volume 6. Citations, 1992.
PB93-207652/REB 93-04 PC **A10**/MF **A03**

**PB93-207660/REB**
Regulatory Impact Analysis: Control of Sulfur and Aromatics Contents of on-Highway Diesel Fuel.
PB93-207660/REB 93-04 PC **A12**/MF **A03**

**PB93-207710/REB**
Strategic Assessment of Near Coastal Waters: Northeast Case Study. Chapter 3. Susceptibility and Concentration Status of Northeast Estuaries to Nutrient Discharges.
PB93-207710/REB 93-04 PC **A04**/MF **A01**

**PB93-207728/REB**
Cost of Providing Government Services to Alternative Residential Patterns.
PB93-207728/REB 93-04 PC **A09**/MF **A02**

**PB93-207744/REB**
Monitoring, Research, and Surveillance Plan for the 106-Mile Deepwater Municipal Sludge Dump Site and Environs.
PB93-207744/REB 93-04 PC **A07**/MF **A02**

**PB93-207769/REB**
Great Lakes Water Quality Guidance Docket Index.
PB93-207769/REB 93-04 PC **A05**/MF **A01**

**PB93-207926/REB**
Lake and Reservoir Restoration Guidance Manual: Second Edition.
PB93-207926/REB 93-04 PC **A15**/MF **A03**

**PB93-207934/REB**
Supplementary Development Document for Effluent Limitations Guidelines for the Leather Tanning and Finishing Point Source Category.
PB93-207934/REB 93-04 PC **A06**/MF **A02**

**PB93-207967/REB**
Introduction to Water Quality-Based Toxics Control for the NPDES Program.
PB93-207967/REB 93-04 PC **A03**/MF **A01**

**PB93-207975/REB**
Federal Test Procedure Review Project: Preliminary Technical Report.
PB93-207975/REB 93-04 PC **A11**/MF **A03**

**PB93-208007/REB**
Analysis of Original Equipment and Aftermarket Manufacturer Oxygen Sensor Constructional, Functional, and Price Differences.
PB93-208007/REB 93-04 PC **A18**/MF **A04**

**PB93-208015/REB**
Report on the EPA/Manufacturer Cooperative I/M Testing Program.
PB93-208015/REB 93-04 PC **A10**/MF **A03**

**PB93-208072/REB**
Proceedings of the Ocean Dumping Workshop 106-Mile Site. Held in Ocean City, NJ., on March 28-30, 1989.
PB93-208072/REB 93-04 PC **A07**/MF **A02**

**PB93-208148/REB**
Clark-Fork-Pend Oreille Basin Water Quality Study: A Summary of Findings and a Management Plan.
PB93-208148/REB 93-04 PC **A08**/MF **A02**

**PB93-208213/REB**
Development Document for Effluent Limitations Guidelines and Standards for the Aluminum Forming Point Source Category.
PB93-208213/REB 93-04 PC **A99**/MF **A06**

**PB93-208221/REB**
Development Document for Proposed Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Pharmaceutical Manufacturing Point Source Category.
PB93-208221/REB 93-04 PC **A22**/MF **A04**

**PB93-208262/REB**
Incorporating Uncertainty Associated with Censored Water Quality Data in Parametric Trend Analysis.
PB93-208262/REB 93-04 PC **A03**/MF **A01**

**PB93-208270/REB**
Chesapeake Bay Coordinated Split Sample Program Annual Report, 1990-1991: Analytical Methods and Quality Assurance Workgroup of the Chesapeake Bay Program Monitoring Subcommittee.
PB93-208270/REB 93-04 PC **A06**/MF **A02**

**PB93-208288/REB**
Comparison of Mid-Bay and Lateral Station Water Quality Data in the Chesapeake Bay Mainstem: Chesapeake Bay Program.
PB93-208288/REB 93-04 PC **A05**/MF **A01**

**PB93-208320/REB**
Proceedings and Summary of the Workshop on Finfish as Indicators of Toxic Contamination. Held in Airlie, Virginia on July 27-28, 1986.
PB93-208320/REB 93-04 PC **A06**/MF **A02**

**PB93-208668/REB**
Toxics Release Inventory. Public Data Release. State Fact Sheets, 1991.
PB93-208668/REB 93-04 PC **A06**/MF **A02**

**PB93-208759/REB**
Illinois Annual Air Quality Report, 1992.
PB93-208759/REB 93-04 PC **A05**/MF **A01**

**PB93-208775/REB**
Illinois Annual Air Quality Report, 1991.
PB93-208775/REB 93-04 PC **A05**/MF **A01**

**PB93-209013/REB**
Enhancement of the Pesticide Residues Information System (PRIS). Volume 1.
PB93-209013/REB 93-04 PC **A03**/MF **A01**

**PB93-209021/REB**
Enhancement of the Pesticide Residues Information System (PRIS). Volume 2.
PB93-209021/REB 93-04 PC **A15**/MF **A03**

**PB93-209146/REB**
Test Plan and Technical Protocol for a Field Treatability Test for Bioventing.
PB93-209146/REB 93-04 PC **A05**/MF **A01**

**PB93-209401/REB**
Compilation of Ground-Water Models.
PB93-209401/REB 93-04 PC **A13**/MF **A03**

**PB93-209419/REB**
Geotechnical Systems for Structures on Contaminated Sites: A Technical Guidance Document.
PB93-209419/REB 93-04 PC **A08**/MF **A02**

**PB93-209427/REB**
Report to the United States Congress on Radionuclides in Drinking Water: Multimedia Risk and Cost Assessment of Radon in Drinking Water.
PB93-209427/REB 93-04 PC **A08**/MF **A02**

**PB93-209872/REB**
Supplemental Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation.
PB93-209872/REB 93-04 PC **A06**/MF **A02**

**PB93-209898/REB**
Guidance for Capacity Assurance Planning. Capacity Planning Pursuant to CERCLA Section 104(c)(9).
PB93-209898/REB 93-04 PC **A09**/MF **A02**

**PB93-209989/REB**
National Radon Measurement Proficiency Program: Individual Proficiency Report.
PB93-209989/REB 93-04 PC **A16**/MF **A03**

**PB93-209997/REB**
National Radon Contractor Proficiency (RCP) Program. Proficiency Report, July 1993.
PB93-209997/REB 93-04 PC **A11**/MF **A03**

**PB93-210110/REB**
Survey of Medical Waste Incinerators and Emissions Control.
PB93-210110/REB 93-04 PC **A19**/MF **A04**

**PB93-210193/REB**
Water Quality in Illinois, 1990-1991.
PB93-210193/REB 93-04 PC **A03**/MF **A01**

**PB93-210219/REB**
Xeriscape Landscaping: Preventing Pollution and Using Resources Efficiently.
PB93-210219/REB 93-04 PC **A03**/MF **A01**

**PB93-210250/REB**
User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections.
PB93-210250/REB 93-04 PC **A05**/MF **A02**

**PB93-210300/REB**
Commitment to Watershed Protection: A Review of the Clean Lakes Program.
PB93-210300/REB 93-04 PC **A04**/MF **A01**

**PB93-210359/REB**
Guidance on the Application of Refined Dispersion Models for Hazardous/Toxic Air Releases.
PB93-210359/REB 93-04 PC **A20**/MF **A04**

**PB93-210367/REB**
Workbook of Screening Techniques for Assessing Impacts of Toxic Air Pollutants (Revised).
PB93-210367/REB 93-04 PC **A14**/MF **A03**

**PB93-210375/REB**
Fish and Fisheries Management in Lakes and Reservoirs. Technical Supplement to the Lake and Reservoir Restoration Guidance Manual.
PB93-210375/REB 93-04 PC **A15**/MF **A03**

**PB93-210383/REB**
Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.
PB93-210383/REB 93-04 PC **A07**/MF **A02**

**PB93-210391/REB**
Guideline for Modeling Carbon Monoxide from Roadway Intersections.
PB93-210391/REB 93-04 PC **A04**/MF **A01**

**PB93-211985/REB**
What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Sea.
PB93-211985/REB 93-04 PC **A21**/MF **A04**

**PB93-212025/REB**
Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants (Revised).
PB93-212025/REB 93-04 PC **A05**/MF **A01**

**PB93-212033/REB**
Partners Rebuilding America: Public-Private Partnerships in Wastewater Finance.
PB93-212033/REB 93-04 PC **A01**/MF **A01**

**PB93-212041/REB**
Catalog of Materials as Potential Sources of Indoor Air Emissions. Volume 1. Insulation, Wallcoverings, Resilient Floor Coverings, Carpet, Adhesives, Sealants and Caulks, and Pesticides.
PB93-212041/REB 93-04 PC **A13**/MF **A03**

**PB93-212058/REB**
Research Plan and Methods Manual for the Oregon Wetlands Study.
PB93-212058/REB 93-04 PC **A09**/MF **A02**

**PB93-212181/REB**
Field Test of a Generic Method for Halogenated Hydrocarbons.
PB93-212181/REB 93-04 PC **A13**/MF **A03**

**PB93-212264/REB**
Association of Personal and Workplace Characteristics with Reported Health Symptoms of 6771 Government Employees in Washington, DC.
PB93-212264/REB 93-04 PC **A02**/MF **A01**

**PB93-212272/REB**
UV Monitoring Program at US EPA.
PB93-212272/REB 93-04 PC **A03**/MF **A01**

**PB93-212298/REB**
Low Cost Procedure to Make Gaseous Pollutant Audit Materials.
PB93-212298/REB 93-04 PC **A02**/MF **A01**

**PB93-212306/REB**
Pilot Study for Measuring Environmental Exposures from Agricultural Applications of Pesticides: An Overview.
PB93-212306/REB 93-04 PC **A02**/MF **A01**

**PB93-212314/REB**
Recent Advances in Measuring Exhaled Breath and Estimating Exposure and Body Burden for Volatile Organic Compounds (VOCS).
PB93-212314/REB 93-04 PC **A03**/MF **A01**

**PB93-212322/REB**
National Performance Audit Program (NPAP).
PB93-212322/REB 93-04 PC **A02**/MF **A01**

**PB93-212330/REB**
Indoor, Outdoor, and Personal Air Exposures to Particles, Elements, and Nicotine for 178 Residents of Riverside, California.
PB93-212330/REB 93-04 PC **A02**/MF **A01**

**PB93-212348/REB**
NCI/EPA Agricultural Health Study (AHS): Development of the Biomarker Questionnaire.
PB93-212348/REB 93-04 PC **A02**/MF **A01**

**PB93-212355/REB**
Rapid Phase Indentification of Mixed Crystalline Solids.
PB93-212355/REB 93-04 PC **A03**/MF **A01**

**PB93-212363/REB**
Experimental Evaluation of the Mathematical Model for In situ Aquifer Restoration Processes.
PB93-212363/REB 93-04 PC **A02**/MF **A01**

**PB93-212371/REB**
Evaluating Parameter Estimation Techniques Applied in Vadose Zone Modeling.
PB93-212371/REB 93-04 PC **A03**/MF **A01**

**PB93-212389/REB**
EPA's Information Management System for Tracking Reasonable Further Progress.
PB93-212389/REB 93-04 PC **A03**/MF **A01**

**PB93-212397/REB**
IAQPC: An Indoor Air Quality Simulator.
PB93-212397/REB 93-04 PC **A03**/MF **A01**

**PB93-212405/REB**
Relating Air Cleaner Efficiency to Indoor Air Quality.
PB93-212405/REB 93-04 PC **A03**/MF **A01**

**PB93-212413/REB**
EPA's Photovoltaic Demand-Side Management Cost-Shared Demonstrations.
PB93-212413/REB 93-04 PC **A02**/MF **A01**

**PB93-212421/REB**
Methane Emissions from the Natural Gas Industry.
PB93-212421/REB 93-04 PC **A03**/MF **A01**

**PB93-212439/REB**
EPA's Research in LCA Methodology.
PB93-212439/REB 93-04 PC **A03**/MF **A01**

**PB93-212447/REB**
Pollution Prevention Research Ongoing: EPA's Risk Reduction Engineering Laboratory.
PB93-212447/REB 93-04 PC **A02**/MF **A01**

**PB93-212454/REB**
Effects of Ultraviolet-B Radiation on Primary Production along Latitudinal Transects in the South Pacific Ocean.
PB93-212454/REB 93-04 PC **A03**/MF **A01**

**PB93-212462/REB**
Impacts of Section 404 Permits Requiring Compensatory Mitigation of Freshwater Wetlands in Texas and Arkansas.
PB93-212462/REB 93-04 PC **A03**/MF **A01**

**PB93-212470/REB**
Comparison of Created and Natural Freshwater Emergent Wetlands in Connecticut (USA).
PB93-212470/REB 93-04 PC **A03**/MF **A01**

**PB93-212488/REB**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: I. Method Summary.
PB93-212488/REB 93-04 PC **A03**/MF **A01**

**PB93-212496/REB**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: II. Defining Assessment End Points, Indicators, and Functional Subregions.
PB93-212496/REB 93-04 PC **A02**/MF **A01**

**PB93-212504/REB**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: III. Deposition Characterization.
PB93-212504/REB 93-04 PC **A03**/MF **A01**

**PB93-212512/REB**
Impacts of Section 404 Permits Requiring Compensatory Mitigation on Wetlands in California (USA).
PB93-212512/REB 93-04 PC **A03**/MF **A01**

**PB93-212520/REB**
Transient Suppression Packaging for Reduced Emissions from Rotary Kiln Incinerators.
PB93-212520/REB 93-04 PC **A03**/MF **A01**

**PB93-212538/REB**
Hazardous Waste Incineration: The In-situ Capture of Lead by Sorbents in a Laboratory Down-Flow Combustor.
PB93-212538/REB 93-04 PC **A03**/MF **A01**

**PB93-212546/REB**
Estimation of Methane Emissions from a Surface Coal Mine Using Open-Path FTIR Spectroscopy and Modeling Techniques.
PB93-212546/REB 93-04 PC **A03**/MF **A01**

**PB93-212553/REB**
Estimate of Global Methane Emissions from Coal Mines.
PB93-212553/REB 93-04 PC **A03**/MF **A01**

**PB93-212561/REB**
Comparison of Methods for Estimating Global Methane Emissions from Landfills.
PB93-212561/REB 93-04 PC **A03**/MF **A01**

**PB93-212579/REB**
Global Methane Emissions Program for Landfills, Coal Mines, and Natural Gas Systems.
PB93-212579/REB 93-04 PC **A02**/MF **A01**

**PB93-212587/REB**
Effects of Food Density on Growth and on Patterns of Prey Depletion by Larval Silverside Fish, 'Menidia beryllina' (Cope): A Laboratory Investigation with Image Analysis.
PB93-212587/REB 93-04 PC **A03**/MF **A01**

**PB93-212595/REB**
Characterization of Reference Artemia III for Marine Toxicological Studies.
PB93-212595/REB 93-04 PC **A03**/MF **A01**

**PB93-212603/REB**
Experimental Inducement of Nitrogen Saturation at the Watershed Scale.
PB93-212603/REB 93-04 PC **A02**/MF **A01**

**PB93-212611/REB**
Survival Differences among Freeze-Dried Genetically Engineered and Wild-Type Bacteria.
PB93-212611/REB 93-04 PC **A02**/MF **A01**

**PB93-212629/REB**
Biased DNA Integration in 'Colletotrichum gloeosporioides f. sp. aeschynomene' Transformants with Benomyl Resistance.
PB93-212629/REB 93-04 PC **A02**/MF **A01**

**PB93-212637/REB**
Forest Management and Agroforestry to Sequester and Conserve Atmospheric Carbon Dioxide.
PB93-212637/REB 93-04 PC **A03**/MF **A01**

**PB93-212645/REB**
Effect of Phenotypic Plasticity on Epiphytic Survival and Colonization by 'Pseudomonas syringae'.
PB93-212645/REB 93-04 PC **A02**/MF **A01**

**PB93-212652/REB**
Availability and Uptake of Inorganic Nitrogen in a Mixed Old-Growth Coniferous Forest.
PB93-212652/REB 93-04 PC **A03**/MF **A01**

**PB93-212660/REB**
National Critical Loads Framework for Atmospheric Deposition Effects Assessment: IV. Model Selection, Applications, and Critical Loads Mapping.
PB93-212660/REB 93-04 PC **A02**/MF **A01**

**PB93-212678/REB**
Synthesis of Ectomycorrhizae on Northern Red Oak Seedlings in a Michigan Nursery.
PB93-212678/REB 93-04 PC **A02**/MF **A01**

**PB93-212686/REB**
Non-Local Closure Model for Vertical Mixing in the Convective Boundary Layer.
PB93-212686/REB 93-04 PC **A03**/MF **A01**

**PB93-212694/REB**
Accuracy Assessment of EPA Protocol Gases Purchased in 1991.
PB93-212694/REB 93-04 PC **A01**/MF **A01**

**PB93-212702/REB**
Interpretive Analysis of Observed and Modeled Mesoscale Ozone Photochemistry in Areas with Numerous Point Sources.
PB93-212702/REB 93-04 PC **A03**/MF **A01**

**PB93-212710/REB**
Correcting RADM's Sulfate Underprediction: Discovery and Correction of Model Errors and Testing the Corrections through Comparisons against Field Data.
PB93-212710/REB 93-04 PC **A03**/MF **A01**

**PB93-212728/REB**
Final Results of the Condors Convective Diffusion Experiment.
PB93-212728/REB 93-04 PC **A03**/MF **A01**

**PB93-212736/REB**
Vertical Dispersion from Surface and Elevated Releases: An Investigation of a Non-Gaussian Plume Model.
PB93-212736/REB 93-04 PC **A03**/MF **A01**

**PB93-212744/REB**
Ambient Temperature and Driving Cycle Effects on CNG Motor Vehicle Emission.
PB93-212744/REB 93-04 PC **A03**/MF **A01**

**PB93-212751/REB**
Evaluation of Ventilation Performance for Indoor Space.
PB93-212751/REB 93-04 PC **A02**/MF **A01**

**PB93-212769/REB**
Models, Muddles, and Mud: Predicting Bioaccumulation of Sediment-Associated Pollutants.
PB93-212769/REB 93-04 PC **A03**/MF **A01**

**PB93-212777/REB**
Statistical Analyses of COADS Wind Data in Coastal Regions of the United States.
PB93-212777/REB 93-04 PC **A03**/MF **A01**

**PB93-212785/REB**
Alternative Air Quality Indicators for a Secondary Federal Standards for Ozone.
PB93-212785/REB 93-04 PC **A03**/MF **A01**

**PB93-212793/REB**
Ecotoxicological Principles for Avian Field Studies Using Radiotelemetry or Remote Sensing.
PB93-212793/REB 93-04 PC **A02**/MF **A01**

**PB93-212801/REB**
Management of Arsenical Wood Preserving Residuals by Recovery and Immobilization.
PB93-212801/REB 93-04 PC **A03**/MF **A01**

**PB93-212819/REB**
Downwash of Plumes in the Vicinity of Buildings: A Wind-Tunnel Study.
PB93-212819/REB 93-04 PC **A03**/MF **A01**

**PB93-212827/REB**
Aerosol Measurement: Principles, Techniques, and Applications.
PB93-212827/REB 93-04 PC **A03**/MF **A01**

**PB93-212835/REB**
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991.
PB93-212835/REB 93-04 PC **E99**/MF **E99**

**PB93-212843/REB**
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 1. Sessions 1-3.
PB93-212843/REB 93-04 PC **A15**/MF **A03**

**PB93-212850/REB**
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 2. Sessions 4 and 5.
PB93-212850/REB 93-04 PC A20/MF A04

**PB93-212868/REB**
Proceedings: 1991 Joint Symposium on Stationary Combustion NOx Control. Held in Washington, DC. on March 25-28, 1991. Volume 3. Sessions 6-8.
PB93-212868/REB 93-04 PC A19/MF A04

**PB93-213213/REB**
Guideline on Air Quality Models (Revised): Appendix W of 40 CFR Part 51 (Supplement B).
PB93-213213/REB 93-04 PC A03/MF A01

**PB93-213494/REB**
Revision of Methodology for Deriving National Ambient Water Quality Criteria for the Protection of Human Health: Report of Workshop and EPA's Preliminary Recommendations for Revision.
PB93-213494/REB 93-04 PC A06/MF A02

**PB93-213916/REB**
EVAP3.0 CRC Evaporative Emission Model: User's Manual.
PB93-213916/REB 93-04 PC A03/MF A01

**PB93-214328/REB**
Re-Evaluation of the Economic Impact Analysis of Effluent Limitations Guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers Industry.
PB93-214328/REB 93-04 PC A03/MF A01

**PB93-214336/REB**
Supplement to the Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Organic Chemicals, Plastics and Synthetic Fibers Point Source Category.
PB93-214336/REB 93-04 PC A08/MF A02

**PB93-214344/REB**
Preliminary Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease.
PB93-214344/REB 93-04 PC A05/MF A02

**PB93-214419/REB**
Development of an Analysis Method for Total Nonmethane Volatile Organic Carbon Emissions from Stationary Sources.
PB93-214419/REB 93-04 PC A05/MF A01

**PB93-215564/REB**
In-situ Bioremediation of Ground Water and Geological Material: A Review of Technologies.
PB93-215564/REB 93-04 PC A12/MF A03

**PB93-215572/REB**
RCRA Corrective Action Stabilization Technologies. Proceedings of the National Corrective Action Stabilization Conference. Held in Colorado Springs, CO., February 1992.
PB93-215572/REB 93-04 PC A05/MF A01

**PB93-215580/REB**
Wellhead Protection: A Guide for Small Communities.
PB93-215580/REB 93-04 PC A08/MF A02

**PB93-215598/REB**
Organic Air Emissions from Waste Management Facilities.
PB93-215598/REB 93-04 PC A07/MF A02

**PB93-215606/REB**
Small Community Water and Wastewater Treatment.
PB93-215606/REB 93-04 PC A05/MF A01

**PB93-215614/REB**
Control of Air Emissions from Superfund Sites.
PB93-215614/REB 93-04 PC A08/MF A02

**PB93-215622/REB**
Estimation of Air Impacts for Solidification and Stabilization Processes Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215622/REB 93-04 PC A04/MF A01

**PB93-215630/REB**
Estimation of Air Impacts for Thermal Desorption Units Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215630/REB 93-04 PC A04/MF A01

**PB93-215648/REB**
Air/Superfund National Technical Guidance Study Series: Estimation of Air Impacts from Area Sources of Particulate Matter Emissions at Superfund Sites.
PB93-215648/REB 93-04 PC A03/MF A01

**PB93-215655/REB**
Estimation of Air Impacts for Bioventing Systems Used at Superfund Sites. Air/Superfund National Technical Guidance Study Series.
PB93-215655/REB 93-04 PC A04/MF A01

**PB93-215663/REB**
Development and Testing of Dry Deposition Algorithms.
PB93-215663/REB 93-04 PC A08/MF A02

**PB93-215861/REB**
Guidelines for Delineation of Wellhead Protection Areas, 1993.
PB93-215861/REB 93-04 PC A10/MF A03

**PB93-215929/REB**
Lake Water Quality Assessment Program: Southern Illinois Lakes.
PB93-215929/REB 93-04 PC A03/MF A01

**PB93-216067/REB**
Technology Evaluation Report: Toronto Harbour Commissioners (THC) Soil Recycle Treatment Train.
PB93-216067/REB 93-04 PC A07/MF A02

**PB93-216075/REB**
Environmental Monitoring Issues: Results of Workshops Held in July 1992 as Part of EPA's Eighth Annual Waste Testing and Quality Assurance Symposium.
PB93-216075/REB 93-04 PC A12/MF A03

**PB93-216109/REB**
Protecting Local Ground-Water Supplies through Wellhead Protection.
PB93-216109/REB 93-04 PC A03/MF A01

**PB93-216174/REB**
Marine Industry Characterization Report.
PB93-216174/REB 93-04 PC A10/MF A03

**PB93-216273/REB**
Selecting Remediation Techniques for Contaminated Sediment.
PB93-216273/REB 93-04 PC A10/MF A03

**PB93-216380/REB**
Simultaneous Control of PM-10 and Hazardous Air Pollutants: Rationale for Selection of Hazardous Air Pollutants as Potential Particulate Matter or Associated with Particulate Matter at Source Conditions.
PB93-216380/REB 93-04 PC A05/MF A01

**PB93-216562/REB**
Mobile On-Site Recycling of Metalworking Fluids.
PB93-216562/REB 93-04 PC A04/MF A01

**PB93-216570/REB**
Outreach to Manufacturers of Lead Test Kits.
PB93-216570/REB 93-04 PC A03/MF A01

**PB93-216588/REB**
Effects of UV-B and Global Climate Change on Rice: Second Annual Program Progress Report.
PB93-216588/REB 93-04 PC A07/MF A02

**PB93-216596/REB**
Technology Evaluation Report: Site Program Demonstration Test. Accutech Pneumatic Fracturing Extraction and Hot Gas Injection, Phase 1. Volume 1.
PB93-216596/REB 93-04 PC A08/MF A02

**PB93-216604/REB**
Workshop Report: Identification of Performance Parameters for Test Kit Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 12-13, 1993.
PB93-216604/REB 93-04 PC A06/MF A02

**PB93-216612/REB**
Workshop Report: Identification of Performance Parameters for Portable X-ray Fluorescence Measurement of Lead in Paint. Held in Research Triangle Park, North Carolina on January 11-12, 1993.
PB93-216612/REB 93-04 PC A05/MF A02

**PB93-216638/REB**
Companies that Generate, Treat, Dispose or Recover Hazardous Waste. 1991 Annual Report.
PB93-216638/REB 93-04 PC A15/MF A03

**PB93-216869/REB**
Evaluation of Specialized Catalysts for Methanol (M100) Vehicles.
PB93-216869/REB 93-04 PC A03/MF A01

**PB93-216885/REB**
SCREEN2 Model User's Guide.
PB93-216885/REB 93-04 PC A04/MF A01

**PB93-216927/REB**
Volunteer Lake Monitoring Program, 1992. Volume 1: Statewide Summary.
PB93-216927/REB 93-04 PC A06/MF A02

**PB93-216950/REB**
Comparative Health Effects Assessment of Drinking Water Treatment Technologies: Report to Congress.
PB93-216950/REB 93-04 PC A03/MF A01

**PB93-216992/REB**
Turning the Tide on Trash: A Learning Guide on Marine Debris.
PB93-216992/REB 93-04 PC A05/MF A01

**PB93-217172/REB**
National Estuary Program Guidance. Comprehensive Conservation and Management Plans: Content and Approval Requirements.
PB93-217172/REB 93-04 PC A03/MF A01

**PB93-217180/REB**
Biological and Water Quality Survey of Sugar Creek and Tributaries Crawford County, Illinois, August and September 1992.
PB93-217180/REB 93-04 PC A04/MF A01

**PB93-217214/REB**
Volunteer Lake Monitoring Program, 1992. Volume 2: Northwestern Illinois Region.
PB93-217214/REB 93-04 PC A04/MF A01

**PB93-217412/REB**
Reactive Plume Model IV (RPM-IV) User's Guide.
PB93-217412/REB 93-04 PC A23/MF A04

**PB93-217537/REB**
Guidance for Writing Permits for the Use or Disposal of Sewage Sludge.
PB93-217537/REB 93-04 PC A18/MF A04

**PB93-217560/REB**
Guiding Principles for Chemical Accident Prevention, Preparedness and Response.
PB93-217560/REB 93-04 PC A07/MF A02

**PB93-217628/REB**
State Clean Water Strategies: Meeting the Challenges of the Future.
PB93-217628/REB 93-04 PC A03/MF A01

**PB93-217636/REB**
Benefits and Feasibility of Effluent Trading between Point Sources: An Analysis in Support of Clean Water Act Reauthorization.
PB93-217636/REB 93-04 PC A04/MF A01

**PB93-217644/REB**
Training Manual for NPDES Permit Writers.
PB93-217644/REB 93-04 PC A09/MF A02

**PB93-217651/REB**
Risk Reduction Engineering Laboratory Site Remediation Technical Support Program: FY92 Annual Report.
PB93-217651/REB 93-04 PC A03/MF A01

**PB93-217669/REB**
3DFEMWATER/3DLEWASTE: Numerical Codes for Delineating Wellhead Protection Areas in Agricultural Regions Based on the Assimilative Capacity Criterion.
PB93-217669/REB 93-04 PC A12/MF A03

**PB93-217784/REB**
Leachate Generation and Migration at Subtitle D Facilities: A Summary and Review of Processes and Mathematical Models.
PB93-217784/REB 93-04 PC A07/MF A02

**PB93-217792/REB**
Anaerobic Dehalogenation and Its Environmental Implications. Abstracts of 1992 American Society for Microbiology Conference. Held in Athens, Georgia on August 30-September 4, 1992.
PB93-217792/REB 93-04 PC A04/MF A01

**PB93-218170/REB**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 4. Appendices.
PB93-218170/REB 93-04 PC A14/MF A03

**PB93-218188/REB**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province. Volume 3. Level 3 Analyses and Summary of Results.
PB93-218188/REB 93-04 PC A14/MF A03

**PB93-218196/REB**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 2. Level 1 and Level 2 Analyses.
PB93-218196/REB 93-04 PC A18/MF A04

**PB93-218204/REB**
Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northern and Southern Blue Ridge Province. Volume 1. Executive Summary, Project Approach and Data Sources.
PB93-218204/REB 93-04 PC A14/MF A03

**PB93-218238/REB**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 1.
PB93-218238/REB 93-04 PC A07/MF A02

**PB93-218246/REB**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 1: Pages 1 through 662.
PB93-218246/REB 93-04 PC A99/MF A06

**PB93-218253/REB**
Demonstration of Remedial Action Technologies for Contaminated Land and Groundwater. Volume 2, Appendices. Part 2: Pages 663 through 1389.
PB93-218253/REB 93-04 PC A99/MF A06

**PB93-218501/REB**
Airborne Asbestos Concentrations Three Years After Abatement in Seventeen Schools.
PB93-218501/REB 93-04 PC A07/MF A02

**PB93-218519/REB**
Fluid Sorbent Recycling Device for Industrial Fluid Users.
PB93-218519/REB 93-04 PC A04/MF A01

**PB93-218568/REB**
Evaluation of Three Cleaning Methods for Removing Asbestos from Carpet: Determination of Airborne Asbestos Concentrations Associated with Each Method.
PB93-218568/REB 93-04 PC A05/MF A01

**PB93-218576/REB**
Method for the Determination of Asbestos in Bulk Building Materials. (Test Method).
PB93-218576/REB 93-04 PC A05/MF A02

**PB93-218865/REB**
Recycling Nickel Electroplating Rinse Waters by Low Temperature Evaporation and Reverse Osmosis.
PB93-218865/REB 93-04 PC A04/MF A01

**PB93-219095/REB**
Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised.
PB93-219095/REB 93-04 PC A05/MF A01

**PB93-219111/REB**
Volunteer Lake Monitoring Program, 1992. Volume 4. West Central Illinois Region.
PB93-219111/REB 93-04 PC A04/MF A01

**PB93-219459/REB**
PR Notices 92-1 through 92-6.
PB93-219459/REB 93-04 PC E99/MF E99

**PB93-219467/REB**
PR Notice 92-1. Notice to Manufacturers, Formulators, Producers, and Registrants of Pesticide Products.
PB93-219467/REB 93-04 PC A02/MF A01

**PB93-219475/REB**
PR Notice 92-2. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219475/REB 93-04 PC **A01**/MF **A01**

**PB93-219483/REB**
PR Notice 92-3. Notice to Manufacturers, Formulators, Distributors, and Registrants of Pesticide Products.
PB93-219483/REB 93-04 PC **A03**/MF **A01**

**PB93-219491/REB**
PR Notice 92-4. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219491/REB 93-04 PC **A01**/MF **A01**

**PB93-219509/REB**
PR Notice 92-5. Notice to Manufacturers, Formulators, Producers and Registrants of Pesticide Products.
PB93-219509/REB 93-04 PC **A01**/MF **A01**

**PB93-219517/REB**
PR Notice 92-6. Notice to Manufacturers, Producers, Formulators and Registrants of Pesticides.
PB93-219517/REB 93-04 PC **A01**/MF **A01**

**PB93-219822/REB**
Pesticide Fact Sheet: 1-Indole-3-Butanethioic Acid, S-Phenyl Ester.
PB93-219822/REB 93-04 PC **A02**/MF **A01**

**PB93-219830/REB**
Pesticide Fact Sheet: Glufosinate Ammonium.
PB93-219830/REB 93-04 PC **A03**/MF **A01**

**PB93-219848/REB**
Pesticide Fact Sheet: GY-81/Enzone.
PB93-219848/REB 93-04 PC **A03**/MF **A01**

**PB93-219968/REB**
Toxics Release Inventory: Public Release Data, 1991.
PB93-219968/REB 93-04 PC **A16**/MF **A03**

**PB93-221620/REB**
Genetic Damage In vitro in Human Cells Following Ethylene Oxide Exposure: Chromosome Aberrations and DNA Single Strand Breaks 1 and 14 Days Following Exposure.
PB93-221620/REB 93-04 PC **A04**/MF **A01**

**PB93-221638/REB**
Evaluation of Ultrafiltration to Recover Aqueous Iron Phosphating/Degreasing Bath.
PB93-221638/REB 93-04 PC **A04**/MF **A01**

**PB93-221646/REB**
Environmental Fate Constants for Organic Chemicals under Consideration for EPA's Hazardous Waste Identification Projects.
PB93-221646/REB 93-04 PC **A09**/MF **A02**

**PB93-221653/REB**
Investigation of Test Kits for Detection of Lead in Paint, Soil and Dust.
PB93-221653/REB 93-04 PC **A07**/MF **A02**

**PB93-221810/REB**
Bioaccumulation of p,p'-DDE and PCB 1254 by a Flatsigh Bioindicator from Highly Contaminated Marine Sediments of Southern California (Chapter 10).
PB93-221810/REB 93-04 PC **A03**/MF **A01**

**PB93-221828/REB**
DNA Alterations (Chapter 3).
PB93-221828/REB 93-04 PC **A03**/MF **A01**

**PB93-221836/REB**
Significance of In-Place Contaminated Marine Sediments on the Water Column: Processes and Effects (Chapter 7).
PB93-221836/REB 93-04 PC **A03**/MF **A01**

**PB93-221844/REB**
Plume Definition in Regions of Strong Bending.
PB93-221844/REB 93-04 PC **A02**/MF **A01**

**PB93-221851/REB**
Source Apportionment of Fine Particle Organics and Mutagenicity in Wintertime Roanoke.
PB93-221851/REB 93-04 PC **A02**/MF **A01**

**PB93-221869/REB**
Analysis of Protocol Gases: An On-Going Quality Assurance Audit (May 1993).
PB93-221869/REB 93-04 PC **A03**/MF **A01**

**PB93-221877/REB**
VOCs in Mexico City Ambient Air.
PB93-221877/REB 93-04 PC **A02**/MF **A01**

**PB93-221885/REB**
Acid Aerosol Measurement Methods: A Summary of U.S. EPA Intercomparisons.
PB93-221885/REB 93-04 PC **A02**/MF **A01**

**PB93-221893/REB**
Replacement of Charcoal Sorbent in the VOST.
PB93-221893/REB 93-04 PC **A03**/MF **A01**

**PB93-221901/REB**
Combining Treatability Studies and Site Characterization for Rational Design of In situ Bioremediation Using Nitrate as an Electron Acceptor.
PB93-221901/REB 93-04 PC **A03**/MF **A01**

**PB93-221919/REB**
Retrospective Performance Evaluation on In situ Bioremediation: Site Characterization.
PB93-221919/REB 93-04 PC **A03**/MF **A01**

**PB93-221927/REB**
Geochemical Indicators of Anaerobic Biodegradation of BTEX.
PB93-221927/REB 93-04 PC **A03**/MF **A01**

**PB93-221935/REB**
Bioremediation of Chlorinated Solvents in the Vadose Zone.
PB93-221935/REB 93-04 PC **A02**/MF **A01**

**PB93-221943/REB**
Performance of Pilot Scale Bioventing at an Aviation Gasoline Spill Site.
PB93-221943/REB 93-04 PC **A02**/MF **A01**

**PB93-221950/REB**
Biotreatability of a Vadose Zone Soil Contaminated with Dioctyl Phthalate.
PB93-221950/REB 93-04 PC **A01**/MF **A01**

**PB93-221968/REB**
Comparison of Bioventing and Air Sparging for In situ Bioremediation of Fuels.
PB93-221968/REB 93-04 PC **A02**/MF **A01**

**PB93-221976/REB**
Particle-Size-Dependent Efficiency of Air Cleaners.
PB93-221976/REB 93-04 PC **A01**/MF **A01**

**PB93-221984/REB**
Establishing Priorities in the U.S. EPA's Indoor Air Engineering Research Program.
PB93-221984/REB 93-04 PC **A02**/MF **A01**

**PB93-221992/REB**
Fundamental Mass Transfer Models for Indoor Air Pollution Sources.
PB93-221992/REB 93-04 PC **A02**/MF **A01**

**PB93-222008/REB**
Technological Considerations for Planning the Global Carbon Future.
PB93-222008/REB 93-04 PC **A03**/MF **A01**

**PB93-222016/REB**
Removal Efficiencies in Terms of Particle Size and Concentration in a Suburban Home of Console Air Cleaners.
PB93-222016/REB 93-04 PC **A03**/MF **A01**

**PB93-222024/REB**
Assessment of Fungal Growth on Ceiling Tiles under Environmentally Characterized Conditions.
PB93-222024/REB 93-04 PC **A02**/MF **A01**

**PB93-222032/REB**
Bioresponse Testing of Sources of Indoor Air Contaminants.
PB93-222032/REB 93-04 PC **A02**/MF **A01**

**PB93-222040/REB**
Status of ASHRAE Standard 62. Ventilation for Acceptable Indoor Air Quality.
PB93-222040/REB 93-04 PC **A02**/MF **A01**

**PB93-222057/REB**
Evaluation of Carbon Black Slurries as Clean Burning Fuels.
PB93-222057/REB 93-04 PC **A03**/MF **A01**

**PB93-222065/REB**
EPA's Indoor Air/Pollution Prevention Workshop.
PB93-222065/REB 93-04 PC **A03**/MF **A01**

**PB93-222073/REB**
International Comparison Experiment on the Determination of VOCs Emitted from Indoor Materials Using Small Test Chambers.
PB93-222073/REB 93-04 PC **A02**/MF **A01**

**PB93-222081/REB**
Quantitative Assessment of Cancer Risk from Exposure to Diesel Engine Emissions.
PB93-222081/REB 93-04 PC **A03**/MF **A01**

**PB93-222099/REB**
Practical Simulation of Composting in the Laboratory.
PB93-222099/REB 93-04 PC **A03**/MF **A01**

**PB93-222107/REB**
Acid Volatile Sulfide Predicts the Acute Toxicity of Cadmium and Nickel in Sediments.
PB93-222107/REB 93-04 PC **A02**/MF **A01**

**PB93-222115/REB**
Measurement of Sediment Resuspension Rates in Long Island Sound.
PB93-222115/REB 93-04 PC **A01**/MF **A01**

**PB93-222123/REB**
Organic Combustion Fingerprints of Three Common Home Heating Fuels.
PB93-222123/REB 93-04 PC **A02**/MF **A01**

**PB93-222180/REB**
Guidelines for Water Use.
PB93-222180/REB 93-04 PC **A12**/MF **A03**

**PB93-222198/REB**
Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 1.
PB93-222198/REB 93-04 PC **A10**/MF **A03**

**PB93-222206/REB**
Behavior and Assimilation of Organic and Inorganic Priority Pollutants Codisposed with Municipal Refuse. Volume 2. Appendices.
PB93-222206/REB 93-04 PC **A15**/MF **A03**

**PB93-222214/REB**
Disinfection By-Product Formation by Alternative Disinfections and Removal by Granular Activated Carbon.
PB93-222214/REB 93-04 PC **A10**/MF **A03**

**PB93-222222/REB**
Gasoline and Methanol Exposures from Automobiles within Residences and Attached Garages.
PB93-222222/REB 93-04 PC **A02**/MF **A01**

**PB93-222230/REB**
Development of a Test Method for the Measurement of Gaseous Methanol Emissions from Stationary Sources.
PB93-222230/REB 93-04 PC **A02**/MF **A01**

**PB93-222248/REB**
Role and Design of Water Quality Monitoring on Forested Watersheds.
PB93-222248/REB 93-04 PC **A02**/MF **A01**

**PB93-222255/REB**
Histopathologic Biomarkers (Chapter 3).
PB93-222255/REB 93-04 PC **A04**/MF **A01**

**PB93-222263/REB**
Chemically Induced Histopathology in Aquatic Invertebrates (Chapter 14).
PB93-222263/REB 93-04 PC **A03**/MF **A01**

**PB93-222271/REB**
Climate Change Impacts on Net Primary Production in China.
PB93-222271/REB 93-04 PC **A03**/MF **A01**

**PB93-222289/REB**
Comparing Sampling Designs for Monitoring Ecological Status and Trends: Impact of Temporal Patterns (Chapter 3).
PB93-222289/REB 93-04 PC **A03**/MF **A01**

**PB93-222297/REB**
Dynamometer Testing of On-Road Vehicles from the Los Angeles in-Use Emissions Study.
PB93-222297/REB 93-04 PC **A03**/MF **A01**

**PB93-222305/REB**
Habitat Quality Assessment of Two Wetland Treatment Systems in the Arid West: A Pilot Study.
PB93-222305/REB 93-04 PC **A06**/MF **A02**

**PB93-222313/REB**
Global Climates: Past, Present, and Future. Activities for Integrated Science Education.
PB93-222313/REB 93-04 PC **A06**/MF **A02**

**PB93-222321/REB**
Stream Indicator and Design Workshop.
PB93-222321/REB 93-04 PC **A05**/MF **A01**

**PB93-222339/REB**
Effects of CO2 and Climate Change on Forest Trees.
PB93-222339/REB 93-04 PC **A07**/MF **A02**

**PB93-222354/REB**
Analytical Procedures and Quality Assurance Criteria for the Determination of Major and Minor Deoxynucleosides in Fish Tissue DNA by Liquid Chromatography-Ultraviolet Spectroscopy and Liquid Chromatography Thermospray Mass Spectrometry.
PB93-222354/REB 93-04 PC **A03**/MF **A01**

**PB93-222362/REB**
Sediment Testing Intermittent Renewal System for the Automated Renewal of Overlying Water in Toxicity Tests with Contaminated Sediments.
PB93-222362/REB 93-04 PC **A03**/MF **A01**

**PB93-222370/REB**
Protozoa in Subsurface Sediments from Sites Contaminated with Aviation Gasoline or Jet Fuel.
PB93-222370/REB 93-04 PC **A02**/MF **A01**

**PB93-222388/REB**
Global Flux of Methane from Shallow Submarine Sediments.
PB93-222388/REB 93-04 PC **A03**/MF **A01**

**PB93-222396/REB**
Microbial Degradative Activity in Ground Water at a Chemical Waste Disposal Site.
PB93-222396/REB 93-04 PC **A02**/MF **A01**

**PB93-222404/REB**
Sublethal Narcosis and Population Persistence: A Modeling Study on Growth Effects.
PB93-222404/REB 93-04 PC **A02**/MF **A01**

**PB93-222438/REB**
Industrial Boiler Furnace Sorbent Injection Algorithm Development.
PB93-222438/REB 93-04 PC **A01**/MF **A01**

**PB93-222545/REB**
Preliminary Diagnostic Procedures for Radon Control. Project Summary.
PB93-222545/REB 93-04 PC **A01**/MF **A01**

**PB93-222552/REB**
Projections of Regional Fuel Oil and Natural Gas Prices. Project Summary.
PB93-222552/REB 93-04 PC **A01**/MF **A01**

**PB93-222560/REB**
Baseline Emissions Forecasts for Industrial Non-Boiler Sources. Project Summary.
PB93-222560/REB 93-04 PC **A01**/MF **A01**

**PB93-222578/REB**
Industrial Boiler Low NOx Combustion Retrofit Cost Algorithm Development. Project Summary.
PB93-222578/REB 93-04 PC **A01**/MF **A01**

**PB93-222586/REB**
Eastern Lake Survey: Phase 2 and National Stream Survey-Phase 1 Processing Laboratory Operations Report (Project Summary).
PB93-222586/REB 93-04 PC **A01**/MF **A01**

**PB93-222594/REB**
Clinton, New Jersey, Radon Mitigation Follow-Up and Long-Term Monitoring. Project Summary.
PB93-222594/REB 93-04 PC **A02**/MF **A01**

**PB93-222602/REB**
Field Evaluation of Sampling and Analysis for Organic Pollutants in Indoor Air. Project Summary.
PB93-222602/REB 93-04 PC **A02**/MF **A01**

**PB93-222610/REB**
Guidelines for Stack Testing at Municipal Waste Combustion Facilities. Project Summary.
PB93-222610/REB 93-04 PC **A02**/MF **A01**

**PB93-222628/REB**
Development of a Breadboard CO2 Laser Photoacoustic Toxic Vapor Monitor. Project Summary.
PB93-222628/REB 93-04 PC **A01**/MF **A01**

**PB93-222636/REB**
Advanced Utility Simulation Model. Project Summary.
PB93-222636/REB 93-04 PC **A02**/MF **A01**

**PB93-222644/REB**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. (Chapters 1 through 8).
PB93-222644/REB 93-04 PC **E99**/MF **E99**

**PB93-222651/REB**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 1. Disposition and Pharmacokinetics.
PB93-222651/REB 93-04 PC **A07**/MF **A02**

**PB93-222669/REB**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 2. Mechanisms of Toxic Actions.
PB93-222669/REB 93-04 PC **A03**/MF **A01**

**PB93-222677/REB**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 3. Acute, Subchronic, and Chronic Toxicity.
PB93-222677/REB 93-04 PC **A04**/MF **A01**

**PB93-222685/REB**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 4. Immunotoxic Effects.
PB93-222685/REB 93-04 PC **A04**/MF **A01**

**PB93-222693/REB**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 5. Reproductive and Developmental Toxicity.
PB93-222693/REB 93-04 PC **A06**/MF **A02**

**PB93-222701/REB**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 6. Carcinogenicity of TCDD in Animals.
PB93-222701/REB 93-04 PC **A04**/MF **A01**

**PB93-222719/REB**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 7. Epidemiology/ Human Data.
PB93-222719/REB 93-04 PC **A07**/MF **A02**

**PB93-222727/REB**
Health Assessment for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Chapter 8. Dose-Response Relationships.
PB93-222727/REB 93-04 PC **A11**/MF **A03**

**PB93-222735/REB**
Vapor Pressures, Liquid Molar Volumes, Vapor Non-Ideality, and Critical Properties of CF3OCF2CF2CF3, c-CF2CF2CF2CF2O, CF3OCF2OCF3, and CF3OCF2CF2H.
PB93-222735/REB 93-04 PC **A02**/MF **A01**

**PB93-222743/REB**
Oxidation and Acidification of Anaerobic Sediment-Water Systems by Autoclaving.
PB93-222743/REB 93-04 PC **A02**/MF **A01**

**PB93-222750/REB**
Structure-Reactivity Relationships in Dehydrohalogenation Reactions of Polychlorinated and Polybrominated Alkanes.
PB93-222750/REB 93-04 PC **A03**/MF **A01**

**PB93-222768/REB**
Reduction of Structural Iron in Ferruginous Smectite by Free Radicals.
PB93-222768/REB 93-04 PC **A02**/MF **A01**

**PB93-222776/REB**
Soil Warming and Trace Gas Fluxes: Experimental Design and Preliminary Flux Results.
PB93-222776/REB 93-04 PC **A02**/MF **A01**

**PB93-222784/REB**
Influence of Alternative Electron Acceptors on the Anaerobic Biodegradability of Chlorinated Phenols and Benzoic Acids.
PB93-222784/REB 93-04 PC **A02**/MF **A01**

**PB93-222792/REB**
Simple Mini-Method to Extract DNA Directly from Soil for Use with Polymerase Chain Reaction Amplification.
PB93-222792/REB 93-04 PC **A02**/MF **A01**

**PB93-222800/REB**
Methane Production from Anaerobic Soil Amended with Rice Straw and Nitrogen Fertilizers.
PB93-222800/REB 93-04 PC **A02**/MF **A01**

**PB93-222818/REB**
Soil Redox and pH Effects on Methane Production in a Flooded Rice Soil.
PB93-222818/REB 93-04 PC **A02**/MF **A01**

**PB93-222826/REB**
Relationship of Total Viable and Culturable Cells in Epiphytic Populations of 'Pseudomonas syringae'.
PB93-222826/REB 93-04 PC **A02**/MF **A01**

**PB93-222834/REB**
Recovery of DNA from Soils and Sediments.
PB93-222834/REB 93-04 PC **A02**/MF **A01**

**PB93-222842/REB**
Armitage-Doll Two-Stage Model: Implications and Extension.
PB93-222842/REB 93-04 PC **A02**/MF **A01**

**PB93-222859/REB**
Mechanical Integrity Testing and Training Facility, Ada, Oklahoma.
PB93-222859/REB 93-04 PC **A02**/MF **A01**

**PB93-222867/REB**
Microcosm and In situ Field Studies of Enhanced Biotransformation of Trichloroethylene by Phenol-Utilizing Microorganisms.
PB93-222867/REB 93-04 PC **A02**/MF **A01**

**PB93-222875/REB**
Removal of Radionuclides by Electrokinetic Soil Processing.
PB93-222875/REB 93-04 PC **A02**/MF **A01**

**PB93-222883/REB**
Inactivation of 'Escherichia coli' by Titanium Dioxide Photocatalytic Oxidation.
PB93-222883/REB 93-04 PC **A01**/MF **A01**

**PB93-222891/REB**
Investigating the Preferential Dissolution of Lead from Solder Particulates.
PB93-222891/REB 93-04 PC **A02**/MF **A01**

**PB93-222909/REB**
Nucleotide Sequencing and Transcriptional Mapping of the Genes Encoding Biphenyl Dioxygenase, a Multicomponent Polychlorinated-Biphenyl-Degrading Enzyme in 'Pseudomonas' Strain LB400.
PB93-222909/REB 93-04 PC **A03**/MF **A01**

**PB93-222933/REB**
Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources. March 1991 Edition.
PB93-222933/REB 93-04 PC **A24**/MF **A04**

**PB93-222941/REB**
Water Employees Together with America's Youth (WET WAY). Celebration of the 20th Anniversary of the Clean Water Act and Promotion of National Geography Awareness Week.
PB93-222941/REB 93-04 PC **A07**/MF **A02**

**PB93-222958/REB**
Drinking Water Information Guide.
PB93-222958/REB 93-04 PC **A06**/MF **A02**

**PB93-222990/REB**
Multiple Chemical Sensitivities. Addendum to Biologic Markers in Immunotoxicology.
PB93-222990/REB 93-04 PC **A09**/MF **A03**

**PB93-223014/REB**
Nonpoint Source Pollution: Land Use and Water Quality.
PB93-223014/REB 93-04 PC **A03**

**PB93-223022/REB**
Volatile Organic Compound Model Quality Assurance and Sensitivity Testing (Version 1.8).
PB93-223022/REB 93-04 PC **A01**/MF **A01**

**PB93-223048/REB**
Guidance Manual for the Review of Permitted and Civil Works Projects for the Ocean Disposal of Dredged Material.
PB93-223048/REB 93-04 PC **A14**/MF **A03**

**PB93-223154/REB**
Acid Precipitation in North America: 1986 Annual and Seasonal Data Summaries from Acid Deposition System Data Base.
PB93-223154/REB 93-04 PC **A04**/MF **A01**

**PB93-223162/REB**
Volunteer Lake Monitoring Program, 1992. Volume 5. East-Central Illinois Region.
PB93-223162/REB 93-04 PC **A05**/MF **A01**

**PB93-223170/REB**
Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility.
PB93-223170/REB 93-04 PC **A06**/MF **A02**

**PB93-223188/REB**
Emergency Disinfection of Drinking Water.
PB93-223188/REB 93-04 PC **A01**/MF **A01**

**PB93-223204/REB**
Office of Wastewater Enforcement and Compliance Strategic Plan.
PB93-223204/REB 93-04 PC **A03**/MF **A01**

**PB93-223410/REB**
NPDES Storm Water Program. Question and Answer Document. Volume 1.
PB93-223410/REB 93-04 PC **A03**/MF **A01**

**PB93-223428/REB**
Public Health Action Agenda for the Gulf of Mexico: Frame Work for Action.
PB93-223428/REB 93-04 PC **A06**/MF **A02**

**PB93-223444/REB**
Summary of the 1987 EPA National Performance Audit Program on Source Measurements.
PB93-223444/REB 93-04 PC **A03**/MF **A01**

**PB93-223469/REB**
Marine Debris Action Agenda for the Gulf of Mexico: Framework for Action.
PB93-223469/REB 93-04 PC **A06**/MF **A02**

**PB93-223543/REB**
Setting Priorities: The Key to Nonpoint Source Control.
PB93-223543/REB 93-04 PC **A04**/MF **A01**

**PB93-223550/REB**
Storm Water Management for Construction Activities. Developing Pollution Prevention Plans and Best Management Practices. Summary Guidance.
PB93-223550/REB 93-04 PC **A03**/MF **A01**

**PB93-223568/REB**
Dredged Material Ocean Dumping Reference Document.
PB93-223568/REB 93-04 PC **A04**/MF **A01**

**PB93-223576/REB**
Methodology for Analysis of Detention Basins for Control of Urban Runoff Quality.
PB93-223576/REB 93-04 PC **A04**/MF **A01**

**PB93-223584/REB**
Sewage Treatment Plant NSPS: Responses to Comments on April 1986 Proposed Revisions.
PB93-223584/REB 93-04 PC **A03**/MF **A01**

**PB93-223592/REB**
Workbook for Plume Visual Impact Screening and Analysis (Revised).
PB93-223592/REB 93-04 PC **A08**/MF **A02**

**PB93-226017/REB**
Chesapeake Bay American Eel Fishery Management Plan. Agreement Commitment Report 1991.
PB93-226017/REB 93-04 PC **A03**/MF **A01**

**PB93-226058/REB**
Chesapeake Bay Alosid, Blue Crab, Bluefish, and Weakfish/Spotted Seatrout Fishery Management Plans, December 1992.
PB93-226058/REB 93-04 PC **A04**/MF **A01**

**PB93-226082/REB**
Protocol for Determining the Best Performing Model.
PB93-226082/REB 93-04 PC **A03**/MF **A01**

**PB93-226090/REB**
General Provisions for 40 CFR Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories. Background Information for Proposed Regulation.
PB93-226090/REB 93-04 PC **A06**/MF **A02**

**PB93-226108/REB**
Modeling Protocol for Applying MESOPUFF II to Long Range Transport Problems.
PB93-226108/REB 93-04 PC **A04**/MF **A01**

**PB93-226199/REB**
Pesticide Reregistration Progress Report, April 1993.
PB93-226199/REB 93-04 PC **A03**/MF **A01**

**PB93-226595/REB**
Drinking Water Handbook for Public Officials.
PB93-226595/REB 93-04 PC **A04**/MF **A01**

**PB93-226611/REB**
Region 10 In-Stream Biological Monitoring Handbook: For Wadable Streams in the Pacific Northwest.
PB93-226611/REB 93-04 PC **A05**/MF **A01**

**PB93-226629/REB**
Chesapeake Bay Atlantic Croaker and Spot Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226629/REB 93-04 PC **A03**/MF **A01**

**PB93-226637/REB**
Chesapeake Bay Summer Flounder Fishery Management Plan: Agreement Commitment Report 1991.
PB93-226637/REB 93-04 PC **A03**/MF **A01**

**PB93-226694/REB**
Role of Ozone Precursors in Tropospheric Ozone Formation and Control: A Report to Congress.
PB93-226694/REB 93-04 PC **A04**/MF **A01**

**PB93-226702/REB**
Summary of Public Comments and EPA Responses on the Draft Report: The Role of Ozone Precursors in Tropospheric Ozone Formation and Control.
PB93-226702/REB 93-04 PC **A03**/MF **A01**

**PB93-226710/REB**
Private Wells: Guidance for What to Do After the Flood.
PB93-226710/REB 93-04 PC **A02**/MF **A01**

**PB93-226728/REB**
National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges (40CFR Parts 122, 123, and 124 Final Rule).
PB93-226728/REB 93-04 PC **A06**/MF **A02**

**PB93-226736/REB**
Office of Wastewater Enforcement and Compliance (OWEC): Primer.
PB93-226736/REB 93-04 PC **A05**/MF **A01**

**PB93-226744/REB**
Ethylene Oxide Emissions from Commercial Sterilization/ Fumigation Operations: Background Information for Proposed Standards.
PB93-226744/REB 93-04 PC **A13**/MF **A03**

**PB93-226751/REB**
Comparison of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model and Wind Tunnel Data.
PB93-226751/REB 93-04 PC **A08**/MF **A02**

**PB93-226769/REB**
Sensitivity Analysis of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model.
PB93-226769/REB 93-04 PC **A05**/MF **A01**

**PB93-226777/REB**
Development and Evaluation of a Revised Area Source Algorithm for the Industrial Source Complex Long Term Model.
PB93-226777/REB 93-04 PC **A06**/MF **A02**

**PB93-227114/REB**
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana.
PB93-227114/REB 93-04 PC **E99**/MF **E99**

**PB93-227122/REB**
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 1.
PB93-227122/REB 93-04 PC **A08**/MF **A02**

**PB93-227130/REB**
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 1.
PB93-227130/REB 93-04 PC **A24**/MF **A04**

**PB93-227148/REB**
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grant Calumet River, Gary, Indiana. Volume 2. Part 2.
PB93-227148/REB 93-04 PC **A99**/MF **A06**

**PB93-227155/REB**
Technology Evaluation Report. SITE Program Demonstration, Resources Conservation Company, Basic Extractive Sludge Treatment (B.E.S.T. (Trade Name)), Grand Calumet River, Gary, Indiana. Volume 2. Part 3.
PB93-227155/REB 93-04 PC **A11**/MF **A03**

**PB93-227163/REB**
Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 1.
PB93-227163/REB 93-04 PC **A11**/MF **A03**

**PB93-227171/REB**
Laboratory Validation of VOST and SemiVOST for Halogenated Hydrocarbons from the Clean Air Act Amendments List. Volume 2.
PB93-227171/REB 93-04 PC **A12**/MF **A03**

**PB93-227197/REB**
Use of Alternative Materials for Daily Cover at Municipal Solid Waste Landfills.
PB93-227197/REB 93-04 PC **A08**/MF **A02**

**PB93-227205/REB**
Site Emerging Technologies: Bioscrubber for Removing Hazardous Organic Emissions from Soil, Water and Air Decontamination Processes.
PB93-227205/REB 93-04 PC **A04**/MF **A01**

**PB93-227551/REB**
Airborne Asbestos Concentrations during Buffing of Resilient Floor Tile.
PB93-227551/REB 93-04 PC **A06**/MF **A02**

**PB93-227635/REB**
Federal Register Volume 57 No. 175 Wednesday, September 9, 1992 Notices. Part 2. Final NPDES General Permits for Storm Water Discharges from Construction Sites; Fact Sheet.
PB93-227635/REB 93-04 PC **A03**/MF **A01**

**PB93-227858/REB**
Drinking Water State Revolving Fund: Ensuring Safe Drinking Water for America.
PB93-227858/REB 93-04 PC **A02**/MF **A01**

**PB93-227866/REB**
Wildlife Criteria Portions of the Proposed Water Quality Guidance for the Great Lakes System.
PB93-227866/REB 93-04 PC **A05**/MF **A01**

**PB93-228138/REB**
Final Regulatory Impact Analysis and Summary and Analysis of Comments: Control of Vehicular Evaporative Emissions.
PB93-228138/REB 93-04 PC **A07**/MF **A02**

**PB93-228146/REB**
State and Local Funding of Nonpoint Source Control Programs.
PB93-228146/REB 93-04 PC **A09**/MF **A02**

**PB93-228443/REB**
Storm Water Management Model User's Manual, Version 4. Project Summary.
PB93-228443/REB 93-04 PC **A02**/MF **A01**

**PB93-228450/REB**
Bench-Scale Studies to Identify Process Parameters Controlling Reburning with Pulverized Coal. Project Summary.
PB93-228450/REB 93-04 PC **A02**/MF **A01**

**PB93-228468/REB**
Evaluation of Low-Emission Coal Burner Technology on Industrial Boilers. Project Summary.
PB93-228468/REB 93-04 PC **A02**/MF **A01**

**PB93-228484/REB**
Evaluation of FGD Dry Injection Sorbents and Additives. Volume 1. Development of High Reactivity Sorbents. Project Summary.
PB93-228484/REB 93-04 PC **A02**/MF **A01**

**PB93-228492/REB**
Single-Laboratory Evaluation of SW-846 Methods 7090/7091 Determination of Beryllium by Flame and Furnace Atomic Absorption Spectrophotometry. Project Summary.
PB93-228492/REB 93-04 PC **A02**/MF **A01**

**PB93-228500/REB**
Wet Deposition and Snowpack Monitoring. Final Project Report. Project Summary.
PB93-228500/REB 93-04 PC **A02**/MF **A01**

**PB93-228518/REB**
Development and Validation of Methods for Real-Time Measurement of Pollutant Transport from an Urbanized Estuary.
PB93-228518/REB 93-04 PC **A02**/MF **A01**

**PB93-228526/REB**
Development and Evaluation of a Transportable Fast Gas Chromatograph for the Monitoring of Organic Vapors in Air.
PB93-228526/REB 93-04 PC **A02**/MF **A01**

**PB93-228534/REB**
Comparison of Air Quality Measurements in Roanoke, Virginia, and Other Integrated Air Cancer Project Monitoring Locations.
PB93-228534/REB 93-04 PC **A02**/MF **A01**

**PB93-228542/REB**
Chemical Contaminants in House Dust: Occurrences and Sources.
PB93-228542/REB 93-04 PC **A02**/MF **A01**

**PB93-228559/REB**
Exposure Modeling of Acid Aerosols.
PB93-228559/REB 93-04 PC **A02**/MF **A01**

**PB93-228567/REB**
SITE Program Demonstration of the SBP Technologies, Inc., Membrane Filtration System on Creosote-Contaminated Water.
PB93-228567/REB 93-04 PC **A02**/MF **A01**

**PB93-228575/REB**
Surface Chemical Effects on Colloid Stability and Transport through Natural Porous Media.
PB93-228575/REB 93-04 PC **A03**/MF **A01**

**PB93-228583/REB**
Molecular Size Exclusion by Soil Organic Materials Estimated from Their Swelling in Organic Solvents.
PB93-228583/REB 93-04 PC **A02**/MF **A01**

**PB93-228591/REB**
Locally Synthesized Phosphatidylcholine, but Not Protein, Undergoes Rapid Retrograde Axonal Transport in the Rat Sciatic Nerve.
PB93-228591/REB 93-04 PC **A02**/MF **A01**

**PB93-228609/REB**
Strain Comparisons of DFP Neurotoxicity in Rats.
PB93-228609/REB 93-04 PC **A03**/MF **A01**

**PB93-228815/REB**
Pulmonary Response of White and Black Adults to Six Concentrations of Ozone.
PB93-228815/REB 93-04 PC **A02**/MF **A01**

**PB93-228823/REB**
Modeling Receptor-Mediated Processes with Dioxin: Implications for Pharmacokinetics and Risk Assessment.
PB93-228823/REB 93-04 PC **A03**/MF **A01**

**PB93-228831/REB**
Comparison of DNA Adducts from Exposure to Complex Mixtures in Various Human Tissues and Experimental Systems.
PB93-228831/REB 93-04 PC **A03**/MF **A01**

**PB93-228849/REB**
Predictors of Individual Differences in Acute Response to Ozone Exposure.
PB93-228849/REB 93-04 PC **A02**/MF **A01**

**PB93-228856/REB**
Detection and Comparison of DNA Adducts After In vitro and In vivo Diesel Emission Exposures.
PB93-228856/REB 93-04 PC **A02**/MF **A01**

**PB93-228864/REB**
Pulmonary Clearance of Inhaled Particles 24 to 48 Hours Post Deposition: Effect of Beta-Adrenergic Stimulation.
PB93-228864/REB 93-04 PC **A02**/MF **A01**

**PB93-228872/REB**
Developmental Neurotoxicity Following Neonatal Exposure to 3,3'-Iminodipropionitrile in the Rat.
PB93-228872/REB 93-04 PC **A03**/MF **A01**

**PB93-228880/REB**
Disruption of Human Eyeblink Conditioning After Central Cholinergic Blockade with Scopolamine.
PB93-228880/REB 93-04 PC **A03**/MF **A01**

**PB93-228898/REB**
Rapid Efficient Production of Baculovirus Expression Vectors.
PB93-228898/REB 93-04 PC **A03**/MF **A01**

**PB93-228906/REB**
Mainstream and Sidestream Cigarette Smoke-Induced DNA Adducts in C7B1 and DBA Mice.
PB93-228906/REB 93-04 PC **A01**/MF **A01**

**PB93-228914/REB**
Death of Intermediolateral Spinal Cord Neurons Follows Selective, Complement-Mediated Destruction of Peripheral Preganglionic Sympathetic Terminals by Acetylcholinesterase Antibodies.
PB93-228914/REB 93-04 PC **A03**/MF **A01**

**PB93-228922/REB**
EPA's Reassessment of Dioxin Risk: Directed Health Research.
PB93-228922/REB 93-04 PC **A02**/MF **A01**

**PB93-228930/REB**
Incorporating Biologically Based Models into Assessments of Risk from Chemical Contaminants.
PB93-228930/REB 93-04 PC **A02**/MF **A01**

**PB93-228948/REB**
Assessing the Neurotoxic Potential of Chemicals: A Multidisciplinary Approach.
PB93-228948/REB 93-04 PC **A03**/MF **A01**

**PB93-228955/REB**
Effects on Carbon Monoxide Levels in Mobile Homes Using Unvented Kerosene Heaters for Residential Heating.
PB93-228955/REB 93-04 PC **A02**/MF **A01**

**PB93-228963/REB**
Detection of Direct-Acting Mutagens in Ambient Air: A Comparison of Two Highly Sensitive Mutagenicity Assays.
PB93-228963/REB 93-04 PC **A03**/MF **A01**

**PB93-228971/REB**
Acute and Delayed Effects of Diisopropyl Fluorophosphate on Body Temperature, Heart Rate and Motor Activity in the Awake, Unrestrained Rat.
PB93-228971/REB 93-04 PC **A03**/MF **A01**

**PB93-228989/REB**
Dithicarbamate Fungicide Thiram Disrupts the Hormonal Control of Ovulation in the Female Rat.
PB93-228989/REB 93-04 PC **A02**/MF **A01**

**PB93-228997/REB**
Developmental Toxicity of Bromohydroquinone BHQ) and BHQ-Glutathione Conjugates In vivo and in Whole Embryo Culture.
PB93-228997/REB 93-04 PC **A02**/MF **A01**

**PB93-229003/REB**
Effect of Repeated Organophosphate Administration on Carbachol-Stimulated Phosphoinositide Hydrolysis in the Rat Brain.
PB93-229003/REB 93-04 PC **A02**/MF **A01**

**PB93-229011/REB**
Watts Nickel and Rinse Water Recovery via an Advanced Reverse Osmosis System.
PB93-229011/REB 93-04 PC **A05**/MF **A01**

**PB93-229128/REB**
Replacement of Hazardous Material in Wide Web Flexographic Printing Process.
PB93-229128/REB 93-04 PC **A05**/MF **A01**

**PB93-229136/REB**
Comparison of Selected Critical Loads Estimation Approaches for Assessing the Effects of Sulfate Deposition on Lakes in the Northeastern United States.
PB93-229136/REB 93-04 PC **A07**/MF **A02**

**PB93-229144/REB**
Reduction of CO2 Emissions from Mobile Sources by Alternative Fuels Derived from Biomass.
PB93-229144/REB 93-04 PC **A03**/MF **A01**

**PB93-229151/REB**
Comparison of Transfer of Surface Chlorpyrifos Residues from Carpet by Three Dislodgeable Residue Methods.
PB93-229151/REB 93-04 PC **A03**/MF **A01**

**PB93-229177/REB**
Scanning Electron Microscopy/X-ray Fluorescence Characterization of Post-Abatement Dust.
PB93-229177/REB 93-04 PC **A03**/MF **A01**

**PB93-229185/REB**
Numerical Simulation to Determine the Effects of Incident Wind Shear and Turbulence Level on the Flow Around a Building.
PB93-229185/REB 93-04 PC **A02**/MF **A01**

**PB93-229193/REB**
Evaluation of a Sampling and Analysis Method for Determination of Polyhalogenated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air.
PB93-229193/REB 93-04 PC **A02**/MF **A01**

**PB93-229201/REB**
Sequence Similarities in the Genes Encoding Polychlorinated Biphenyl Degradation by 'Pseudomonas' Strain LB400 and 'Alcaligenes eutrophus' H850.
PB93-229201/REB 93-04 PC **A01**/MF **A01**

**PB93-229219/REB**
Protocol for Equipment Leak Emission Estimates.
PB93-229219/REB 93-04 PC **A12**/MF **A03**

**PB93-229227/REB**
Cloning and Expression in 'Escherichia coli' of Pseudomonas Strain LB400 Genes Encoding Polychlorinated Biphenyl Degradation.
PB93-229227/REB 93-04 PC **A02**/MF **A01**

**PB93-229235/REB**
Proteins from Eight Eukaryotic Cytochrome P-450 Families Share a Segmented Region of Sequence Similarity.
PB93-229235/REB 93-04 PC **A02**/MF **A01**

**PB93-229243/REB**
Primary Structure of the P450 Lanosterol Demethylase Gene from 'Saccharomyces cerevisiae'.
PB93-229243/REB 93-04 PC **A03**/MF **A01**

**PB93-229250/REB**
Isolation of the 'Candida tropicalis' Gene for P450 Lanosterol Demethylase and Its Expression in 'Saccharomyces cerevisiae'.
PB93-229250/REB 93-04 PC **A02**/MF **A01**

**PB93-229268/REB**
Characterization of the Alkane-Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis': Identification of a New P450 Gene Family.
PB93-229268/REB 93-04 PC **A03**/MF **A01**

**PB93-229276/REB**
Disruption of the 'Saccharomyces cerevisiae' Gene for NADPH-Cytochrome P450 Reductase Causes Increased Sensitivity to Ketoconazole.
PB93-229276/REB 93-04 PC **A03**/MF **A01**

**PB93-229284/REB**
Isolation of the Alkane Inducible Cytochrome P450 (P450alk) Gene from the Yeast 'Candida tropicalis'.
PB93-229284/REB 93-04 PC **A02**/MF **A01**

**PB93-229292/REB**
Gene Engineering in Yeast for Biodegradation: Immunological Cross-Reactivity among Cytochrome P-450 System Pro-

teins of 'Saccharomyces cerevisiae' and 'Candida tropicalis'.
PB93-229292/REB 93-04 PC A03/MF A01

**PB93-229300/REB**
Individual and Combined Cytotoxic Effects of Cadmium, Copper, and Nickel on Brown Cells of 'Mercenaria mercenaria'.
PB93-229300/REB 93-04 PC A03/MF A01

**PB93-229318/REB**
Review of the Current Status of Marine Algal Toxicity Testing in the United States.
PB93-229318/REB 93-04 PC A03/MF A01

**PB93-229326/REB**
Chemical Induction of Tumors in Oysters by a Mixture of Aromatic and Chlorinated Hydrocarbons, Amines and Metals.
PB93-229326/REB 93-04 PC A02/MF A01

**PB93-229334/REB**
Water Column Toxicity from Contaminated Marine Sediments: Effects on Multiple Endpoints of Three Marine Species.
PB93-229334/REB 93-04 PC A03/MF A01

**PB93-229342/REB**
Global Environmental Change Issues in the Western Indian Ocean Region.
PB93-229342/REB 93-04 PC A03/MF A01

**PB93-229359/REB**
Cytology and Biochemistry of Brown Cells in 'Crassostrea virginica' Collected at Clean and Contaminated Stations.
PB93-229359/REB 93-04 PC A02/MF A01

**PB93-229367/REB**
Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC A02/MF A01

**PB93-229375/REB**
Relationships between Accumulation of a 60 kDa Stress Protein and Scope-for-Growth in 'Mytilus edulis' Exposed to a Range of Copper Concentrations.
PB93-229375/REB 93-04 PC A03/MF A01

**PB93-229383/REB**
Rapid and Accurate Method for Estimating Molecular Weights of Organic Compounds from Low Resolution Mass Spectra.
PB93-229383/REB 93-04 PC A03/MF A01

**PB93-229391/REB**
Stochastic Methodology for Regional Wind-Field Modeling.
PB93-229391/REB 93-04 PC A03/MF A01

**PB93-229409/REB**
Optical Remote Measurement of Toxic Gases.
PB93-229409/REB 93-04 PC A03/MF A01

**PB93-229417/REB**
Tagged Species Engineering Model (TSEM).
PB93-229417/REB 93-04 PC A03/MF A01

**PB93-229425/REB**
Pattern Recognition/Expert System for Mass Spectra of Volatile Toxic and Other Organic Compounds.
PB93-229425/REB 93-04 PC A03/MF A01

**PB93-229433/REB**
Aromatic Hydrocarbon Degradation: A Molecular Approach.
PB93-229433/REB 93-04 PC A03/MF A01

**PB93-229441/REB**
Primary Structure of the Cytochrome P450 Lanosterol 14 alpha-Demethylase Gene from 'Candida tropicalis'.
PB93-229441/REB 93-04 PC A03/MF A01

**PB93-229458/REB**
Isolation and Characterization of the Alkane-Inducible NADPH-Cytochrome P-450 Oxidoreductase Gene from 'Candida tropicalis'.
PB93-229458/REB 93-04 PC A03/MF A01

**PB93-229466/REB**
Oxidation of Biphenyl by a Multicomponent Enzyme System from 'Pseudomonas' sp. Strain LB400.
PB93-229466/REB 93-04 PC A02/MF A01

**PB93-229474/REB**
Oxidation of Polychlorinated Biphenyls by 'Pseudomonas' sp. Strain LB400 and 'Pseudomonas pseudoalcaligenes' KF707.
PB93-229474/REB 93-04 PC A02/MF A01

**PB93-229482/REB**
Isolation of a Cytochrome P-450 Structural Gene from 'Saccharomyces cerevisiae'.
PB93-229482/REB 93-04 PC A03/MF A01

**PB93-229490/REB**
Maturational Changes in Dermal Absorption of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Fischer 344 Rats.
PB93-229490/REB 93-04 PC A02/MF A01

**PB93-229508/REB**
Using Neuroblastoma Cell Lines to Examine Organophosphate Neurotoxicity.
PB93-229508/REB 93-04 PC A02/MF A01

**PB93-229516/REB**
Ammonia Abatement System for Whole-Body Small Animal Inhalation Exposures to Acid Aerosols.
PB93-229516/REB 93-04 PC A03/MF A01

**PB93-229524/REB**
Extraction of Phenol and Its Metabolites from Aqueous Solution.
PB93-229524/REB 93-04 PC A02/MF A01

**PB93-229532/REB**
Symposium Overview: Advances in Biologically Based Models for Respiratory Tract Uptake of Inhaled Volatiles.
PB93-229532/REB 93-04 PC A02/MF A01

**PB93-229540/REB**
Framework for Validation and Implementation of In vitro Toxicity Tests: Report of the Validation and Technology Transfer Committee of the Johns Hopkins Center for Alternatives to Animal Testing.
PB93-229540/REB 93-04 PC A02/MF A01

**PB93-229557/REB**
Reaction of Cyclopent(c,d)pyrene-3,4-epoxide with DNA and Deoxynucleotides.
PB93-229557/REB 93-04 PC A02/MF A01

**PB93-229565/REB**
Determining Health Risks Associated with Disinfectants and Disinfection By-Products: Research Notes.
PB93-229565/REB 93-04 PC A02/MF A01

**PB93-229573/REB**
Combined Effects of Solvents on the Rat's Auditory System: Styrene and Trichloroethylene.
PB93-229573/REB 93-04 PC A03/MF A01

**PB93-229581/REB**
In vitro Metabolism and DNA Adduct Formation from the Mutagenic Environmental Contaminant 2-Nitrofluoranthene.
PB93-229581/REB 93-04 PC A02/MF A01

**PB93-229599/REB**
Utility of a Neurobehavioral Screening Battery for Differentiating the Effects of Two Pyrethroids, Permethrin and Cypermethrin.
PB93-229599/REB 93-04 PC A03/MF A01

**PB93-229607/REB**
Effect of Local Ultraviolet Irradiation on Infections of Mice with 'Candida albicans', 'Mycobacterium bovis BCG', and 'Schistosoma mansoni'.
PB93-229607/REB 93-04 PC A02/MF A01

**PB93-229615/REB**
Short Communication: Improved Thin-Layer Chromatographic Separation of 32P-Postlabeled DNA Adducts.
PB93-229615/REB 93-04 PC A02/MF A01

**PB93-229623/REB**
Biotransformation and Mineralization of Alkylbenzenes under Denitrifying Conditions.
PB93-229623/REB 93-04 PC A03/MF A01

**PB93-229631/REB**
Dissolved Organic Carbon and Sulfate Sorption by Spodosol Mineral Horizons.
PB93-229631/REB 93-04 PC A02/MF A01

**PB93-229649/REB**
Implications of Climate Change Scenarios for Soil Erosion Potential in the USA.
PB93-229649/REB 93-04 PC A03/MF A01

**PB93-229656/REB**
Conservation and Sequestration of Carbon: The Potential of Forest and Agroforest Management Practices.
PB93-229656/REB 93-04 PC A03/MF A01

**PB93-229664/REB**
Forest Fires in Russia: Carbon Dioxide Emissions to the Atmosphere.
PB93-229664/REB 93-04 PC A02/MF A01

**PB93-229672/REB**
Reactions That Modify Chemistry in Lakes of the National Surface Water Survey.
PB93-229672/REB 93-04 PC A02/MF A01

**PB93-229680/REB**
Current Land Cover in the Tropics and Its Potential for Sequestering Carbon.
PB93-229680/REB 93-04 PC A03/MF A01

**PB93-229698/REB**
Target Detection and Mapping of Aquatic Hazardous Waste Sites in Massachusetts Bay Utilizing Sidescan Sonar.
PB93-229698/REB 93-04 PC A02/MF A01

**PB93-229706/REB**
Construction of a Regional Relational/GIS Database in Support of Ocean Disposal Issues in Massachusetts Bay.
PB93-229706/REB 93-04 PC A02/MF A01

**PB93-229714/REB**
Utilizing a Chirp Sonar to Accurately Characterize Newly Deposited Material at the Calcasieu Ocean Dredged Material Disposal Site, Louisiana.
PB93-229714/REB 93-04 PC A02/MF A01

**PB93-229722/REB**
Longterm Response of Lakes to Acidic Deposition.
PB93-229722/REB 93-04 PC A02/MF A01

**PB93-229730/REB**
Total Volatile Organic Concentrations in 2700 Personal, Indoor, and Outdoor Air Samples Collected in the US EPA Team Studies.
PB93-229730/REB 93-04 PC A03/MF A01

**PB93-229748/REB**
Genetic and Cell-Free Studies of PCB Biodegradation in 'Pseudomonas putida' LB400.
PB93-229748/REB 93-04 PC A03/MF A01

**PB93-229755/REB**
Field Applications of Robotic Systems in Hazardous Environments, p1-29 1993. See also PB86-176344 and PB92-166743.
PB93-229755/REB 93-04 PC A03/MF A01

**PB93-229763/REB**
Biological Approaches for Polychlorinated Biphenyl Degradation.
PB93-229763/REB 93-04 PC A03/MF A01

**PB93-229771/REB**
Investigation of Possible Uses of Surplus CFC/Halon Chemicals.
PB93-229771/REB 93-04 PC A07/MF A02

**PB93-229789/REB**
Weatherability of Enhanced-Degradable Plastics.
PB93-229789/REB 93-04 PC A14/MF A03

**PB93-229813/REB**
Assessment and Control of Bioconcentratable Contaminants in Surface Waters.
PB93-229813/REB 93-04 PC A13/MF A03

**PB93-229847/REB**
Guidance on Evaluation, Resolution, and Documentation of Analytical Problems Associated with Compliance Monitoring.
PB93-229847/REB 93-04 PC A03/MF A01

**PB93-229854/REB**
Virginian Province Demonstration Report. EMAP-Estuaries, 1990.
PB93-229854/REB 93-04 PC A11/MF A03

**PB93-229862/REB**
Initial Assessment of Emissions from Heat Setting Carpet Yarn.
PB93-229862/REB 93-04 PC A04/MF A01

**PB93-229870/REB**
Evaluation of Solidification/Stabilization Treatment Processes for Municipal Waste Combustion Residues.
PB93-229870/REB 93-04 PC A25/MF A06

**PB93-230027/REB**
Methodology for Evaluating Potential Carcinogenicity in Support of Reportable Quantity Adjustments Pursuant to CERCLA Section 102.
PB93-230027/REB 93-04 PC A04/MF A01

**PB93-230829/REB**
Status of Pesticides in Reregistration and Special Review (Rainbow Report), June 1993.
PB93-230829/REB 93-04 PC A17/MF A03

**PB93-231066/REB**
RCRA Public Involvement Manual.
PB93-231066/REB 93-04 PC A11/MF A03

**PB93-231140/REB**
Municipal Water Pollution Prevention Program, National MWPP Conference. Held in Washington, DC. on April 27-28, 1993.
PB93-231140/REB 93-04 PC A03/MF A01

**PB93-231165/REB**
Emerging Technology Report: Metals Treatment at Superfund Sites by Absorptive Filtration.
PB93-231165/REB 93-04 PC A04/MF A01

**PB93-231835/REB**
Chemical Characterization of Mutagenic Fractions of Particles from Indoor Coal Combustion: A Study of Lung Cancer in Xuan Wei, China.
PB93-231835/REB 93-04 PC A02/MF A01

**PB93-231843/REB**
Human Health Effects of Air Pollution.
PB93-231843/REB 93-04 PC A03/MF A01

**PB93-231850/REB**
Evaluation of the Effects of Methanol during Early Pregnancy in the Rat.
PB93-231850/REB 93-04 PC A03/MF A01

**PB93-231868/REB**
Ozone-Enhanced Pulmonary Infection with 'Streptococcus zooepidemicus' in Mice: The Role of Alveolar Macrophage Function and Capsular Virulence Factors.
PB93-231868/REB 93-04 PC A02/MF A01

**PB93-231876/REB**
Effects of 5-Fluorouracil on Embryonic Rat Palate In vitro: Fusion in the Absence of Proliferation.
PB93-231876/REB 93-04 PC A01/MF A01

**PB93-232114/REB**
Measurement of the Surface Permeability of Basement Concretes.
PB93-232114/REB 93-04 PC A03/MF A01

**PB93-232122/REB**
Supplemental for Pretreatment to the Interim Final Development Document for the Secondary Aluminum Segment of the Nonferrous Metals Manufacturing. Point Source Category.
PB93-232122/REB 93-04 PC A07/MF A02

**PB93-232692/REB**
Pesticides Industry Sales and Usage: 1990 and 1991 Market Estimates.
PB93-232692/REB 93-04 PC A03/MF A01

**PB93-232890/REB**
Pilot Project for Vehicle Scrapping in Illinois.
PB93-232890/REB 93-04 PC A06/MF A02

**PB93-232908/REB**
RED Facts: 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-232908/REB 93-04 PC A02/MF A01

**PB93-232916/REB**
RED Facts: Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-232916/REB 93-04 PC A02/MF A01

**PB93-232924/REB**
RED Facts: Silver.
PB93-232924/REB 93-04 PC A02/MF A01

**PB93-232932/REB**
Development of Conversion Factors for Heavy-Duty Bus Engines G/BHP-HR to G/Mile.
PB93-232932/REB 93-04 PC A03/MF A01

**PB93-232973/REB**
Reregistration Eligibility Document (RED): Silver.
PB93-232973/REB 93-04 PC A05/MF A02

**PB93-233740/REB**
Instruction Manual for the Biennial Reporting System (BRS) NTIS Data Tape.
PB93-233740/REB 93-04 PC **A05**/MF **A01**

**PB93-233757/REB**
Hazardous Waste Report, 1991: Instructions and Forms.
PB93-233757/REB 93-04 PC **A08**/MF **A02**

**PB93-233815/REB**
Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEB, Engine: B5254S EGR.
PB93-233815/REB 93-04 PC **A13**/MF **A03**

**PB93-233823/REB**
Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEB, Engine: B230FT.
PB93-233823/REB 93-04 PC **A10**/MF **A03**

**PB93-233831/REB**
Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAEA, Engine: B230F.
PB93-233831/REB 93-04 PC **A09**/MF **A02**

**PB93-233849/REB**
Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GAFA, Engine: B230FS4.
PB93-233849/REB 93-04 PC **A11**/MF **A03**

**PB93-233856/REB**
Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEA, Engine: B6304S EGR.
PB93-233856/REB 93-04 PC **A13**/MF **A03**

**PB93-233864/REB**
Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.4VHGAEA, Engine: B5254S.
PB93-233864/REB 93-04 PC **A09**/MF **A02**

**PB93-233872/REB**
Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3VHGFEK, Engine: B5234T.
PB93-233872/REB 93-04 PC **A17**/MF **A03**

**PB93-233880/REB**
Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.4VHGFEA, Engine: B5254S AIR.
PB93-233880/REB 93-04 PC **A15**/MF **A03**

**PB93-233898/REB**
Volvo 49 State Application, 1994 Model Year. Engine Family: RVV2.9VHGAEB, Engine: B6304S.
PB93-233898/REB 93-04 PC **A11**/MF **A03**

**PB93-233906/REB**
Volvo 50 State Application, 1994 Model Year. Engine Family: RVV2.3V7GEEA, Engine: B230FT4.
PB93-233906/REB 93-04 PC **A13**/MF **A03**

**PB93-233914/REB**
Handbook for Constructed Wetlands Receiving Acid Mine Drainage.
PB93-233914/REB 93-04 PC **A12**/MF **A03**

**PB93-234128/REB**
Volunteer Lake Monitoring Program, 1992. Volume 6. Southwestern Illinois Region.
PB93-234128/REB 93-04 PC **A03**/MF **A01**

**PB93-234292/REB**
Guide to Nonpoint Source Pollution Control. Controlling Nonpoint Source Pollution: A Guide.
PB93-234292/REB 93-04 PC **A07**/MF **A02**

**PB93-234375/REB**
Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone. Volume 2. Emission Inventory Requirements for Photochemical Air Quality Simulation Models (Revised).
PB93-234375/REB 93-04 PC **A11**/MF **A03**

**PB93-234490/REB**
Approaches for Measuring Stable Carbon and Nitrogen Isotopes in Bacteria.
PB93-234490/REB 93-04 PC **A03**/MF **A01**

**PB93-234508/REB**
Trends of In-Vehicle CO Exposures on a California Arterial Highway Over One Decade.
PB93-234508/REB 93-04 PC **A03**/MF **A01**

**PB93-234516/REB**
Adding a Landscape Ecology Perspective to Conservation and Management Planning.
PB93-234516/REB 93-04 PC **A03**/MF **A01**

**PB93-234524/REB**
Role of Ecological Sample Surveys in the Implementation of Biocriteria.
PB93-234524/REB 93-04 PC **A03**/MF **A01**

**PB93-234532/REB**
Engineered Plants in the Environment.
PB93-234532/REB 93-04 PC **A03**/MF **A01**

**PB93-234540/REB**
Bottomland Hardwoods in the Tifton-Vadalia Upland of Georgia: A Conceptual Model for Ecological Risk Assessment.
PB93-234540/REB 93-04 PC **A04**/MF **A01**

**PB93-234557/REB**
Contribution to Indoor Ozone Levels of an Ozone Generator.
PB93-234557/REB 93-04 PC **A03**/MF **A01**

**PB93-234565/REB**
In situ Bioremediation of Contaminated Unsaturated Subsurface Soils.
PB93-234565/REB 93-04 PC **A03**/MF **A01**

**PB93-234672/REB**
Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters.
PB93-234672/REB 93-04 PC **A99**/MF **E08**

**PB93-234755/REB**
Reregistration Eligibility Document (RED) 10, 10'-Oxybisphenoxarsine (OBPA).
PB93-234755/REB 93-04 PC **A07**/MF **A02**

**PB93-234763/REB**
Reregistration Eligibility Document (RED) Hydroxytetracycline Monohydrochloride and Oxytetracycline Calcium.
PB93-234763/REB 93-04 PC **A07**/MF **A02**

**PB93-234771/REB**
Proceedings of Annual Analytical Symposium (10th). U.S. Environmental Protection Agency, Office of Water, Industrial Technology Division. Held in Norfolk, Virginia on May 13-14, 1987.
PB93-234771/REB 93-04 PC **A99**/MF **E08**

**PB93-234789/REB**
Opportunities and Challenges for Local Emergency Planning Committees: Bestseller in EPCRA.
PB93-234789/REB 93-04 PC **A02**/MF **A01**

**PB93-234797/REB**
Chemical Emergency Preparedness and Prevention Advisory: Hydrogen Fluoride, Series 8, No. 3.
PB93-234797/REB 93-04 PC **A02**/MF **A01**

**PB93-236008/REB**
Report to Congress on Implementation of Section 112 of the Clean Air Act Amendments of 1990.
PB93-236008/REB 93-04 PC **A05**/MF **A01**

**PB93-236024/REB**
Analytical Methods for the National Sewage Sludge Survey.
PB93-236024/REB 93-04 PC **A12**/MF **A03**

**PB93-236057/REB**
Guidelines for Deriving Ambient Aquatic Life Advisory Concentrations.
PB93-236057/REB 93-04 PC **A03**/MF **A01**

**PB93-236107/REB**
Regional Interim Emission Inventories (1987-1991). Volume 1. Development Methodologies.
PB93-236107/REB 93-04 PC **A07**/MF **A02**

**PB93-236115/REB**
Regional Interim Emission Inventories (1987-1991). Volume 2. Emission Summaries.
PB93-236115/REB 93-04 PC **A06**/MF **A02**

**PB93-236164/REB**
Heavy-Duty Engine Testing Report Non-Road Engine Configurations Injection Timing Effects Test Results, 1992.
PB93-236164/REB 93-04 PC **A05**/MF **A01**

**PB93-236172/REB**
Heavy-Duty Engine Testing Report Cummins/EPA/Taiwan Correlation Test Results, 1993.
PB93-236172/REB 93-04 PC **A03**/MF **A01**

**PB93-236206/REB**
International Trade in Environmental Protection Equipment: An Assessment of Existing Data.
PB93-236206/REB 93-04 PC **A04**/MF **A01**

**PB93-236214/REB**
Roles of Monitoring and Research in Polar Environments: A Perspective.
PB93-236214/REB 93-04 PC **A02**/MF **A01**

**PB93-236222/REB**
Cholinesterases of Aquatic Animals.
PB93-236222/REB 93-04 PC **A03**/MF **A01**

**PB93-236230/REB**
Long-Term Survival and Plasmid Maintenance of 'Escherichia coli' in Marine Microcosms.
PB93-236230/REB 93-04 PC **A02**/MF **A01**

**PB93-236248/REB**
Microbial Trophic Interactions in Aquatic Microcosms Designed for Testing Genetically Engineered Microorganisms: A Field Comparison.
PB93-236248/REB 93-04 PC **A03**/MF **A01**

**PB93-236255/REB**
Variations in Larval Growth and Metabolism of an Estuarine Shrimp 'Palaemonetes pugio' during Toxicosis by an Insect Growth Regulator.
PB93-236255/REB 93-04 PC **A02**/MF **A01**

**PB93-236263/REB**
Temperature Preferences and Tolerances of Three Fish Species Inhabiting Hyperthermal Ponds on Mangrove Islands.
PB93-236263/REB 93-04 PC **A03**/MF **A01**

**PB93-236271/REB**
Chronic Toxicity of Pydraul 50E to Lake Trout.
PB93-236271/REB 93-04 PC **A02**/MF **A01**

**PB93-236289/REB**
Recent Developments in Cleanup Technologies.
PB93-236289/REB 93-04 PC **A03**/MF **A01**

**PB93-236297/REB**
Spawning Periodicity of the Inland Silverside, 'Menidia beryllina' (Pisces: Atherinidae) in the Laboratory: Relationship to Lunar Cycles.
PB93-236297/REB 93-04 PC **A02**/MF **A01**

**PB93-236305/REB**
Action of 50 Hz Magnetic Fields on Neurite Outgrowth in Pheochromocytoma Cells.
PB93-236305/REB 93-04 PC **A03**/MF **A01**

**PB93-236313/REB**
DNA Adducts as Biomarkers for Assessing Exposure to Polycyclic Aromatic Hydrocarbons in Tissues from Xuan Wei Women with High Exposure to Coal Combustion Emissions and High Lung Cancer Mortality.
PB93-236313/REB 93-04 PC **A02**/MF **A01**

**PB93-236321/REB**
Effects of Inhaled Phosgene on Rat Lung Antioxidant Systems.
PB93-236321/REB 93-04 PC **A03**/MF **A01**

**PB93-236339/REB**
Effect of Nongenotoxic Environmental Contaminants on Cholesterol and DNA Synthesis in Cultured Primary Rat Hepatocytes.
PB93-236339/REB 93-04 PC **A03**/MF **A01**

**PB93-236347/REB**
Reproductive and Thyroid Effects of Low-Level Polychlorinated Biphenyl (Aroclor 1254) Exposure.
PB93-236347/REB 93-04 PC **A02**/MF **A01**

**PB93-236354/REB**
Factors That Influence the Suppression of Pulmonary Antibacterial Defenses in Mice Exposed to Ozone.
PB93-236354/REB 93-04 PC **A03**/MF **A01**

**PB93-236362/REB**
Method for Combining and Comparing Short-Term Genotoxicity Test Data: Preface. A Report from ICPEMC Committee 1.
PB93-236362/REB 93-04 PC **A04**/MF **A01**

**PB93-236370/REB**
Bitertanol, a Triazole Fungicide, Increases Operant Responding but Not Motor Activity.
PB93-236370/REB 93-04 PC **A02**/MF **A01**

**PB93-236388/REB**
Deposition of Sulfate Acid Aerosols in the Developing Human Lung.
PB93-236388/REB 93-04 PC **A03**/MF **A01**

**PB93-236396/REB**
Mucociliary Clearance of Inhaled Particles Measured at 2 h after Ozone Exposure in Humans.
PB93-236396/REB 93-04 PC **A02**/MF **A01**

**PB93-236404/REB**
Cytogenetic Studies of Mice Exposed to Styrene by Inhalation.
PB93-236404/REB 93-04 PC **A03**/MF **A01**

**PB93-236412/REB**
Effects of Dopaminergic Drugs on Working and Reference Memory in Rats.
PB93-236412/REB 93-04 PC **A03**/MF **A01**

**PB93-236420/REB**
Testing for Trends When There Are Changes in Methods.
PB93-236420/REB 93-04 PC **A03**/MF **A01**

**PB93-236438/REB**
Trends and Patterns in Lake Acidification in the State of Vermont: Evidence from the Long-Term Monitoring Project.
PB93-236438/REB 93-04 PC **A03**/MF **A01**

**PB93-236446/REB**
Use of Overlap Studies to Evaluate Method Changes in Water Chemistry Protocols.
PB93-236446/REB 93-04 PC **A03**/MF **A01**

**PB93-236453/REB**
Inter-Regional Comparison of Patterns and Trends in Surface Water Acidification Across the United States.
PB93-236453/REB 93-04 PC **A03**/MF **A01**

**PB93-236461/REB**
Perspectives on Environmental Monitoring: An Introduction to the U.S. EPA Long-Term Monitoring (LTM) Project.
PB93-236461/REB 93-04 PC **A02**/MF **A01**

**PB93-236479/REB**
Measurements of Conformational Changes during Adhesion of Lipid and Protein (Polylysine and S-Layer) Surfaces.
PB93-236479/REB 93-04 PC **A03**/MF **A01**

**PB93-236487/REB**
Acid-Base Characteristics of Organic Carbon in the Humex Lake Skjervatjern.
PB93-236487/REB 93-04 PC **A03**/MF **A01**

**PB93-236495/REB**
Sensitivity of Critical Load Estimates for Surface Waters to Model Selection and Regionalization Schemes.
PB93-236495/REB 93-04 PC **A03**/MF **A01**

**PB93-236503/REB**
Manual of Federal Geographic Data Products.
PB93-236503/REB 93-04 PC **A17**/MF **A03**

**PB93-236511/REB**
Method for Separating Volatile Organic Carbon from 0.1 (sup 3) of Air to Identify Sources of Ozone Precursors via Isotope (14C) Measurements.
PB93-236511/REB 93-04 PC **A03**/MF **A01**

**PB93-236529/REB**
New Mathematical Model of Pollutant Dispersion Near a Building.
PB93-236529/REB 93-04 PC **A03**/MF **A01**

**PB93-236537/REB**
Enhancement of Biodegradation of Alaskan Weathered Crude Oil Components by Indigenous Microbiota with the Use of Fertilizers and Nutrients.
PB93-236537/REB 93-04 PC **A02**/MF **A01**

**PB93-236545/REB**
Development and Evaluation of Application Techniques for Delivery of Nutrients to Contaminated Shoreline in Prince William Sound.
PB93-236545/REB 93-04 PC **A02**/MF **A01**

**PB93-236552/REB**
EPANET Water Quality Model.
PB93-236552/REB 93-04 PC **A03**/MF **A01**

**PB93-236560/REB**
Foam Scrubbing (Chapter 9).
PB93-236560/REB 93-04 PC **A03**/MF **A01**

**PB93-236578/REB**
Oil Spill Dispersants: Mechanisms of Action and Laboratory Tests.
PB93-236578/REB 93-04 PC **A04**/MF **A01**

**PB93-236586/REB**
Residence Time of Contaminants Released in Surface Coal Mines: A Wind-Tunnel Study.
PB93-236586/REB 93-04 PC **A03**/MF **A01**

**PB93-236594/REB**
Wind-Tunnel Measurements of Flow Fields in the Vicinity of Buildings.
PB93-236594/REB 93-04 PC **A03**/MF **A01**

**PB93-236602/REB**
Status of Restoration Science: Wetlands Ecosystems.
PB93-236602/REB 93-04 PC **A01**/MF **A01**

**PB93-236610/REB**
Establishing Quantitative Performance Criteria for Wetland Restoration.
PB93-236610/REB 93-04 PC **A01**/MF **A01**

**PB93-236628/REB**
Landscape-Scale Effects of Toxic Events for Ecological Risk Assessment.
PB93-236628/REB 93-04 PC **A03**/MF **A01**

**PB93-236636/REB**
Fractional Aerosol Filtration Efficiency of Air Cleaners.
PB93-236636/REB 93-04 PC **A02**/MF **A01**

**PB93-236644/REB**
Three-Stage Combustion (Reburning) Test Results from a 300-MWe Boiler in the Ukraine.
PB93-236644/REB 93-04 PC **A03**/MF **A01**

**PB93-236651/REB**
Utility of the Murine Erythroleukemic Cell (MELC) in Assessing Mechanisms of Action of DNA-Active Developmental Toxicants: Application to 5-Fluorouracil.
PB93-236651/REB 93-04 PC **A03**/MF **A01**

**PB93-236669/REB**
Evidence for Direct Effect of Magnetic Fields on Neurite Outgrowth.
PB93-236669/REB 93-04 PC **A02**/MF **A01**

**PB93-236677/REB**
Potentiation of 2,6-Dinitrotoluene Genotoxicity in Fischer-344 Rats by Pretreatment with Aroclor 1254.
PB93-236677/REB 93-04 PC **A03**/MF **A01**

**PB93-236693/REB**
EPA Evaluation of the Fuelon Power Gasoline Fuel Additive under Section 511 of the Motor Vehicle Information and Cost Savings Act.
PB93-236693/REB 93-04 PC **A03**/MF **A01**

**PB93-236701/REB**
Emissions and Fuel Economy Effects of the Fuelon Power Gasoline Fuel Additive.
PB93-236701/REB 93-04 PC **A03**/MF **A01**

**PB93-237493/REB**
Radon Measurement in Schools: Revised Edition.
PB93-237493/REB 93-04 PC **A04**/MF **A01**

**PB93-237519/REB**
Proceedings of Annual Analytical Symposium (7th). Held in Norfolk, Virginia on March 28-29, 1984.
PB93-237519/REB 93-04 PC **A99**/MF **A06**

**PB93-237535/REB**
Technical Resource Document: Solidification/Stabilization and Its Application to Waste Materials.
PB93-237535/REB 93-04 PC **A16**/MF **A03**

**PB93-237899/REB**
Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1. Fish Sampling and Analysis.
PB93-237899/REB 93-04 PC **A16**/MF **A03**

**PB93-237907/REB**
Watershed Manipulation Project Quality Assurance Implementation Plan: FY 90-93.
PB93-237907/REB 93-04 PC **A06**/MF **A02**

**PB93-500007/REB**
AutoMOUSE (Modular Oriented Uncertainty SystEm) - An Improvement to the MOUSE Computerized Uncertainty Analysis Program (for Microcomputers).
PB93-500007/REB 93-01 CP **D03**

**PB93-500197/REB**
Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Inventory Synonym and Preferred Name File, June 1992.
PB93-500197/REB 93-01 CP **T05**

**PB93-500221/REB**
Industrial Source Complex Short Term (ISCST) (for Microcomputers).
PB93-500221/REB 93-01 CP **D03**

**PB93-500239/REB**
Industrial Source Complex LongTerm (ISCLT) (for Microcomputers).
PB93-500239/REB 93-01 CP **D03**

**PB93-500247/REB**
MESOPUFF (for Microcomputers).
PB93-500247/REB 93-01 CP **D02**

**PB93-500254/REB**
CALINE: California Line Source Model (for Microcomputers).
PB93-500254/REB 93-01 CP **D02**

**PB93-500270/REB**
Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 3) (for Microcomputers).
PB93-500270/REB 93-01 CP **D02**

**PB93-500288/REB**
Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 2) (for Microcomputers).
PB93-500288/REB 93-01 CP **D02**

**PB93-500346/REB**
PA-Score (Preliminary Assessment Score), Version 2.1, 5 1/4 inch (for Microcomputers).
PB93-500346/REB 93-01 CP **D02**

**PB93-500353/REB**
PA-Score (Preliminary Assessment Score), Version 2.1, 3 1/2 inch (for Microcomputers).
PB93-500353/REB 93-01 CP **D02**

**PB93-500478/REB**
Preamble and Final Sludge Rule (for Microcomputers).
PB93-500478/REB 93-01 CP **D01**

**PB93-500577/REB**
Oil and Hazardous Materials, Technical Assistance Data System (OHM-TADS) (for Microcomputers).
PB93-500577/REB 93-01 CP **D06**

**PB93-500684/REB**
ADL Migration Estimation Model (for Microcomputers) (Release Number 1).
PB93-500684/REB 93-01 CP **D02**

**PB93-500742/REB**
Toxic Release Inventory (TRI), 1987-1990 (on CD-ROM).
PB93-500742/REB 93-01 CD-ROM$45.00

**PB93-502631/REB**
Flexible Membrane Liner Advisory Expert System (FLEX) (for Microcomputers) (Version 3.0).
PB93-502631/REB 93-01 CP **D02**

**PB93-504538/REB**
COMPLEX1 (for Microcomputers).
PB93-504538/REB 93-01 CP **D05**

**PB93-504546/REB**
Emissions and Fuel Economy Results 1992 Car Models (for Microcomputers).
PB93-504546/REB 93-01 CP **D02**

**PB93-504553/REB**
Emissions and Fuel Economy Results 1993 Car Models (for Microcomputers).
PB93-504553/REB 93-01 CP **D02**

**PB93-504595/REB**
Toxic Substances Control Act (TSCA) Chemical Substances Inventory: Revised Synonym and Preferred Name File, January 1993.
PB93-504595/REB 93-01 CP **T05**

**PB93-504793/REB**
Crosswalk/Air Toxic Emission Factor Data Base Management System (XATEF) Version 2.0 (for Microcomputers).
PB93-504793/REB 93-01 CP **D02**

**PB93-504959/REB**
Geo-EAS: Software for Geostatistics 1.2.1 (5 1/4 Inch Version) (for Microcomputers).
PB93-504959/REB 93-01 CP **D02**

**PB93-504967/REB**
Geo-EAS: Software for Geostatistics 1.2.1 (3 1/2 inch Version) (for Microcomputers).
PB93-504967/REB 93-01 CP **D02**

**PB93-505154/REB**
ASESS 1.01A (3 1/2 Inch Diskette) (for Microcomputers).
PB93-505154/REB 93-01 CP **D02**

**PB93-505162/REB**
Geophysics Advisor Expert System (Version 2.0) (for Microcomputers).
PB93-505162/REB 93-01 CP **D02**

**PB93-505238/REB**
Volatile Organic Compound/Particulate Matter Speciation Data Base Management System (SPECIATE), Version 1.5 (for Microcomputers).
PB93-505238/REB 93-01 CP **D02**

**PB93-505295/REB**
ASSESS 1.01A (5 1/4 Inch Diskette) (for Microcomputers).
PB93-505295/REB 93-01 CP **D02**

**PB93-505303/REB**
SCOUT: A Data Analysis Program (Version 1.40) (for Microcomputers).
PB93-505303/REB 93-01 CP **D02**

**PB93-505345/REB**
Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 4) (for Microcomputers).
PB93-505345/REB 93-04 CP **D02**

**PB93-505352/REB**
Inorganic Contract Compliance Screening System (ICCSS) Software (ILM02.1 Version 3) (for Microcomputers).
PB93-505352/REB 93-04 CP **D02**

**PB93-505386/REB**
Regulatory Impact Analysis (RIA) for the Proposed Great Lakes Water Quality Guidance (for Microcomputers).
PB93-505386/REB 93-04 CP **D02**

**PB93-505394/REB**
Assessment of Compliance Costs Resulting from Implementation of the Proposed Great Lakes Water Quality Initiative Guidance (for Microcomputers).
PB93-505394/REB 93-04 CP **D02**

**PB93-505402/REB**
Great Lakes Water Quality Guidance Implementation Procedures Compliance Cost Study Technical Background Document (for Microcomputers).
PB93-505402/REB 93-04 CP **D04**

**PB93-505469/REB**
Economic Growth Analysis System (E-GAS) for all EPA Regions (I through X) (for Microcomputers).
PB93-505469/REB 93-04 CP **D18**

**PB93-505477/REB**
Economic Growth Analysis System (E-GAS) for EPA Region I - New England States (for Microcomputers).
PB93-505477/REB 93-04 CP **D03**

**PB93-505485/REB**
Economic Growth Analysis System (E-GAS) for EPA Regions II and III - Mid Atlantic (for Microcomputers).
PB93-505485/REB 93-04 CP **D03**

**PB93-505493/REB**
Economic Growth Analysis System (E-GAS) for EPA Region IV - South East (for Microcomputers).
PB93-505493/REB 93-04 CP **D03**

**PB93-505501/REB**
Economic Growth Analysis System (E-GAS) for EPA Region V - Great Lakes (for Microcomputers).
PB93-505501/REB 93-04 CP **D03**

**PB93-505519/REB**
Economic Growth Analysis System (E-GAS) for EPA Region VI - South West (for Microcomputers).
PB93-505519/REB 93-04 CP **D03**

**PB93-505527/REB**
Economic Growth Analysis System (E-GAS) for EPA Region VII - Plains Area (for Microcomputers).
PB93-505527/REB 93-04 CP **D03**

**PB93-505535/REB**
Economic Growth Analysis System (E-GAS) for EPA Regions VIII and X - Rocky Mountain and North West (for Microcomputers).
PB93-505535/REB 93-04 CP **D03**

**PB93-505543/REB**
Economic Growth Analysis System (E-GAS) for EPA Region IX - Far West (for Microcomputers).
PB93-505543/REB 93-04 CP **D03**

**PB93-505725/REB**
Aquatic Toxicity Information Retrieval Data Base (AQUIRE).
PB93-505725/REB 93-04 CP **T02**

**PB93-505733/REB**
Aquatic Toxicity Information on VAX VMS Backup (AQUIRE for VMS).
PB93-505733/REB 93-01 CP **T02**

**PB93-505873/REB**
Toxic Release Inventory, (TRI), 1991.
PB93-505873/REB 93-04 CP **T14**

**PB93-505881/REB**
Toxic Release Inventory, 1991 Reporting Facilities Names and Addresses.
PB93-505881/REB 93-04 CP **T02**

**PB93-505915/REB**
Preliminary Ranking Evaluation Score (PREscore) Version 2.0 (for Microcomputers).
PB93-505915/REB 93-04 CP **D02**

**PB93-505980/REB**
PRELIM, Version 4.0 (for Microcomputers).
PB93-505980/REB 93-04 CP **D03**

**PB93-506004/REB**
Toxic Release Inventory (TRI), 1987.
PB93-506004/REB 93-04 CP **T16**

**PB93-506012/REB**
Toxic Release Inventory (TRI), 1988.
PB93-506012/REB 93-04 CP **T14**

**PB93-506020/REB**
Toxic Release Inventory (TRI), 1989.
PB93-506020/REB 93-04 CP **T14**

**PB93-506038/REB**
Toxic Release Inventory (TRI), 1990.
PB93-506038/REB 93-04 CP **T14**

**PB93-506053/REB**
Organic Contract Compliance Screening System (OCCSS) Software (OLM01.8 Version 5) (for Microcomputers).
PB93-506053/REB 93-04 CP **D02**

**PB93-506061/REB**
Protocol-A Computerized Solid Waste Quantity and Composition Estimation System (Version 1.02) (for Microcomputers).
PB93-506061/REB 93-04 CP **D03**

**PB93-506079/REB**
EPA Model Pretreatment Ordinance (for Microcomputers).
PB93-506079/REB 93-04 CP **D02**

**PB93-506111/REB**
Site Assessment Information Directory (SAID) Region 1 (for Microcomputers). Date of Coverage: October 1991.
PB93-506111/REB 93-04 CP **D03**

**PB93-506129/REB**
Site Assessment Information Directory (SAID) Region 2 (for Microcomputers). Date of Coverage: October 1991.
PB93-506129/REB 93-04 CP **D03**

**PB93-506137/REB**
Site Assessment Information Directory (SAID) Region 3 (for Microcomputers). Date of Coverage: October 1991.
PB93-506137/REB 93-04 CP **D03**

**PB93-506145/REB**
Site Assessment Information Directory (SAID) Region 4 (for Microcomputers). Date of Coverage: October 1991.
PB93-506145/REB 93-04 CP **D03**

**PB93-506152/REB**
Site Assessment Information Directory (SAID) Region 5 (for Microcomputers). Date of Coverage: 1991.
PB93-506152/REB 93-04 CP **D03**

**PB93-506160/REB**
Site Assessment Information Directory (SAID) Region 6 (for Microcomputers). Date of Coverage: October 1991.
PB93-506160/REB 93-04 CP **D03**

**PB93-506178/REB**
Site Assessment Information Directory (SAID) Region 7 (for Microcomputers). Date of Coverage: October 1991.
PB93-506178/REB 93-04 CP **D03**

**PB93-506186/REB**
Site Assessment Information Directory (SAID) Region 8 (for Microcomputers). Date of Coverage: 1991.
PB93-506186/REB 93-04 CP **D03**

**PB93-506194/REB**
Site Assessment Information Directory (SAID) Region 9 (for Microcomputers). Date of Coverage: October 1991.
PB93-506194/REB 93-04 CP **D03**

**PB93-506202/REB**
Site Assessment Information Directory (SAID) Region 10 (for Microcomputers). Date of Coverage: October 1991.
PB93-506202/REB 93-04 CP **D03**

**PB93-506301/REB**
Evaporative Emission Model (EVAP 3.0) (for Microcomputers).
PB93-506301/REB 93-04 CP **D02**

**PB93-506426/REB**
Environmental Fate Data Base (EFDB) Complete: XREF, CASLST, DATALOG, BIOLOG, CHEMFATE, and BIODEG. (Date of Coverage 1993).
PB93-506426/REB 93-04 CP **T05**

**PB93-506582/REB**
Field Certification Tracking System (FCTS), Version 2.1 (for Microcomputers).
PB93-506582/REB 93-04 CP **D02**

**PB93-507044/REB**
Biennial Reporting System (BRS) 1989 (Date of Coverage: 1989).
PB93-507044/REB 93-04 CP **T04**

**PB93-592570/REB**
Resource Conservation and Recovery Information System (RCRIS) Extract Tapes.
PB93-592570/REB 93-04 SubscriptionPC**$2540.00**

**PB93-780773/REB**
Course 1. Model Curriculum for Training Asbestos Abatement Contractors and Supervisors (Training Manual).
PB93-780773/REB 93-01 PC**$182.00**

**PB93-780781/REB**
Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Student Notebook. Course 1 (Training Manual).
PB93-780781/REB 93-01 PC **A21**

**PB93-780799/REB**
Model Curriculum for Training Asbestos Abatement Contractors and Supervisors. Instructor's Course Syllabus. Course 1 (Training Manual).
PB93-780799/REB 93-01 PC **A09**

**PB93-780823/REB**
Course 2. Model Curriculum for School Building Inspectors (Training Manual).
PB93-780823/REB 93-01 PC**$136.00**

**PB93-780831/REB**
Model EPA Curriculum for Training Building Inspectors. Student Notebook. Course 2 (Training Manual).
PB93-780831/REB 93-01 PC **A17**

**PB93-780849/REB**
Model EPA Curriculum for Training Building Inspectors. Instructor's Course Syllabus. Course 2 (Training Manual).
PB93-780849/REB 93-01 PC **A07**

**PB93-780872/REB**
Course 3. Model Curriculum for School Asbestos Management Planners (Training Manual).
PB93-780872/REB 93-01 PC**$81.00**

**PB93-780880/REB**
Model EPA Curriculum for Training Management Planners. Student Notebook. Course 3 (Training Manual).
PB93-780880/REB 93-01 PC **A07**

**PB93-780898/REB**
Model EPA Curriculum for Training Management Planners. Instructor's Course Syllabus. Course 3 (Training Manual).
PB93-780898/REB 93-01 PC **A04**

**PB93-780922/REB**
Course 4. Model Curriculum for Asbestos Abatement Workers (English Version) (Training Manual).
PB93-780922/REB 93-01 PC**$235.00**

**PB93-780930/REB**
EPA Model Asbestos Worker Training Manual. Course 4 (English Version).
PB93-780930/REB 93-01 PC **A14**

**PB93-780948/REB**
EPA Model Asbestos Worker Training Course. Instructor's Manual. Course 4 (English Version) (Training Manual).
PB93-780948/REB 93-01 PC **A15**

**PB93-780955/REB**
EPA Model Asbestos Worker Training Instructor's Resources. Course 4 (English Version) (Training Manual).
PB93-780955/REB 93-01 PC **A09**

**PB93-780971/REB**
Course 5. Presentation to Accompany 'Guidance for Controlling Asbestos-Containing Materials in Buildings' (Training Manual).
PB93-780971/REB 93-01 PC**$41.00**

**PB93-781979/REB**
Medical Waste Incinerator Operator Training Program: Course Handbook.
PB93-781979/REB 93-04 PC**$56.00**/MF**$22.00**

**PB93-904200/REB**
EPA (Environmental Protection Agency) Publications Bibliography, Quarterly Abstract Bulletin.
PB93-904200/REB 93-01 Subscription

**PB93-911600/REB**
Pesticide Compact Label File - 1990 Updates.
PB93-911600/REB 93-01 Subscription

**PB93-916202/REB**
National Transportation Safety Board Highway Accident Report: Charter Bus Loss of Control, Overturn, and Fire, Vernon, New Jersey, July 26, 1992.
PB93-916202/REB 93-04 PC **A05**/MF **A01**

**PB93-921100/REB**
Health Effects Assessment Summary Tables.
PB93-921100/REB 93-01 Standing Order

**PB93-921700/REB**
Environmental Protection Agency Civil Enforcement Docket.
PB93-921700/REB 93-01 Subscription

**PB93-963100/REB**
Superfund: Environmental Response and Health and Safety (Training Materials).
PB93-963100/REB 93-01 Standing Order

**PB93-963201/REB**
National Priorities List Sites: Alabama, 1992.
PB93-963201/REB
93-01
see individual report for order number and price

**PB93-963202/REB**
National Priorities List Sites: Alaska, 1992.
PB93-963202/REB 93-01 PC **A04**/MF **A01**

**PB93-963203/REB**
National Priorities List Sites: The United States Territories, 1992.
PB93-963203/REB 93-01 PC **A04**/MF **A01**

**PB93-963204/REB**
National Priorities List Sites: Arizona and Nevada, 1992.
PB93-963204/REB 93-01 PC **A04**/MF **A01**

**PB93-963205/REB**
National Priorities List Sites: Arkansas, 1992.
PB93-963205/REB 93-01 PC **A04**/MF **A01**

**PB93-963206/REB**
National Priorities List Sites: California and Hawaii, 1992.
PB93-963206/REB 93-01 PC **A12**/MF **A03**

**PB93-963207/REB**
National Priorities List Sites: Colorado, 1992.
PB93-963207/REB 93-01 PC **A05**/MF **A01**

**PB93-963208/REB**
National Priorities List Sites: Connecticut, 1992.
PB93-963208/REB 93-01 PC **A04**/MF **A01**

**PB93-963209/REB**
National Priorities List Sites: Delaware, 1992.
PB93-963209/REB 93-01 PC **A05**/MF **A01**

**PB93-963210/REB**
National Priorities List Sites: Florida, 1992.
PB93-963210/REB 93-01 PC **A08**/MF **A02**

**PB93-963211/REB**
National Priorities List Sites: Georgia, 1992.
PB93-963211/REB 93-01 PC **A04**/MF **A01**

**PB93-963212/REB**
National Priorities List Sites: Idaho, 1992.
PB93-963212/REB 93-01 PC **A04**/MF **A01**

**PB93-963213/REB**
National Priorities List Sites: Illinois, 1992.
PB93-963213/REB 93-01 PC **A06**/MF **A02**

**PB93-963214/REB**
National Priorities List Sites: Indiana, 1992.
PB93-963214/REB 93-01 PC **A06**/MF **A02**

**PB93-963215/REB**
National Priorities List Sites: Iowa, 1992.
PB93-963215/REB 93-01 PC **A05**/MF **A01**

**PB93-963216/REB**
National Priorities List Sites: Kansas, 1992.
PB93-963216/REB 93-01 PC **A04**/MF **A01**

**PB93-963217/REB**
National Priorities List Sites: Kentucky, 1992.
PB93-963217/REB 93-01 PC **A05**/MF **A01**

**PB93-963218/REB**
National Priorities List Sites: Louisiana, 1992.
PB93-963218/REB 93-01 PC **A04**/MF **A01**

**PB93-963219/REB**
National Priorities List Sites: Maine, 1992.
PB93-963219/REB 93-01 PC **A04**/MF **A01**

**PB93-963220/REB**
National Priorities List Sites: Maryland, 1992.
PB93-963220/REB 93-01 PC **A04**/MF **A01**

**PB93-963221/REB**
National Priorities List Sites: Massachusetts, 1992.
PB93-963221/REB 93-01 PC **A06**/MF **A02**

**PB93-963222/REB**
National Priorities List Sites: Michigan, 1992.
PB93-963222/REB 93-01 PC **A10**/MF **A03**

**PB93-963223/REB**
National Priorities List Sites: Minnesota, 1992.
PB93-963223/REB 93-01 PC **A07**/MF **A02**

**PB93-963224/REB**
National Priorities List Sites: Mississippi, 1992.
PB93-963224/REB 93-01 PC **A03**/MF **A01**

**PB93-963225/REB**
National Priorities List Sites: Missouri, 1992.
PB93-963225/REB 93-01 PC **A05**/MF **A02**

**PB93-963226/REB**
National Priorities List Sites: Montana, 1992.
PB93-963226/REB 93-01 PC **A04**/MF **A01**

**PB93-963227/REB**
National Priorities List Sites: Nebraska, 1992.
PB93-963227/REB 93-01 PC **A04**/MF **A01**

**PB93-963228/REB**
National Priorities List Sites: New Hampshire, 1992.
PB93-963228/REB 93-01 PC **A05**/MF **A01**

**PB93-963229/REB**
National Priorities List Sites: New Jersey, 1992.
PB93-963229/REB 93-01 PC **A14**/MF **A03**

**PB93-963230/REB**
National Priorities List Sites: New Mexico, 1992.
PB93-963230/REB 93-01 PC **A04**/MF **A01**

**PB93-963231/REB**
National Priorities List Sites: New York, 1992.
PB93-963231/REB 93-01 PC **A11**/MF **A03**

**PB93-963232/REB**
National Priorities List Sites: North Carolina, 1992.
PB93-963232/REB 93-01 PC **A05**/MF **A01**

**PB93-963233/REB**
National Priorities List Sites: North and South Dakota, 1992.
PB93-963233/REB 93-01 PC **A04**/MF **A01**

**PB93-963234/REB**
National Priorities List Sites: Ohio, 1992.
PB93-963234/REB 93-01 PC **A06**/MF **A02**

**PB93-963235/REB**
National Priorities List Sites: Oklahoma, 1992.
PB93-963235/REB 93-01 PC **A04**/MF **A01**

**PB93-963236/REB**
National Priorities List Sites: Oregon, 1992.
PB93-963236/REB 93-01 PC **A04**/MF **A01**

**PB93-963237/REB**
National Priorities List Sites: Pennsylvania, 1992.
PB93-963237/REB 93-01 PC **A12**/MF **A03**

**PB93-963238/REB**
National Priorities List Sites: Puerto Rico and Virgin Islands, 1992.
PB93-963238/REB 93-01 PC **A04**/MF **A01**

**PB93-963239/REB**
National Priorities List Sites: Rhode Island, 1992.
PB93-963239/REB 93-01 PC **A04**/MF **A01**

**PB93-963240/REB**
National Priorities List Sites: South Carolina, 1992.
PB93-963240/REB 93-01 PC **A05**/MF **A01**

**PB93-963241/REB**
National Priorities List Sites: Tennessee, 1992.
PB93-963241/REB 93-01 PC **A04**/MF **A01**

**PB93-963242/REB**
National Priorities List Sites: Texas, 1992.
PB93-963242/REB 93-01 PC **A06**/MF **A02**

**PB93-963243/REB**
National Priorities List Sites: Utah, 1992.
PB93-963243/REB 93-01 PC **A04**/MF **A01**

**PB93-963244/REB**
National Priorities List Sites: Vermont, 1992.
PB93-963244/REB 93-01 PC **A04**/MF **A01**

**PB93-963245/REB**
National Priorities List Sites: Virginia, 1992.
PB93-963245/REB 93-01 PC **A05**/MF **A01**

**PB93-963246/REB**
National Priorities List Sites: Washington, 1992.
PB93-963246/REB 93-01 PC **A08**/MF **A02**

**PB93-963247/REB**
National Priorities List Sites: West Virginia, 1992.
PB93-963247/REB 93-01 PC **A04**/MF **A01**

**PB93-963248/REB**
National Priorities List Sites: Wisconsin, 1992.
PB93-963248/REB 93-01 PC **A07**/MF **A02**

**PB93-963249/REB**
National Priorities List Sites: Wyoming, 1992.
PB93-963249/REB 93-01 PC **A03**/MF **A01**

**PB93-963250/REB**
National Priorities List Sites (1992).
PB93-963250/REB 93-01 PC**$700.00**

**PB93-963251/REB**
Mentor-Protege Program.
PB93-963251/REB 93-01 PC **A02**/MF **A01**

**PB93-963252/REB**
Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP.
PB93-963252/REB 93-01 PC **A03**/MF **A01**

**PB93-963253/REB**
Exercising Flexibility through the Superfund Accelerated Cleanup Model (SACM).
PB93-963253/REB 93-01 PC **A01**/MF **A01**

**PB93-963254/REB**
Superfund Progress: Fall/Winter 1992.
PB93-963254/REB 93-01 PC **A03**/MF **A01**

**PB93-963255/REB**
Superfund Progress. Aficionado's Version. Progress as of September 30, 1992.
PB93-963255/REB 93-01 PC **A03**/MF **A01**

**PB93-963256/REB**
Superfund Records of Decision Update. Volume 7, Number 2, November 1992.
PB93-963256/REB 93-01 PC **A02**/MF **A01**

**PB93-963258/REB**
Required Contracts Management Training for Regional Superfund Personnel.
PB93-963258/REB 93-01 PC **A01**/MF **A01**

**PB93-963259/REB**
Overview of the Outyear Liability Model (OLM).
PB93-963259/REB 93-01 PC **A02**/MF **A01**

**PB93-963261/REB**
Highlights: Superfund Program Management. Fiscal Year 1993.
PB93-963261/REB 93-01 PC **A03**/MF **A01**

**PB93-963268/REB**
Standard Document for Remedial Site Assessment Decisions.
PB93-963268/REB 93-01 PC **A01**/MF **A01**

**PB93-963274/REB**
Superfund: EPA/ICMA Superfund Revitalization Conference. Held in Chicago, Illinois on November 12-13, 1992.
PB93-963274/REB 93-01 PC **A04**/MF **A01**

**PB93-963275/REB**
Initiatives to Streamline the Alternative Remedial Contracting Strategy (ARCS) Contracts' Award Fee Process.
PB93-963275/REB 93-01 PC **A03**/MF **A01**

**PB93-963276/REB**
Performance Tracking under ARCS Contracts.
PB93-963276/REB 93-01 PC **A01**/MF **A01**

**PB93-963278/REB**
Amendment to Historical Definitions of NPL Deletion Start and Completion Dates.
PB93-963278/REB 93-01 PC **A01**/MF **A01**

**PB93-963279/REB**
Identification of a Senior Superfund Official for Addressing Special NPL Site-Related Issues.
PB93-963279/REB 93-01 PC **A01**/MF **A01**

**PB93-963280/REB**
Guidance on Program Management Activities under ARCS.
PB93-963280/REB 93-01 PC **A03**/MF **A01**

**PB93-963281/REB**
Clarification of Delegation to Approve Consistency Exemptions at NPL Sites.
PB93-963281/REB 93-01 PC **A01**/MF **A01**

**PB93-963282/REB**
Use of Time and Materials and Cost Reimbursement Subcontracts for Remedial Actions under the Alternative Remedial Contracting Strategy Contracts.
PB93-963282/REB 93-01 PC **A02**/MF **A01**

**PB93-963283/REB**
Smart Moves in Superfund - Regional Pilots and Initiatives. Volume 1, Number 2, September 1992.
PB93-963283/REB 93-01 PC **A01**/MF **A01**

**PB93-963284/REB**
Smart Moves in Superfund - Revitalization One Year Later. Volume 1, Number 3, January 1993.
PB93-963284/REB 93-01 PC **A01**/MF **A01**

**PB93-963286/REB**
Superfund Accelerated Cleanup Model (SACM): Questions and Answers.
PB93-963286/REB 93-04 PC **A01**/MF **A01**

**PB93-963289/REB**
HSED SACM Report. Volume 1, Number 1, January 1993.
PB93-963289/REB 93-01 PC **A01**/MF **A01**

**PB93-963290/REB**
Response Action Contractor Final Indemnification Guidelines. Volume 2, Number 1, March 1993.
PB93-963290/REB 93-01 PC **A01**/MF **A01**

**PB93-963291/REB**
Further Direction on Implementing the Superfund Accelerated Cleanup Model (SACM).
PB93-963291/REB 93-01 PC **A02**/MF **A01**

**PB93-963292/REB**
Superfund Response Action Contracts.
PB93-963292/REB 93-01 PC **A01**/MF **A01**

**PB93-963294/REB**
Superfund Administrative Improvements. Executive Summary.
PB93-963294/REB 93-04 PC **A03**/MF **A01**

**PB93-963295/REB**
Superfund Administrative Improvements. Final Report.
PB93-963295/REB 93-04 PC **A04**/MF **A01**

**PB93-963297/REB**
Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis.
PB93-963297/REB 93-04 PC **A03**/MF **A01**

**PB93-963298/REB**
Superfund Reauthorization: NACEPT Subcommittee Handbook.
PB93-963298/REB 93-04 PC **A05**/MF **A02**

**PB93-963304/REB**
Cost of Remedial Action Model.
PB93-963304/REB 93-04 PC **A01**/MF **A01**

**PB93-963318/REB**
Cost of Remedial Actions (CORA) Model: Overview and Applications.
PB93-963318/REB 93-04 PC **A03**/MF **A01**

**PB93-963324/REB**
SARA '200' Remedial Action Starts Requirement.
PB93-963324/REB 93-01 PC **A01**/MF **A01**

**PB93-963325/REB**
Permits and Permit 'Equivalency' Processes for CERCLA On-Site Response Actions.
PB93-963325/REB 93-01 PC **A02**/MF **A01**

**PB93-963326/REB**
Obligation of Funds under Superfund State Contracts.
PB93-963326/REB 93-04 PC **A01**/MF **A01**

**PB93-963327/REB**
NPL Construction Completion Definition at Bioremediation and Soil Vapor Extraction Sites.
PB93-963327/REB 93-04 PC **A01**/MF **A01**

**PB93-963328/REB**
Compendium of ROD Language for FY 1993 Focus Areas.
PB93-963328/REB 93-01 PC **A04**/MF **A01**

**PB93-963329/REB**
Technology Selection Guide for Wood Treater Sites.
PB93-963329/REB 93-04 PC **A02**/MF **A01**

**PB93-963333/REB**
Guidance on Setting Priorities for NPL Candidate Sites.
PB93-963333/REB 93-01 PC **A02**/MF **A01**

**PB93-963334/REB**
ATSDR Health Consultations under CERCLA.
PB93-963334/REB 93-01 PC **A01**/MF **A01**

**PB93-963336/REB**
Ensuring the Adequacy of Cost Share Provisions in Superfund State Contracts.
PB93-963336/REB 93-01 PC **A03**/MF **A01**

**PB93-963338/REB**
Discussions with the Public Concerning NPL Listings.
PB93-963338/REB 93-01 PC **A03**/MF **A01**

**PB93-963339/REB**
Presumptive Remedy for CERCLA Municipal Landfill Sites.
PB93-963339/REB 93-04 PC **A03**/MF **A01**

**PB93-963342/REB**
PA Review Checklist.
PB93-963342/REB 93-04 PC **A03**/MF **A01**

**PB93-963345/REB**
Presumptive Remedies: Policy and Procedures.
PB93-963345/REB 93-04 PC **A02**/MF **A01**

**PB93-963346/REB**
Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites with Volatile Organic Compounds in Soils.
PB93-963346/REB 93-04 PC **A03**/MF **A01**

**PB93-963347/REB**
Site Assessment: Evaluating Risks at Superfund Sites.
PB93-963347/REB 93-04 PC **A02**/MF **A01**

**PB93-963348/REB**
Guide to Community Involvement for Site Assessment Managers.
PB93-963348/REB 93-04 PC **A02**/MF **A01**

**PB93-963401/REB**
OSWER Integrated Health and Safety Standard Operating Practices.
PB93-963401/REB 93-01 PC **A01**/MF **A01**

**PB93-963402/REB**
Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA.
PB93-963402/REB 93-04 PC **A04**/MF **A01**

**PB93-963406/REB**
Facility Response Plans.
PB93-963406/REB 93-01 PC **A01**/MF **A01**

**PB93-963410/REB**
Expedited Response Actions.
PB93-963410/REB 93-01 PC **A02**/MF **A01**

**PB93-963411/REB**
Questions and Answers on Release Notification Requirements and Reportable Quantity Adjustments.
PB93-963411/REB 93-01 PC **A03**/MF **A01**

**PB93-963412/REB**
Guidance for Federal Facilities on Release Notification Requirements under CERCLA and SARA Title III.
PB93-963412/REB 93-01 PC **A03**/MF **A01**

**PB93-963413/REB**
Guidance on Implementation of the 'Contribute to Remedial Performance' Provision.
PB93-963413/REB 93-04 PC **A02**/MF **A01**

**PB93-963415/REB**
Field Certification Tracking System (FCTS). User's Guide. Version 2.1.
PB93-963415/REB 93-04 PC **A04**/MF **A01**

**PB93-963416/REB**
Determination of Imminent and Substantial Endangerment for Removal Actions.
PB93-963416/REB 93-04 PC **A01**/MF **A01**

**PB93-963419/REB**
Effect of OSHA's Bloodborne Pathogens Standard on Hazardous Waste Cleanup Activities.
PB93-963419/REB 93-04 PC **A02**/MF **A01**

**PB93-963420/REB**
Personal Air Sampling and Air Monitoring Requirements under 29 CFR 1910.120.
PB93-963420/REB 93-04 PC **A03**/MF **A01**

**PB93-963501/REB**
Reassignment of CLP Transportation Functions.
PB93-963501/REB 93-01 PC **A01**/MF **A01**

**PB93-963502/REB**
Extending the Tracking of Analytical Services to Potentially Responsible Party-Lead Superfund Sites (Supplemental Guidance on OSWER Directive 9240.0-2A).
PB93-963502/REB 93-01 PC **A03**/MF **A01**

**PB93-963506/REB**
Summary of GIS Support to Superfund.
PB93-963506/REB 93-04 PC **A04**/MF **A01**

**PB93-963614/REB**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Harvey and Knott Drum Site, New Castle County, Delaware).
PB93-963614/REB 93-04 PC **A01**/MF **A01**

**PB93-963616/REB**
Superfund at Work: Hazardous Waste Cleanup Efforts Nationwide, Spring 1993 (Fulton Terminals Site Profile, Oswego County, NY).
PB93-963616/REB 93-04 PC **A02**/MF **A01**

**PB93-963619/REB**
Guidance on CERCLA Settlements with De Micromis Waste Contributors.
PB93-963619/REB 93-04 PC **A03**/MF **A01**

**PB93-963702/REB**
Superfund Record of Decision (EPA Region 1): Darling Hill Dump, Lyndon, VT. (First Remedial Action), June 1992.
PB93-963702/REB 93-01 PC **A03**/MF **A01**

**PB93-963703/REB**
Superfund Record of Decision (EPA Region 1): Revere Textile Prints, Sterling, CT. (First Remedial Action), September 1992.
PB93-963703/REB 93-04 PC **A03**/MF **A01**

**PB93-963704/REB**
Superfund Record of Decision (EPA Region 1): Otis Air National Guard/Camp Edwards, MA. (First Remedial Action), May 1992.
PB93-963704/REB 93-04 PC **A05**/MF **A01**

**PB93-963705/REB**
Superfund Record of Decision (EPA Region 1): Town Garage Radio Beacon, Londonderry, NH. (First Remedial Action), September 1992.
PB93-963705/REB 93-04 PC **A06**/MF **A02**

**PB93-963706/REB**
Superfund Record of Decision (EPA Region 1): Brunswick Naval Air Station, Operable Unit 2, ME. (Second Remedial Action), June 1992.
PB93-963706/REB 93-04 PC **A05**/MF **A01**

**PB93-963707/REB**
Superfund Record of Decision (EPA Region 1): Newport Naval Education/Training Center, Newport, RI. (First Remedial Action), September 1992.
PB93-963707/REB 93-04 PC **A04**/MF **A01**

**PB93-963708/REB**
Superfund Record of Decision (EPA Region 1): PSC Resources Site, Palmer, MA. (First Remedial Action), September 1992.
PB93-963708/REB 93-04 PC **A09**/MF **A02**

**PB93-963709/REB**
Superfund Record of Decision (EPA Region 1): Tibbetts Road, Barrington, NH. (First Remedial Action), September 1992.
PB93-963709/REB 93-04 PC **A07**/MF **A02**

**PB93-963801/REB**
Superfund Record of Decision (EPA Region 2): Ramapo Landfill Site, Rockland County, NY. (First Remedial Action), March 1992.
PB93-963801/REB 93-01 PC **A04**/MF **A01**

**PB93-963805/REB**
Superfund Record of Decision (EPA Region 2): Pasley Solvents and Chemicals, Town of Hempstead, Nassau County, NY. (First Remedial Action), April 1992.
PB93-963805/REB 93-01 PC **A06**/MF **A02**

**PB93-963807/REB**
Superfund Record of Decision (EPA Region 2): Bioclinical Laboratories, Town of Islip, Suffolk County, NY. (First Remedial Action), September 1992.
PB93-963807/REB 93-04 PC **A04**/MF **A01**

**PB93-963808/REB**
Superfund Record of Decision (EPA Region 2): FAA Technical Center, Atlantic County, Atlantic City International Airport, NJ. (Third Remedial Action), September 1992.
PB93-963808/REB 93-04 PC **A03**/MF **A01**

**PB93-963809/REB**
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 5), Lakehurst, NJ. (Sixth Remedial Action), January 1992.
PB93-963809/REB 93-04 PC **A03**/MF **A01**

**PB93-963810/REB**
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 6), Lakehurst, NJ. (Fifth Remedial Action), December 1991.
PB93-963810/REB 93-04 PC **A03**/MF **A01**

**PB93-963811/REB**
Superfund Record of Decision (EPA Region 2): North Sea Municipal Landfill, Suffolk County, Southampton, NY. (Second Remedial Action), September 1992.
PB93-963811/REB 93-04 PC **A04**/MF **A01**

**PB93-963812/REB**
Superfund Record of Decision (EPA Region 2): Witco Chemical (Oakland Plant), Bergen County, Oakland, NJ. (First Remedial Action), September 1992.
PB93-963812/REB 93-04 PC **A04**/MF **A01**

**PB93-963813/REB**
Superfund Record of Decision (EPA Region 2): Higgins Farm, Franklin Township, Somerset County, NJ. (Second Remedial Action), September 1992.
PB93-963813/REB 93-04 PC **A05**/MF **A01**

**PB93-963814/REB**
Superfund Record of Decision (EPA Region 2): Evor Phillips Leasing Company, Old Bridge Township, Middlesex County, NJ. (First Remedial Action), September 1992.
PB93-963814/REB 93-04 PC **A04**/MF **A01**

**PB93-963815/REB**
Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 1), Clinton County, NY. (First Remedial Action), September 1992.
PB93-963815/REB 93-04 PC **A05**/MF **A01**

**PB93-963816/REB**
Superfund Record of Decision (EPA Region 2): Plattsburgh Air Force Base (Operable Unit 3), Clinton County, NY. (Second Remedial Action), September 1992.
PB93-963816/REB 93-04 PC **A05**/MF **A01**

**PB93-963817/REB**
Superfund Record of Decision (EPA Region 2): Preferred Plating, Suffolk County, Farmingdale, NY. (Second Remedial Action), September 1992.
PB93-963817/REB 93-04 PC **A03**/MF **A01**

**PB93-963818/REB**
Superfund Record of Decision (EPA Region 2): Cosden Chemical Coatings, City of Beverly, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963818/REB 93-04 PC **A04**/MF **A01**

**PB93-963819/REB**
Superfund Record of Decision (EPA Region 2): Dover Municipal Well 4, Morris County, Dover, NJ. (First Remedial Action), September 1992.
PB93-963819/REB 93-04 PC **A04**/MF **A01**

**PB93-963820/REB**
Superfund Record of Decision (EPA Region 2): Ellis Property, Sharp Road, Burlington County, NJ. (First Remedial Action), September 1992.
PB93-963820/REB 93-04 PC **A04**/MF **A01**

**PB93-963821/REB**
Superfund Record of Decision (EPA Region 2): Endicott Village Well Field, Broome County, NY. (Third Remedial Action), September 1992.
PB93-963821/REB 93-04 PC **A05**/MF **A01**

**PB93-963822/REB**
Superfund Record of Decision (EPA Region 2): Facet Enterprises, Village of Elmira Heights, Chemung County, NY. (First Remedial Action), September 1992.
PB93-963822/REB 93-04 PC **A07**/MF **A02**

**PB93-963823/REB**
Superfund Record of Decision (EPA Region 2): Imperial Oil/Champion Chemicals, Monmouth County, NJ. (Second Remedial Action), September 1992.
PB93-963823/REB 93-04 PC **A05**/MF **A01**

**PB93-963824/REB**
Superfund Record of Decision (EPA Region 2): Industrial Latex, Bergen County, Wallington, NJ. (First Remedial Action), September 1992.
PB93-963824/REB 93-04 PC **A04**/MF **A01**

**PB93-963825/REB**
Superfund Record of Decision (EPA Region 2): Islip Municipal Sanitary Landfill, Town of Islip, NY. (First Remedial Action), September 1992.
PB93-963825/REB 93-04 PC **A05**/MF **A02**

**PB93-963826/REB**
Superfund Record of Decision (EPA Region 2): Naval Air Engineering Center (Operable Unit 7), Ocean County, NJ. (Seventh Remedial Action), March 1992.
PB93-963826/REB 93-04 PC **A04**/MF **A01**

**PB93-963827/REB**
Superfund Record of Decision (EPA Region 2): Rowe Industries Groundwater Contamination, Sag Harbor, NY. (First Remedial Action), September 1992.
PB93-963827/REB 93-04 PC **A05**/MF **A01**

**PB93-963901/REB**
Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, (Operable Unit 5), Richmond, VA. (First Remedial Action), March 1992.
PB93-963901/REB 93-01 PC **A04**/MF **A01**

**PB93-963902/REB**
Superfund Record of Decision (EPA Region 3): Raymark Site, Operable Unit 1, Montgomery County, PA. (First Remedial Action), December 1991.
PB93-963902/REB 93-01 PC **A07**/MF **A02**

**PB93-963903/REB**
Superfund Record of Decision (EPA Region 3): Dublin Water Supply, Bucks County, PA. (First Remedial Action), December 1991.
PB93-963903/REB 93-01 PC **A06**/MF **A02**

**PB93-963904/REB**
Superfund Record of Decision (EPA Region 3): MW Manufacturing Site, Montour County, PA. (Subsequent Remedial Action), June 1992.
PB93-963904/REB 93-01 PC **A05**/MF **A01**

**PB93-963907/REB**
Superfund Record of Decision (EPA Region 3): Dixie Caverns Landfill Site, Operable Unit 2, Roanoke County, VA. (Second Remedial Action), September 1992.
PB93-963907/REB 93-01 PC **A03**/MF **A01**

**PB93-963912/REB**
Superfund Record of Decision (EPA Region 3): Route 940 Drum Dump, Tobyhanna Township, Monroe County, PA. (First Remedial Action), September 1992.
PB93-963912/REB 93-04 PC **A04**/MF **A01**

**PB93-963913/REB**
Superfund Record of Decision (EPA Region 3): Suffolk City Landfill, Suffolk, VA. (First Remedial Action), September 1992.
PB93-963913/REB 93-04 PC **A03**/MF **A01**

**PB93-963914/REB**
Superfund Record of Decision (EPA Region 3): Eastern Diversified Metals Site, Schuylkill County, Hometown, PA. (Second Remedial Action), July 1992.
PB93-963914/REB 93-04 PC **A05**/MF **A01**

**PB93-963915/REB**
Superfund Record of Decision (EPA Region 3): USA Aberdeen, Operable Unit One, Michaelsville, MD. (Second Remedial Action), June 1992.
PB93-963915/REB 93-04 PC **A04**/MF **A01**

**PB93-963916/REB**
Superfund Record of Decision (EPA Region 3): Strasburg Landfill, Newtin Township, Chester County, PA. (Third Remedial Action), March 1992.
PB93-963916/REB 93-04 PC **A04**/MF **A01**

**PB93-963917/REB**
Superfund Record of Decision (EPA Region 3): Abex Corporation, Portsmouth, VA. (First Remedial Action), September 1992.
PB93-963917/REB 93-04 PC **A04**/MF **A01**

**PB93-963918/REB**
Superfund Record of Decision (EPA Region 3): Brown's Battery Breaking, Tilden Township, Berks County, PA. (Second Remedial Action), July 1992.
PB93-963918/REB 93-04 PC **A05**/MF **A01**

**PB93-963919/REB**
Superfund Record of Decision (EPA Region 3): Butz Landfill, Pocono and Jackson Townships, Monroe County, PA. (Second Remedial Action), June 1992.
PB93-963919/REB 93-04 PC **A05**/MF **A01**

**PB93-963920/REB**
Superfund Record of Decision (EPA Region 3): Commodore Semiconductor Group, Lower Providence Township, PA. (First Remedial Action), September 1992.
PB93-963920/REB 93-04 PC **A06**/MF **A02**

**PB93-963921/REB**
Superfund Record of Decision (EPA Region 3): Rhinehart Tire Fire Dump, Operable Unit 2, Winchester, VA. (Second Remedial Action), September 1992.
PB93-963921/REB 93-04 PC **A03**/MF **A01**

**PB93-963922/REB**
Superfund Record of Decision (EPA Region 3): Tonolli Corporation, Nesquehoning Borough, Carbon County, PA. (First Remedial Action), September 1992.
PB93-963922/REB 93-04 PC **A05**/MF **A01**

**PB93-963923/REB**
Superfund Record of Decision (EPA Region 3): U.S. Defense General Supply Center, Operable Unit 1, Richmond, VA. (First Remedial Action), May 1992.
PB93-963923/REB 93-04 PC **A05**/MF **A01**

**PB93-964009/REB**
Superfund Record of Decision (EPA Region 4): Chemform, Operable Unit One, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964009/REB 93-04 PC **A04**/MF **A01**

**PB93-964010/REB**
Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation (Operable Unit 18), TN. (Fifth Remedial Action), September 1992.
PB93-964010/REB 93-04 PC **A03**/MF **A01**

**PB93-964011/REB**
Superfund Record of Decision (EPA Region 4): Wilson Concepts of Florida, Pompano Beach, FL. (First Remedial Action), September 1992.
PB93-964011/REB 93-04 PC **A04**/MF **A01**

**PB93-964012/REB**
Superfund Record of Decision (EPA Region 4): Woodbury Chemical Site, Princeton, FL. (First Remedial Action), June 1992.
PB93-964012/REB 93-04 PC **A04**/MF **A01**

**PB93-964013/REB**
Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), A/M Area Groundwater Operable Unit 3, Aiken County, SC. (Third Remedial Action), June 1992.
PB93-964013/REB 93-04 PC **A03**/MF **A01**

**PB93-964014/REB**
Superfund Record of Decision (EPA Region 4): Standard Auto Bumper Site, Dade County, Hialeah, FL. (First Remedial Action), September 1992.
PB93-964014/REB 93-04 PC **A05**/MF **A01**

**PB93-964015/REB**
Superfund Record of Decision (EPA Region 4): Yellow Water Road Dump, Duval County, Baldwin, FL. (Second Remedial Action), June 1992.
PB93-964015/REB 93-04 PC **A05**/MF **A01**

**PB93-964016/REB**
Superfund Record of Decision (EPA Region 4): National Electric Coil/Cooper Industries, KY. (First Remedial Action), September 1992.
PB93-964016/REB 93-04 PC **A03**/MF **A01**

**PB93-964017/REB**
Superfund Record of Decision (EPA Region 4): Agrico Chemical, Escambia County, Pensacola, FL. (First Remedial Action), September 1992.
PB93-964017/REB 93-04 PC **A04**/MF **A01**

**PB93-964018/REB**
Superfund Record of Decision (EPA Region 4): Benfield Industries, Haywood County, Hazelwood, NC. (First Remedial Action), July 1992.
PB93-964018/REB 93-04 PC **A09**/MF **A02**

**PB93-964019/REB**
Superfund Record of Decision (EPA Region 4): Carrier Air Conditioning, Collierville, TN. (First Remedial Action), September 1992.
PB93-964019/REB 93-04 PC **A04**/MF **A01**

**PB93-964020/REB**
Superfund Record of Decision (EPA Region 4): Florida Steel Corporation, Martin County, Indiantown, FL. (First Remedial Action), June 1992.
PB93-964020/REB 93-04 PC **A04**/MF **A01**

**PB93-964021/REB**
Superfund Record of Decision (EPA Region 4): Madison County Sanitary Landfill, Madison, FL. (First Remedial Action), September 1992.
PB93-964021/REB 93-04 PC **A05**/MF **A01**

**PB93-964022/REB**
Superfund Record of Decision (EPA Region 4): Milan Army Ammunition Plant, TN. (First Remedial Action), September 1992.
PB93-964022/REB 93-04 PC **A04**/MF **A01**

**PB93-964023/REB**
Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 1, SC. (First Remedial Action), June 1992.
PB93-964023/REB 93-04 PC **A03**/MF **A01**

**PB93-964024/REB**
Superfund Record of Decision (EPA Region 4): Savannah River (USDOE), Operable Unit 2, SC. (Second Remedial Action), June 1992.
PB93-964024/REB 93-04 PC **A03**/MF **A01**

**PB93-964025/REB**
Superfund Record of Decision (EPA Region 4): US DOE Oak Ridge Reservation, Operable Unit 6, Roane County, TN. (Fourth Remedial Action), September 1992.
PB93-964025/REB 93-04 PC **A04**/MF **A01**

**PB93-964026/REB**
Superfund Record of Decision (EPA Region 4): USMC Camp Lejeune Military Reservation, NC. (First Remedial Action), September 1992.
PB93-964026/REB 93-04 PC **A03**/MF **A01**

**PB93-964101/REB**
Superfund Record of Decision (EPA Region 5): Grand Traverse Overall Supply Site, Greilickville, MI. (First Remedial Action), February 1992.
PB93-964101/REB 93-01 PC **A03**/MF **A01**

**PB93-964102/REB**
Superfund Record of Decision (EPA Region 5): Midco II, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964102/REB 93-01 PC **A05**/MF **A01**

**PB93-964103/REB**
Superfund Record of Decision (EPA Region 5): Twin Cities AF Reserve (SAR Landfill), MN. (First Remedial Action), March 1992.
PB93-964103/REB 93-01 PC **A04**/MF **A01**

**PB93-964104/REB**
Superfund Record of Decision (EPA Region 5): Columbus Old Municipal Landfill, Columbus, IN. (First Remedial Action), March 1992.
PB93-964104/REB 93-01 PC **A03**/MF **A01**

**PB93-964106/REB**
Superfund Record of Decision (EPA Region 5): Clare Water Supply Site, Clare County, Clare, MI. (Second Remedial Action), September 1992.
PB93-964106/REB 93-01 PC **A04**/MF **A01**

**PB93-964111/REB**
Superfund Record of Decision (EPA Region 5): Kohler Landfill, Kohler, WI. (First Remedial Action), March 1992.
PB93-964111/REB 93-01 PC **A05**/MF **A02**

**PB93-964113/REB**
Superfund Record of Decision (EPA Region 5): Metal Working Shop, Benzie County, Lake Ann, MI. (First Remedial Action), June 1992.
PB93-964113/REB 93-01 PC **A03**/MF **A01**

**PB93-964116/REB**
Superfund Record of Decision (EPA Region 5): Savanna Army Depot, Savanna, IL. (First Remedial Action), March 1992.
PB93-964116/REB 93-01 PC **A04**/MF **A01**

**PB93-964120/REB**
Superfund Record of Decision (EPA Region 5): Torch Lake Site, Operable Units 1 and 3, Houghton County, MI. (First Remedial Action), September 1992.
PB93-964120/REB 93-01 PC **A04**/MF **A01**

**PB93-964121/REB**
Superfund Record of Decision (EPA Region 5): Alsco Anaconda Site, Gnadenhutten, OH. (Second Remedial Action), September 1992.
PB93-964121/REB 93-04 PC **A04/MF A01**

**PB93-964122/REB**
Superfund Record of Decision (EPA Region 5): Butterworth No. 2 Landfill Site, Grand Rapids, MI. (First Remedial Action), September 1992.
PB93-964122/REB 93-04 PC **A03/MF A01**

**PB93-964123/REB**
Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 1, Anoka County, Andover, MN. (Second Remedial Action), (Amendment), June 1992.
PB93-964123/REB 93-04 PC **A03/MF A01**

**PB93-964124/REB**
Superfund Record of Decision (EPA Region 5): Reilly Tar and Chemical, St. Louis Park, MN. (Fourth Remedial Action), September 1992.
PB93-964124/REB 93-04 PC **A03/MF A01**

**PB93-964125/REB**
Superfund Record of Decision (EPA Region 5): American Chemical Services, Griffith, IN. (First Remedial Action), September 1992.
PB93-964125/REB 93-04 PC **A05/MF A01**

**PB93-964126/REB**
Superfund Record of Decision (EPA Region 5): Cannelton Industries Site, Sault Sainte Marie, MI. (First Remedial Action), September 1992.
PB93-964126/REB 93-04 PC **A04/MF A01**

**PB93-964127/REB**
Superfund Record of Decision (EPA Region 5): Central Illinois Public Service, Taylorville Manufactured Gas Plant Site, Christian County, IL. (First Remedial Action), September 1992.
PB93-964127/REB 93-04 PC **A05/MF A01**

**PB93-964128/REB**
Superfund Record of Decision (EPA Region 5): City Disposal Sanitary Landfill, Dane County, WI. (First Remedial Action), September 1992.
PB93-964128/REB 93-04 PC **A04/MF A01**

**PB93-964129/REB**
Superfund Record of Decision (EPA Region 5): H. Brown Company, Walker, MI. (First Remedial Action), September 1992.
PB93-964129/REB 93-04 PC **A05/MF A01**

**PB93-964130/REB**
Superfund Record of Decision (EPA Region 5): MIDCO I, Gary, IN. (First Remedial Action), (Amendment), April 1992.
PB93-964130/REB 93-04 PC **A05/MF A01**

**PB93-964131/REB**
Superfund Record of Decision (EPA Region 5): New Brighton/Arden Hills, Ramsey County, MN. (Eighth Remedial Action), September 1992.
PB93-964131/REB 93-04 PC **A07/MF A02**

**PB93-964132/REB**
Superfund Record of Decision (EPA Region 5): South Andover Salvage Yards, Operable Unit 2, Anoka County, Andover, MN. (Second Remedial Action), December 1992.
PB93-964132/REB 93-04 PC **A03/MF A01**

**PB93-964133/REB**
Superfund Record of Decision (EPA Region 5): Tri County/Elgin Landfill Site, Elgin, IL. (First Remedial Action), September 1992.
PB93-964133/REB 93-04 PC **A04/MF A01**

**PB93-964206/REB**
Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 2), Vermilion Parish, LA. (First Remedial Action), September 1992.
PB93-964206/REB 93-04 PC **A05/MF A01**

**PB93-964207/REB**
Superfund Record of Decision (EPA Region 6): Gulf Coast Vacuum Services (Operable Unit 1), Vermilion Parish, LA. (Second Remedial Action), September 1992.
PB93-964207/REB 93-04 PC **A05/MF A01**

**PB93-964208/REB**
Superfund Record of Decision (EPA Region 6): Koppers (Texarkana Plant), TX. (First Remedial Action), (Amendment), March 1992.
PB93-964208/REB 93-04 PC **A03/MF A01**

**PB93-964209/REB**
Superfund Record of Decision (EPA Region 6): Prewitt Abandoned Refinery, Prewitt, NM. (First Remedial Action), September 1992.
PB93-964209/REB 93-04 PC **A09/MF A02**

**PB93-964210/REB**
Superfund Record of Decision (EPA Region 6): Double Eagle Refinery, Oklahoma City, OK. (First Remedial Action), September 1992.
PB93-964210/REB 93-04 PC **A05/MF A01**

**PB93-964304/REB**
Superfund Record of Decision (EPA Region 7): Hydro-Flex Site, Topeka, KS. (First Remedial Action), March 1992.
PB93-964304/REB 93-04 PC **A03/MF A01**

**PB93-964305/REB**
Superfund Record of Decision (EPA Region 7): Pester Refinery, Butler County, El Dorado, KS. (First Remedial Action), September 1992.
PB93-964305/REB 93-04 PC **A04/MF A01**

**PB93-964402/REB**
Superfund Record of Decision (EPA Region 8): Denver Radium, Operable Unit 9, Denver, CO. (Eighth Remedial Action), December 1991.
PB93-964402/REB 93-04 PC **A04/MF A01**

**PB93-964403/REB**
Superfund Record of Decision (EPA Region 8): Hill Air Force Base, UT. (Second Remedial Action), September 1992.
PB93-964403/REB 93-04 PC **A03/MF A01**

**PB93-964404/REB**
Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), (Operable Unit 4), Golden, CO. (Third Remedial Action), April 1992.
PB93-964404/REB 93-04 PC **A06/MF A02**

**PB93-964405/REB**
Superfund Record of Decision (EPA Region 8): Denver Radium Site, Operable Unit 8, Denver, CO. (Ninth Remedial Action), January 1992.
PB93-964405/REB 93-04 PC **A06/MF A02**

**PB93-964406/REB**
Superfund Record of Decision (EPA Region 8): Idaho Pole National Priorities List Site, Bozeman, MT. (First Remedial Action), September 1992.
PB93-964406/REB 93-04 PC **A07/MF A02**

**PB93-964407/REB**
Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 1, Weber County, UT. (Second Remedial Action), June 1992.
PB93-964407/REB 93-04 PC **A04/MF A01**

**PB93-964408/REB**
Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 3, Weber County, UT. (Fourth Remedial Action), September 1992.
PB93-964408/REB 93-04 PC **A04/MF A01**

**PB93-964409/REB**
Superfund Record of Decision (EPA Region 8): Ogden Defense Depot, Operable Unit 4, UT. (Third Remedial Action), September 1992.
PB93-964409/REB 93-04 PC **A05/MF A01**

**PB93-964410/REB**
Superfund Record of Decision (EPA Region 8): Portland Cement Co. (Kiln Dust No. 2 and No. 3), Operable Unit 2, Salt Lake City, UT. (Second Remedial Action), March 1992.
PB93-964410/REB 93-04 PC **A04/MF A01**

**PB93-964411/REB**
Superfund Record of Decision (EPA Region 8): Rocky Flats Plant (USDOE), Operable Unit 2, Golden, CO. (Fourth Remedial Action), September 1992.
PB93-964411/REB 93-04 PC **A19/MF A04**

**PB93-964412/REB**
Superfund Record of Decision (EPA Region 8): Silver Bow Creek/Butte Area, MT. (Second Remedial Action), June 1992.
PB93-964412/REB 93-04 PC **A07/MF A02**

**PB93-964501/REB**
Superfund Record of Decision (EPA Region 9): Westinghouse Electric (Sunnyvale Plant), Sunnyvale, CA. (First Remedial Action), October 1991.
PB93-964501/REB 93-01 PC **A05/MF A01**

**PB93-964505/REB**
Superfund Record of Decision (EPA Region 9): Hassayampa Landfill, AZ. (First Remedial Action), August 1992.
PB93-964505/REB 93-04 PC **A04/MF A01**

**PB93-964506/REB**
Superfund Record of Decision (EPA Region 9): Iron Mountain Mine, Shasta County, CA. (Second Remedial Action), September 1992.
PB93-964506/REB 93-04 PC **A06/MF A02**

**PB93-964507/REB**
Superfund Record of Decision (EPA Region 9): Jasco Chemical Company, Mountain View, CA. (First Remedial Action), September 1992.
PB93-964507/REB 93-04 PC **A05/MF A01**

**PB93-964508/REB**
Superfund Record of Decision (EPA Region 9): Purity Oil Sales, Fresno County, CA. (Second Remedial Action), September 1992.
PB93-964508/REB 93-04 PC **A04/MF A01**

**PB93-964509/REB**
Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 3, Sacramento, CA. (Second Remedial Action), December 1991.
PB93-964509/REB 93-04 PC **A09/MF A03**

**PB93-964510/REB**
Superfund Record of Decision (EPA Region 9): Sacramento Army Depot, Operable Unit 4, Sacramento, CA. (Third Remedial Action), September 1992.
PB93-964510/REB 93-04 PC **A05/MF A01**

**PB93-964604/REB**
Superfund Record of Decision (EPA Region 10): Elmendorf Air Force Base, Operable Unit 2, Source Area ST41, Anchorage, AK. (First Remedial Action), September 1992.
PB93-964604/REB 93-01 PC **A03/MF A01**

**PB93-964606/REB**
Superfund Record of Decision (EPA Region 10): Arrcom (Drexler Enterprise), Rathdrum, ID. (First Remedial Action), June 1992.
PB93-964606/REB 93-04 PC **A03/MF A01**

**PB93-964607/REB**
Superfund Record of Decision (EPA Region 10): Fort Lewis Military Reservation, Landfill No. 5, Pierce County, WA. (First Remedial Action), July 1992.
PB93-964607/REB 93-04 PC **A04/MF A01**

**PB93-964608/REB**
Superfund Record of Decision (EPA Region 10): Pesticide Laboratory, Yakima, WA. (First Remedial Action), September 1992.
PB93-964608/REB 93-04 PC **A03/MF A01**

**PB93-964609/REB**
Superfund Record of Decision (EPA Region 10): Naval Air Station Whidbey Island - Ault Field, (Operable Unit 1, Area 6), Oak Harbor, WA. (First Remedial Action), April 1992.
PB93-964609/REB 93-04 PC **A03/MF A01**

**PB93-964610/REB**
Superfund Record of Decision (EPA Region 10): Umatilla Army Depot (Lagoons), Soils Operable Unit 2, Hermiston, OR. (First Remedial Action), September 1992.
PB93-964610/REB 93-04 PC **A04/MF A01**

**PB93-964611/REB**
Superfund Record of Decision (EPA Region 10): Bunker Hill Mining and Metallurgical Complex, Shoshone County, ID. (Second Remedial Action), September 1992.
PB93-964611/REB 93-04 PC **A08/MF A02**

**PB93-964612/REB**
Superfund Record of Decision (EPA Region 10): Eielson Air Force Base, AK. (First Remedial Action), September 1992.
PB93-964612/REB 93-04 PC **A04/MF A01**

**PB93-964613/REB**
Superfund Record of Decision (EPA Region 10): Joseph Forest Products, Wallowa County, OR. (First Remedial Action), September 1992.
PB93-964613/REB 93-04 PC **A04/MF A01**

**PB93-964614/REB**
Superfund Record of Decision (EPA Region 10): McChord AFB, Washrack Treatment Area, WA. (First Remedial Action), September 1992.
PB93-964614/REB 93-04 PC **A04/MF A01**

**PB93-964615/REB**
Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 2, ID. (Third Remedial Action), September 1992.
PB93-964615/REB 93-04 PC **A03/MF A01**

**PB93-964616/REB**
Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 22, ID. (Fourth Remedial Action), September 1992.
PB93-964616/REB 93-04 PC **A03/MF A01**

**PB93-964617/REB**
Superfund Record of Decision (EPA Region 10): US DOE Idaho National Engineering Laboratory, Operable Unit 23, ID. (Second Remedial Action), June 1992.
PB93-964617/REB 93-04 PC **A03/MF A01**

**PB93-964618/REB**
Superfund Record of Decision (EPA Region 10): Wyckoff/Eagle Harbor, WA. (First Remedial Action), September 1992.
PB93-964618/REB 93-04 PC **A07/MF A02**

**PB94-963201/REB**
Superfund Accelerated Cleanup Model (SACM) Coordination Strategy.
PB94-963201/REB 93-04 PC **A01/MF A01**

**PUB-509**
Identification of Deoxynucleoside; Polyaromatic Hydrocarbon Adducts by Capillary Zone Electrophoresis; Continuous Flow-Fast Atom Bombardment Mass Spectrometry.
PB93-229367/REB 93-04 PC **A02/MF A01**

**RAD-87-231-020-35-07**
Summary of Continuous Emissions Data from Seven Source Categories Producing or Using Hazardous Organic Compounds.
PB93-199354/REB 93-01 PC **A07/MF A02**

**RAND/N-3140-1-EPA/JMO/RC**
Subjective-Probability-Based Scenarios for Uncertain Input Parameters: Stratospheric Ozone Depletion, December 1990.
PB93-143741/REB 93-01 PC **A03/MF A01**

**RCN-293-052-06-03**
Amoco-U.S. Environmental Protection Agency, Pollution Prevention Project, Yorktown, Virginia: Measurements of Hydrocarbon Emissions and Ambient Air Concentrations at the Amoco Yorktown Refinery. Air Quality Data. Volume 1.
PB92-228592/REB 93-01 PC **A12/MF A03**

**REPT-8421.356**
Characterization of the Organic Emissions from the Thermal Destruction of CFCs.
PB93-205557/REB 93-04 PC **A10/MF A03**

**RTI/5960/132-01D**
Determination of Volatile Organic Content in Ultraviolet Radiation-Cured Coatings: Method Development.
PB93-210383/REB 93-04 PC **A07/MF A02**

**RVF-92-17**
Foerbraenning av sorterat industriavfall. Huvudrapport. (Incineration of sorted industrial wastes. Main report).
DE93500869/REB 93-04 PC **A03/MF A01**

**RVF-92-17-1**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
DE93500872/REB 93-04 PC **A03/MF A01**

**RVF-92-17-2**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
DE93500877/REB 93-04 PC **A04/MF A01**

**SNV-3906**
Phasing out of CFCs in the electronics and engineering industries in Sweden.
DE93711212/REB 93-01 PC **A03**/MF **A01**

**SNV-3931**
Bladder-wrack (Fucus vesiculosus L) as an indicator for radionuclides in the environment of Swedish nuclear power plants.
DE93603681/REB 93-01 PC **A03**/MF **A01**

**SNV-3944**
Measurements of total ozone.
DE92563059/REB 93-01 PC **A04**/MF **A01**

**SNV-3945**
Air monitoring in the Arctic: 1980-90.
DE92563060/REB 93-01 PC **A03**/MF **A01**

**SNV-3949**
Radioecology in Nordic limnic systems - present knowledge and future prospects.
DE92643948/REB 93-01 PC **A04**/MF **A01**

**SNV-3963**
Wetlands and lakes as nitrogen traps. Research programme for the period 1 July 1990 - 30 June 1994.
DE92563057/REB 93-01 PC **A03**/MF **A01**

**SNV-3968**
Impact of fuels on diesel exhaust emissions. A chemical and biological characterization.
DE92563058/REB 93-01 PC **A08**/MF **A02**

**SNV-3990**
Metal concentrations of the mor layer.
DE92563061/REB 93-01 PC **A05**/MF **A01**

**SNV-3999**
Sanering av Jaernsjoen i Emaan. Huvudstudie. (Remediation of lake Jaernsjoen in the Emaan river. Main report).
DE93711213/REB 93-01 PC **A04**/MF **A01**

**SNV-4007**
Lichen sensitivity and air pollution - a review of literature data.
DE93778468/REB 93-01 PC **A04**/MF **A01**

**SNV-4018**
Risk assessment, Health-Environment. A research programme during the period 1992/93-1994/95.
DE93711214/REB 93-01 PC **A03**/MF **A01**

**SNV-4033**
New technology for refrigeration and heating plants.
DE93721673/REB 93-01 PC **A03**/MF **A01**

**SNV-4045**
Greenhouse gases. Emissions and countermeasures in an international perspective.
DE93721674/REB 93-01 PC **A07**/MF **A02**

**SNV-4076**
Release of PCB and mercury from fibre sediments.
DE93778469/REB 93-01 PC **A05**/MF **A01**

**SNV-4077**
Trace elements in agricultural soils. Fluxes, balances and background values.
DE93778470/REB 93-01 PC **A03**/MF **A01**

**SNV-4078**
Critical concentrations of heavy metals in the mor horizon of Swedish forests.
DE93778471/REB 93-01 PC **A03**/MF **A01**

**SNV-4079**
Heavy metal concentrations in agricultural soils critical to microorganisms.
DE93778472/REB 93-01 PC **A03**/MF **A01**

**SNV-4087**
Air pollutants in urban areas. A bibliography 1985-1991.
DE93769990/REB 93-01 PC **A04**/MF **A01**

**SNV-4099**
Long-term forest fertilization experiments in Finland and Sweden - their use for vitality and nutrient balance studies.
DE93778473/REB 93-01 PC **A07**/MF **A02**

**SNV-4111**
Freshwater environmental monitoring in Sweden. Proposals from a working group.
DE93778474/REB 93-01 PC **A08**/MF **A02**

**SNV-4120**
Aatgaerder mot klimatfoeraendringar. (Measures against climatic change).
DE93778475/REB 93-01 PC **A14**/MF **A03**

**SNV-4146**
Recovery of CFCs from refrigeration equipment. Current processes.
DE93778476/REB 93-01 PC **A04**/MF **A01**

**SNV-4160**
Foerbraenning av sorterat industriavfall. Huvudrapport. (Incineration of sorted industrial wastes. Main report).
DE93500869/REB 93-04 PC **A03**/MF **A01**

**SNV-4161**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Karaktaerisering. (Incineration of sorted industrial wastes. Basic report: Waste characterization).
DE93500872/REB 93-04 PC **A03**/MF **A01**

**SNV-4162**
Foerbraenning av sorterat industriavfall. Underlagsrapport: Foerbraenningstester. (Incineration of sorted industrial wastes. Basic report: Incineration tests).
DE93500877/REB 93-04 PC **A04**/MF **A01**

**SR93-03-02**
Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage.
PB93-180875/REB 93-01 PC **A06**/MF **A02**

**SRI-ENV-90-785-6411**
Recommended Performance Standard of the Florida Radon Research Program.
PB93-122281/REB 93-01 PC **A03**/MF **A01**

**SRI-ENV-91-44-6411-070**
Radon Mitigation Studies: South Central Florida Demonstration.
PB93-122299/REB 93-01 PC **A07**/MF **A02**

**SRI-ENV-91-89-6790**
Effects of E-SOx Technology on ESP Performance.
PB93-107258/REB 93-01 PC **A04**/MF **A01**

**TBNEP-01-92**
Framework for Characterization. (Revised Final Report March 1992).
PB93-191237/REB 93-01 PC **A04**/MF **A01**

**TBNEP-02-92**
Compendium of Current Monitoring Programs in Tampa Bay and Its Watershed.
PB93-191666/REB 93-01 PC **A05**/MF **A01**

**TBNEP-03-92**
Review of Tampa Bay Information for Interim Nutrient Budgets and Historical Loadings of Bay Segments.
PB93-191187/REB 93-01 PC **A03**/MF **A01**

**TBNEP-04-92**
Oligohaline Areas in Tampa Bay Tributaries: Spatial Extent and Species Lists.
PB93-191179/REB 93-01 PC **A03**/MF **A01**

**TBNEP-05-92**
Distribution of Selected Fish Species in Tampa Bay.
PB93-191229/REB 93-01 PC **A04**/MF **A01**

**TBNEP-06-92**
Database of Benthic Sampling Locations in Tampa Bay.
PB93-191211/REB 93-01 PC **A05**/MF **A01**

**TBNEP-08-92**
Data Management Strategy for the Tampa Bay National Estuary Program: Recommendations and Implementation Plan.
PB93-191633/REB 93-01 PC **A09**/MF **A03**

**TBNEP-09-92**
Design of a Basinwide Monitoring Program for the Tampa Bay Estuary.
PB93-194694/REB 93-01 PC **A05**/MF **A01**

**TBNEP-10-92**
Synthesis of Basic Life Histories of Tampa Bay Species.
PB93-196012/REB 93-01 PC **A12**/MF **A03**

**TETRAT-TC-3218-10**
Commencement Bay Nearshore/Tideflats Feasibility Study. Executive Summary.
PB93-181220/REB 93-01 PC **A06**/MF **A02**

**TETRAT-TC-3218-VOL-1**
Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 1.
PB93-181238/REB 93-01 PC **A25**/MF **A06**

**TETRAT-TC-3218-VOL-2**
Commencement Bay Nearshore/Tideflats Feasibility Study. Volume 2. Appendices.
PB93-181246/REB 93-01 PC **A18**/MF **A04**

**UNC/SG-92/12**
Shoreline Erosion Control Using Marsh Vegetation and Low-Cost Structures.
PB93-142420/REB 93-01 PC **A03**/MF **A01**

**USDA/BLA-118**
Protection of Pome Fruits, March 1985-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149904/REB 93-01 PC **A13**/MF **A03**

**USDA/BLA-120**
Methylbromide and Its Alternatives as Fumigants, 1979-May 1992. Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations.
PB93-149912/REB 93-01 PC **A09**/MF **A03**

**WHOI-89-1**
Molecular Regulation of the Induction of Cytochrome P-450E in the Estuarine Fish Fundulus Heteroclitus.
AD-A258 623/8/REB 93-01 PC **A11**/MF **A03**

*U.S. GOVERNMENT PRINTING OFFICE:1994-300-642/92679

# NTIS Order Form

**U.S. DEPARTMENT OF COMMERCE**
**Technology Administration**
**National Technical Information Service**
**Springfield, VA 22161**

To order subscriptions, call (703) 487-4630.
TDD (For hearing impaired only), call (703) 487-4639.

**(703) 487-4650**
**or FAX this form (703) 321-8547***
* To verify receipt of your FAX order, call (703) 487-4679.

**For Rush Service—1-800-553-NTIS**
Rush service is available for an additional fee. Rush orders are usually shipped next day by *overnight* courier in the U.S. or by Air Mail outside the U.S. ***Do not mail rush orders.***

Please PRINT or TYPE.

## Ship to Address

DTIC Users Code _____
Date _____ Contract No. _____ (Last six digits)

Company
Last Name First Initial
Title
Street Address
City/State/ZIP
Attention
Telephone number FAX number

Signature: _____ (Required to validate all orders)

## Payment

☐ Charge my NTIS Deposit Account _ _ _ _ _ _ _ _

Charge my ☐ VISA ☐ MasterCard ☐ AMERICAN EXPRESS

Account No. |_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|

Exp. _____ Cardholder's name _____ (Please print)

☐ Check/Money order enclosed for $_____ (Payable in U.S. dollars)

☐ Bill me ✱—**Add $7.50 per order if full payment does not accompany order.** Purchase orders accepted only from Government agencies, educational institutions, or corporations in the U.S., Canada & Mexico.

Purchase Order No. _____

**Please Note:**
Although NTIS cannot accept returns for credit or refund, we will gladly replace any item you requested if we made an error in filling your order, if the item was defective, or if you received it in a damaged condition. Just call our Customer Service Department at (703) 487-4660.

## Order Selection

Please PRINT or TYPE.

| Enter NTIS order numbers (Ordering by title alone will delay your order) | Customer Routing† (up to 8 digits) | Unit Price | Quantity: Paper Copy | Quantity: Micro-fiche | Quantity: Other | Specify density for tape orders: 1600 bpi | 6250 bpi | 3480 cartridge | Internat'l Air Mail (see reverse) | TOTAL PRICE |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. /REB | | | | | | | | | | |
| 2. /REB | | | | | | | | | | |
| 3. /REB | | | | | | | | | | |
| 4. /REB | | | | | | | | | | |
| 5. /REB | | | | | | | | | | |
| 6. /REB | | | | | | | | | | |
| 7. /REB | | | | | | | | | | |
| 8. /REB | | | | | | | | | | |
| 9. /REB | | | | | | | | | | |
| 10. /REB | | | | | | | | | | |

**SUBTOTAL from other side**

**Handling Fee** *per order* U.S., Canada & Mexico–$3 Other countries–$4

✱ Billing Fee, add $7.50

**GRAND TOTAL**

**Unless microfiche is specified, paper copy will automatically be sent.**
†NTIS will label each item with up to eight characters of your organization's routing code.

**Prices are subject to change.**

☐ **OVER**—Order continued on reverse

PR-OFA 11/93
All previous versions of this order form are obsolete.

## Order Selection (Cont.)

Please PRINT or TYPE.

| Enter NTIS order numbers (Ordering by title alone will delay your order) | Customer Routing† (up to 8 digits) | Unit Price | Quantity: Paper Copy | Quantity: Micro-fiche | Quantity: Other | Specify density for tape orders: 1600 bpi | 6250 bpi | 3480 cartridge | Internat'l Air Mail (see reverse) | TOTAL PRICE |
|---|---|---|---|---|---|---|---|---|---|---|
| 11. /REB | | | | | | | | | | |
| 12. /REB | | | | | | | | | | |
| 13. /REB | | | | | | | | | | |
| 14. /REB | | | | | | | | | | |
| 15. /REB | | | | | | | | | | |
| 16. /REB | | | | | | | | | | |
| 17. /REB | | | | | | | | | | |
| 18. /REB | | | | | | | | | | |
| 19. /REB | | | | | | | | | | |
| 20. /REB | | | | | | | | | | |
| 21. /REB | | | | | | | | | | |
| 22. /REB | | | | | | | | | | |
| 23. /REB | | | | | | | | | | |
| 24. /REB | | | | | | | | | | |
| 25. /REB | | | | | | | | | | |
| | | | | | | | | Subtotal | | |

***ENTER on the other side.***

## FREE Catalogs & Information

**Call (703) 487-4650 and ask for any of the following products**

- PR-827 – NTIS Products & Services Catalog
- PR-858 – **Tour NTIS by Video Tape**. *NTIS-The Competitive Edge*, is an 8-minute video tape that gives an overview of NTIS and its activities.
- PR-797 – NTIS Alerts–current awareness bulletins
- PR-888 – CD-ROMs & Optical Discs available from NTIS
- PR-868 – Environmental Highlights (catalog of reports on the environment)
- PR-758 – Environmental Datafiles & Software Catalog
- PR-882 – Central & Eastern Europe Business Information Catalog
- PR-746 – Directory of Federal Laboratory & Technology Resources
- PR-821 – Health Care Financing Administration Manuals, Program Memorandum, Datafiles & Software
- PR-186 – Published Search® Master Catalog

## International Shipping

*Paper copy reports and microfiche copies are shipped surface mail unless Air Mail is requested.*

Canada and Mexico add $4 per paper copy report; $1 per microfiche copy.

Other countries add $8 per paper copy report; $1.25 per microfiche copy.

Computer products are shipped by air courier as part of the regular $4 handling fee.

---

**For a copy of the latest NTIS price code conversion table, call (703) 487-4650 and ask for PR-360-3 for prices in the U.S., Canada and Mexico. Ask for PR-360-4 for conversion table for foreign prices.**

After the original stock of a technical report is exhausted, NTIS reprints directly from the master archive copy. These printed-to-order copies are the best possible reproductions.

For more order forms, call (703) 487-4650 and ask for PR-OFA.