

EPA-600/5-73-002
July 1973

BIBLIOGRAPHY
of
R & D RESEARCH REPORTS

by

Publications Staff
Office of Program Management

OFFICE OF RESEARCH AND DEVELOPMENT
U.S. Environmental Protection Agency
Washington, D.C. 20460

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INTRODUCTION

On July 1, 1973 the former Office of Research and Monitoring was redesignated Office of Research and Development, Environmental Protection Agency (EPA). This bibliography records all research reports produced up to July 1, 1973, and supercedes EPA-R5-73-012, January 1973, Bibliography of R&M Research Reports. Source information (page 5) is included for procurement of these reports.

Part I of this bibliography identifies reports which relate to all areas of pollution control research in the series described below. Part II contains one of the major separate research series which was discontinued during 1972. This section is a revision of the discontinued publication, "Bibliography of Water Quality Research Reports," which was last issued in June 1972.

As of July 1972, research reports from all components of the OR&D, EPA, are now grouped into five series. These five broad categories were established to facilitate further development and application of environmental technology. Elimination of traditional grouping was consciously planned to foster technology transfer and a maximum interface in related fields. When these OR&D-wide series were established, all existing series which separately grouped different pollution control programs, such as the "Water Pollution Control Research Series," were discontinued.

In conjunction with establishing these series, a uniform report numbering system for all OR&D research reports was also established. This numbering system is keyed to the report series assigned to the report. Following is a description of the five series, with the identifying report cover color which is also series related. An explanation and sample of the standard numbering system is also provided.

Series Descriptions

ENVIRONMENTAL HEALTH EFFECTS RESEARCH - (R1) - (yellow covers)

This series describes projects and studies relating to the tolerances of man for unhealthy substances or conditions. This work is generally assessed from a medical viewpoint, including physiological or psychological studies. In addition to toxicology and other medical specialities, study areas include biomedical instrumentation and health research techniques utilizing animals - but always with intended application to human health measures.

ENVIRONMENTAL PROTECTION TECHNOLOGY - (R2) - (light blue covers)

This series describes research performed to develop and demonstrate instrumentation, equipment and methodology to repair or prevent environmental degradation from point and non-point sources of pollution. This work provides the new or improved technology required for the control and treatment of pollution sources to meet environmental quality standards.

ECOLOGICAL RESEARCH - (R3) - (light green covers)

This series describes research on the effects of pollution on humans, plant and animal species, and materials. Problems are assessed for their long- and short-term influences. Investigations include formation, transport, and pathway studies to determine the fate of pollutants and their effects. This work provides the technical basis for setting standards to minimize undesirable changes in living organisms in the aquatic, terrestrial and atmospheric environments.

ENVIRONMENTAL MONITORING - (R4) - (gray covers)

This series describes research conducted to develop new or improved methods and instrumentation for the identification and quantification of environmental pollutants at the lowest conceivably significant concentrations. It also includes studies to determine the ambient concentrations of pollutants in the environment and/or the variance of pollutants as a function of time or meteorological factors.

SOCIOECONOMIC ENVIRONMENTAL STUDIES - (R5) - (rust covers)

This series describes research on the socioeconomic impact of environmental problems. This covers recycling and other recovery operations with emphasis on monetary incentives. The non-scientific realms of legal systems, cultural values, and business systems are also involved. Because of their interdisciplinary scope, system evaluations and environmental management reports are included in this series.

All OR&D reports are numbered with a five element number. A sample number might be: EPA-R2-72-007b

- EPA Identifies all Environmental Protection Agency publications. This element is invariant.
- R2 Identifies the OR&M series series of publications. The letter R is used for all Research and Monitoring publications. The number following corresponds to series assignment (1-5).
- 72 Indicates (the last two digits of) the year of publication.
- 007 Indicates the serial number which is: (1) sequentially assigned, (2) unique within the series, and (3) normally pure numerics.
- b Indicates an expander to the serial number element. (The sample number contains a b suffix to indicate it is the second in a separate sequence or set.)

Reports are numbered consecutively within each series. Any one series may include reports from research areas in the fields of air, water, solid wastes, radiation, pesticides, and noise. Individual program areas within each field have been matched to the most appropriate series.

(NOTE: The above numbering system is being slightly modified for use after July 1973. Such changes will appear in the next issue of this bibliography. This bibliography is identified with the new number format.)

When EPA was formed in December 1971, many of the component organizations which are now a part of EPA, retained their established methods of controlling on-going research projects. One of these former organizations responsible for water pollution control, had a consistent project and report numbering system which is reflected in Part II of this bibliography. To retain the coded subject identification of water pollution control reports, these project numbers are also shown under the OR&D report numbers in Part I when applicable. The appendix is a cross index of Part I reports by these project numbers.

Inquiries for information on earlier research in other areas of EPA interest, should be directed to the appropriate office shown on the following list.

For Air Pollution Control Research:

Air Pollution Technical Information Center
Office of Technical Information and Publications
Office of Air Programs
Environmental Protection Agency
Research Triangle Park, North Carolina 27711

For Solid Waste Research:

Technical Information Office
National Environmental Research Center
Environmental Protection Agency
Cincinnati, OH 45268

For Pesticides Research:

Information Section
Division of Pesticides Programs
Office of Pesticides Programs
Environmental Protection Agency
4770 Buford Highway
Chamblee, Georgia 30341

For Radiation Research:

Office of Radiation Programs
Environmental Protection Agency
Room 614, Waterside Mall East
401 M Street, SW
Washington, D.C. 20460

For Noise Research:

Office of Noise Abatement and Control
Environmental Protection Agency
Crystal Mall Bldg. #2
Washington, D.C. 20460

SOURCE INFORMATION

The published reports listed in this bibliography were prepared by or for the Environmental Protection Agency, and initial distribution has been completed. Additional copies of any of these reports can only be obtained from the sources indicated. The Publications Staff does not sell publications, nor are copies available upon request. Therefore, forwarding requests to this office will only cause delay.

- 1) When only "GPO" and price is listed, documents (in paper copy form) are available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, at the specified price. The indicated catalog number should be included with GPO orders to expedite delivery. For alternate GPO sources see the following listing of GPO bookstores. GPO prices are listed at mail-order rate. Lower prices are available for direct purchase at bookstore counters.
- 2) When the GPO source entry is followed by "NTIS - PB" and number, the document is also available from the National Technical Information Service, Springfield, Virginia, 22151, under the designated accession number. In general the only available form of the report at NTIS will be a microfiche so long as GPO has sale copies. However, in some cases, paper copies are also available as indicated by the price. The NTIS microfiche price for each report is 95¢ and paper copies are as listed. NTIS orders must include the PB number(s).
- 3) When the only source listed is "NTIS", then the document is available only from the National Technical Information Service in paper copies and microfiche. Paper copies are \$3.00 each unless otherwise indicated by a different price.
- 4) A notation of "Pending" indicates document is undergoing final preparations for publication, or that source information is not yet available.

Checks should be made payable to and forwarded to the designated office from which the document is available. Please do not send your orders to the Publications Staff.

GOVERNMENT PRINTING OFFICE BOOKSTORES

The following is a list of U.S. Government Printing Office Bookstores. A typical bookstore stocks approximately 1,500 different publications and provides access to the 20,000 publications available by mail order from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

ATLANTA BOOKSTORE
Room 100, Federal Building
275 Peachtree Street, NE
Atlanta, Georgia 30303
Telephone: 404-526-6947

BIRMINGHAM BOOKSTORE
Room 102A
2121 Building
2121 Eighth Avenue, N
Birmingham, Alabama 35203
Telephone: 205-325-6056

BOSTON BOOKSTORE
Room G25, John F. Kennedy Federal Building
Sudbury Street
Boston, Massachusetts 02203
Telephone: 617-223-6071

CANTON BOOKSTORE
Federal Office Building
201 Cleveland Avenue, SW
Canton, Ohio 44702
Telephone: 216-455-8971

CHICAGO BOOKSTORE
Room 1463 - 14th Floor
Everett McKinley Dirksen Building
219 South Dearborn Street
Chicago, Illinois 60604
Telephone: 312-353-5133

DALLAS BOOKSTORE
Room 1046
Federal Building - U.S. Courthouse
1100 Commerce Street
Dallas, Texas 75202
Telephone: 214-749-1541

DENVER BOOKSTORE
Room 1421
Federal Building - U.S. Courthouse
1961 Stout Street
Denver, Colorado 80202
Telephone: 303-837-3965

DETROIT BOOKSTORE
Room 229, Federal Office Building
231 W. Lafayette Blvd.
Detroit, Michigan 48226
Telephone: 313-226-7816

KANSAS CITY BOOKSTORE
Room 144, Federal Office Building
601 East 12th Street
Kansas City, Missouri 64106
Telephone: 816-374-2140

LOS ANGELES BOOKSTORE
Room 1015, Federal Office Building
300 North Los Angeles Street
Los Angeles, California 90012
Telephone: 213-688-5841

NEW YORK BOOKSTORE
Room 110
26 Federal Plaza
New York, New York 10007
Telephone: 212-264-3826

PHILADELPHIA BOOKSTORE
Main Lobby, U.S. Post Office and Courthouse
9th and Chestnut Streets
Philadelphia, Pennsylvania 19107
Telephone: 215-597-0677

SAN FRANCISCO BOOKSTORE
Room 1023, Federal Office Building
450 Golden Gate Avenue
San Francisco, California 94102
Telephone: 415-556-6657

GOVERNMENT PRINTING OFFICE BOOKSTORE
710 North Capitol Street
Washington, D.C. 20402
Telephone: 202-783-3238

DEPARTMENT OF COMMERCE BOOKSTORE
14th and Constitution Avenue, NW
Washington, D.C. 20230
Telephone: 202-967-3527

USIA Bookstore
1776 Pennsylvania Avenue, NW
Washington, D.C. 20547
Telephone: 202-632-9668

DEPARTMENT OF STATE BOOKSTORE
21st and C Streets, NW
Washington, D.C. 20520
Telephone: 202-632-1437
(Public access to building controlled by security regulations.)

PENTAGON BOOKSTORE
Main Concourse, south end
Washington, D.C. 20310
Telephone: 202-541-2998

FORRESTAL BOOKSTORE
Room 1-J-001, James Forrestal Building
1000 Independence Avenue, SW
(L'Enfant Plaza)
Washington, D.C. 20407
Telephone: 202-426-7937

PART I

R & D RESEARCH REPORTS BY SERIES

Publications Staff
Office of Program Management
Office of Research and Development
Environmental Protection Agency
Washington, D.C. 20460

**RESEARCH, DEVELOPMENT, AND DEMONSTRATION GRANT,
CONTRACT, AND IN-HOUSE REPORTS**

ENVIRONMENTAL HEALTH EFFECTS RESEARCH SERIES (R1)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R1-73-001 (18040 DGI)	<u>Plant Analysis for Nutrient Assay of Natural Waters; by G. C. Gerloff, Univ. of Wisconsin, Madison, WI</u>	GPO - 95¢ EP 1.23/4:73-001 NTIS - PB 221 332
EPA-R1-72-002	<u>Physiological Adaptations to Carbon Monoxide Levels and Exercise in Normal Men; by C. R. Collier, et. al., Research Univ. of Southern California, Los Angeles, CA</u>	NTIS - PB 213 834
EPA-R1-72-003	<u>Interactions of Various Air Pollutants on Causation of Pulmonary Disease; by R. Ehrlich and J. D. Fenters, IIT Research Inst., Chicago, IL</u>	NTIS - PB 214 064 (\$4.50)
EPA-R1-73-004	<u>Research Study to Determine the Range of Carboxyhemoglobin in Various Segments of the American Population; by The Medical College of Wisconsin, Milwaukee, WI</u>	NTIS - PB 210 021
EPA-R1-73-005	<u>A Survey of Air and Population Lead Levels in Selected American Communities; by L. B. Tepper and L. S. Levin, Univ. of Cincinnati, OH</u>	(Pending)

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-72-001 (12050 DKF)	<u>Evaluation of Waste Waters from Petroleum and Coal Processing;</u> by G. W. Reid and L. E. Streebin, Univ. of Oklahoma, Norman, OK	GPO - \$2.75 EP 1.23/2:72-001 NTIS - PB 214 610 (\$5.25)
EPA-R2-72-002 (14010 EAH)	<u>Pyritic Systems: A Mathematical Model;</u> by A. H. Morth, E. E. Smith and K. S. Shumate, Ohio State Univ., Columbus, OH	GPO - \$2.25 EP 1.23/2:72-002 NTIS - PB 213 887
EPA-R2-73-003 (12080 HBM)	<u>Wastewater Treatment Studies in Aggregate and Concrete Products;</u> by R. G. Monroe, Smith & Monroe & Gray Engineers, Inc., Lake Oswego, OR	GPO - \$1.25 EP 1.23/2:73-003 NTIS - PB 219 670
EPA-R2-72-004 (16020 GIY)	<u>Identification of Polychlorinated Biphenyls in the Presence of DDT-Type Compounds;</u> by Baird-Atomic, Inc., Bedford, MA	GPO - \$1.25 EP 1.23/2:72-004 NTIS - PB 213 900
EPA-R2-72-005a (16130 FHH)	<u>Workbook of Thermal Plume Prediction - Vol. I - Submerged Discharges;</u> by M. A. Shirazi and L. R. Davis, NERC, EPA, Corvallis, OR	GPO - \$1.75 EP 1.23/2:72-005a
EPA-R2-72-006 (15080 GBJ)	<u>A Free Floating Endless Belt Oil Skimmer;</u> by R. W. Agnew, Rex Chainbelt, Inc., Milwaukee, WI	GPO - \$1.50 EP 1.23/2:72-006 NTIS - PB 214 103 (\$3.50)
EPA-R2-72-007 (15080 HOK)	<u>Aerial Surveillance Spill Prevention System;</u> by C. L. Rudder, C. J. Reinheimer, and J. L. Berrey, McDonnell Aircraft Co., McDonnell Douglas Corp., St. Louis, MO	GPO - \$3.00 EP 1.23/2:72-007 NTIS - PB 221 484
EPA-R2-72-008 (11023 GSC)	<u>The Swirl Concentrator as a Combined Sewer Overflow Regulator Facility;</u> by American Public Works Assn., Research Foundation, Chicago, IL	GPO - \$2.25 EP 1.23/2:72-008 NTIS - PB 214 687
EPA-R2-73-009 (16020 GHQ)	<u>Neutron Activation Analysis of Bottom Sediments;</u> by R. V. Moore and O. W. Propheter, Southeast Environmental Research Lab., EPA, Athens, GA	GPO - 40¢ EP 1.23/2:73-009
EPA-R2-72-010 (15090 GLU)	<u>Rapid Detection System for Organophosphates and Carbamate Insecticides in Water;</u> by L. H. Goodson, Midwest Research Inst., Kansas City, MO	GPO - 95¢ EP 1.23/2:72-010 NTIS - PB 214 764
EPA-R2-72-011	<u>Management Information for Solid Waste Collection;</u> by R. M. Clark, NERC, EPA, Cincinnati, OH	NTIS - PB 213 308
EPA-R2-72-012	<u>Urban Solid Waste Management: Economic Case Study;</u> by R. M. Clark, NERC, EPA, Cincinnati, OH	NTIS - PB 213 394
EPA-R2-72-013 (16100 FHB)	<u>Winter Survival of Fecal Indicator Bacteria in a Subarctic Alaskan River;</u> by R. C. Gordon, Alaska Water Lab., EPA, College, AK	GPO - 50¢ EP 1.23/2:72-013 NTIS - PB 213 071 (\$3.00)

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES [R2] (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-72-014 (14020 DLN)	<u>Rehabilitation of a Brine-Polluted Aquifer;</u> by J. S. Fryberger, Engineering Enterprises, Norman, OK	GPO - \$1.25 EP 1.23/72-014 NTIS - PB 218 860
EPA-R2-72-015 (15030 FMZ)	<u>Guidelines for Erosion and Sediment Control Planning and Implementation;</u> by The Dept. of Water Resources, State of Maryland, Annapolis, MD and B. C. Becker, and T. R. Mills, Hittman Associates, Inc., Columbia, MD	GPO - \$1.75 EP 1.23/2:72-015 NTIS - PB 213 119
EPA-R2-72-016 (12100 ---)	<u>Forest Fertilization - A State of the Art Review and Description of Environmental Effects;</u> by W. A. Groman, NERC, EPA, Corvallis, OR	GPO - 65¢ EP 1.23/2:72-016 NTIS - PB 213 073
EPA-R2-73-017 (12060 EHS)	<u>Cannery Waste Treatment by Anaerobic Lagoons and Oxidation Ditch;</u> by C. D. Parker and G. P. Skerry, Melbourne Water Science Inst., Victoria, Australia	GPO - \$2.10 EP 1.23/2:73-017 NTIS - PB 219 823
EPA-R2-72-018 (12060 ---)	<u>Proceedings Third National Symposium on Food Processing Wastes;</u> by Pacific Northwest Water Lab., EPA, Corvallis, OR - cosponsored by National Canners Assn.	GPO - \$5.25 EP 1.23/2:72-018 NTIS - PB 214 418
EPA-R2-72-019	<u>Electron Paramagnetic Resonance (EPR) Investigation of Limestones and Their Calcines and Correlation with Reactivity with Acid Gases;</u> by N. Ashford and F. Jarke, IIT Research Inst., Chicago, IL	NTIS - PB 211 504
EPA-R2-72-020	<u>Study of Chemically Active Fluid Bed Gasifier for Reduction of Sulfur Oxide Emissions;</u> by Esso Research Centre, Abingdon, Berkshire, England	NTIS - PB 211 438 (\$6.00)
EPA-R2-72-021	<u>Study of Characterization and Control of Air Pollutants from a Fluidized-bed Boiler - The SO₂ Acceptor Process;</u> by Pope, Evans, and Robbins, Alexandria, VA	(Pending)
EPA-R2-72-022	<u>Survey of Coal Availabilities by Sulfur Content;</u> by Mitre Corp., Washington, DC	NTIS - PB 211 505
EPA-R2-72-023	<u>Cyclic Operation of Plate Columns for Gas-Liquid Contacting;</u> by Massachusetts Inst. of Technology, Cambridge, MA	NTIS - PB 211 853
EPA-R2-73-024 (12060 ---)	<u>Cannery Wastewater Treatment with Rotating Biological Contactor and Extended Aeration;</u> by M. W. Cochrane, R. J. Burn, and K. A. Dostal, Pacific Northwest Environmental Research Lab., EPA, Corvallis, OR	GPO - 90¢ EP 1.23/2:73-024 NTIS - PB 221 333
EPA-R2-73-025 (12060 ---)	<u>Anaerobic-Aerobic Ponds for Beet Sugar Waste Treatment;</u> by Beet Sugar Development Foundation, Fort Collins, CO	GPO - \$2.10 EP 1.23/2:73-025
EPA-R2-72-026	(Number cancelled)	

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-72-027	<u>Pilot Scale Up of Processes to Demonstrate Utilization of Pulverized Coal Flyash Modified by the Addition of Limestone - Dolomite Sulfur Dioxide Removal Additives;</u> by Coal Research Bureau, West Virginia Univ., Morgantown, WV	NTIS - PB 213 639
EPA-R2-72-028	(Number cancelled)	
EPA-R2-72-029	(Number cancelled)	
EPA-R2-72-030	(Number cancelled)	
EPA-R2-72-031 (17010 DUX)	<u>An Investigation of Phosphorus Removal Mechanisms in Activated Sludge Systems;</u> by W. E. Morgan, and E. G. Fruh, Univ. of Texas, Austin, TX	GPO - \$2.00 EP 1.23/2:72-031 NTIS - PB 213 893
EPA-R2-72-032 (17030 EYA)	<u>Fluidized Bed Clarification as Applied to Wastewater Treatment;</u> by J. C. Orcutt, Research Triangle Inst., Research Triangle Park, NC	GPO - \$1.50 EP 1.23/2:72-032 NTIS - PB 216 604
EPA-R2-72-033 (15080 EHP)	<u>Air Modulated Vacuum Oil Recovery Collection of Spilled Oil (Foams);</u> by The City of Cleveland, OH	GPO - 75¢ EP 1.23/2:72-033 NTIS - PB 214 695
EPA-R2-72-034 (17010 DRF)	<u>Evaluation of Processes Available for Removal of Phosphorus from Wastewater;</u> by L. K. Cecil, Consulting Engineer, Tucson, AZ	NTIS - PB 211 191 (\$3.75)
EPA-R2-72-035	<u>SO₂-Free Two-Stage Coal Combustion Process;</u> by Applied Technology Corp., Pittsburg, PA	NTIS - PB 211 888
EPA-R2-72-035a	<u>SO₂-Free Two-Stage Coal Combustion Process -- Appendices;</u> by Applied Technology Corp., Pittsburgh, PA	NTIS - PB 216 329 (\$5.45)
EPA-R2-72-036	<u>Asbestos Fiber Atlas;</u> by California Dept. of Public Health	(Pending)
EPA-R2-72-037 (15040 EJZ)	<u>Flow into a Stratified Reservoir;</u> by Univ. of California, Berkeley, CA	GPO - 65¢ EP 1.23/2:72-037 NTIS - PB 213 072
EPA-R2-72-038	<u>Development of the Catalytic Chamber Process;</u> by Tyco Labs, Waltham, MA	NTIS - PB 220 436
EPA-R2-72-039 (15080 ---)	<u>The Appearance and Visibility of Thin Oil Films on Water;</u> by B. Hornstein, Edison Water Quality Research Div., NERC, EPA, Edison, NJ	GPO - \$2.50 EP 1.23/2:72-039 NTIS - PB 219 825
EPA-R2-72-040	<u>Sewage Sludge Incineration;</u> by EPA Task Force, EPA, Washington, DC	NTIS - PB 211 323

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-72-041	<u>Sulfur Behavior and Sequestering of Sulfur Compounds During Coal Carbonization, Gasification and Combustion;</u> by Scientific Research Instruments Corp., Baltimore, MD	NTIS - PB 211 481
EPA-R2-72-042	<u>Abatement of Particulate Emissions from Stationary Sources;</u> by National Research Council, National Academy of Engineering, Washington, DC	NTIS - PB 211 961
EPA-R2-72-043 (16080 HTY)	<u>Control of Mercury Pollution in Sediments;</u> by Midwest Research Inst., Kansas City, MO	GPO - 75¢ EP 1.23/2:72-043 NTIS - PB 213 771 (\$2.75)
EPA-R2-73-044 (12010 DMF)	<u>Chemical Treatment of Plating Waste for Removal of Heavy Metals;</u> by The Beaton and Corbin Mfr. Co., Southington, CT	GPO - 75¢ EP 1.23/2:73-044
EPA-R2-72-045 (15080 EOT)	<u>Restoration of Beaches Contaminated by Oil;</u> by G. D. Gumtz, Meloy Laboratories, Inc., Springfield, VA	GPO - \$3.50 EP 1.23/2:72-045 NTIS - PB 214 419
EPA-R2-72-046	<u>An Investigation of the Biodegradability of Packaging Plastics;</u> by J. E. Potts, R. A. Clendinning and W. B. Ackart, Union Carbide Corp., Bound Brook, NJ	NTIS - PB 213 488
EPA-R2-72-047 (13030 DOA)	<u>Evaluation of Canal Lining for Salinity Control in Grand Valley;</u> by G. V. Skogerboe and W. R. Walker, Colorado State Univ., Fort Collins, CO	GPO - \$2.75 EP 1.23/2:72-047 NTIS - PB 214 113
EPA-R2-73-048 (12090 FZB)	<u>Dyestuff Color Removal by Ionizing Radiation and Chemical Oxidation;</u> by T. F. Craft and G. G. Eichholz, Georgia Inst. of Technology, Atlanta, GA	GPO - \$2.10 EP 1.23/2:73-048 NTIS - PB 221 486
EPA-R2-72-049 (15080 HEU)	<u>Concept Evaluation: Recovery of Floating Oil Using Polyurethane Foam Sorbent;</u> by C. H. Henager and J. D. Smith, Battelle Pacific Northwest Laboratories, Richland, WA	GPO - \$1.50 EP 1.23/2:72-049 NTIS - PB 221 251
EPA-R2-72-050 (17070 DIW)	<u>Full Scale Conversion of Anaerobic Digesters to Heated Aerobic Digesters;</u> by City of Hamilton, OH	NTIS - PB 211 448
EPA-R2-72-051	<u>Development of Aqueous Processes for Removing NO_x from Flue Gases;</u> by Esso Research and Engineering Co., Linden, NJ	NTIS - PB 212 858
EPA-R2-73-051a	<u>Development of Aqueous Processes for Removing NO_x from Flue Gases - Addendum;</u> by Esso Research and Engineering, Linden, NJ	(Pending)

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-72-052	<u>Design and Construction of a System for Remote Optical Sensing of Emissions;</u> by M. L. Streiff and C. R. Claysmith, Convair Aerospace, Div. of General Dynamics, San Diego, CA	NTIS - PB 221 073 (\$6.00)
EPA-R2-72-053 (17030 DLX)	<u>Initial Mixing in Coagulation Processes;</u> by R. J. Stenquist and W. J. Kaufman, Univ. of California, Berkeley, CA	GPO - \$2.25 EP 1.23/2:72-053 NTIS - PB 213 902
EPA-R2-72-054 (15080 ---)	<u>Runoff of Oils from Rural Roads Treated to Suppress Dust;</u> by F. J. Freestone, Water Quality Research Div., NERC, EPA, Edison, NJ	GPO - \$1.00 EP 1.23/2:72-054
EPA-R2-72-055 (15080 ---)	<u>Biological Effects of Oil Pollution, Selected Bibliography II;</u> by R. J. Nadeau, and T. H. Roush, Edison Water Quality Research Lab., EPA, Edison, NJ	NTIS - PB 213 483 (\$4.50)
EPA-R2-72-056 (14010 FNJ)	<u>Acid Mine Drainage Treatment by Ion Exchange;</u> by J. Holmes and E. Kreusch, Culligan International Co., Northbrook, IL	GPO - \$2.75 EP 1.23/2:72-056 NTIS - PB 214 454
EPA-R2-72-057 (16020 GVY)	<u>Development of Method for NTA Analysis in Raw Water;</u> by J. K. Taylor, et. al., National Bureau of Standards, Washington, DC	GPO - 70¢ EP 1.23/2:72-057 NTIS - PB 219 035
EPA-R2-73-058 (12090 EOX)	<u>A Study of the Photodegradation of Commercial Dyes;</u> by Dr. J. J. Porter, Clemson Univ., Clemson, SC	GPO - \$1.25 EP 1.23/2:73-058 NTIS - PB 221 483
EPA-R2-72-059	<u>The Beverage Container Problem - Analysis and Recommendations;</u> by T. H. Bingham and P. F. Mulligan, Research Triangle Inst., Research Triangle Park, NC	GPO - \$2.25 EP 1.23/2:72-059 NTIS - PB 213 341 (\$6.75)
EPA-R2-72-060	<u>Low Sulfur-Char as a Co-Product in Coal Gasification;</u> by Consolidation Coal Co., Library, PA	NTIS - PB 214 162
EPA-R2-72-061 (13040 FHP)	<u>Characteristics of Rainfall Runoff from a Beef Cattle Feedlot;</u> by R. D. Kreis, M. R. Scalf, & J. F. McNabb, Robt. S. Kerr Water Research Center, EPA, Ada, OK	GPO - \$1.00 EP 1.23/2:72-061 NTIS - PB 213 929
EPA-R2-72-062	<u>Afterburner Systems Study;</u> by Shell Development Co., Emeryville, CA	NTIS - PB 212 560 (\$6.00)
EPA-R2-72-063	<u>Development of X-Ray Flourescence Spectroscopy for Elemental Analysis of Particulate Matter in the Atmosphere and in Source Emissions;</u> by Naval Research Lab., Washington, DC	NTIS - PB 213 366
EPA-R2-72-064 (17080 DAR)	<u>Calcium Phosphate Precipitation in Wastewater Treatment;</u> by A. B. Menar and D. Jenkins, Univ. of California at Berkeley, CA	GPO - \$1.50 EP 1.23/2:72-064 NTIS - PB 216 605

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-72-065 (17050 ENM)	<u>Full Scale Parallel Activated Sludge Process Evaluation</u> ; by E. D. Toerber, Freeport Illinois Water and Sewer Commission, Freeport, IL	GPO - \$2.75 EP 1.23/2:72-065 NTIS - PB 213 928
EPA-R2-72-066	<u>Effect of Fuel Additives on the Chemical and Physical Characteristics of Particulate Emissions and Automotive Exhaust</u> ; by Dow Chemical Co., Midland, MI	(Pending)
EPA-R2-72-067	<u>An Improved Manual Method for NOx Emission Measurements</u> ; by Air Force Rocket Propulsion Lab., Edwards, CA	NTIS - PB 212 859
EPA-R2-72-068 (11030 FLN)	<u>Storm Sewer Design - An Evaluation of the RRL Method</u> ; by J. B. Stall and M. L. Terstriep, Illinois State Water Survey, Univ. of Illinois, Urbana, IL	GPO - \$1.25 EP 1.23/2:72-068 NTIS - PB 214 134
EPA-R2-72-069 (14010 FMM)	<u>Oxidation of Pyrites in Chlorinated Solvents</u> ; by J. C. Troy, J. A. Boros, and D. R. Brenneman, Cyrus Wm. Rice Div., NUS Corp., Pittsburgh, PA	GPO - \$1.00 EP 1.23/2:72-069 NTIS - PB 214 455
EPA-R2-72-070 (11023 FIY)	<u>Storage and Treatment of Combined Sewer Overflows</u> ; by The City of Chippewa Falls, WI	GPO - \$2.00 EP 1.23/2:72-070 NTIS - PB 214 106 (\$4.00)
EPA-R2-72-071a	<u>The Development of the Gold Amalgamation Sampling and Analytical Procedure for Investigation of Mercury in Stack Gases</u> ; by G. W. Kalb and C. Baldeck, Tradet, Inc., Columbus, OH	NTIS - PB 210 817 (\$4.85)
EPA-R2-72-071b	<u>The Adaptation of the Gold Amalgamation Sampling and Analytical Procedure for the Analysis of Mercury and Stack Gases to High SO₂ Environments Observed in Smelters</u> ; by G. W. Kalb, Tradet, Inc., Columbus, OH	NTIS - PB 211 215
EPA-R2-72-072a	<u>State of the Art for Controlling NO_x Emissions, Part I, Utility Boilers</u> ; by Catalytic, Inc., Charlotte, NC	NTIS - PB 213 297 (\$5.45)
EPA-R2-72-073 (12020 EWZ)	<u>Solvent Extraction Status Report</u> ; by L. F. Mayhue, Robt. S. Kerr Environmental Research Center, EPA, Ada, OK	GPO - 75¢ EP 1.23/2:72-073 NTIS - PB 221 458 (\$2.75)
EPA-R2-72-074a (16130 ERN)	<u>A Procedure and Case Study Demonstration for Evaluating the Cost of Thermal Effluent Control for Proposed Steam-Electric Generating Units (Final Report)</u> ; by F. A. Smith and L. Ortolano, The Center for the Environment and Man, Inc., Hartford, CT	NTIS - PB 214 207

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-72-074b (16130 ERN)	<u>A Procedure for Estimating Costs of Thermal Effluent Modifications for Existing Steam-Electric Generating Stations (Study Paper No. 2);</u> by L. Ortolano and F. A. Smith, The Center for the Environment and Man, Inc., Hartford, CT	NTIS - PB 214 123
EPA-R2-72-075 (17090 EEV)	<u>Equalization of Wastewater Flows;</u> by M. D. La Grega, O'Brien and Gere Engineers, Inc., Syracuse, NY	NTIS - PB 212 389
EPA-R2-72-076 (17010 DTG)	<u>Removal of Organic and Eutrophying Pollutants by Chemical-Biological Treatment;</u> by Univ. of Notre Dame, Notre Dame, IN	NTIS - PB 214 628
EPA-R2-72-077 (16080 GWU)	<u>Control of Mercury Contamination in Freshwater Sediments;</u> by G. Feick, E. E. Johanson and D. S. Yeaple, JBF Scientific Corp., Burlington, MA	GPO - \$2.00 EP 1.23/2:72-077 NTIS - PB 214 107 (\$4.00)
EPA-R2-72-078 (16080 ERP)	<u>Correlated Studies of Vancouver Lake - Hydraulic Model Study;</u> by J. F. Orsborn, Washington State Univ., Pullman, WA	GPO - \$1.25 EP 1.23/2:72-078 NTIS - PB 221 248
EPA-R2-72-079 (16020 EWC)	<u>Liquid Chromatography of Carbamate Pesticides;</u> by A. D. Thruston, Jr., Southeast Environmental Research Lab., EPA, Athens, GA	GPO - 55¢ EP 1.23/2:72-079 NTIS - PB 219 669
EPA-R2-72-080 (11000 ---) (16080 ---) (16100 ---) (17000 ---)	<u>Projects of the Municipal Technology Branch through June 1972;</u> by Municipal Technology Branch, Office of Research and Monitoring, EPA, Washington, DC	GPO - \$6.00 EP 1.23/2:72-080 NTIS - PB 214 759
EPA-R2-72-081 (11030 FUJ)	<u>Water Pollution Aspects of Street Surface Contaminants;</u> by J. D. Sartor and G. B. Boyd, URS Research Co., San Mateo, CA	GPO - \$3.00 EP 1.23/2:72-081 NTIS - PB 214 408
EPA-R2-72-082 (11024 GRF)	<u>Feasibility Study of Electromagnetic Subsurface Profiling;</u> by R. M. Morey and W. S. Harrington, Jr., Geophysical Survey Systems, Inc., North Billerica, MA	GPO - \$1.25 EP 1.23/2:72-082 NTIS - PB 213 892
EPA-R2-72-083 (16130 FOK)	<u>Controlling Thermal Pollution in Small Streams;</u> by G. W. Brown and J. R. Brazier, Oregon State Univ., Corvallis, OR	GPO - \$1.25 EP 1.23/2:72-083 NTIS - PB 213 901
EPA-R2-73-084a	<u>Field Investigation of Emissions from Combustion Equipment for Space Heating;</u> by Battelle Columbus Lab., Columbus, OH	(Pending)
EPA-R2-73-084b	<u>Field Investigation of Emissions from Combustion Equipment for Space Heating, (Data Supplement);</u> by Battelle Columbus Lab., Columbus, OH	(Pending)
EPA-R2-73-085 (12100 EBG)	<u>The Influence of Log Handling on Water Quality;</u> by F. D. Scharemburg, Oregon State Univ., Corvallis, OR	GPO - \$1.25 EP 1.23/2:73-085 NTIS - PB 219 824

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-086 (12040 DYD)	<u>Color Removal from Kraft Pulp Mill Effluents by Massive Lime Treatment</u> ; by International Paper Co., Springhill, LA	GPO - \$1.25 EP 1.23/2:73-086 NTIS - PB 219 594
EPA-R2-72-087	<u>A Study of Resistivity and Conditioning of Fly Ash</u> ; by Southern Research Inst., Birmingham, AL	NTIS - PB 212 607
EPA-R2-72-088	<u>Investigation of Odor Control in the Rendering Industry</u> ; by Fats and Protein Research Foundation Inc., Des Plaines, IL	NTIS - PB 213 386
EPA-R2-72-089	<u>Study of Laser Backscatter By Particulates in Stack Emissions</u> ; by E. E. Uthe and C. E. Lapple, Stanford Research Inst., Menlo Park, CA	NTIS - PB 212 530
EPA-R2-72-090	<u>Development and Application of Tunable Diode Lasers to the Detection and Quantitative Evaluation of Pollutant Gases</u> ; by E. D. Hinkley, et. al., Lincoln Lab., Massachusetts Inst. of Technology, Lexington, MA	NTIS - PB 214 240
EPA-R2-72-091 (11022 DQI)	<u>A Pressure Sewer System Demonstration</u> ; by I. G. Carcich, L. J. Hetling and R. P. Farrell, New York State Dept. of Environmental Conservation, Albany, NY	GPO - \$2.75 EP 1.23/2:72-091 NTIS - PB 214 409
EPA-R2-72-092	<u>Off-Line Analysis Programs for Long-Path Spectrometer</u> ; by R. H. Hansen and R. H. Dye, Bendix Aerospace Systems Div., Ann Arbor, MI	NTIS - PB 212 625
EPA-R2-72-093	<u>Study of Air Pollutants by Microwave Spectroscopy</u> ; by G. F. Crable, Dow Chemical Co., Midland, MI	NTIS - PB 212 554
EPA-R2-72-094 (13030 FVN)	<u>Selected Irrigation Return Flow Quality Abstracts, 1968-1969</u> ; by G. V. Skogerboe, V. T. Sahni, and W. R. Walker, Agricultural Engineering Dept., Colorado State Univ., Fort Collins, CO	GPO - \$2.75 EP 1.23/2:72-094 NTIS - PB 214 105 (\$5.25)
EPA-R2-73-095 (13040 DDG) (13040 DPA)	<u>Development and Demonstration of Nutrient Removal from Animal Wastes</u> ; by R. C. Loehr, et. al., Cornell Univ., Ithaca, NY	GPO - \$3.00 EP 1.23/2:73-096 NTIS - PB 217 887
EPA-R2-73-096 (13040 EGH)	<u>The Disposal of Cattle Feedlot Wastes by Pyrolysis</u> ; by W. Garner and I. C. Smith, Midwest Research Inst., Kansas City, MO	GPO - \$1.25 EP 1.23/2:73-096
EPA-R2-72-097	<u>Emissions From and Within an Allison J-33 Combustor</u> ; by A. M. Mellor, et. al., Purdue Univ., Lafayette, IN	NTIS - PB 212 844
EPA-R2-72-098	<u>Optical Studies of Automotive and Natural Hazes: Scattering from Single Particles</u> ; by D. T. Phillips and P. J. Wyatt, Science Spectrum, Inc., Santa Barbara, CA	NTIS - PB 202 361

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-72-099	<u>In-Stack Transmissometer Techniques for Measuring Opacities of Particulate Emissions from Stationary Sources;</u> by C. M. Peterson, and M. Tomaides, Environmental Research Corp., St. Paul, MN	NTIS - PB 212 741
EPA-R2-72-100	<u>Applicability of SO₂ Control Processes to Power Plants;</u> by A. G. Sliger, M. W. Kellogg Co., Piscataway, NJ	NTIS - PB 213 421
EPA-R2-72-101 (13040 FUU)	<u>Bibliography of Livestock Waste Management;</u> by J. R. Miner, D. Bundy and G. Christenbury, Iowa State Univ., Ames, IA	GPO - \$2.00 EP 1.23/2:72-101 NTIS - PB 214 410
EPA-R2-73-102 (15080 HDL)	<u>Oil Pollution Source Identification;</u> by Esso Research and Engineering Co., Linden, NJ	GPO - \$2.35 EP 1.23/2:73-102 NTIS - PB 219 822
EPA-R2-72-103 (17040 FEE)	<u>Hollow Fibre Technology for Advanced Waste Treatment;</u> by J. D. Bashaw, J. K. Lawson, and T. A. Orofino, Monsanto Research Corp., Durham, NC	GPO - \$1.25 EP 1.23/2:72-103 NTIS - PB 214 605 (\$3.25)
EPA-R2-72-104 (17020 EVQ)	<u>Photochemical Methods for Purifying Water;</u> by C. Y. Cha and J. M. Smith, Univ. of California, Davis, CA	GPO - 70¢ EP 1.23/2:72-104 NTIS - PB 214 099
EPA-R2-72-105	<u>Validation of Improved Chemical Methods for Sulfur Oxides Measurements from Stationary Sources;</u> by J. Driscoll et. al., Walden Research Corp., Boston, MA	NTIS - PB 215 887 (\$6.75)
EPA-R2-72-106	<u>Evaluation of Monitoring Methods and Instrumentation for Hydrocarbons and Carbon Monoxide in Stationary Source Emissions;</u> by J. Driscoll, et. al., Walden Research Corp., Boston, MA	(Pending)
EPA-R2-72-107	<u>Biological Consequences of Plant Residue Decomposition in Soil;</u> by W. C. Snyder, Z. A. Patrick, and A. R. Weinhold, Univ. of California, Berkeley, CA	(Pending)
EPA-R2-73-108 (12120 DOD)	<u>Treatment of Laundromat Wastes;</u> by D. B. Aulenbach, P. C. Town and M. Chilson, Rensselaer Polytechnic Inst., Troy, NY	GPO - 95¢ EP 1.23/2:73-108
EPA-R2-73-109 (17010 EDR)	<u>Water Treatment by Membrane Ultrafiltration;</u> by H. B. Hopfenberg, North Carolina State Univ., Raleigh, NC	NTIS - PB 220 685
EPA-R2-72-110 (12050 EZG)	<u>Oily Waste Disposal by Soil Cultivation Process;</u> by C. B. Kincannon, Shell Oil Co., Houston Refinery, Deer Park, TX	GPO - \$2.00 EP 1.23/2:72-110 NTIS - PB 219 059
EPA-R2-72-111 (16080 ERQ)	<u>Correlated Studies of Vancouver Lake - Water Quality Prediction Study;</u> by S. K. Bhagat, W. H. Funk, and D. L. Johnstone, Washington State Univ., Pullman, WA	GPO - \$2.00 EP 1.23/2:72-111 NTIS - PB 214 457

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-112 (15080 FVP)	<u>A Rapidly Deployable Oil Containment Boom for Emergency Harbor Use;</u> by J. Cunningham, Alpine Geophysical Associates, Inc., Norwood, NJ	GPO - 65¢ EP 1.23/2:73-112 NTIS - PB 221 523
EPA-R2-73-113 (15080 FVP)	<u>Use of Fire Streams to Control Floating Oil;</u> by B. Katz and R. Cross, Alpine Geophysical Associates, Inc., Norwood, NJ	GPO - 75¢ EP 1.23/2:73-113 NTIS - PB 221 543
EPA-R2-73-114 (15080 FVP)	<u>Shore Termination for Oil Spill Booms;</u> by A. C. Roberts, Alpine Geophysical Associates, Inc., Norwood, NJ	GPO - 50¢ EP 1.23/2:73-114 NTIS - PB 221 547
EPA-R2-73-115 (15080 FVP)	<u>A Small Vacuum Oil Skimming System;</u> by R. H. Cross, III, Alpine Geophysical Associates, Inc., Norwood, NJ	GPO - 50¢ EP 1.23/2:73-115 NTIS - PB 221 544
EPA-R2-73-116 (15080 FVP)	<u>Removal of Oil from Under Piers;</u> by B. Katz, Alpine Geophysical Associates, Inc., Norwood, NJ	GPO - 65¢ EP 1.23/2:73-116 NTIS - PB 221 545
EPA-R2-73-117 (15080 FVP)	<u>Oil Spills Control Manual for Fire Departments;</u> by R. Cross, et. al., Alpine Geophysical Associates, Inc., Norwood, NJ	GPO - \$1.25 EP 1.23/2:73-117 NTIS - PB 219 884 (\$3.00)
EPA-R2-72-118a	<u>Wet Scrubber Systems Study - Vol. I, Scrubber Handbook;</u> by Ambient Purification Technology, Inc., Riverside, CA	NTIS - PB 213 016 (\$13.50)
EPA-R2-72-118b	<u>Wet Scrubber Systems Study - Vol. II, Final Report and Bibliography;</u> by Ambient Purification Technology, Inc., Riverside, CA	NTIS - PB 213 017 (\$6.00)
EPA-R2-72-119 (14010 HNS)	<u>Revegetation Augmentation by Reuse of Treated Active Surface Mine Drainage - A Feasibility Study;</u> by F. J. Zavel and J. D. Robins, Cyrus Wm. Rice Div., NUS Corp., Pittsburgh, PA	GPO - \$2.00 EP 1.23/2:72-119 NTIS - PB 214 458
EPA-R2-72-120 (12000 ---) (16130 ---)	<u>Projects in the Industrial Pollution Control Program, July 1972;</u> by Applied Science and Technology Branch, Office of Research and Monitoring, EPA, Washington, DC	GPO - \$4.50 EP 1.23/2:72-120 NTIS - PB 218 160
EPA-R2-72-121	<u>Development of an Infrared Fluorescent Gas Analyzer;</u> by Arkon Scientific Labs, Berkeley, CA	NTIS - PB 213 846
EPA-R2-73-122 (17080 DOI)	<u>Evaluation of Treatment for Urban Wastewater Reuse;</u> by K. D. Linstedt and E. R. Bennett, Univ. of Colorado, Boulder, CO	(Pending)

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-72-123 (17010 HAM)	<u>Ammonia Removal in a Physical-Chemical Wastewater Treatment Process:</u> by R. A. Barnes, Ayres, Lewis, Norris & May, Inc.; and P. F. Atkins, Jr. and D. A. Scherger, Environmental Control Technology Corp., Ann Arbor, MI	GPO - \$1.25 EP 1.23/2:72-123 NTIS - PB 214 531
EPA-R2-73-124 (11023 FWT)	<u>Microstraining and Disinfection of Combined Sewer Overflows - Phase II:</u> by G. E. Glover, and G. R. Herbert, Crane Co., King of Prussia, PA	GPO - \$2.10 EP 1.23/2:73-124 NTIS - PB 219 879
EPA-R2-72-125 (11040 ---)	<u>A Search: New Technology for Pavement Snow and Ice Control:</u> by D. M. Murray and M. R. Eigerman, ABT Associates, Inc., Cambridge, MA	GPO - \$1.00 EP 1.23/2:72-125 NTIS - PB 221 250
EPA-R2-72-126	<u>Development of Methods for Sampling and Analysis of Particulate and Gaseous Fluorides from Stationary Sources:</u> by E. T. Peters, J. E. Oberholtzer, and J. R. Valentine, Arthur D. Little, Inc., Cambridge, MA	NTIS - PB 213 313 (\$5.45)
EPA-R2-72-127 (11020 HMM)	<u>Selected Urban Storm Water Runoff Abstracts, July 1971 - June 1972:</u> by D. A. Sandoski, The Franklin Inst. Research Lab., Philadelphia, PA	GPO - \$1.50 EP 1.23/2:72-127 NTIS - PB 214 411
EPA-R2-72-128	(Number cancelled)	
EPA-R2-72-129 (13040 GJU)	<u>Beef Cattle Feedlot Site Selection for Environmental Protection:</u> by R. D. Kreis, and L. R. Shuyler, Robert S. Kerr Environmental Research Lab., EPA, Ada, OK	GPO - \$1.00 EP 1.23/2:72-129
EPA-R2-72-130 (14010 FKX)	<u>Removal of Dissolved Contaminants from Mine Drainage:</u> by Dr. J. D. Miller, Univ. of Utah, Salt Lake City, UT	GPO - \$1.25 EP 1.23/2:72-130 NTIS - PB 214 593
EPA-R2-72-131	<u>Microbiological Studies of Compost Plant Dust:</u> by D. Armstrong and M. Peterson, Solid Waste Research Lab., NERC, EPA, Cincinnati, OH	(Pending)
EPA-R2-72-132	<u>Portable Laser Velocimeter for Stack Velocity Measurements:</u> by L. O. Hefflinger, B. J. Matthews, and H. Shelton, TRW Systems Group, Redondo Beach, CA	NTIS - PB 213 263
EPA-R2-73-133 (16130 DJU)	<u>A Users' Manual for Three-Dimensional Heated Surface Discharge Computations:</u> by K. D. Stolzenbach, E. E. Adams, and D. R. F. Harleman, Massachusetts Inst. of Technology, Cambridge, MA	GPO - \$1.25 EP 1.23/2:72-133 NTIS - PB 219 243
EPA-R2-72-134 (14000 ---) (15000 ---)	<u>Projects of the Pollution Control Analysis Section, November 1972:</u> by Applied Science and Technology Branch, Office of Research and Monitoring, EPA, Washington, DC	GPO - \$2.00 EP 1.23/2:72-134

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-135 (14010 EKW)	<u>Investigation of Use of Gel Material for Mine Sealing</u> ; by N. K. Chung, Dravo Corp., Pittsburgh, PA	GPO - \$1.25 EP 1.23/2:73-135 NTIS - PB 221 247
EPA-R2-72-136	<u>Laser Exhaust Program</u> ; by Dr. G. Linsford, Hughes Aircraft, Culver City, CA	NTIS - PB 220 429 (\$4.50)
EPA-R2-73-137 (15080 ---)	<u>Visible Effects from the Controlled Discharge of Oil-Water Mixtures</u> ; by B. Hornstein, Edison Water Quality Research Lab., EPA, Edison, NJ	(Pending)
EPA-R2-73-138 (11010 FDI)	<u>The Feasibility of Flow Smoothing Stations in Municipal Sewage Systems</u> ; by C. N. Click, Research Triangle Inst., Research Triangle Park, NC	GPO - \$1.25 EP 1.23/2:73-138 NTIS - PB 221 246 (\$3.25)
EPA-R2-73-139 (11030 DNK)	<u>The Beneficial Use of Storm Water</u> ; by C. W. Mallory, Hittman Associates, Inc., Columbia, MD	GPO - \$2.85 EP 1.23/2:73-139 NTIS - PB 217 506
EPA-R2-73-140 (14010 DSC)	<u>Evaluation of Pollution Abatement Procedures, Moraine State Park</u> ; by J. W. Foreman and D. C. McLean, Gwin, Dobson, and Foreman, Inc., Altoona, PA	GPO - \$1.00 EP 1.23/2:73-140 NTIS - PB 221 337
EPA-R2-73-141 (12040 DKD)	<u>Kraft Effluent Color Characterization Before and After Stoichiometric Lime Treatment</u> ; by J. W. Swanson, et. al., The Inst. of Paper Chemistry, Appleton, WI	GPO - \$1.00 EP 1.23/2:73-141 NTIS - PB 219 827
EPA-R2-73-142 (14010 HHG)	<u>Water Infiltration Control to Achieve Mine Water Pollution Control</u> ; by F. J. Zaval and J. D. Robins, Cyrus W. Rice Div., NUS Corp., Pittsburgh, PA	GPO - \$2.35 EP 1.23/2:73-142 NTIS - PB 217 886
EPA-R2-73-143 (17070 ENP)	<u>Park Development with Wet Digested Sludge</u> ; by Municipality of Metropolitan Seattle, WA	NTIS - PB 217 878
EPA-R2-73-144 (17090 FDO)	<u>Lagoon Performance and the State of Lagoon Technology</u> ; by G. Barsom, Ryckman, Edgerley, Tomlinson and Associates, St. Louis, MO	(Pending)
EPA-R2-73-145 (11020 EYD)	<u>A Thermal Wave Flowmeter for Measuring Combined Sewer Flows</u> ; by P. Eshleman and R. Blase, Hydrospace Challenger, Inc., Rockville, MD	GPO - \$1.25 EP 1.23/2:73-145
EPA-R2-73-146 (17020 DYC)	<u>Pilot Plant for Tertiary Treatment of Wastewater with Ozone</u> ; by Dr. C. S. Wynn, Dr. B. S. Kirk and Dr. R. McNabney, Airco Inc., Murray Hill, NJ	GPO - \$2.60 EP 1.23/2:73-146 NTIS - PB 219 877
EPA-R2-73-147 (17030 DGQ)	<u>Biological Removal of Colloidal Matter from Wastewater</u> ; by W. J. Maier, Univ. of Minnesota, Minneapolis, MN	(Pending)

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-148a	<u>A Process Cost Estimate for Limestone Slurry Scrubbing of Flue Gas, Part I:</u> by Catalytic, Inc., Charlotte, NC	NTIS - PB 219 016 (\$4.85)
EPA-R2-73-148b	<u>A Process Cost Estimate for Limestone Slurry Scrubbing of Flue Gas, Part II, Detailed Estimate Sheets;</u> by Catalytic, Inc., Charlotte, NC	NTIS - PB 219 017 (\$4.85)
EPA-R2-73-149 (11020 DSQ)	<u>Physical-Chemical Treatment of Combined and Municipal Sewage;</u> by A. J. Shuckrow, G. W. Dawson and W. F. Bonner, PNW Lab., Battelle Memorial Inst., Richland, WA	GPO - \$2.35 EP 1.23/2:73-149 NTIS - PB 219 668
EPA-R2-73-150 (14010 GYH)	<u>Treatment of Ferrous Acid Mine Drainage with Activated Carbon;</u> by C. T. Ford and J. F. Boyer, Jr., Bituminous Coal Research, Inc., Monroeville, PA	GPO - \$1.75 EP 1.23/2:73-150 NTIS - PB 219 826
EPA-R2-73-151 (14010 HJQ)	<u>Feasibility Study of Lake Hope Mine Drainage Demonstration Project;</u> by Ohio Department of Natural Resources, Columbus, OH	GPO - \$1.25 EP 1.23/2:73-151
EPA-R2-73-152 (11020 ---)	<u>Combined Sewer Overflow Study for the Hudson River Conference;</u> by A. I. Mytelka, et. al., Interstate Sanitation Commission, New York, NY (jointly sponsored by Office of Enforcement and General Council and Office of Research and Monitoring, EPA)	GPO - \$2.85 EP 1.23/2:73-152
EPA-R2-73-153	<u>The Determination of Mercury in Stack Gases of High SO₂ Content by the Gold Amalgamation Technique;</u> by C. Baldeck and G. W. Kalb, TraDet, Inc., Columbus, OH	NTIS - PB 220 323 (\$5.45)
EPA-R2-73-154	<u>Research Program for the Prototype Coal Cleaning Plant;</u> by Roberts and Schaefer Co., Chicago, IL	(Pending)
EPA-R2-73-155 (16020 GHZ)	<u>Environmental Applications of Advanced Instrumental Analysis: Assistance Projects, FY 69-71;</u> by Dr. L. H. Keith and S. H. Hercules, Southeast Environmental Research Lab., EPA, Athens, GA	GPO - \$1.25 EP 1.23/2:73-155
EPA-R2-73-156 (15080 HEV)	<u>Development and Preliminary Design of a Sorbent-Oil Recovery System;</u> by E. Miller, L. Stephens, and J. Ricklis, Hydronautics, Inc., Laurel, MD	GPO - \$2.60 EP 1.23/2:73-156 NTIS - PB 221 497
EPA-R2-73-157 (13040 GJU)	<u>National Animal Feedlot Waste Research Program;</u> by L. R. Shuyler, Robert S. Kerr Environmental Research Center, EPA, Ada, OK	GPO - 75¢ EP 1.23/2:73-157 NTIS - PB 219 821
EPA-R2-73-158 (17010 EPM)	<u>Field Study of Nitrification with the Submerged Filter;</u> by D. D. McHarness and P. L. McCarty, Stanford Univ., Stanford, CA	GPO - \$1.25 EP 1.23/2:73-158 NTIS - PB 219 878

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-159 (17050 DCC)	<u>Pilot Plant Demonstration of a Lime - Biological Treatment Phosphorus Removal Method; by Dr. L. Schmid, Kansas State Univ., Manhattan, KS</u>	(Pending)
EPA-R2-73-160	<u>Develop an Operational System for Evaluating and Testing Methods and Instruments for Determining the Effects of Fuels and Fuel Additives on Automobile Exhaust Emissions; by E. R. Blosser, Battelle Memorial Inst., Columbus, OH</u>	(Pending)
EPA-R2-73-161 (16130 FLM)	<u>Analysis of Engineering Alternatives for Environmental Protection from Thermal Discharges; by State of Washington Water Research Center, Univ. of Washington/Washington State Univ., Pullman, WA</u>	GPO - \$2.60 EP 1.23/2:73-161 NTIS - PB 221 498
EPA-R2-73-162 (16130 DGM)	<u>Numerical Thermal Plume Model for Vertical Outfalls in Shallow Waters; by D. S. Trent, and J. R. Welty, Oregon State Univ., Corvallis, OR</u>	GPO - \$4.80 EP 1.23/2:73-162 NTIS - PB 221 488
EPA-R2-73-163	<u>Monitoring Instrumentation for the Measurement of Sulfur Dioxide Emissions from Stationary Sources; by F. C. Jaye, Div. of Chemistry and Physics Lab., NERC, EPA, Research Triangle Park, NC</u>	NTIS - PB 220 202 (\$5.45)
EPA-R2-73-164 (12040 EJU)	<u>Kraft Pulping Effluent Treatment and Reuse - State of the Art; by W. G. Timpe, E. Lang, and R. L. Miller, St. Regis Paper Co., West Nyack, NY</u>	GPO - \$1.25 EP 1.23/2:73-164
EPA-R2-73-165 (17090 GAF)	<u>Waste Heat Utilization in Wastewater Treatment; by Dr. F. J. Agardy, M. Fields, and M. Staackman, URS Research Co., San Mateo, CA</u>	NTIS - PB 217 880
EPA-R2-73-166 (15080 HER)	<u>Oil/Sorbent Harvesting System for Use on Vessels of Opportunity; by J. D. Sartor, C. R. Foget, and R. W. Castle, URS Research Co., San Mateo, CA</u>	GPO - \$1.25 EP 1.23/2:73-166 NTIS - PB 221 550
EPA-R2-73-167 (12010 EDY)	<u>Biological Removal of Carbon and Nitrogen Compounds from Coke Plant Wastes; by J. E. Barker, R. J. Thompson, Armco Environmental Engineering, Middletown, OH</u>	GPO - \$2.35 EP 1.23/2:73-167 NTIS - PB 221 485
EPA-R2-73-168 (13030 GJS)	<u>Prediction Modeling for Salinity Control in Irrigation Return Flows; by A. G. Hornsby, Robert S. Kerr Environmental Research Lab., EPA, Ada, OK</u>	GPO - 90¢ EP 1.23/2:73-168 NTIS - PB 221 647
EPA-R2-73-169 (14010 FJX)	<u>Dewatering of Mine Drainage Sludge - Phase II; by D. J. Akers, Jr., and E. A. Moss, West Virginia University, Morgantown, WV</u>	GPO - \$2.10 EP 1.23/2:73-b169 NTIS - PB 221 145

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-170 (11024 FEJ)	<u>Combined Sewer Overflow Abatement Plan, Des Moines, Iowa; by P. L. Davis and F. A. Borchardt, Henningson, Durham, and Richardson, Inc., Omaha, NB</u>	(Pending)
EPA-R2-73-171 (13000 ---) (15000 ---)	<u>Projects of the Agricultural and Marine Pollution Control Section, March 1973; by Applied Science and Technology Branch, Office of Research and Monitoring, EPA, Washington, DC</u>	GPO - \$2.60 EP 1.23/2:73-171
EPA-R2-73-172	<u>Instrumental Analyses for Wet Scrubbing Processes; by E. A. Burns, et. al., TRW Systems Group, Redondo Beach, CA</u>	(Pending)
EPA-R2-73-173a	<u>Chemical Desulfurizer of Coal: Report of Bench-Scale Developments - Vol. I; by J. W. Hamersma, et. al., TRW Systems Group, Inc., Redondo Beach, CA</u>	NTIS - PB 221 405 (\$6.00)
EPA-R2-73-173b	<u>Chemical Desulfurizer of Coal: Report of Bench-Scale Developments - Vol. II; by J. W. Hamersma, et. al., TRW Systems Group, Inc., Redondo Beach, CA</u>	NTIS - PB 221 406 (\$4.85)
EPA-R2-73-174	<u>Identification and Classification of Combustion Source Equipment; by C. O. Bieser, Processes Research, Inc., Cincinnati, OH</u>	NTIS - PB 218 933 (\$4.85)
EPA-R2-73-175 (16080 FTO)	<u>Preliminary Studies on a Biological Filter; by Dr. R. V. Harmsworth, et. al., Limnetics Inc., Milwaukee, WI</u>	NTIS - PB 217 889
EPA-R2-73-176 (17090 FYZ)	<u>Application of Selected Industrial Engineering Techniques to Wastewater Treatment; by C. W. Mallory and Dr. R. Waller, Hittman Associates, Inc., Columbia, MD</u>	GPO - \$2.60 EP 1.23/2:73-176 NTIS - PB 221 144
EPA-R2-73-177 (16020 GCQ)	<u>Adsorption of Chlorinated Hydrocarbons from Seawater by a Crosslinked Polymer; by G. R. Harvey, Woods Hole Oceanographic Inst., Woods Hole, MA</u>	GPO - 55¢ EP 1.23/2:73-177
EPA-R2-73-178 (12060 FGF)	<u>National Meat-Packing Waste Management Research and Development Program; by J. L. Witherow, S. C. Yin and D. M. Farmer, Robert S. Kerr Environmental Research Lab., EPA, Ada, OK</u>	GPO - 75¢ EP 1.23/2:73-178 NTIS - PB 221 546
EPA-R2-73-179a (16080 GNC)	<u>Assessing the Water Pollution Potential of Manufactured Products; by J. B. Berkowitz, G. R. Schimke, and V. R. Valeri, Arthur D. Little Inc., Cambridge, MA</u>	GPO - 75¢ EP 1.23/2:73-179a NTIS - PB 221 489
EPA-R2-73-179b (16080 GNC)	<u>Water Pollution Potential of Manufactured Products, Catalog Section I - Summary; by J. B. Berkowitz, G. R. Schimke, and V. R. Valeri, Arthur D. Little, Inc., Cambridge, MA</u>	GPO - \$1.25 EP 1.23/2:73-179b

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-179c (16080 GNC)	<u>Water Pollution Potential of Manufactured Products, Catalog Section II - Product Listing</u> ; by J. B. Berkowitz, G. R. Schimke, and V. R. Valeri, Arthur D. Little, Inc., Cambridge, MA	GPO - \$7.25 EP 1.23/2:73-179c
EPA-R2-73-179d (16080 GNC)	<u>Water Pollution Potential of Manufactured Products, Catalog Section III - Chemical Ingredient Listing</u> ; by J. B. Berkowitz, G. R. Schimke, and V. R. Valeri, Arthur D. Little, Inc., Cambridge, MA	GPO - \$3.70 EP 1.23/2:73-179d
EPA-R2-73-180	<u>Evaluation of Measurement Methods and Instrumentation for Odorous Compounds in Stationary Sources - Vol. II - Field Testing</u> ; by H. J. Hall, Esso Research Co., Linden, NJ	(Pending)
EPA-R2-73-181 (15080 FVP)	<u>Using Fire Streams with a Self-Propelled Oil Spill Skimmer</u> ; by A. C. Roberts, Alpine Geophysical Assn., Inc., Norwood, NJ	GPO - 55¢ EP 1.23/2:73-181 NTIS - PB 221 542
EPA-R2-73-182	<u>X-Ray Fluorescence Spectrometer for Air-borne Particulate Monitoring</u> ; by F. S. Goulding and J. M. Jaklevic, Lawrence Berkeley Labs., Berkeley, CA	(Pending)
EPA-R2-73-183 (17050 EGI)	<u>Activated Carbon Treatment of Raw Sewage in Solids - Contact Clarifiers</u> ; by R. L. Beebe, Westinghouse Electric Corp., Richmond, VA	GPO - \$1.25 EP 1.23/2:73-183 NTIS - PB 219 883
EPA-R2-73-184 (12040 HAR)	<u>State-of-the-Art Review of Pulp and Paper Waste Treatment</u> ; by Dr. H. Gehm, WAPORA, Inc., Washington, DC	GPO - \$2.85 EP 1.23/2:73-184 NTIS - PB 221 434 (\$5.35)
EPA-R2-73-185 (15090 HGP)	<u>Control of Hazardous Chemical Spills by Physical Barriers</u> ; by J. V. Friel, R. H. Hiltz, and M. D. Marshall, MSA Research Corp., Evans City, PA	GPO - \$1.25 EP 1.23/2:73-185 NTIS - PB 221 493
EPA-R2-73-186	<u>Regeneration Chemistry of Sodium-Based Double-Alkali Scrubbing Process</u> ; by D. C. Draemel, NERC, EPA, Research Triangle Park, NC	NTIS - PB 220 077 (\$3.75)
EPA-R2-73-187	<u>Neutralization of Abatement Derived Sulfuric Acid</u> ; by W. D. Beers, Processes Research, Inc., Cincinnati, OH	NTIS - PB 220 362 (\$4.50)
EPA-R2-73-188	<u>Characterization of Claus Plant Emissions</u> ; by W. D. Beers, Processes Research, Inc., Cincinnati, OH	NTIS - PB 220 376 (\$6.00)
EPA-R2-73-189	<u>Baseline Measurement Test Results for the Cat-Ox Demonstration Program</u> ; by J. S. Burton, et. al., Mitre Corp., McLean, VA	NTIS - PB 220 363 (\$6.75)

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-190	<u>Cadmium in the Environment, II;</u> by L. Friberg, Karolinska Inst., Stockholm, Sweden	NTIS - PB 221 198 (\$6.00)
EPA-R2-73-191	<u>Systems Study of Conventional Combustion Sources in the Primary Aluminum Industry;</u> by J. Goldish, et. al., Walden Research Corp., Cambridge, MA	(Pending)
EPA-R2-73-192	<u>Systems Study of Conventional Combustion Sources in the Iron and Steel Industry;</u> by J. Goldish, et. al., Walden Research Corp., Cambridge, MA	(Pending)
EPA-R2-73-193	<u>Improvement of Optical Efficiency of Luminescence of a Flame Photometric Detector;</u> by Baird-Atomic Co., Bedford, MA	NTIS - PB 220 480
EPA-R2-73-194 (12020 FER)	<u>Identification and Control of Petrochemical Pollutants Inhibitory to Anaerobic Processes;</u> by J. C. Hovious, G. T. Waggy and R. A. Conway, Union Carbide Corp., South Charleston, WV	(Pending)
EPA-R2-73-195 (12100 EZU)	<u>Aerobic Secondary Treatment of Plywood Glue Wastes;</u> by J. L. Graham, CH2M/Hill, Corvallis, OR	GPO - 90¢ EP 1.23/2:73-195 NTIS - PB 221 338
EPA-R2-73-196 (12040 EXQ)	<u>Steam Stripping Odorous Substances from Kraft Effluent Streams;</u> by B. F. Hrutfiord, L. N. Johanson, and J. L. McCarthy, Univ. of Washington, Seattle, WA	GPO - \$1.25 EP 1.23/2:73-196 NTIS - PB 221 335
EPA-R2-73-197	<u>Optimum Production of Atomic Oxygen for Use in Analytical Technology;</u> by D. J. Milnes, J. D. Henry, Ozone Research and Equipment Corp., Phoenix, AZ	NTIS - PB 221 178
EPA-R2-73-198 (12060 PAV)	<u>Low Water Volume Enzyme Deactivation of Vegetables before Preservation;</u> by Dr. J. W. Ralls, W. A. Mercer, National Canners Assn., Berkeley, CA	GPO - \$1.25 EP 1.23/2:73-198 NTIS - PB 221 511
EPA-R2-73-199 (17010 FSJ)	<u>Application of Plastic Media Trickling Filter for Biological Nitrification Systems;</u> by G. A. Duddles and S. E. Richardson, Dow Chemical Co., Midland, MI	(Pending)
EPA-R2-73-200 (12020 EAS)	<u>Recondition and Reuse of Organically Contaminated Waste Sodium Chloride Brines;</u> by R. D. Fox, R. T. Keller, and C. J. Pinamont, Dow Chemical Co., Midland, MI	GPO - \$2.10 EP 1.23/2:73-200
EPA-R2-73-201 (15080 ---)	<u>Standard Dispersant Effectiveness and Toxicity Tests;</u> by L. T. McCarthy, Jr., I. Wilder and J. S. Dorrlar, Edison Water Quality Research Lab., EPA, Edison, NJ	GPO - 90¢ EP 1.23/2:73-201 NTIS - PB 221 548
EPA-R2-72-202	<u>Package Sorption Device System Study;</u> by MSA Research Corp., Division of Mine Safety Appliance Co., Evans City, PA	NTIS - PB 221 138 (\$12.50)

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-203 (15080 HBH)	<u>Containment and Removal of Oil Spills from Shallow Waters</u> ; by H. L. Franklin, Corpus Christi Area Oil Spill Control Assn., Corpus Christi, TX	(Pending)
EPA-R2-73-204 (15080 GBT)	<u>Simulated Oils for Testing Oil Spill Counter Measure Systems</u> ; by J. H. Ross, J. L. Overfield, and H. M. Stierwalt, Jetco Chemicals, Inc., Corsicana, TX	(Pending)
EPA-R2-73-205 (15080 FWL)	<u>The Development and Demonstration of an Underwater Oil Harvesting Technique</u> ; by R. A. Bianchi and G. Henry, JBF Scientific Corp., Burlington, MA	GPO - \$1.25 EP 1.23/2:73-205 NTIS - PB 221 431 (\$3.25)
EPA-R2-73-206 (17080 EDV)	<u>Tertiary Treatment by Lime Addition at Santee, California</u> ; by H. Almgren, Santee County Water District, Santee, CA	NTIS - PB 217 888
EPA-R2-73-207	<u>Development of Improved Systems for Obtaining Time Integrated Measurements of SO₂, NO₂, NO_x and Other Pollutants</u> ; by V. R. Huebner, Instra-Tech, Inc., Fullerton, CA	(Pending)
EPA-R2-73-208 (17020 HAL)	<u>Electrochemical Carbon Regeneration</u> ; by P. H. Owen and J. P. Barry, Environics, Inc., Huntington Beach, CA	(Pending)
EPA-R2-73-209 (12120 EFM)	<u>Secondary Waste Treatment for a Small Diversified Tannery</u> ; by E. L. Thackston, Caldwell Lace Leather Co., Auburn, KY	GPO - \$1.25 EP 1.23/2:73-209 NTIS - PB 221 494
EPA-R2-73-210	<u>Stationary Internal Combustion Engines in the United States</u> ; by Shell Development Co., Houston, TX	NTIS - PB 221 457 (\$5.45)
EPA-R2-73-211 (17080 EKG)	<u>Wastewater Reclamation Studies in Dallas, Texas</u> ; by H. W. Wolf, Dallas Water Utilities Dept., City of Dallas, TX	(Pending)
EPA-R2-73-212 (17080 FAB)	<u>Ultra-Filtration of Domestic Sewage at Extreme Altitudes Including Effluent Reuse</u> ; by City of Colorado Springs, Colorado Springs, CO	(Pending)
EPA-R2-73-213 (17070 DIZ)	<u>Stabilization of Sewage Solids by the Channel Aeration Process</u> ; by M. W. Wehking, et. al., Univ. of Wisconsin River Falls, River Falls, WI	(Pending)
EPA-R2-73-214	<u>Evaluation of Problems Related to Scaling in Limestone Wet Scrubbing</u> ; by Arthur D. Little, Inc., Cambridge, MA	NTIS - PB 221 159 (\$6.00)
EPA-R2-73-215 (15080 HOP)	<u>Oil Spill Surveillance System Study</u> ; by D. Mohr, et. al., Texas Instruments, Inc., Galveston, TX	GPO - \$2.60 EP 1.23/2:73-215

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-216	<u>Chemical Composition of Particulate Air Pollutants from Fossil-Fuel Combustion Sources;</u> by Battelle Columbus Labs., Columbus, OH	NTIS - PB 219 009
EPA-R2-73-217 (16020 EAO)	<u>Fluorescent Probes in the Detection of Insecticides in Water;</u> by C. M. Himel, Univ. of Georgia, Athens, GA	GPO - 75¢ EP 1.23/2:73-217 NTIS - PB 221 336
EPA-R2-73-218	<u>Development of In-Situ Prototype Diode Laser System to Monitor SO₂ Across the Stack;</u> by E. D. Hinkley, Lincoln Lab., Massachusetts Inst. of Technology, Cambridge, MA	(Pending)
EPA-R2-73-219	<u>Feasibility Study of In-Situ Source Monitoring of Particulate Composition by Roman or Fluorescence Scatter;</u> by M. L. Wright, Stanford Research Inst., Menlo Park, CA	(Pending)
EPA-R2-73-220	<u>Prototype Construction and Field Demonstration of the Parallel Cyclone Sampling Train;</u> by D. A. Brooks, Walter C. McCrone Associates, Inc., Chicago, IL	NTIS - PB 221 291
EPA-R2-73-221 (15080 HDJ)	<u>A Multiparameter Oil Pollution Source Identification System;</u> by J. W. Miller, Phillips Petroleum Co., Bartlesville, OK	(Pending)
EPA-R2-73-222 (17030 HMM)	<u>Ultra High Rate Filtration of Activated Sludge Plant Effluent;</u> by R. Nebolsine, I. Pouschine, Jr., and Chi-Yuan Fan, Hydrotechnic Corp., New York, NY	GPO - \$2.10 EP 1.23/2:73-222 NTIS - PB 221 492
EPA-R2-73-223 (12070 ---)	<u>Management of Recycled Waste-Process Water Ponds;</u> by C. E. Renn, Johns Hopkins Univ., Baltimore, MD	GPO - 85¢ EP 1.23/2:73-223
EPA-R2-73-224 (17090 FJU)	<u>Characterization of the Activated Sludge Process;</u> by R. D. Bargman and J. Borgerding, City of Los Angeles, Bureau of Sanitation, Los Angeles, CA	GPO - 95¢ EP 1.23/2:73-224 NTIS - PB 221 340
EPA-R2-73-225 (15080 HDL)	<u>Identification Based on Gas Chromatogram of Tricyclic Aromatic in Petroleum;</u> by R. A. Brown, Esso Research, Linden, NJ	(Pending)
EPA-R2-73-226 (15020 GYM)	<u>Marine Sanitation System Demonstration;</u> by E. L. Kaminsky and W. F. Roberts, Marland Environmental Systems, Inc., Wayne, PA and J. C. Volk, Jr., Delaware River and Bay Authority, Newcastle, DE	GPO - \$1.25 EP 1.23/2:73-226 NTIS - PB 221 334
EPA-R2-73-227 (16040 EXD)	<u>Pyrographic Gross Characterization of Water Contaminants;</u> by I. Lysyj and P. R. Newton, Rocketdyne, A Division of North American Rockwell Corp., Canoga Park, CA	GPO - \$1.25 EP 1.23/2:73-227 NTIS - PB 221 551

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-228 (17020 FEV)	<u>Hydrodynamic Flux Control for Waste Water Application of Hyperfiltration Systems</u> ; by D. G. Thomas, R. B. Gallaher, and J. S. Johnson, Jr., Oak Ridge National Laboratory, Oak Ridge, TN	GPO - \$1.25 EP 1.23/2:73-228
EPA-R2-73-229	<u>Recent Developments in Desulfurization of Fuel Oil and Waste Gas in Japan (1973); by Processes Research, Inc.</u> , Cincinnati, OH	NTIS - PB 221 439 (\$10.25)
EPA-R2-73-230 (14010 DDH)	<u>Control of Mine Drainage from Coal Mine Mineral Wastes - Phase II, Pollution Abatement and Monitoring</u> ; by Z. V. Kosowski, Consolidation Coal Co., Library, PA	GPO - \$1.25 EP 1.23/2:73-230
EPA-R2-73-231 (11060 EZX)	<u>Pressure Filtration of Waste Water Sludge with Ash Filter Aid</u> ; by J. W. Gerlich and M. D. Rockwell, City of Cedar Rapids, IA	(Pending)
EPA-R2-73-232 (12040 ESV)	<u>Methods for Pulp and Paper Mill Sludge Utilization and Disposal</u> ; by Dr. T. R. Aspitarte, et. al., Crown Zellerback Corp., Camas, WA	GPO - \$2.10 EP 1.23/2:73-232
EPA-R2-73-233 (15080 FIG)	<u>Development of a Mobile System for Cleaning Oil-Contaminated Beaches</u> ; by F. X. Dolan, Creare, Inc., Hanover, NH and J. P. Bowersox, Dorr-Oliver, Inc., Stamford, CT	GPO - \$1.25 EP 1.23/2:73-233
EPA-R2-73-234 (16020 ---)	<u>Organic Pollutant Identification Utilizing Mass Spectrometry</u> ; by J. M. McGuire, A. L. Alford, and M. H. Carter, Southeast Environmental Research Lab., EPA, Athens, GA	(Pending)
EPA-R2-73-235 (13030 FDJ)	<u>Cation Transport in Soils and Factors Affecting Soil Carbonate Solubility</u> ; by J. J. Jurinok, Sung-Ho Lai, and J. J. Hassett, Utah State Univ., Logan, UT	GPO - \$1.25 EP 1.23/2:73-235
EPA-R2-73-236 (11060 DLF)	<u>Tertiary Treatment of Combined Domestic and Industrial Wastes</u> ; by J. W. Lee, Jr., CH2M/Hill, Corvallis, OR	GPO - \$2.60 EP 1.23/2:73-236
EPA-R2-73-237 (17090 DRU)	<u>Cost Estimating Guidelines for Waste-water Treatment Systems</u> ; by Bechtel Corp., San Francisco, CA	NTIS - PB 215 516
EPA-R2-73-238 (11020 GQG)	<u>Flow Augmenting Effects of Additives on Open Channel Flows</u> ; by C. Derick and K. Logie, Columbia Research, Inc., Gaithersburg, MD	GPO - \$1.00 EP 1.23/2:73-238
EPA-R2-73-239 (17080 EDV)	<u>Desal Ion Exchange for Demineralization at Santee, California</u> ; by H. Filar, Jr., Santee County Water District, Santee, CA	NTIS - PB 220 123

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-240 (17040 FKG)	<u>Carbon Adsorption and Electrodialysis for Demineralization at Santee, California;</u> by H. Filar, Jr., Santee County Water District, Santee, CA	NTIS - PB 220 360 (\$6.00)
EPA-R2-73-241	<u>Air Pollution from Fuel Combustion in Stationary Sources; (Final Report on the U.S. National Report to the OECD Joint Group..) by Processes Research, Inc., Cincinnati, OH</u>	(Pending)
EPA-R2-73-242 (11030 DSL)	<u>Temporary Detention of Storm and Combined Sewage in Natural Underground Formations;</u> by City of St. Paul, Minnesota	GPO - 95¢ EP 1.23/2:73-242
EPA-R2-73-243 (15080 ---)	<u>Aerial Spill Prevention Surveillance During Sub-Optimum Weather;</u> by R. I. Welch, A. D. Marmelstein, and P. M. Maughan, Earth Satellite Corp., Washington, DC	(Pending)
EPA-R2-73-244	<u>Sulfur Oxide Removal from Power Plant Stack Gas (Magnesia Scrubbing - Regeneration);</u> by Tennessee Valley Authority, Muscle Shoals, AL	(Pending)
EPA-R2-73-245 (13040 FTX)	<u>Demonstration of a Waste Disposal System for Livestock Wastes;</u> by C. R. Moore, Moore Engineering, Inc., West Fargo, ND	GPO - 85¢ EP 1.23/2:73-245
EPA-R2-73-246	<u>Tentative Method for the Calibration of NO, NO₂, and O₃ Analyzers by Gas Phase Titration;</u> by K. A. Rehmer, B. E. Martin, and J. A. Hodgeson, Chemistry and Physics Lab., NERC, OR&M, EPA, Research Triangle Park, NC	(Pending)
EPA-R2-73-247a (12010 FPK)	<u>Water Pollution Control in the Primary Nonferrous Metals Industry, Vol. I - Copper, Zinc, and Lead Industries;</u> by Battelle Memorial Inst., Columbus, OH	(Pending)
EPA-R2-73-247b (12010 FPK)	<u>Water Pollution Control in the Primary Nonferrous Metals Industry, Vol. II - Aluminum, Mercury, Gold, Silver, Molybdenum, and Tungsten;</u> by Battelle Memorial Inst., Columbus, OH	(Pending)
EPA-R2-73-248 (12090 EQO)	<u>Anaerobic-Aerobic Treatment of Textile Wastes with Activated Carbon;</u> by Dr. C. P. C. Poén, Univ. of Rhode Island, and P. P. Virgadamo, Fram Corp., Pawtucket, RI	GPO - \$2.85 EP 1.23/2:73-248
EPA-R2-73-249	<u>Potential Pollutants in Fossil Fuels;</u> by Esso Research & Engineering Co., Linden, NJ	(Pending)

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-250 (17080 FSF)	<u>Sludge Processing for Combined Physical-Chemical-Biological Sludges;</u> by D. S. Parker, F. J. Zadick, and K. E. Train, Brown and Caldwell, San Francisco, CA	(Pending)
EPA-R2-73-251 (15090 HGW)	<u>Feasibility of Plastic Foam Plugs for Sealing Leaking Chemical Containers;</u> by R. C. Mitchell, C. L. Hamermesh, and J. V. Lecce, Rocketdyne Div. of Rockwell International Corp., Canoga Park, CA	GPO - 85¢ EP 1.23/2:73-251
EPA-R2-73-252	<u>Instrumentation for Monitoring Specific Particulate Substances in Stationary Source Emissions;</u> by J. Pustinger, Monsanto Research Corp. Dayton Laboratories, Dayton, OH	(Pending)
EPA-R2-73-253	<u>Fluidized-Bed Combustion and Regeneration of Sulfur-Containing Additives;</u> by Argonne National Laboratory, Argonne, IL	(Pending)
EPA-R2-73-254 (16020 EWE)	<u>Polarographic Determination of NTA;</u> by T. B. Hoover, Southeast Environmental Research Lab., EPA, Athens, GA	GPO - 75¢ EP 1.23/2:73-254
EPA-R2-73-255 (12040 DBD)	<u>Ion Exchange Color and Mineral Removal from Kraft Bleach Wastes;</u> by R. L. Sanks, Montana State Univ., Bozeman, MT	GPO - \$2.35 EP 1.23/2:73-255
EPA-R2-73-256 (11020 FAM)	<u>An Evaluation of Three Combined Sewer Overflow Treatment Alternatives;</u> by J. W. Parks, J. O. Finks and F. B. Price, for the City of Shelbyville, IL	(Pending)
EPA-R2-73-257 (11020 ---)	<u>Water Pollution and Associated Effects from Street Salting;</u> by R. Field, H. E. Masters and A. N. Tafuri, Edison Water Quality Research Lab., EPA, Edison, NJ and E. J. Struzeski, EPA, Denver, CO	GPO - 85¢ EP 1.23/2:73-257
EPA-R2-73-258	<u>Survey of Australian Experience in Collecting High-Resistivity Fly Ash With Electrostatic Precipitators;</u> by Unisearch, Ltd., Kensington, New South Wales, Australia	NTIS - PB 221 139
EPA-R2-73-259 (16130 DIP)	<u>Heat and Water Vapor Exchange Between Water Surface and Atmosphere;</u> by W. H. Brutsaert, Cornell Univ., Ithaca, NY	GPO - 90¢ EP 1.23/2:73-259
EPA-R2-73-260 (12090 FWD)	<u>Study of Gamma Induced Low Temperature Oxidation of Textile Effluents;</u> by F. N. Case and E. E. Kitchen, Oak Ridge National Laboratory, Oak Ridge, TN	GPO - 90¢ EP 1.23/2:73-260
EPA-R2-73-261 (11020 ---)	<u>An Assessment of Automatic Sewer Flow Samplers;</u> by P. E. Shelley and G. W. Kirkpatrick, Hydrospace-Challenger, Inc., Rockville, MD	(Pending)

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-262	<u>Evaluation of Dewatering of Limestone Wet Scrubbing Process Sludges; by West Virginia Univ., Morgantown, WV</u>	NTIS - PB 221 155
EPA-R2-73-263 (17090 FWA)	<u>Guide to the Preparation of Operational Plans for Sewage Treatment Facilities; by E. L. Seiler and J. W. Altman, Synectics Corp., Allison Park, PA</u>	(Pending)
EPA-R2-73-264 (17020 EFB)	<u>Physical-Chemical Treatment of a Municipal Wastewater Using Powdered Carbon; by D. E. Burns, G. L. Shell, Eimco Corp., Salt Lake City, UT</u>	(Pending)
EPA-R2-73-265 (13030 FDJ)	<u>Irrigation Management for Control of Quality of Irrigation Return Flow; by L. G. King and R. J. Hanks, Utah State Univ., Logan, UT</u>	GPO - \$3.45 EP 1.23/2:73-265
EPA-R2-73-266 (13030 FDJ)	<u>Herbicide Contamination of Surface Runoff Waters; by J. O. Evans and D. R. Duseja, Utah State Univ., Logan, UT</u>	GPO - \$1.25 EP 1.23/2:73-266
EPA-R2-73-267 (16060 HNI)	<u>An Investigation of the Nitrate Problem in Runnels County, Texas; by Dr. D. C. Jones, Radian Corp., Austin, TX</u>	GPO - \$2.60 EP 1.23/2:73-267
EPA-R2-73-268 (16060 ---)	<u>Ground Water Pollution in the South Central States; by M. R. Scalf, J. W. Keeley, and C. J. LaFevres, Robert S. Kerr Environmental Research Center, EPA, Ada, OK</u>	GPO - \$2.35 EP 1.23/2:73-268
EPA-R2-73-269 (12120 ERF)	<u>Treatment of Complex Cyanide Compounds for Reuse or Disposal; by T. N. Hendrickson and Dr. L. G. Daignault, Computerized Pollution Abatement Corp., Leicester, NY</u>	GPO - \$2.10 EP 1.23/2:73-269
EPA-R2-73-270 (11050 FOU)	<u>Pressure Sewer Demonstration at the Borough of Phoenixville, Pennsylvania; by G. Mekosh and D. Ramos, General Electric Co., Philadelphia, PA</u>	(Pending)
EPA-R2-73-271 (13030 FVN)	<u>Selected Irrigation Return Flow Quality Abstracts, 1970-1971; by G. V. Skogerboe, et. al., Colorado State Univ., Fort Collins, CO</u>	GPO - \$3.20 EP 1.23/2:73-271
EPA-R2-73-272	<u>Limited Oil Gasification Experiment; by H. P. Sorensen, International Materials Corp., Burlington, MA</u>	(Pending)
EPA-R2-73-273 (16130 ---)	<u>Predicting and Controlling Residual Chlorine in Cooling Tower Blowdown; by G. R. Nelson, PNW Environmental Research Lab., EPA, NERC, Corvallis, OR</u>	(Pending)
EPA-R2-73-274 (11060 DXX)	<u>Phosphorus Removal and Plant Operation Studies at Fort Wayne, Indiana; by P. L. Brunner, M. Spiegel, and C. F. Niles, Jr., for the City of Fort Wayne, IN</u>	(Pending)

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-275	<u>Analysis of the Odorous Compounds in Diesel Engine Exhaust; by Dr. P. L. Levins, Arthur D. Little Co., Cambridge, MA</u>	(Pending)
EPA-R2-73-276	<u>Characteristics and Photochemical Reactivity of Emissions; by B. Dimitriades, et. al., U.S. Bureau of Mines, Bartlesville, OK</u>	(Pending)
EPA-R2-73-277 (16020 GHP)	<u>Current Practice in GC-MS Analysis of Organics in Water; by R. G. Webb, et. al., Southeast Environmental Research Lab., EPA, Athens, GA</u>	(Pending)
EPA-R2-73-278 (17050 DGJ)	<u>Electrical Stimulation of Microbial Waste Treatment; by J. S. Schultz, Univ. of Michigan, Ann Arbor, MI</u>	(Pending)
EPA-R2-73-279 (17010 DZG)	<u>Phosphorus Removal by Trickling Filter Slimes; by Dr. A. E. Zanoni, Marquette Univ., Milwaukee, WI</u>	(Pending)
EPA-R2-73-280a (15080 HOC)	<u>Petroleum Systems Reliability Analysis, Vol. I - Engineering Report; by J. E. Ritchie, Jr., et. al., Computer Sciences Corp., Falls Church, VA</u>	(Pending)
EPA-R2-73-280b (15080 HOC)	<u>Petroleum Systems Reliability Analysis, Vol. II - Appendices; by J. E. Ritchie, Jr., et. al., Computer Sciences Corp., Falls Church, VA</u>	(Pending)
EPA-R2-73-281 (17090 ---)	<u>Electrical Power Consumption for Municipal Wastewater Treatment; by R. Smith, AWTR Lab., EPA, NERC, Cincinnati, OH</u>	(Pending)
EPA-R2-73-282 (17070 FBE)	<u>Study of Utilization and Disposal of Lime Sludges Containing Phosphates; by R. E. Opferkuch, T. Ctvrticek, and S. M. Mehta, Monsanto Research Corp., Dayton, OH</u>	(Pending)
EPA-R2-73-283 (11034 FUJ)	<u>Toxic Materials Analysis of Street Surface Contaminates; by R. E. Pitt and G. Amy, URS Research Co., San Mateo, CA</u>	(Pending)
EPA-R2-73-284	<u>Nitrogen Oxide Abatement Technology in Japan - 1973; by J. Ando and H. Tohata, Processes Research Inc., Cincinnati, OH</u>	(Pending)
EPA-R2-73-285	<u>Screening Report, Crude Oil and Natural Gas Production Processes; by Processes Research Inc., Cincinnati, OH</u>	(Pending)
EPA-R2-73-286	<u>Screening Study for Background Information and Significant Emissions from Gypsum Product Manufacturing; by Processes Research Inc., Cincinnati, OH</u>	(Pending)

ENVIRONMENTAL PROTECTION TECHNOLOGY SERIES (R2) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R2-73-287 (12010 DFS)	<u>Investigation of Testing Electroplaters Cyanide Waste by Electrodialysis;</u> by S. B. Tuwiner, RAI Research Corp., Long Island City, NY	(Pending)
EPA-R2-73-288	<u>Relationship Between Fabric Structure and Filtration Performance in Dust Filtration;</u> by D. C. Draemel, NERC, EPA, Research Triangle Park, NC	(Pending)
EPA-R2-73-289 (15080 ---)	<u>Aerial Detection of Spill Sources;</u> by C. L. Rudder, A. G. Wallace, and C. J. Reinheimer, McDonnell Aircraft Co., McDonnell Douglas Corp., St. Louis, MO	(Pending)
EPA-R2-73-290 (15080 ---)	<u>Aerial Spill Detection Key, Petroleum Refineries;</u> by C. L. Rudder, A. G. Wallace and C. J. Reinheimer, McDonnell Aircraft Co., McDonnell Douglas Corp., St. Louis, MO	(Pending)
EPA-R2-73-291	<u>Nitric Oxide Formation in Combustion Processes with Strong Recirculation;</u> by United Aircraft Research Laboratories, East Hartford, CT	(Pending)
EPA-R2-73-292a	<u>Experimental Combustor for Development of Package Boiler Emission Control Techniques - Phase 1 of 3;</u> by Ultrasystems, Inc., Irvine, CA	(Pending)
EPA-R2-73-293 (15080 HBO)	<u>Waste Automotive Lubricating Oil as a Municipal Incinerator Fuel;</u> by S. Chansky, B. McCoy, and N. Surprenant, GCA Corp., Bedford, MA	(Pending)
EPA-R2-73-294 (12060 ESY)	<u>Improvement of Treatment of Food Industry Waste;</u> by S. B. Tuwiner, RAI Research Corp., Hauppauge, NY	(Pending)

ECOLOGICAL RESEARCH SERIES (R3)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R3-72-001 (16010 ---)	<u>Role of Phosphorus in Eutrophication;</u> by A. F. Bartsch, Director, NERC, EPA, Corvallis, OR	GPO - 55¢ EP 1.23:72-001
EPA-R3-73-002 (18050 DBW)	<u>Limnology of Yellowtail Reservoir and the Bighorn River;</u> by J. C. Wright, Montana State Univ., Bozeman, MT, and R. A. Soltero, Eastern Washington State College, Cheney, WA	GPO - \$1.25 EP 1.23:73-002 NTIS - PB 221 487
EPA-R3-72-003 (16050 EYV) (16050 EYS) (16050 EPV) (16050 ESP)	<u>An Evaluation of DDT and Dieldrin in Lake Michigan;</u> by The Lake Michigan Interstate Pesticides Committee of the Lake Michigan Enforcement Conference	GPO - \$1.25 EP 1.23:72-003 NTIS - PB 214 696
EPA-R3-72-004 (16010 ECQ)	<u>The Role of Sludge Worms in Eutrophication;</u> by R. O. Brinkhurst, Univ. of Toronto, Toronto, Canada	GPO - \$1.25 EP 1.23:72-004 NTIS - PB 213 894
EPA-R3-73-005 (16050 DXB)	<u>Simulation of Respiration in Microbial Slime Films;</u> by H. R. Bungay III, and D. N. Harold, Jr., Clemson Univ., Clemson, SC	NTIS - PB 217 879
EPA-R3-73-006 (18050 FKT)	<u>Effects of Logging on Growth of Juvenile Coho Salmon;</u> by P. M. Iwanaga and J. D. Hall, Oregon State Univ., Corvallis, OR	GPO - 75¢ EP 1.23:73-006 NTIS - PB 221 541
EPA-R3-73-007 (18080 ---)	<u>Annotated Bibliography on Biological Effects of Metals in Aquatic Environments;</u> by R. Eisler, National Marine Water Quality Lab., EPA, West Kingston, RI	GPO - \$3.20 EP 1.23:73-007
EPA-R3-72-008 (18080 DMV)	<u>Biology of Tropical Bottom Invertebrates;</u> by Dr. H. B. Moore, Univ. of Miami, Miami, FL	(Pending)
EPA-R3-73-009 (18050 EDH)	<u>Pollution as a Result of Fish Cultural Activities;</u> by R. N. Hinshaw, Utah State Div. of Wildlife Resources, Salt Lake City, UT	GPO - \$2.60 EP 1.23:73-009 NTIS - PB 221 376
EPA-R3-73-010 (18050 DDM)	<u>Impairment of the Flavor of Fish by Water Pollutants;</u> by D. L. Shumway and J. R. Palensky, Oregon State Univ., Corvallis, OR	GPO - \$1.25 EP 1.23:73-010 NTIS - PB 221 480
EPA-R3-73-011a (18050 DYC)	<u>Effects of Chemical Variations in Aquatic Environments, Vol. I - Biota and Chemistry of Piceance Creek;</u> by W. H. Everhart, Colorado State Univ., Fort Collins, CO and B. E. May, Florida Game and Fresh Water Fish Commission, Eustis, FL	GPO - \$2.10 EP 1.23:73-011a NTIS - PB 221 343
EPA-R3-73-011b (18050 DYC)	<u>Effects of Chemical Variations in Aquatic Environments, Vol. II - Toxic Effects of Aqueous Aluminum to Rainbow Trout;</u> by W. H. Everhart and R. A. Freeman, Colorado State Univ., Fort Collins, CO	GPO - 75¢ EP 1.23:73-011b NTIS - PB 221 344

ECOLOGICAL RESEARCH SERIES (R3) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R3-73-011c (18050 DYC)	<u>Effects of Chemical Variations in Aquatic Environments, Vol. III - Lead Toxicity to Rainbow Trout and Testing Application Factor Concept;</u> by P. H. Davies and W. H. Everhart, Colorado State Univ., Fort Collins, CO	GPO - \$1.25 EP 1.23:73-011c NTIS - PB 221 345
EPA-R3-72-012 (16050 EDT)	<u>Characterization of Stream Reaeration Capacity;</u> by E. C. Tsivoglou, Georgia Inst. of Technology, Atlanta, GA	GPO - \$3.75 EP 1.23:72-012 NTIS - PB 214 649
EPA-R3-72-013	<u>A Study of Correlation of Ozone and Sulfur Dioxide;</u> by L. F. Ballard and L. K. Matus, Research Triangle Inst., Research Triangle Park, NC	NTIS - PB 212 478
EPA-R3-72-014	<u>Haze Formation -- Its Nature and Origin;</u> by W. E. Wilson, Jr., Warren Schwartz, and G. W. Kinzer, Battelle Columbus Lab., Columbus, OH	NTIS - PB 212 609
EPA-R3-72-015	<u>Specific Methods for the Determination of Ozone in the Atmosphere;</u> by S. L. Sachdev, J. P. Lodge, Jr., and P. W. West, Louisiana State Univ., Baton Rouge, LA	NTIS - PB 213 019
EPA-R3-72-016	<u>Factors Affecting Reactions in Environmental Chambers;</u> by R. J. Jaffe, Lockheed Missiles and Space Co., Sunnyvale, CA	NTIS - PB 212 478
EPA-R3-72-017 (18050 DTX)	<u>Chemical Responses by Marine Organisms to Stress;</u> by H. P. Jeffries, Univ. of Rhode Island, Kingston, RI	NTIS - PB 213 193
EPA-R3-73-018 (16010 HIU)	<u>An In Situ Evaluation of Nutrient Effects in Lakes;</u> by R. A. Jordon and M. E. Bender, Virginia Inst. of Marine Science, Gloucester Point, VA	GPO - \$2.60 EP 1.23:73-018 NTIS - PB 221 341
EPA-R3-73-019 (18050 DJZ)	<u>Development of Dissolved Oxygen Criteria for Freshwater Fish;</u> by C. E. Warren, P. Doudaroff and D. L. Shumway, Dept. of Fisheries & Wildlife, Oregon State Univ., Corvallis, OR	GPO - \$2.10 EP 1.23:73-019 NTIS - PB 221 513 (\$4.60)
EPA-R3-73-020	<u>Studies on Polycyclic Aeromatic Hydrocarbon in Flames;</u> by R. Long, Univ. of Birmingham, Birmingham, England	(Pending)
EPA-R3-73-021 (18050 FOG)	<u>Effects of Temperature on Growth and Reproduction of Aquatic Snails;</u> by H. van der Schalie and E. G. Berry, Univ. of Michigan, Ann Arbor, MI	GPO - \$2.35 EP 1.23:73-021 NTIS - PB 221 549
EPA-R3-73-022	<u>Thermasonde Processing Techniques;</u> by Sperry Rand Inc., Boston, MA	NTIS - PB 214 184

ECOLOGICAL RESEARCH SERIES (R3) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R3-72-023a	<u>Regional Air Pollution Study - Research Plan - Part 2</u> ; by Stanford Research Inst., Palo Alto, CA	NTIS - PB 210 018 (\$6.75)
EPA-R3-72-023b	<u>Regional Air Pollution Study - Research Facility - Part 3</u> ; by Stanford Research Inst., Palo Alto, CA	NTIS - PB 210 019 (\$6.00)
EPA-R3-72-023c	<u>Regional Air Pollution Study - Management Plan - Part 4</u> ; by Stanford Research Inst., Palo Alto, CA	NTIS - PB 210 020 (\$6.00)
EPA-R3-73-024 (16010 DUA)	<u>Phosphorus Release from Lake Sediments</u> ; by R. E. Wildung and R. L. Schmidt, Battelle Pacific NW Labs., Richland, WA	GPO - \$2.35 EP 1.23:73-024 NTIS - PB 221 342
EPA-R3-72-025	<u>Study of Maritime Aerosols</u> ; by A. W. Hogan, M. H. Degani and C. Thor, State Univ. of New York, Albany, NY	NTIS - PB 214 170
EPA-R3-73-026 (16010 ---)	<u>The Shagawa Lake Project (Lake Restoration by Nutrient Removal from Wastewater Effluents)</u> ; by K. W. Malueg, et. al., Pacific Northwest Environmental Research Lab., NERC, EPA, Corvallis, OR	GPO - 85¢ EP 1.23:73-026
EPA-R3-73-027	<u>Research on the Optical State of the Atmosphere</u> ; by N. McClintock, A. McLellan, and L. Turner, Univ. of Wisconsin, Madison, WI	NTIS - PB 220 394
EPA-R3-73-028a (16120 HVR)	<u>Annotated Bibliography of Lake Ontario Limnological and Related Studies, Vol. I - Chemistry</u> ; by D. Proto and R. A. Sweeney, State Univ. College at Buffalo, Buffalo, NY	GPO - \$1.25 EP 1.23:73-028a
EPA-R3-73-028b (16120 HVR)	<u>Annotated Bibliography of Lake Ontario Limnological and Related Studies, Vol. II - Biology</u> ; by E. P. Downing, J. E. Hassan, and R. A. Sweeney, State Univ. College at Buffalo, Buffalo, NY	GPO - \$1.25 EP 1.23:73-028b
EPA-R3-73-028c (16120 HVR)	<u>Annotated Bibliography of Lake Ontario Limnological and Related Studies, Vol. III - Physical</u> ; by J. Baldwin and R. A. Sweeney, State Univ. College at Buffalo, Buffalo, NY	GPO - \$2.60 EP 1.23:73-028c
EPA-R3-73-029	<u>Cellulose Degradation in Composting</u> ; by R. Regan, et. al., Manhattan College, Bronx, NY	NTIS - PB 215 722 (\$6.00)
EPA-R3-73-030	<u>Air Quality Criteria for Sulfur Oxides: Revised Chapter 5, Effects of Sulfur Oxides in the Atmosphere on Vegetation, and Related Parts of Chapter 10, Summary and Conclusions</u> ; by Office of Research and Monitoring, NERC, EPA, Research Triangle Park, NC	(Pending)

ECOLOGICAL RESEARCH SERIES (R3) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R3-73-031	<u>Photosynthetic Reclamation of Agricultural Solid and Liquid Wastes;</u> by C. G. Golueke, et. al., Univ. of California, Berkeley, CA	(Pending)
EPA-R3-73-032 (18050 DOG)	<u>Fish and Food Organisms in Acid Mine Waters of Pennsylvania;</u> by R. L. Butler, et. al., Pennsylvania State Univ., University Park, PA	GPO - \$2.10 EP 1.23:73-032 NTIS - PB 221 515 (\$4.60)
EPA-R3-73-033 (18080 PCW)	<u>Water Quality Criteria, 1972;</u> by National Academy of Sciences - National Academy of Engineering, Washington, DC	(Pending)
EPA-R3-73-034	<u>Study of Lead, Copper, Zinc, and Cadmium Contamination of Food Chains of Man;</u> by R. Dorn, et. al., Univ. of Missouri, Columbia, MO	(Pending)
EPA-R3-73-035 (18080 DLR)	<u>Environmental Effects on Toxaphene Toxicity to Selected Fishes and Crustaceans;</u> by W. R. Courtenay, Jr. and M. H. Roberts, Jr., Aquatic Sciences, Inc., Boca Raton, FL	GPO - \$1.00 EP 1.23:73-035 NTIS - PB 221 481
EPA-R3-73-036	<u>Mechanisms of Formation and Composition of Photochemical Aerosols;</u> by M. Lipeles, et. al., Rockwell International, Thousand Oaks, CA	(Pending)
EPA-R3-73-037 (16010 DZK)	<u>Effect of Silt and Silt Removal in a Prairie Lake;</u> by C. L. Churchill, C. K. Brashier, and G. Leidahl, Dakota State College, Madison, SD	(Pending)
EPA-R3-73-038	<u>Toxicity of Methyl Parathion, Azodrin, Diazinon, and Toxaphene to Acartia Tonsa;</u> by F. H. Khattat and S. Farley, Hazleton Laboratories, Inc., Vienna, VA	(Pending)
EPA-R3-73-039 (16010 DEG)	<u>Rates of Photosynthesis and Phytoplankton Growth in Shaqawa Lake, Minnesota;</u> by R. O. Megard, Univ. of Minnesota, Minneapolis, MN	(Pending)
EPA-R3-73-040	<u>A Study to Evaluate Techniques of Assessing Air Pollution Damage to Paint;</u> by G. Campbell, G. Schurr and D. Slavickowski, Sherwin-Williams Co., Chicago, IL	(Pending)
EPA-R3-73-041 (18050 GAB)	<u>Thermal Effects on Eggs, Larvae and Juveniles of Bluegill Sunfish;</u> by A. Banner and J. A. Van Arman, Aquatic Sciences, Inc., Boca Raton, FL	GPO - \$2.10 EP 1.23:73-041
EPA-R3-73-042 (18050 EBN)	<u>Interaction Between Marine Organisms and Oil Pollution;</u> by Dr. M. Blumer, et. al., Woods Hole Oceanographic Inst., Woods Hole, MA	GPO - \$1.25 EP 1.23:73-042

ECOLOGICAL RESEARCH SERIES (R3) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R3-73-043a	<u>Oxidant Air Pollutant Effects on a Western Coniferous Forest Ecosystem: Task B Report: Historical Background and Proposed System Study of the San Bernardino Mountain Area;</u> by O. C. Taylor, Univ. of California, Riverside, CA	(Pending)
EPA-R3-73-043b	<u>Oxidant Air Pollutant Effects on a Western Coniferous Forest Ecosystem: Task C Report: Study Site Selection and Verification Data on Pollutants and Species;</u> by O. C. Taylor, Univ. of California, Riverside, CA	(Pending)
EPA-R3-73-044 (16010 EHR)	<u>Biological Investigations of Lake Wingra;</u> by J. F. Koonce, et. al., Univ. of Wisconsin, Madison, WI	(Pending)
EPA-R3-73-045 (18050 DWQ)	<u>Effects of Copper on the Locomotor Orientation of Fish;</u> by H. Kleerekoper, Texas A&M Univ., College Station, TX	GPO - \$1.25 EP 1.23:73-045
EPA-R3-73-046 (18050 DLO)	<u>The Effects of Methoxychlor on Aquatic Biota;</u> by J. W. Merna, Michigan Dept. of Natural Resources, and P. J. Eisele, Univ. of Michigan, Ann Arbor, MI	(Pending)
EPA-R3-73-047	<u>Natural Precipitation Washout of Sulfur Compounds from Plumes;</u> by M. T. Dana, et. al., Battelle PNW Labs., Richland, WA	(Pending)

ENVIRONMENTAL MONITORING SERIES (R4)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R4-72-001	<u>The Growth and Decay of Turbulent Mixing in the Planetary Boundary Layer</u> ; by Dr. R. S. Sholts, College of Engineering, Univ. of Florida, Gainesville, FL	NTIS - PB 220 343
EPA-R4-72-002	<u>Tentative Procedure: Analyzing Pesticide Residues in Solid Wastes</u> ; by R. A. Carnes, Solid Waste Research Lab., NERC, EPA, Cincinnati, OH	(Pending)
EPA-R4-72-003	<u>Preliminary Study of Methods for Analysis of Mercury in Water</u> ; by J. A. Winter, Analytical Quality Control Lab., NERC, EPA, Cincinnati, OH	(Pending)
EPA-R4-72-004a	<u>Field Evaluation of Methods for Collection and Analysis of Airborne Pesticides</u> ; by Syracuse Univ. Research Corp., Syracuse, NY	NTIS - PB 214 008
EPA-R4-72-004b	<u>Field Evaluation of Methods for Collection and Analysis of Airborne Pesticides, Vol. II, Pesticide Field Monitoring Data</u> ; by Syracuse Univ. Research Corp., Syracuse, NY	NTIS - PB 214 009
EPA-R4-72-005	<u>Fluid Model for the Study of Air Pollution Meteorology: Similarity Criteria Facilities Review of Literature and Recommendations</u> ; by W. H. Snyder, Div. of Meteorology, NERC, EPA, Research Triangle Park, NC	(Pending)
EPA-R4-72-006	<u>References for the Identification of Freshwater Macroinvertebrates</u> ; by P. A. Lewis, Analytical Quality Control Lab., NERC, EPA, Cincinnati, OH	NTIS - PB 213 379
EPA-R4-72-007	<u>Studies of Trace Elements in Soils and Plants from the Four Corners Area of New Mexico</u> ; by N. B. Stark, P. F. Harris, Univ. of Nevada Systems, Desert Research Inst., Reno, NV	NTIS - PB 212 561
EPA-R4-73-008	<u>Radioactive Decay Correction Factors</u> ; by Office of Research and Monitoring, NERC, EPA, Las Vegas, NV	NTIS - PB 219 287
EPA-R4-72-009	<u>Collaborative Study of Reference Method for the Continuous Measurement of Carbon Monoxide in the Atmosphere (Non-Dispersive Infrared Spectrometry)</u> ; by H. C. McKee and R. E. Childers, Southwest Research Inst., Houston, TX	NTIS - PB 211 265
EPA-R4-73-010	<u>Work Shop on Mathematical Modeling of Photochemical Smog: Summary of Proceedings</u> ; by Dr. M. C. Dodge, Chemistry and Physics Lab., NERC, EPA, Research Triangle Park, NC	NTIS - PB 221 177

ENVIRONMENTAL MONITORING SERIES (R4) (continued)

<u>Report/Project Number</u>	<u>Title/Author</u>	<u>Source or Status</u>
EPA-R4-73-011 (16020 HJE)	<u>Operation of the Analytical Methodology Information Center</u> ; by R. Little and R. Darby, Battelle Memorial Inst., Columbus, OH	GPO - \$2.35 EP 1.23/5:73-011 NTIS - PB 221 491
EPA-R4-73-012a	<u>Evaluation of a Diffusion Model for Photochemical Smog Simulation</u> ; by A. Eschenroeder, H. R. Martinez, and R. A. Nordsieck, General Research Corp., Santa Barbara, CA	NTIS - PB 220 242 (\$6.75)
EPA-R4-73-012b	<u>Users' Guide to Diffusion/Kinetics (DIFKIN) Code</u> ; by J. R. Martinez, General Research Corp., Santa Barbara, CA	NTIS - PB 220 243 (\$4.50)
EPA-R4-73-012c	<u>Field Program Designs for Verifying Photochemical Diffusion Models</u> ; by A. Eschenroeder, G. W. Deley, and R. J. Wahl, General Research Corp., Santa Barbara, CA	NTIS - PB 221 300 (\$5.00)
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11024DOC09/71	<u>Storm Water Management Model, Vol. III, User's Manual</u> ; by Metcalf & Eddy Engineers, Palo Alto, California	GPO - \$2.75 NTIS - PB 203 291
11024DOC10/71	<u>Storm Water Management Model, Vol. IV, Program Listing</u> ; by Metcalf & Eddy Engineers, Palo Alto, California	GPO - \$2.00 NTIS - PB 203 292
11024DOK02/70	<u>Proposed Combined Sewer Control by Electrode Potential</u> ; by Merrimack College, Andover, Massachusetts	NTIS - PB 195 169
11024DQU10/70	<u>Urban Runoff Characteristics</u> ; by Univ. of Cincinnati, Cincinnati, Ohio	GPO - \$2.75 NTIS - PB 202 865
11024EJC07/70	<u>Selected Urban Storm Water Runoff Abstracts, July 1968-June 1970</u> ; by The Franklin Inst. Research Laboratories, Philadelphia, PA	GPO - \$2.75 NTIS - PB 198 228
11024EJC10/70	<u>Selected Urban Storm Water Runoff Abstracts, First Quarterly Issue</u> ; by The Franklin Inst. Research Laboratories, Philadelphia, PA	GPO - 50¢ NTIS - PB 198 229
11024EJC01/71	<u>Selected Urban Storm Water Runoff Abstracts, Second Quarterly Issue</u> ; by The Franklin Institute Research Laboratories, Philadelphia, Pennsylvania	GPO - 60¢ NTIS - PB 198 312
11024ELB01/71	<u>Storm and Combined Sewer Pollution Sources and Abatement, Atlanta, Ga.</u> ; by Black, Crow and Eidsness, Inc., Atlanta, Georgia	NTIS - PB 201 725
11024EQE06/71	<u>Impregnation of Concrete Pipe</u> ; by Southwest Research Insti., San Antonio, Texas	GPO - 75¢
11024EQG03/71	<u>Storm Water Problems and Control in Sanitary Sewers, Oakland and Berkeley, California</u> ; by Metcalf & Eddy Engineers, Palo Alto, California	GPO - \$4.00 NTIS - PB 208 815
11024EXF08/70	<u>Combined Sewer Overflow Abatement Alternatives, Washington, D.C.</u> ; by Roy F. Weston, Inc., West Chester, Pennsylvania	GPO - \$2.00 NTIS - PB 203 680

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
11024FJE04/71	<u>Selected Urban Storm Water Runoff Abstracts, Third Quarterly Issue; by Franklin Institute Research Laboratories, Philadelphia, PA</u>	GPO - 75¢
11024FJE07/71	<u>Selected Urban Storm Water Runoff Abstracts, July 1970-June 1971; by The Franklin Inst. Research Laboratories, Philadelphia, PA</u>	GPO - \$1.50
11024FKJ10/70	<u>In-Sewer Fixed Screening of Combined Sewer Overflows; by Envirogenics Co., Div. of Aerojet-General Corp., El Monte, CA</u>	GPO - \$1.25 NTIS - PB 213 118
11024FKM12/71	<u>Urban Storm Runoff and Combined Sewer Overflow Pollution, Sacramento, California; by Envirogenics Co., Div. of Aerojet-General Corp., El Monte, California</u>	GPO - \$1.75 NTIS - PB 208 989
11024FKN11/69	<u>Stream Pollution and Abatement from Combined Sewer Overflows, Bucyrus, Ohio; by Burgess and Niple, Ltd., Columbus, Ohio</u>	GPO - \$2.00 NTIS - PB 195 162
11024FLY06/71	<u>Heat Shrinkable Tubing as Sewer Pipe Joints; by The Western Co. of North America, Richardson, Texas</u>	GPO - \$1.25 NTIS - PB 208 816

1103 - Storm Sewer Discharges

11030DNK08/68	<u>The Beneficial Use of Storm Water; by Hittman Associates, Inc., Baltimore, Maryland</u>	NTIS - PB 195 160
11030DNS01/69	<u>Water Pollution Aspects of Urban Runoff; by American Public Works Asso., Chicago, IL</u>	NTIS - PB 215 532
11034DUY03/72	<u>Investigation of Porous Pavements for Urban Runoff Control; by E. Thelen, W. C. Grover, A. J. Hoiberg, and T. I. Haigh, Franklin Inst. Research Laboratories, Philadelphia, Pennsylvania</u>	GPO - \$1.25
11034FKL07/70	<u>Storm Water Pollution From Urban Land Activity; by AVCO Economic Systems Corp., Washington, D.C.</u>	GPO - \$2.50 NTIS - PB 195 281
11034FLU06/71	<u>Hydraulics of Long Vertical Conduits and Associated Cavitation; by Univ. of Minnesota, Minneapolis, Minnesota</u>	GPO - 60¢

1104 - Non-sewered Runoff

11040GKK06/71	<u>Environmental Impact of Highway Deicing; by Edison Water Quality Lab., EPA, Edison, NJ</u>	GPO - \$1.25 NTIS - PB 203 493
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<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
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1105 - Non-sewered Municipal Wastes

11050FKE12/69	<u>A Study of Flow Reduction and Treatment of Wastewater from Households; by General Dynamics Electric Boat Div., Groton, Conn.</u>	GPO - \$1.25 NTIS - PB 197 599
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1106 - Joint (Mun./Ind.) Wastes

11060DPD02/71	<u>Combined Treatment of Municipal Kraft Linerboard and Fiberboard Manufacturing Wastes; by Board of Water Commissioners, City of Macon, Georgia; Georgia Kraft Co.; and Armstrong Cork Company</u>	GPO - \$1.25 NTIS - PB 208 215
11060EOC07/69	<u>Joint Municipal and Semicommercial Pulping Wastes; by City of Erie, Pennsylvania</u>	GPO - \$1.50 NTIS - PB 185 948
11060FAE11/69	<u>Feasibility of Joint Treatment in a Lake Watershed; by Roy F. Weston, Inc., West Chester, Pennsylvania</u>	NTIS - PB 201 698
11060FAE04/71	<u>Onondaga Lake Study; by Onondaga County, Syracuse, New York</u>	GPO - \$4.50 NTIS - PB 206 472

Industrial Pollution Control

12000---07/71	<u>Projects of the Industrial Pollution Control Branch; by Industrial Pollution Control Branch, Applied Science and Technology, EPA, Washington, D.C.</u>	GPO - \$2.50
12000FLX02/71	<u>A System for Industrial Waste Treatment RD&D Project Priority Assignment; by Synectics Corp., Allison Park, PA</u>	GPO - \$1.00 NTIS - PB 206 146

1201 - Metal and Metal Products

12010DIM08/70	<u>Pyrite Depression by Reduction of Solution Oxidation Potential; by Univ. of Utah, Salt Lake City, Utah</u>	GPO - 70¢ NTIS - PB 200 257
12010DPF11/71	<u>Brass Wire Mill Process Changes and Waste Abatement, Recovery and Reuse; by Volco Brass and Copper Co., Kenilworth, NJ</u>	GPO - 55¢
12010DRH11/71	<u>Ultrathin Membranes for Treating Metal Finishing Effluents by Reverse Osmosis; by North Star Research & Development Inst. (through Minnesota Pollution Control Agency), Minneapolis, Minnesota</u>	GPO - \$1.00 NTIS - PB 208 211
12010DTQ02/72	<u>Combined Steel Mill and Municipal Wastewaters Treatment; by Weirton Steel Div., National Steel Corp., Weirton, WV</u>	GPO - \$1.50 NTIS - PB 210 198

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
12010DUL02/71	<u>Limestone Treatment of Rinse Waters from Hydrochloric Acid Pickling of Steel;</u> by Armco Steel Corp., Middleton, Ohio	GPO - \$1.50 NTIS - PB 202 233
12010EIE11/68	<u>A State of the Art Review of Metal Finishing Waste Treatment;</u> by Battelle Memorial Institute, Columbus, Ohio	GPO - \$1.00 NTIS - PB 203 207
12010EIE03/71	<u>An Investigation of Techniques for Removal of Chromium from Electroplating Wastes;</u> by Battelle Memorial Institute, Columbus, OH	GPO - \$1.00 NTIS - PB 215 694
12010EIE11/71	<u>An Investigation of Techniques for Removal of Cyanide from Electroplating Wastes;</u> by Battelle Columbus Labs., Columbus, Ohio	GPO - \$1.00 NTIS - PB 208 210
12010EQF03/71	<u>An Electromembrane Process for Regenerating Acid from Spent Pickle Liquor;</u> by Southern Research Institute, Birmingham, Alabama	GPO - \$1.00 NTIS - PB 201 651
12010EZV02/70	<u>Treatment of Waste Water-Waste Oil Mixtures;</u> by Armco Steel Corp., Middletown, Ohio	GPO - \$2.50 NTIS - PB 195 161

1202 - Chemicals and Allied Products

12020---02/70	<u>Petrochemical Effluents Treatment Practices - Summary;</u> by Engineering-Sciences, Inc./ Texas, Austin, Texas	NTIS - PB 192 310
12020DIS01/72	<u>Anaerobic Treatment of Synthetic Organic Wastes;</u> by J. C. Hovious, J. A. Fisher, and R. A. Conway, Union Carbide Corp., South Charleston, West Virginia	GPO - \$1.75 NTIS - PB 211 130
12020DJI06/71	<u>Wastewater Treatment Facilities for a Polyvinyl Chloride Production Plant;</u> by B. F. Goodrich Chemical Co., Cleveland, OH	GPO - \$1.00 NTIS - PB 211 464
12020DQC03/71	<u>Polymeric Materials for Treatment and Recovery of Petrochemical Wastes;</u> by Gulf South Research Institute, New Orleans, LA	GPO - 70¢ NTIS - PB 201 699
12020EEQ10/71	<u>Treatment of Wastewater from the Production of Polyhydric Organics;</u> by Dow Chemical Co., Texas Division, Freeport, TX	GPO - \$1.75
12020EID03/71	<u>Preliminary Investigational Requirements - Petrochemical and Refinery Waste Treatment;</u> by Engineering-Science, Inc., Austin, Texas	GPO - \$1.50 NTIS - PB 212 369
12020EJI07/71	<u>Inorganic Chemicals Industry Profile;</u> by Datagraphics, Inc., Pittsburgh, PA	GPO - \$1.75 NTIS - PB 206 308
12020EXG03/72	<u>The Effect of Chlorination on Selected Organic Chemicals;</u> by The Manufacturing Chemists Association, Washington, D.C.	GPO - \$1.00 NTIS - PB 211 160

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
12020FPD09/71	<u>Inorganic Fertilizer and Phosphate Mining Industries - Water Pollution and Control;</u> by Battelle Memorial Institute, Richland, Washington	GPO - \$1.75 NTIS - PB 206 154
12020FYE01/72	<u>The Pesticide Manufacturing Industry - Current Waste Treatment and Disposal Practices;</u> by P. R. Atkins, Univ. of Texas, Austin, TX	GPO - \$1.00 NTIS - PB 211 129
12020GND07/71	<u>Projected Wastewater Treatment Costs in the Organic Chemicals Industry;</u> by Data-graphics, Inc., Pittsburgh, PA	GPO - \$1.50 NTIS - PB 206 429

1204 - Paper And Allied Products

12040DLQ08/71	<u>Slime Growth Evaluation of Treated Pulp Mill Waste;</u> by Dept. of Microbiology, Oregon State Univ., Corvallis, Oregon	GPO - 60¢
12040EBY08/70	<u>Aerial Photographic Tracing of Pulp Mill Effluent in Marine Waters;</u> by Oregon State Univ., Corvallis, Oregon	GPO - \$1.25 NTIS - PB 198 232
12040EEK08/71	<u>Treatment of Selected Internal Kraft Mill Wastes in a Cooling Tower;</u> by Georgia Kraft Company, Rome, Georgia	GPO - \$1.25 NTIS - PB 208 217
12040EEL02/72	<u>Reverse Osmosis Concentration of Dilute Pulp and Paper Effluents;</u> by A. J. Wiley, G. A. Dubey, and I. K. Bansal, The Pulp Manufacturers Research League and The Institute of Paper Chemistry, Appleton, WI	GPO - \$2.75 NTIS - PB 211 184
12040EFC01/71	<u>Pollution Abatement by Fiber Modification;</u> by College of Forest Resources, Univ. of Washington, Seattle, WA	GPO - 65¢ NTIS - PB 206 219
12040ELW12/70	<u>Aerated Lagoon Treatment of Sulfite Pulping Effluents;</u> by Crown Zellerbach Corporation, Lebanon, Oregon	GPO - \$1.25 NTIS - PB 208 212
12040EMY12/71	<u>Multi-System Biological Treatment of Bleached Kraft Effluents;</u> by The Mead Corporation, Chillicothe, Ohio	GPO - \$2.00 NTIS - PB 208 213
12040ENC12/71	<u>Color Removal from Kraft Pulping Effluent by Lime Addition;</u> by Interstate Paper Corp., Riceboro, Georgia	GPO - \$1.25
12040EUG10/69	<u>Foam Separation of Kraft Pulping Wastes;</u> by Georgia Kraft Co., Rome, Georgia	NTIS - PB 189 160
12040EZZ04/70	<u>Dilute Spent Kraft Liquor Filtration through Wood Chips;</u> by School of Forest Resources, Univ. of North Carolina, Raleigh, North Carolina	NTIS - PB 191 873

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
12040FES07/71	<u>Sludge Material Recovery System for Manufacturers of Pigmented Papers;</u> by S. D. Warren Co., Div. of Scott Paper Co., Westbrook, Maine	GPO - \$1.00 NTIS - PB 211 026
12040FUB01/72	<u>Recycle of Papermill Waste Waters and Application of Reverse Osmosis;</u> by D. C. Morris, W. R. Nelson & G. O. Walraven, Green Bay Packaging, Inc., Green Bay, WI	GPO - \$1.00 NTIS - PB 211 021

1205 - Petroleum and Coal Products

12050DRC11/71	<u>Experimental Evaluation of Fibrous Bed Coalescers for Separating Oil-Water Emulsions;</u> by Dept. of Chemical Engineering, Illinois Institute of Technology, Chicago, Illinois	GPO - \$1.75 NTIS - PB 210 144
12050DSH03/71	<u>The Impact of Oily Materials on Activated Sludge Systems;</u> by Hydroscience, Inc., Westwood, NJ	GPO - \$1.25 NTIS - PB 212 422
12050EKT03/71	<u>Fluid Bed Incineration of Petroleum Refinery Wastes;</u> by American Oil Co., Mandan, ND	GPO - \$1.50 NTIS - PB 202 570

1206 - Food and Kindred Products

12060---03/68	<u>Potato Waste Treatment (Proceedings of a Symposium);</u> by Univ. of Idaho and FWPCA Pacific Northwest Water Lab., Corvallis, OR	NTIS - PB 208 218
12060---03/68	<u>Aerated Lagoon Treatment of Food Processing Wastes;</u> by Kenneth A. Dostal, Pacific Northwest Water Lab., WQO, EPA, Corvallis, OR	GPO - 55¢
12060---07/69	<u>Secondary Treatment of Potato Processing Wastes;</u> by Kenneth A. Dostal, Pacific Northwest Water Lab., WQO, EPA, Corvallis, Oregon	GPO - 65¢ NTIS - PB 202 234
12060---10/69	<u>Current Practice in Potato Processing Waste Treatment;</u> by Univ. of Washington, Seattle, Washington	GPO - \$1.00 NTIS - PB 189 232
12060---04/70	<u>Proceedings First National Symposium on Food Processing Wastes;</u> by FWQA, USDA, National Canners Association and Northwest Food Processors Association	GPO - \$3.00 NTIS - PB 199 709
12060---08/70	<u>Waste Reduction in Food Canning Operations;</u> by National Canners Asso., Berkeley, CA	GPO - \$1.00 NTIS - PB 198 231
12060---10/70	<u>Treatment of Citrus Processing Wastes;</u> by The Coca-Cola Co., Foods Div., Orlando, FL	GPO - \$2.75 NTIS - PB 202 238
12060---03/71	<u>Proceedings Second Annual Symposium on Food Processing Wastes;</u> by Pacific Northwest Water Lab., EPA, Corvallis, Oregon and National Canners Association	GPO - \$4.50

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
12060DSB09/71	<u>Demonstration of a Full-Scale Waste Treatment System for a Cannery; by L. E. Streebin, G. W. Reid, and A. C. H. Hu; Univ. of Oklahoma, Norman, Oklahoma</u>	GPO - \$ 1.50
12060DSI07/71	<u>State-of-Art, Sugarbeet Processing Waste Treatment; by Beet Sugar Development Foundation, Ft. Collins, Colorado</u>	GPO - \$ 1.25 NTIS - PB 207 646
12060DXF07/71	<u>Membrane Processing of Cottage Cheese Whey for Pollution Abatement; by Crowley's Milk Company, Binghamton, New York</u>	GPO - \$ 1.25 NTIS - PB 209 936
12060DXL01/71	<u>Reduction of Salt Content of Food Processing Liquid Waste Effluent; by National Canners Association, Berkeley, California</u>	GPO - 55¢ NTIS - PB 203 963
12060EAE09/71	<u>Trickling Filter Treatment of Fruit Processing Waste Waters; by National Canners Association, Berkeley, California</u>	GPO - 50¢ NTIS - PB 210 586
12060ECF04/70	<u>Current Practice in Seafoods Processing Waste Treatment; by Oregon State Univ., Corvallis, Oregon</u>	NTIS - PB 202 232
12060EDK08/71	<u>Liquid Wastes from Canning and Freezing Fruits and Vegetables; by National Canners Association, Berkeley, California</u>	GPO - \$ 1.50 NTIS - PB 209 941
12060EDZ08/71	<u>Pilot Plant Installation for Fungal Treatment of Vegetable Canning Wastes; by The Green Giant Co., Le Sueur, Minnesota</u>	GPO - \$ 1.00 NTIS - PB 208 206
12060EGU03/71	<u>Dairy Food Plant Wastes and Waste Treatment Practices; by Dept. of Dairy Tech., Ohio State University, Columbus, Ohio</u>	GPO - \$ 4.00
12060EHT07/70	<u>Use of Fungi Imperfecti in Waste Control; by North Star Research & Development Institute, Minneapolis, Minnesota</u>	GPO - \$ 1.00 NTIS - PB 202 231
12060EHU03/71	<u>Reconditioning of Food Processing Brines; by National Canners Asso., Berkeley, Calif.</u>	GPO - 75¢ NTIS - PB 212 394
12060EHV12/70	<u>Aerobic Secondary Treatment of Potato Processing Wastes; by R. T. French Company, Shelley, Idaho</u>	GPO - \$ 1.50 NTIS - PB 200 623
12060EZP09/70	<u>Cannery Waste Treatment Kehr Activated Sludge; by FMC Corp., Santa Clara, Calif.</u>	GPO - 70¢ NTIS - PB 199 071
12060EZY08/71	<u>Complete Mix Activated Sludge Treatment of Citrus Process Wastes; by Winter Garden Citrus Products Cooperative, Winter Garden, Florida</u>	GPO - \$ 1.25 NTIS - PB 210 407
12060FAD10/69	<u>Aerobic Treatment of Fruit Processing Wastes; by Snokist Growers, Yakima, WA</u>	NTIS - PB 188 506
12060FDS11/71	<u>Elimination of Water Pollution by Packinghouse Animal Paunch and Blood; by Beefland International, Inc., Council Bluffs, Iowa</u>	GPO - 50¢ NTIS - PB 211 023

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
12060FQE12/70	<u>Dry Caustic Peeling of Tree Fruit for Liquid Waste Reduction; by National Canners Association, Berkeley, California</u>	GPO - 60¢ NTIS - PB 208 209

1208 - Stone, Clay & Glass Products

12080EZF09/70	<u>Phenolic Water Reuse by Diatomite Filtration; by Johns-Manville Products Corp., Manville, New Jersey</u>	GPO - \$1.25 NTIS - PB 199 069
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1209 - Textile Mill Products

12090DWM01/71	<u>Bio-Regenerated Activated Carbon Treatment of Textile Dye Wastewater; by Fram Corp., Providence, Rhode Island</u>	GPO - \$1.00 NTIS - PB 203 599
12090ECS02/71	<u>State of the Art of Textile Waste Treatment; by Clemson University, Clemson, SC</u>	GPO - \$2.50 NTIS - PB 212 359
12090EOE01/72	<u>Water Pollution Reduction Through Recovery of Desizing Wastes; by Dept. of Textile Chemistry, North Carolina State Univ., Raleigh, North Carolina</u>	GPO - 60¢ NTIS - PB 211 245
12090ESG01/71	<u>Zinc Precipitation and Recovery from Viscose Rayon Wastewater; by American Enka Co., Enka, North Carolina</u>	GPO - \$1.00 NTIS - PB 205 205
12090EUX10/70	<u>Reuse of Chemical Fiber Plant Wastewater and Cooling Water Blowdown; by Fiber Industries, Inc., Charlotte, NC and Davis & Floyd Engineers, Inc., Greenwood, South Carolina</u>	GPO - 70¢ NTIS - PB 200 695

1212 - Miscellaneous Industrial Sources

12120---09/69	<u>Activated Sludge Treatment of Chrome Tannery Wastes; by A. C. Lawrence Company, Peabody, Massachusetts</u>	GPO - \$2.00 NTIS - PB 186 158
12120---09/70	<u>Treatment of Sole Leather Vegetable Tannery Wastes; by Dr. J. David Eye, Univ. of Cincinnati, Cincinnati, Ohio</u>	GPO - \$1.25 NTIS - PB 199 068
12120DIK12/70	<u>Anaerobic-Aerobic Lagoon Treatment for Vegetable Tanning Wastes; by Univ. of Virginia, Charlottesville, Virginia</u>	GPO - \$1.00 NTIS - PB 202 235
12120ERC08/69	<u>Disposal of Wastes from Water Treatment Plants; by American Water Works Association Research Foundation, New York, NY</u>	NTIS - PB 186 157
12120ESW06/71	<u>Magnesium Carbonate, A Recycled Coagulant for Water Treatment; by Dept. of Public Utilities, City of Gainesville, Florida</u>	GPO - \$1.00 NTIS - PB 209 938

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
12120EUR11/71	<u>Information Resource: Water Pollution Control in the Water Utility Industry</u> ; by American Water Works Association Research Foundation, New York, NY	GPO - \$1.50 NTIS - PB 209 860
12120FYF03/72	<u>Fluidized-Bed Incineration of Selected Carbonaceous Industrial Wastes</u> ; by Battelle Laboratories, Columbus, Ohio	GPO - \$1.00 NTIS - PB 211 161
<u>1213 - Joint (Ind./Mun.) Wastes</u>		
12130DUJ09/71	<u>Whey Effluent Packed Tower Trickling Filtration</u> ; by Quirk, Lawler & Matusky Engineers, Tappan, New York for the Village of Walton, New York	GPO - \$1.50 NTIS - PB 210 408
12130EDX07/70	<u>Joint Treatment of Municipal Sewage and Pulp Mill Effluents</u> ; by The Green Bay Metro. Sewerage District, Green Bay, WI	GPO - \$6.00
12130EGK06/71	<u>Biological Treatment of Chlorophenolic Wastes</u> ; by the City of Jacksonville, AR	GPO - \$1.50 NTIS - PB 206 813
12130EZR05/71	<u>Combined Treatment of Domestic and Industrial Wastes by Activated Sludge</u> ; by City of Dallas, Oregon	GPO - \$1.25 NTIS - PB 205 206
12130FJQ06/71	<u>Pollution Abatement and By-Product Recovery in Shellfish and Fisheries Processing</u> ; by Food, Chemical and Research Laboratories, Inc., Seattle, Washington, and Engineering-Science of Alaska, Anchorage, Alaska	GPO - \$1.00 NTIS - PB 208 214

Agricultural Pollution Control

1301 - Forestry and Logging

13010---02/70	<u>Industrial Waste Guide on Logging Practices</u> ; by Northwest Region, FWPCA, Portland, OR	NTIS - PB 207 644
13010EGA02/71	<u>Studies on Effects of Watershed Practices on Streams</u> ; by Oregon State Univ., Corvallis, Oregon	GPO - \$1.50

1302 - Agricultural Run-off

13020---07/71	<u>Agricultural Pollution of the Great Lakes Basin</u> ; by Governments of the United States and Canada	GPO - \$1.50 NTIS - PB 206 906
13020DGX08/71	<u>Role of Animal Wastes in Agricultural Land Runoff</u> ; by School of Agricultural and Life Sciences, North Carolina State Univ., Raleigh, North Carolina	GPO - \$1.25 NTIS - PB 209 213

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
13020DPB08/71	<u>Management of Nutrients on Agricultural Land for Improved Water Quality;</u> by Dept. of Agronomy, College of Agriculture and Life Science, Cornell Univ., Ithaca, NY	GPO - \$1.25 NTIS - PB 209 858
<u>1303 - Irrigation Return Flows</u>		
13030---05/69	<u>Characteristics and Pollution Problems of Irrigation Return Flow;</u> by Utah State Univ. Foundation, Logan, Utah	NTIS - PB 204 817
13030---11/71	<u>Research Needs for Irrigation Return Flow Quality Control;</u> by Gaylord V. Skogerboe, Colorado State Univ., Ft. Collins, CO and J. P. Law, Robert S. Kerr Water Research Center, EPA, Ada, Oklahoma	GPO - \$1.00 NTIS - PB 219 979
13030DYY06/69	<u>Water Quality Management Problems in Arid Regions;</u> by Robert S. Kerr Water Research Center, FWQA, Ada, Oklahoma	NTIS - PB 198 125
13030ELY12/69	<u>Collected Papers Regarding Nitrates in Agricultural Waste Waters;</u> by FWQA, San Francisco, CA; U.S. Bureau of Reclamation; and California Dept. of Water Resources	GPO - \$1.50 NTIS - PB 197 595
13030ELY04/71-7	<u>Removal of Nitrate by an Algal System;</u> by California Dept. of Water Resources, San Joaquin Valley, California	GPO - \$1.25 NTIS - PB 205 425 (\$3.00)
13030ELY04/71-8	<u>Denitrification by Anaerobic Filters and Ponds;</u> by Robert S. Kerr Water Research Center, EPA, Ada, Oklahoma	GPO - 75¢ NTIS - PB 213 719
13030ELY05/71-12	<u>Desalination of Agricultural Tile Drainage;</u> by Robert S. Kerr Water Research Center, EPA, Ada, Oklahoma	GPO - \$1.00 NTIS - PB 213 890
13030ELY05/71-3	<u>Nutrients from Tile Drainage Systems;</u> by California Department of Water Resources	GPO - \$1.00
13030ELY05/71-6	<u>Removal of Nitrogen from Tile Drainage - A Summary Report;</u> by California Department of Water Resources and EPA	GPO - 50¢
13030ELY06/71-10	<u>Techniques to Reduce Nitrogen in Drainage Effluent During Transport;</u> by U.S. Bureau of Reclamation, Region 2	GPO - 60¢
13030ELY06/71-13	<u>Removal of Nitrate by an Algal System - Phase II;</u> by Calif. Dept. of Water Resources, San Joaquin Valley, CA	GPO - \$1.75
13030ELY06/71-14	<u>Denitrification by Anaerobic Filters and Ponds - Phase II;</u> by Robert S. Kerr Water Research Center, EPA, Ada, Oklahoma	GPO - \$1.00
13030ELY08/71-9	<u>The Effects of Agricultural Waste Water Treatment on Algal Bioassay Response;</u> by EPA, San Francisco, CA	GPO - \$1.00 NTIS - PB 213 891

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
13030ELY05/72-11	<u>Possibility of Reducing Nitrogen in Drainage Water by On Farm Practices:</u> by U. S. Bureau of Reclamation, Sacramento, CA	GPO - \$1.25 NTIS - PB 221 482
13030GJS12/71	<u>National Irrigation Return Flow Research and Development Program;</u> by J. P. Law, Jr., Robert S. Kerr Water Research Center, EPA, Ada, Oklahoma	GPO - 40¢ NTIS - PB 209 857

1304 - Animal Feed Lots

13040---07/68	<u>Pollution Implications of Animal Wastes - A Forward Oriented Review;</u> by Dr. Raymond C. Loehr, Cornell Univ., Ithaca, New York	NTIS - PB 204 818
13040DEM01/71	<u>Characteristics of Wastes from Southwestern Cattle Feedlots;</u> by Texas Tech. Univ., Lubbock, Texas	GPO - \$1.25 NTIS - PB 209 214
13040DKP06/71	<u>Closed System Waste Management for Livestock;</u> by Dr. P. O. Ngoddy, J. P. Harper, R. K. Collins, G. D. Wells, and F. A. Heidar, Michigan State Univ., East Lansing, Michigan	GPO - \$1.25 NTIS - PB 211 022
13040EYX11/69	<u>Agricultural Practices and Water Quality;</u> by Iowa State Univ., Ames, Iowa	NTIS - PB 199 828 (\$3.00)
13040FXG11/71	<u>Evaluation of Beef Cattle Feedlot Waste Management Alternatives;</u> by A. F. Butchbaker, J. E. Garton, G. W. A. Mahoney, and M. D. Paine, Oklahoma State University, Stillwater, Oklahoma	GPO - \$2.50 NTIS - PB 211 242

Mining Pollution Control

1401 - Mine Drainage

14010---06/70	<u>Oxygenation of Ferrous Iron;</u> by Harvard University, Cambridge, Massachusetts	GPO - \$1.75 NTIS - PB 189 233
14010DAY06/71	<u>Inorganic Sulfur Oxidation by Iron-Oxidizing Bacteria;</u> by Syracuse Univ., Syracuse, New York	GPO - \$1.25 NTIS - PB 213 006
14010DDH08/71	<u>Control of Mine Drainage from Coal Mine Mineral Wastes - Phase I - Hydrology and Related Experiments;</u> by Truax-Traer Coal Company, Pinckneyville, Illinois	GPO - \$1.25 NTIS - PB 206 194
14010DEE12/70	<u>Treatment of Acid Mine Drainage;</u> by Horizons, Inc., Cleveland, Ohio	GPO - \$1.00 NTIS - PB 197 470
14010DII05/71	<u>Rotary Precoat Filtration of Sludge from Acid Mine Drainage Neutralization;</u> by Johns-Manville Products Corp., Manville, New Jersey	GPO - \$1.25 NTIS - PB 203 190

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
14010DKN11/70	<u>Microbial Factor in Acid Mine Drainage Formation;</u> by Mellon Institute, Carnegie-Mellon Univ., Pittsburgh, Pennsylvania	GPO - 70¢ NTIS - PB 196 113
14010DLC11/69	<u>Sulfide Treatment of Acid Mine Drainage;</u> by Bituminous Coal Research, Inc., Monroeville, Pennsylvania	NTIS - PB 187 866
14010DLI02/71	<u>Silicate Treatment for Acid Mine Drainage Prevention;</u> by Tyco Laboratories, Inc., Waltham, Massachusetts	GPO - \$1.00 NTIS - PB 198 427
14010DMO03/70-A	<u>Investigative Mine Survey of a Small Watershed;</u> by Halliburton Co., Duncan, Oklahoma	GPO - \$2.00 NTIS - PB 196 110
14010DMO03/70	<u>New Mine Sealing Techniques for Water Pollution Abatement;</u> by Halliburton Co., Duncan, Oklahoma	GPO - \$1.50 NTIS - PB 196 736
14010DRB05/71	<u>Flocculation and Clarification of Mineral Suspensions;</u> by University of Minnesota, Minneapolis, Minnesota	GPO - \$1.25 NTIS - PB 206 238
14010DRZ02/71	<u>Purification of Mine Water by Freezing;</u> by Applied Science Laboratories, Inc., State College, Pennsylvania	GPO - 70¢ NTIS - PB 213 121
14010DYG08/71	<u>Acid Mine Waste Treatment Using Reverse Osmosis;</u> by Gulf Environmental Systems Company, San Diego, California	GPO - \$1.00 NTIS - PB 202 228
14010DYH12/71	<u>Neutraedesulfating Treatment Process for Acid Mine Drainage;</u> by Catalytic, Inc., Philadelphia, Pennsylvania	GPO - \$1.00 NTIS - PB 213 720
14010DYI02/71	<u>Evaluation of a New Acid Mine Drainage Treatment Process;</u> by Black, Sivalls and Bryson, Inc., Pittsburgh, Pennsylvania	GPO - \$1.50 NTIS - PB 202 571
14010DYK03/70	<u>Treatment of Acid Mine Drainage by Reverse Osmosis;</u> by Rex Chainbelt, Inc., for the Commonwealth of Pennsylvania	GPO - 55¢ NTIS - PB 195 200
14010DZM08/70	<u>Feasibility Study of Mining Coal in an Oxygen Free Atmosphere;</u> by Island Creek Coal Co., Holden, WV and Cyrus Wm. Rice Div., NUS Corp., Pittsburgh, Pennsylvania	GPO - \$1.50 NTIS - PB 197 446
14010ECC08/71	<u>The Effects of Various Gas Atmospheres on the Oxidation of Coal Mine Pyrites;</u> by Cyrus Wm. Rice Div., NUS Corporation, Pittsburgh, Pennsylvania	GPO - \$1.25 NTIS - PB 203 679
14010EFK06/72	<u>Use of Latex as a Soil Sealant to Control Acid Mine Drainage;</u> by Uniroyal, Inc., Wayne, NJ	GPO - \$1.00 NTIS - PB 213 040
14010EGJ11/69	<u>Effects of Antibacterial Agents on Mine Drainage;</u> by MSA Research Corp. and Pennsylvania Dept. of Mines and Mineral Industries	NTIS - PB 191 215

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
14010EHN04/71	<u>Detection of Abandoned Underground Coal Mines by Geophysical Methods; by HRB-Singer, Inc., State College, Pennsylvania</u>	GPO - \$1.00 NTIS - PB 211 554
14010EIZ01/70	<u>Limestone Treatment of Acid Mine Drainage; by Bituminous Coal Research, Inc., Monroeville, Pennsylvania</u>	GPO - \$1.25 NTIS - PB 195 282
14010EIZ12/71	<u>Studies of Limestone Treatment of Acid Mine Drainage - Part II; by Bituminous Coal Research, Inc., Monroeville, Pennsylvania</u>	GPO - \$1.25 NTIS - PB 208 326
14010EJE12/71	<u>Mine Spoil Potentials for Water Quality and Controlled Erosion; by College of Agriculture and Forestry, West Virginia University, Morgantown, West Virginia</u>	GPO - \$1.75 NTIS - PB 208 817
14010EJT09/71	<u>Studies on Densification of Coal Mine Drainage Sludge; by Bituminous Coal Research, Inc., Monroeville, Pennsylvania</u>	GPO - \$1.25 NTIS - PB 203 189
14010EMS09/69	<u>Bulk Transport of Waste Slurries to Inland and Ocean Disposal Sites - Vol. I;</u> " " " " - Vol. II; " " " " - Vol. III; " " " " - Summary: by Bechtel Corp., San Francisco, CA	NTIS - PB 189 757 NTIS - PB 189 758 NTIS - PB 189 759 NTIS - PB 189 756
14010ENW09/71	<u>Microbiological Treatment of Acid Mine Drainage Waters; by Continental Oil Co., Ponca City, Oklahoma</u>	GPO - \$1.00 NTIS - PB 206 231
14010ETV08/70	<u>Neutralization of High Ferric Iron Acid Mine Drainage; by Roger C. Wilmoth and Ronald D. Hill, FWQA, Cincinnati, Ohio</u>	GPO - 50¢ NTIS - PB 192 087
14010EXA03/71	<u>Pilot Scale Study of Acid Mine Drainage; by Ohio State University, Columbus, Ohio</u>	GPO - \$1.00 NTIS - PB 214 771
14010FBZ09/71	<u>Concentrated Mine Drainage Disposal Into Sewage Treatment Systems; by Environmental Research & Applications, Inc., Wilton, CT</u>	GPO - 75¢ NTIS - PB 213 042
14010FII03/71	<u>Evaluation of Pyritic Oxidation by Nuclear Methods; by Mellon Insti., Carnegie-Mellon University, Pittsburgh, Pennsylvania</u>	GPO - 50¢ NTIS - PB 198 523
14010FJX12/71	<u>Dewatering of Mine Drainage Sludge; by Coal Research Bureau, West Virginia University, Morgantown, West Virginia</u>	GPO - \$1.00 NTIS - PB 208 347
14010FKK12/70	<u>Underground Coal Mining Methods to Abate Water Pollution; by West Virginia Univ., Morgantown, West Virginia</u>	GPO - 60¢ NTIS - PB 214 697
14010FLW07/70	<u>Feasibility Study Manual - Mine Water Pollution Control Demonstrations; by FWQA, Washington, D.C.</u>	GPO - 65¢ NTIS - PB 197 594
14010FMH12/70	<u>Treatment of Acid Mine Drainage by Ozone Oxidation; by Brookhaven National Laboratories, Associated Universities, Inc., Atomic Energy Commission, Upton, New York</u>	GPO - \$1.00 NTIS - PB 198 225

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
14010FNQ02/72	<u>Electrochemical Treatment of Acid Mine Waters;</u> by Tyco Laboratories, Inc., Waltham, Massachusetts	GPO - \$1.00 NTIS - PB 208 820
14010FOA02/71	<u>Carbonate Bonding of Coal Refuse;</u> by Black, Sivalls and Bryson, Inc., Pittsburgh, PA	GPO - 60¢ NTIS - PB 198 230
14010FPR04/71	<u>Acid Mine Drainage Formation and Abatement;</u> by Ohio State University Research Foundation, Columbus, Ohio	NTIS - PB 199 835
14010FPS02/70	<u>Sulfide to Sulfate Reaction Mechanism;</u> by Ohio State University Research Foundation, Columbus, Ohio	GPO - \$1.50
14010FQR03/72	<u>Reverse Osmosis Demineralization of Acid Mine Drainage;</u> by The Ecology Division, Rex Chainbelt, Inc., Milwaukee, Wisconsin	GPO - \$1.00 NTIS - PB 211 020
14010FUI10/71	<u>Foam Separation of Acid Mine Drainage;</u> by Horizons, Inc., Cleveland, Ohio	GPO - 65¢ NTIS - PB 208 411
14010FY09/71	<u>Study of Sulfur Recovery from Coal Refuse;</u> by Black, Sivalls and Bryson, Inc., Pittsburgh, Pennsylvania	GPO - 70¢ NTIS - PB 203 488
14010FZU03/72	<u>Legal Problems of Coal Mine Reclamation;</u> by University of Maryland School of Law, Baltimore, Maryland	GPO - \$2.00 NTIS - PB 209 862
14010HBQ09/71	<u>Feasibility Study Upper Meander Creek Mine Drainage Abatement Project;</u> by Stanley Consultants, Cleveland, Ohio	GPO - 60¢ NTIS - PB 206 232

1403 - Oil Shale

14030EDB12/71	<u>Water Pollution Potential of Spent Oil Shale Residues;</u> by Colorado State Univ., Fort Collins, Colorado	GPO - \$1.25 NTIS - PB 206 808
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1405 - Phosphate Mining

14050EPU08/71	<u>Utilization of Phosphate Slime;</u> by International Minerals & Chemical Corporation, Skokie, Illinois	GPO - \$1.25 NTIS - PB 203 191
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Other Sources of Pollution Control

1501 - Recreation

15010---01/69	<u>Basic Waste Characteristics at Winter Recreation Areas;</u> by B. D. Clark, Pacific Northwest Laboratory, FWPCA, Corvallis, OR	NTIS - PB 208 437
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<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
15010---03/70	<u>Working Paper No. 68 - Evaluation of Extended Aeration Treatment at Recreation Areas; by B. D. Clark, Pacific Northwest Laboratory, FWPCA, Corvallis, Oregon</u>	NTIS - PB 208 436
<u>1502 - Watercraft Wastes</u>		
15020---06/67	<u>Houseboat Wastes: Methods for Collection and Treatment; by B. D. Clark, Pacific Northwest Water Laboratory, FWPCA, Corvallis, Oregon</u>	NTIS - PB 208 439
15020---04/68	<u>Houseboat Waste Characteristics and Treatment; by B. D. Clark, Pacific Northwest Water Laboratory, FWPCA, Corvallis, Oregon</u>	NTIS - PB 208 438
15020DGR08/70	<u>Flexible Holding Tank for Pleasurecraft Sanitary System; by Uniroyal, Inc., Wayne, New Jersey</u>	GPO - 55¢ NTIS - PB 201 700
15020DHB04/70	<u>Storage of Wastes from Watercraft and Disposal at Shore Facilities; by General Dynamics Electric Boat Div., Groton, CT</u>	GPO - \$1.00
15020DHE09/69	<u>Collection, Underwater Storage, and Disposal of Pleasurecraft Wastes; by Underwater Storage, Inc., and Silver Schwartz, Ltd., Washington, D.C.</u>	NTIS - PB 188 505
15020DHG09/71	<u>Watercraft Waste Treatment System Development and Demonstration Report; by General Electric Company, Philadelphia, PA</u>	GPO - \$1.25 NTIS - PB 208 345
15020ENN09/71	<u>Control of Pollution from Outboard Engine Exhaust: A Reconnaissance Study; by Rensselaer Polytechnic Institute, Troy, NY</u>	GPO - 50¢ NTIS - PB 206 192
<u>1503 - Construction</u>		
15030DTL05/70	<u>Urban Soil Erosion and Sediment Control; by National Association of Counties Research Foundation, Washington, D.C.</u>	GPO - \$1.00 NTIS - PB 196 111
<u>1504 - Impoundments</u>		
15040EJZ12/70	<u>Selective Withdrawal from a Stratified Reservoir; by University of California, Berkeley, California</u>	GPO - \$1.00 NTIS - PB 201 726
<u>1508 - Oil Spills</u>		
15080---03/69	<u>Chemical Treatment of Oil Slicks; by Edison Water Quality Lab., FWQA, Edison New Jersey</u>	NTIS - PB 185 947

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
15080---10/70	<u>Oil Containment Systems</u> ; by Edison Water Quality Lab., FWQA, Edison, New Jersey	NTIS - PB 206 797
15080DB003/71	<u>Conversion of Crankcase Waste Oil into Useful Products</u> ; by National Oil Recovery Corporation, Bayonne, New Jersey	GPO - \$1.00 NTIS - PB 205 207
15080DJM07/70	<u>Recovery of Oil Spills Using Vortex Assisted Airlift System</u> ; by Battelle Memorial Institute, Richland, Washington	GPO - 50¢ NTIS - PB 203 489
15080DJN01/71	<u>Gelling Crude Oils to Reduce Marine Pollution From Tanker Oil Spills</u> ; by Western Co. of North America, Richardson, Texas	GPO - \$1.25 NTIS - PB 202 239
15080DJO10/69	<u>Oil Tagging System Study - Summary</u> ; by Melpar, Inc., Arlington, Virginia	NTIS - PB 190 193
15080DJ005/70	<u>Oil Tagging System Study - Final Report</u> ; by Melpar, Inc., Arlington, Virginia	GPO - \$1.50 NTIS - PB 195 283
15080DJP10/70	<u>Oil/Water Separation System with Sea Skimmer</u> ; by The Garrett Corp., AiResearch Manufacturing Div., Los Angeles, Calif.	GPO - \$1.50 NTIS - PB 211 604
15080DJQ04/70	<u>Ultrasonic Emulsification of Oil Tanker Cargo</u> ; by Sonics International, Inc., Dallas, Texas	NTIS - PB 193 674
15080DOZ12/70	<u>Testing and Evaluation of Oil Spill Recovery Equipment</u> ; by Maine Port Authority, Portland, Maine	GPO - \$1.50 NTIS - PB 200 081
15080DXE11/70	<u>Feasibility Analysis of Incinerator Systems for Restoration of Oil Contaminated Beaches</u> ; by Envirogenics Co., Div. of Aerojet-General Corp., El Monte, California	GPO - 75¢ NTIS - PB 198 227
15080DZR11/70	<u>Santa Barbara Oil Pollution, 1969</u> ; by University of California, Santa Barbara, California	GPO - 55¢ NTIS - PB 197 670
15080EAG07/69	<u>Review of Santa Barbara Channel Oil Pollution Incident</u> ; by Pacific NW Laboratories, Battelle Memorial Institute, Richland, WA	NTIS - PB 191 712
15080EAL02/71	<u>Santa Barbara Oil Spill: Short-term Analysis of Macroplankton and Fish</u> ; by University of California, Santa Barbara, California	GPO - 70¢ NTIS - PB 212 782
15080EBZ12/70	<u>Effects of Oil Pollution on Waterfowl: A Study of Salvage Methods</u> ; by Zoological Society of San Diego, California	GPO - 50¢ NTIS - PB 198 091
15080EH005/69	<u>Oil Dispersing Chemicals</u> ; by M. Poliakoff, for the Edison Water Quality Laboratory, FWQA, Edison, New Jersey	NTIS - PB 188 207

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
15080EIL12/69	<u>Proceedings: Joint Conference on Prevention and Control of Oil Spills; sponsored by the American Petroleum Institute and the Federal Water Quality Administration</u>	NTIS - PB 194 395
15080EOS03/70	<u>Preliminary Operations Planning Manual for the Restoration of Oil-Contaminated Beaches; by URS Research Company, San Mateo, Calif.</u>	NTIS - PB 191 711
15080EOS10/70-1	<u>Evaluation of Selected Earthmoving Equipment for the Restoration of Oil-Contaminated Beaches; by URS Research Co., San Mateo, CA</u>	GPO - \$1.50 NTIS - PB 206 693
15080EPL04/70	<u>Spreading and Movement of Oil Spills; by H. G. Schwartzberg, New York University, New York, NY</u>	NTIS - PB 192 852
15080EUU10/70	<u>Vortex Separation Process for Oil Spill Recovery Systems; by American Process Equipment Corp., Panama City, Florida</u>	GPO - 60¢ NTIS - PB 201 656
15080FHS08/69	<u>Cleaning Oil-Contaminated Beaches; by Northeast Region Research & Development Program, FWQA, Edison, New Jersey</u>	NTIS - PB 189 172
15080FHT12/69	<u>Oil Sampling Techniques; by Edison Water Quality Lab., FWQA, Edison, New Jersey</u>	NTIS - PB 190 171
15080FHU10/69	<u>Biological Effects of Oil Pollution - Bibliography; by Edison Water Quality Laboratory, FWQA, Edison, New Jersey</u>	NTIS - PB 188 206
15080FTU05/71	<u>Oil Pollution Incident, Platform Charlie, Main Pass Block 41 Field, Louisiana; by Alpine Geophysical Associates, Inc., Norwood, NJ</u>	GPO - \$1.25 NTIS - PB 203 497
15080FWN07/71	<u>Recovery of Floating Oil Rotating Disk Type Skimmer; by Atlantic Research Systems Div., The Susquehanna Corp., Costa Mesa, Calif.</u>	GPO - \$1.25 NTIS - PB 205 208
15080FWO02/71	<u>Floating Oil Recovery Devices; by New Mexico State University, Las Cruces, NM</u>	GPO - \$1.00
15080FWP04/71	<u>Concept Development of a Hydraulic Skimmer System for Recovery of Floating Oil; by Battelle Memorial Institute, Richland, Washington</u>	GPO - \$1.25 NTIS - PB 203 498
15080HOL01/72	<u>A Feasibility Demonstration of an Aerial Surveillance Spill Prevention System; by R. I. Welch, A. D. Marmelstein, and P. M. Maughan, Earth Satellite Corp., Washington, D.C.</u>	GPO - \$2.00 NTIS - PB 214 400
<u>1509 - Hazardous Material Spills</u>		
15090FOZ10/70	<u>Control of Spillage of Hazardous Polluting Substances; by Battelle Memorial Institute, Pacific NW Laboratories, Richland, WA</u>	GPO - \$3.00 NTIS - PB 197 596

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
	<u>Water Quality Control</u>	

1601 - Eutrophication

16010---10/67	<u>Environmental Requirements of Blue-Green Algae (Proceedings of Symposium);</u> by Univ. of Washington, Seattle, WA and Pacific Northwest Water Lab., FWPCA, Corvallis, OR	NTIS - PB 206 538
16010---10/69	<u>Working Paper No. 66: Field Studies on Sediment - Water Algal Nutrient Interchange Processes and Water Quality of Upper Klamath and Agency Lakes;</u> by A. R. Gahler, Pacific NW Water Lab., FWPCA, Corvallis, OR	NTIS - PB 207 643
16010---10/69	<u>Plankton Community and Hydraulic Characterization Preliminary to Lake Flushing;</u> by University of Washington, Seattle, WA	NTIS - PB 192 760
16010---03/71	<u>Demonstrating the Effects of Nutrients in Bio-oxidation Pond Receiving Streams;</u> by University of Oklahoma, Norman, Oklahoma	NTIS - PB 199 269
16010DDDS03/70	<u>Dynamics of the Nitrogen Cycle in Lakes;</u> by University of Alaska, College, Alaska	NTIS - PB 203 791
16010DMG12/71	<u>Flushing of Small Shallow Lakes;</u> by C. C. Lomax, and J. F. Orsborn, Washington State University, Pullman, Washington	GPO - 50¢ NTIS - PB 213 840
16010DNY07/71	<u>Eutrophication of Surface Waters - Lake Tahoe Indian Creek Reservoir;</u> by Lake Tahoe Area Council, South Lake Tahoe, CA	GPO - \$1.25 NTIS - PB 211 462
16010DON02/72	<u>Eutrophication Factors in North Central Florida Lakes;</u> by H. D. Putnam, P. L. Brezonik and E. E. Shannon, Environmental Engineering Dept., Univ. of Florida, Gainesville, Florida	GPO - \$1.25 NTIS - PB 209 863
16010DOU06/70	<u>Pharmacological Testing of Blue-Green Algae for Constituents Having Therapeutic Value;</u> by World Life Research Institute, Colton, California	GPO - 30¢ NTIS - PB 206 476
16010DQB10/71	<u>Provisional Algal Assay Procedures;</u> by D. F. Toerien, et al., Univ. of California, Berkeley, California	NTIS - PB 206 140
16010DSW05/71	<u>Eutrophication of Surface Waters - Lake Tahoe;</u> by Lake Tahoe Area Council, South Lake Tahoe, California	GPO - \$1.25 NTIS - PB 211 460
16010DXV11/71	<u>The Carbon Dioxide System and Eutrophication;</u> by S. D. Morton, P. H. Derse, and R. C. Sernau, Warf Institute, Inc., Madison, Wisconsin	GPO - \$1.25 NTIS - PB 210 706

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
16010EHC12/71	<u>Eutrophication in Coastal Waters: Nitrogen as a Controlling Factor</u> ; by Scripps Institute of Oceanography, University of California, San Diego, La Jolla, California	GPO - \$1.25 NTIS - PB 210 710
16010EHR03/71	<u>The Chemical Investigation of Recent Lake Sediments from Wisconsin Lakes and Their Interpretation</u> ; by G. C. Bortleson, Univ. of Wisconsin, Madison, Wisconsin	GPO - \$2.25 NTIS - PB 208 965
16010EHR08/71	<u>Nutrient Sources for Algae and Their Control</u> ; by Dr. G. P. Fitzgerald, Univ. of Wisconsin Water Resources Center, Madison, Wisconsin	GPO - \$1.00 NTIS - PB 210 707
16010EHR12/71	<u>Problem Lakes in the United States</u> ; by Martha J. Ketelle and Paul D. Uttormark, Water Resources Center, University of Wisconsin, Madison, Wisconsin	GPO - \$2.00 NTIS - PB 209 864
16010EHR03/72	<u>Role of Bacteria in the Nitrogen Cycle in Lakes</u> ; by E. F. McCoy, University of Wisconsin, Madison, Wisconsin	GPO - 35¢ NTIS - PB 211 461
16010EQA10/71	<u>Dissolved and Particulate Organic Carbon in Some Colorado Waters</u> ; by E. B. Reed, Dept. of Zoology, Colorado State University, Fort Collins, Colorado	GPO - \$1.00 NTIS - PB 210 705
16010EXE12/71	<u>The Effects of Artificial Aeration on Lake Ecology</u> ; by A. W. Fast, Michigan State University, East Lansing, Michigan	GPO - \$4.25 NTIS - PB 210 704
<u>1602 - Physical - Chemical Identification of Pollutants</u>		
16020---10/67	<u>Iron-59 as a Solids Tracer in Aqueous Suspensions</u> ; by M. R. Scalf, J. L. Witherow, and C. P. Priesing, Robert S. Kerr Water Research Center, FWPCA, Ada, Oklahoma	NTIS - PB 205 827
16020---07/71	<u>Methods for Chemical Analysis of Water and Wastes, 1971</u> ; by Analytical Quality Control Lab., EPA, Cincinnati, Ohio	GPO - \$3.00 NTIS - PB 211 968
16020DHV07/70	<u>Aquatic Plant Chemistry. Its Application to Water Pollution Control</u> ; by R.T. Lalonde, State Univ. College of Forestry at Syracuse Univeristy, Syracuse, New York	NTIS - PB 192 810
16020DKW09/70	<u>Chemical Characteristics of Organic Color in Water</u> ; by University of Washington, Seattle, Washington	NTIS - PB 199 707
16020EWC04/71	<u>Catalog of Pesticide NMR Spectra</u> ; by Southeast Water Lab., EPA, Athens, Georgia	GPO - \$1.50 NTIS - PB 206 144
16020FEN03/71	<u>Characterization and Separation of Secondary Effluent Components by Molecular Weight</u> ; by Arthur D. Little, Inc., Cambridge, Mass.	GPO - 55¢ NTIS - PB 206 193

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
16020FQT12/70	<u>Fluid Product Pipeline Leak Detection from Airborne Platforms; by Resources Technology Corporation, Houston, Texas</u>	GPO - \$1.00
16020FSO06/71	<u>Design and Operation of an Information Center on Analytical Methodology; by Battelle Memorial Institute, Columbus, OH</u>	GPO - \$1.25 NTIS - PB 204 820
16020GAG02/71	<u>Sampling of Glacial Snow for Pesticide Analysis; by T. R. Stengle, University of Mass., Amherst, Mass., J. J. Lichtenberg, Analytical Quality Control Lab., EPA, Cincinnati, Ohio and C. S. Houston, Univ. of Vermont, Burlington, Vermont</u>	GPO - 35¢ NTIS - PB 212 727
16020GDQ10/71	<u>A Microbiological Survey in Lake Erie Near Cleveland, Ohio; by R. P. Collins, Univ. of Connecticut, Storrs, Connecticut</u>	GPO - 50¢ NTIS - PB 210 324
16020GFR07/71	<u>Interaction of Nitrilotriacetic Acid With Suspended and Bottom Material; by National Bureau of Standards, Washington, D.C.</u>	GPO - 45¢
16020GLY05/71	<u>Monitoring Mercury Vapor Near Pollution Sites; by Environmental Measurements, Inc., San Francisco, California</u>	GPO - 70¢ NTIS - PB 212 370
<u>1603 - Biological Identification of Pollutants</u>		
16030DNL01/72	<u>Aquatic and Wetland Plants of Southwestern United States; by Dr. Donovan Corral, Washington, D.C. (formerly with Texas Research Foundation)</u>	GPO - \$7.75 NTIS - PB 214 811
16030DQH11/70	<u>Mayfly Distribution as a Water Quality Index; by Winona State College, Winona, MN</u>	GPO - 50¢ NTIS - PB 198 223
<u>1604 - Sources of Pollutants</u>		
16040DGH08/71	<u>Characterization of Taste and Odors in Water Supplies; by Ralph P. Collins, Univ. of Connecticut, Storrs, Connecticut</u>	GPO - 35¢ NTIS - PB 211 025
16040ELO06/70	<u>Investigation of Means for Controlled Self-Destruction of Pesticides; by Aerojet-General Corp., El Monte, Calif.</u>	GPO - \$1.25 NTIS - PB 198 224
<u>1605 - Fate of Pollutants in Fresh Surface Waters</u>		
16050---04/67	<u>The Components of Oxygenation of Flowing Streams; by F. S. Stay, Jr., W. R. Duffer, B. L. DePrater, and J. W. Keeley, Robert S. Kerr Water Research Center, FWPCA, Ada, Oklahoma</u>	NTIS - PB 205 826

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
16050DJK08/70	<u>Dynamic Model Study of Lake Erie:</u> <u>Part I: Similitude Criteria and Experimental Set-up;</u> <u>Part II: Analytical and Experimental Results;</u> by Ralph R. Rumer, Jr., State University of New York at Buffalo	NTIS - PB 195 544 NTIS - PB 195 545
16050DOW10/71	<u>Multidirectional Turbulence Probe Development - Phase I: Unidirectional Turbulence Sensor Development;</u> by Battelle Columbus Laboratories, Columbus, Ohio	GPO - 65¢ NTIS - PB 211 280
16050DXN07/70	<u>Development of Immobilized Enzyme Systems for Enhancement of Biological Waste Treatment Processes;</u> by Grumman Aerospace Corp., Bethpage, New York	GPO - 70¢ NTIS - PB 203 598
16050EMF06/71	<u>A Quick Biochemical Oxygen Demand Test;</u> by University of California, Davis, Calif.	GPO - 60¢ NTIS - PB 210 753
16050EQS12/71	<u>Enteric Bacterial Degradation of Stream Detritus;</u> by Dr. C. W. Hendricks, Univ. of Georgia, Athens, Georgia	GPO - \$1.00 NTIS - PB 213 120
16050ERS08/71	<u>Deposition of Fine Sediments in Turbulent Flows;</u> by E. Partheniades and A. J. Mehta, Dept. of Coastal and Oceanographic Engr., Univ. of Florida, Gainesville, FL	GPO - 50¢ NTIS - PB 213 043
16050EYT06/71	<u>Pesticide Inputs and Levels Minnesota Waters - Lake Superior Basin;</u> by Minnesota Pollution Control Agency, Minneapolis, MN	GPO - \$1.00 NTIS - PB 210 708
16050FGS07/70	<u>The Interrelation of Carbon and Phosphorus in Regulating Heterotrophic and Autotrophic Populations in Aquatic Ecosystems;</u> by P. Kerr, et al., Southeast Water Lab., FWQA, Athens, Georgia	GPO - 60¢ NTIS - PB 195 195
16050FOR01/72	<u>Symposium on Direct Tracer Measurement of the Reaeration Capacity of Streams and Estuaries;</u> sponsored by Georgia Institute of Technology, Atlanta, Georgia and EPA	GPO - \$1.00 NTIS - PB 218 478 (\$3.00)

1606 - Fate of Pollutants in Ground Water

16060---03/67	<u>Moisture Movement in a Horizontal Soil Column Under the Influence of an Applied Pressure;</u> by Wm. W-G Yeh, Stanford Univ., Stanford, California	NTIS - PB 205 443
16060---06/70	<u>Determination of Pollution Potential of the Ogallala Aquifer by Salt Water Injection;</u> by Robert S. Kerr Water Research Center, FWQA, Ada, Oklahoma	NTIS - PB 202 227
16060DC010/70	<u>Potential Pollution of the Ogallala by Recharging Playa Lake Water - Pesticides;</u> by D. Wells, E. Huddleston, and R. Rekers, Texas Tech University, Lubbock, Texas	GPO - 40¢ NTIS - PB 208 813

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
16060DDZ07/71	<u>Study of Reutilization of Wastewater Recycled Through Groundwater, Vol. I:</u> by D. F. Boen, J. H. Bunts, Jr., and R. J. Currie, Eastern Municipal Water District, Hemet, California	GPO - \$1.50 NTIS - PB 209 859
16060DDZ07/71	<u>Study of Reutilization of Wastewater Recycled Through Groundwater, Vol. II:</u> by D. F. Boen, J. H. Bunts, Jr., and R. J. Currie, Eastern Municipal Water District, Hemet, California	GPO - \$1.25
16060DLL09/70	<u>Dispersion in Heterogeneous Nonuniform Anisotropic Porous Media:</u> by Purdue Univ., Lafayette, Indiana	GPO - \$1.00 NTIS - PB 200 258
16060DMP03/71	<u>Interaction of Herbicides and Soil Micro-organisms:</u> by Boyce Thompson Institute for Plant Research, Inc., Yonkers, New York	GPO - 75¢ NTIS - PB 211 566
16060DOE04/72	<u>Nitrate in the Unsaturated Zone Under Agricultural Lands:</u> by P. F. Pratt, Univ. of California, Riverside, California	GPO - 55¢ NTIS - PB 211 166
16060DRV03/72	<u>Renovating Secondary Sewage by Ground Water Recharge With Infiltration Basins:</u> by H. Bouwer, R. C. Rice, and E. D. Escarcega, U. S. Water Conservation Lab., Dept. of Agriculture, Phoenix, AZ, and M. S. Riggs, Salt River Project, Phoenix, Arizona	GPO - \$1.00 NTIS - PB 211 164
16060EGS01/71	<u>Infiltration Rates and Groundwater Quality Beneath Cattle Feedlots, Texas High Plains:</u> by Texas Tech. Univ., Lubbock, Texas	GPO - 65¢ NTIS - PB 203 681
16060ELJ03/72	<u>Density Induced Mixing in Confined Aquifers:</u> by L. W. Gelhar, J. L. Wilson, J. S. Miller, and J. M. Hamrick, Ralph M. Parsons Lab. for Water Resources and Hydrodynamics, Massachusetts Institute of Technology, Cambridge, MA	GPO - \$1.25 NTIS - PB 211 298
16060ERU12/71	<u>Ground Water Pollution in Arizona, California, Nevada, and Utah:</u> by D. K. Fuhriman and J. R. Barton; Fuhriman, Barton and Associates, Provo, UT	GPO - \$2.00 NTIS - PB 211 145
16060GHR11/71	<u>Investigations Concerning Probable Impact of Nitrilotriacetic Acid on Ground Water:</u> by W. J. Dunlap, R. L. Cosby, J. F. McNabb, B. E. Bledsoe, and M. R. Scalf, Robert S. Kerr Water Research Center, EPA, Ada, OK	GPO - 60¢ NTIS - PB 208 433
16060GRB08/71	<u>The National Ground Water Quality Symposium:</u> by The National Water Well Association, Columbus, Ohio, and EPA	GPO - \$1.75 NTIS - PB 214 614
16060HIJ02/72	<u>Evaluation of Salt Water Disposal Into Potential Ground-Water Resources:</u> by F. A. Norris, Oklahoma Corp. Commission, Oklahoma City, OK	GPO - 35¢ NTIS - PB 210 852

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
<u>1607 - Fate of Pollutants in Marine Waters</u>		
16070---10/66	<u>Environmental Factors in Coastal and Estuarine Waters, Bibliographic Series, Vol. I, Coast of Oregon; by G. R. Ditsworth, Pacific Northwest Water Lab., FWPCA, Corvallis, OR</u>	NTIS - PB 202 878
16070---09/67	<u>Index to Research - Coastal and Estuarine Waters in the United States; by G. R. Ditsworth, Pacific Northwest Water Lab., FWPCA, Corvallis, OR</u>	NTIS - PB 206 543
16070---08/68	<u>Environmental Factors in Coastal and Estuarine Waters, Bibliographic Series, Vol. II, Coast of Washington; by G. R. Ditsworth, Pacific Northwest Water Lab., FWPCA, Corvallis, OR</u>	NTIS - PB 202 879
16070---12/69	<u>Working Paper No. 64: Disposal of Solid Aluminum Process Wastes in the Ocean; by D. J. Baumgartner, et al., Pacific Northwest Water Lab., FWPCA, Corvallis, OR</u>	NTIS - PB 210 110
16070---03/70	<u>Working Paper No. 70: Salinity Runoff and Wind Measurements, Yaquina Estuary, Oregon; by R. J. Callaway, et al., Pacific Northwest Water Lab., FWPCA, Corvallis, OR</u>	NTIS - PB 210 112 (\$4.50)
16070---04/70	<u>Working Paper No. 71: Design and Construction of a Saltwater Environment Simulator; by W. A. DeBen, Pacific Northwest Water Lab., FWQA, Corvallis, OR</u>	NTIS - PB 210 111 (\$4.00)
16070---07/70	<u>Working Paper No. 78: Trace Materials in Wastes Disposal to Coastal Waters: Fates, Mechanisms, and Ecological Guidance and Control; by Milton H. Feldman, Pacific Northwest Water Lab., FWQA, Corvallis, OR</u>	NTIS - PB 202 346
16070---09/70	<u>Working Paper No. 76: Summary of the Oceanography and Surface Wind Structure of the Pacific Subarctic Region in Relation to Waste Releases at Sea; by R. J. Callaway, Pacific Northwest Water Lab., FWQA, Corvallis, OR</u>	NTIS - PB 204 739
16070---10/70	<u>Working Paper No. 77: The 50-Mile Ballast-Oil Dumping Prohibited Zone Off Alaska, Reconsidered in the Light of Available Data Gleaned from Significant Incidents; by M. H. Feldman, Pacific Northwest Water Lab., FWQA, Corvallis, OR</u>	NTIS - PB 204 740
16070DBH11/69	<u>Mathematical Model of the Columbia River from the Pacific Ocean to Bonneville Dam, Part I; by R. J. Callaway, et al., Pacific Northwest Water Lab., EPA, Corvallis, OR</u>	NTIS - PB 202 422

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
16070DBH04/70	<u>Ocean Outfall Design: Part I - Literature Review and Theoretical Development; by D. J. Baumgartner, D. S. Trent, Pacific Northwest Water Lab., FWQA, Corvallis, OR</u>	NTIS - PB 203 749
16070DBH04/71	<u>Mathematical Model of the Columbia River from the Pacific Ocean to Bonneville Dam, Part II; by R. J. Callaway, et al., Pacific Northwest Water Lab., EPA, Corvallis, OR</u>	NTIS - PB 202 423
16070DCD09/70	<u>The Oxygen Uptake Demand of Resuspended Bottom Sediments; by Seattle University, Seattle, WA</u>	GPO - 50¢
16070DUF11/70	<u>Waste Management Concepts for the Coastal Zone; by National Academy of Science - National Academy of Engineering, Washington, D.C.</u>	NTIS - PB 195 861
16070DZV02/71	<u>Estuarine Modeling: An Assessment; edited by G. H. Ward, Jr., Tracor, Inc., Austin, TX</u>	GPO - \$4.50 NTIS - PB 206 807
16070EFG12/71	<u>Limitations and Effects of Waste Disposal on an Ocean Shelf; by Florida Ocean Sciences Institute, Deerfield Beach, FL</u>	GPO - \$2.25 NTIS - PB 210 862
16070ENS06/71	<u>Airphoto Analysis of Ocean Outfall Dispersion; by Oregon State University, Corvallis, OR</u>	GPO - \$2.25 NTIS - PB 210 406
16070EOK07/71	<u>Oceanography of the Nearshore Coastal Waters of the Pacific Northwest Relating to Possible Pollution, Vol. I; by Oregon State University, Corvallis, OR</u>	GPO - \$5.25 NTIS - PB 211 275
16070EOK07/71	<u>Oceanography of the Nearshore Coastal Waters of the Pacific Northwest Relating to Possible Pollution, Vol. II; by Oregon State University, Corvallis, OR</u>	GPO - \$6.00 NTIS - PB 211 276
16070FGY07/71	<u>The Barged Ocean Disposal of Wastes: A Review of Current Practice and Methods of Evaluation; by B. D. Clark, W. F. Rittall, D. J. Baumgartner, et al., Pacific Northwest Water Lab., EPA, Corvallis, OR</u>	NTIS - PB 204 868
16070GHV05/71	<u>Working Paper No. 80: User's Guide and Documentation for Outfall Plume Model; by D. J. Baumgartner, et al., Pacific Northwest Water Lab., EPA, Corvallis, OR</u>	NTIS - PB 204 577
<u>1608 - Water Quality Control</u>		
16080---00/68	<u>Pilot Study of Dynamics of Reservoir Destratification; by L. E. Leach, W. R. Duffer, and C. C. Harlin, Jr., Robert S. Kerr Water Research Center, FWPCA, Ada, OK</u>	NTIS - PB 205 825

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
16080---01/68	<u>Agricultural Utilization of Sewage Effluent and Sludge: An Annotated Bibliography;</u> by J. P. Law, Robert S. Kerr Water Research Center, FWPCA, Ada, OK	GPO - 45¢ NTIS - PB 205 028
16080---06/69	<u>Hydraulic and Mixing Characteristics of Suction Manifolds;</u> by Univ. of Washington, Seattle, WA	NTIS - PB 190 800
16080---10/69	<u>Nutrient Removal from Enriched Waste Effluent by the Hydroponic Culture of Cool Season Grasses;</u> by James P. Law, Robert S. Kerr Water Research Center, Ada, OK	GPO - 50¢ NTIS - PB 196 112
16080---11/69	<u>Nutrient Removal from Cannery Wastes by Spray Irrigation of Grassland;</u> by J. P. Law, et al., Robert S. Kerr Water Research Center, Ada, OK	NTIS - PB 189 774
16080---10/70	<u>Induced Hypolimnion Aeration for Water Quality Improvement of Power Releases;</u> by L. E. Leach, et al., Robert S. Kerr Water Research Center, EPA, Ada, OK	GPO - 50¢ NTIS - PB 198 226
16080---11/70	<u>Induced Aeration of Small Mountain Lakes;</u> by Robert S. Kerr Water Research Center, EPA, Ada, Oklahoma	GPO - 65¢
16080DF001/71	<u>Water Quality Control Through Flow Augmentation;</u> by Heidelberg College, Tiffin, OH	GPO - \$1.50 NTIS - PB 206 473
16080DO007/70	<u>Optimum Mechanical Aeration Systems for Rivers and Ponds;</u> by Littleton Research and Engineering Corp., Littleton, MA	GPO - \$1.25 NTIS - PB 206 218
16080DRX10/69	<u>Stratified Reservoir Currents;</u> by Oregon State University, Corvallis, OR	NTIS - PB 193 026
16080DUP12/70	<u>Oxygen Regeneration of Polluted Rivers: The Delaware River;</u> by Rutgers Univ., New Brunswick, NJ	GPO - \$1.00 NTIS - PB 201 649
16080DVF12/70	<u>Development of Phosphate-free Home Laundry Detergents;</u> by IIT Research Institute, Chicago, IL	GPO - \$1.00 NTIS - PB 198 222
16080DVF02/72	<u>Technical Evaluation of Phosphate-free Home Laundry Detergents;</u> by H. G. Reilich, IIT Research Institute, Chicago, IL	GPO - \$1.25 NTIS - PB 213 410
16080DWP11/70	<u>Induced Air Mixing of Large Bodies of Polluted Water;</u> by University of Maine, Orono, ME	GPO - 60¢ NTIS - PB 198 220
16080FSN10/71	<u>Engineering Methodology for River and Stream Reaeration;</u> by JBF Scientific Corp., Burlington, MA	GPO - \$1.25 NTIS - PB 208 818
16080FYA03/71	<u>Oxygen Regeneration of Polluted Rivers: The Passaic River;</u> by Rutgers University, New Brunswick, NJ	GPO - 65¢ NTIS - PB 206 190

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
16080GGH08/71	<u>Changes in Water Quality Resulting From Impoundment;</u> by W. R. Duffer and C. C. Harlin, Jr., Robert S. Kerr Water Research Center, EPA, Ada, OK	GPO - \$1.25 NTIS - PB 211 159
16080GGP07/71	<u>Effects of Feedlot Runoff on Water Quality of Impoundments;</u> by W. R. Duffer, R. D. Kreis, and C. C. Harling, Jr., Robert S. Kerr Water Research Center, EPA, Ada, OK	GPO - 65¢ NTIS - PB 211 124
16080GPF03/71	<u>Corrosion Potential of NTA in Detergent Formulations;</u> by Battelle Columbus Lab., Columbus, OH	GPO - \$1.00 NTIS - PB 212 393
16080GWF02/72	<u>Soil Systems for Municipal Effluents -- A Workshop and Selected References;</u> by R. H. Ramsey, C. R. Wetherill and H. C. Duffer, East Central State College, Ada, OK	GPO - 65¢
16080HTD03/72	<u>Mercury Pollution Control in Stream and Lake Sediments;</u> by J. D. Suggs, D. H. Peterson, and J. B. Middlebrook, Jr., Advanced Technology Center, Inc., Dallas, TX	GPO - 50¢ NTIS - PB 211 250
16080HTZ05/72	<u>Polymer Film Overlay System for Mercury Contaminated Sludge - Phase I;</u> by M. M. Epstein and M. U. Widman, Battelle Columbus Lab., Columbus, OH	GPO - \$1.00 NTIS - PB 214 688
16080HUB04/72	<u>Waste Wool as a Scavenger for Mercury Pollution in Waters;</u> by J. P. Tratnyek, Arthur D. Little, Inc., Cambridge, MA	GPO - 60¢ NTIS - PB 211 128
16080HVA01/72	<u>Sand and Gravel Overlay for Control of Mercury in Sediments;</u> by L. H. Bongers and M. N. Khattak, Research Institute for Advanced Studies, Martin Marietta Corp., Baltimore, MD	GPO - 55¢ NTIS - PB 211 165

1609 - Water Resources Data

16090---07/69	<u>Use of Mathematical Models in Water Quality Control Studies;</u> by Northeastern University, Boston, MA	NTIS - PB 189 494
16090DBJ08/70	<u>Design of Water Quality Surveillance Systems;</u> by Cyrus Wm. Rice Div., NUS Corp., Pittsburgh, PA	GPO - \$3.00 NTIS - PB 195 675
16090DBX04/70	<u>Evaluation of Dispersed Pollutational Loads from Urban Areas;</u> by University of Oklahoma, Norman, OK	NTIS - PB 203 746
16090DCL05/70	<u>Delaware Estuary and Bay Water Quality Sampling and Mathematical Model Project;</u> by the Delaware River Basin Commission, Trenton, NJ	NTIS - PB 193 799

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
16090DEA12/69	<u>Complementary-Competitive Aspects of Water Storage</u> ; by Sacramento State College Foundation, Sacramento, CA	NTIS - PB 190 197
16090DLU11/69	<u>Economic Evaluation of Water Quality</u> ; by University of California, Berkeley, CA	NTIS - PB 189 169
16090DQZ06/71	<u>Research Supplement to Journal Water Pollution Control Federation</u> ; by the Water Pollution Control Federation, Washington, D.C.	GPO - 45¢ NTIS - PB 213 041
16090DRM09/69	<u>A Model for Quantifying Flow Augmentation Benefits</u> ; by University of Florida, Gainesville, FL	NTIS - PB 188 208
16090DUH02/71	<u>Stochastic Modeling for Water Quality Management</u> ; by Stochastics, Inc., Blacksburg, VA	GPO - \$3.00 NTIS - PB 203 427
16090DVU07/70	<u>Computer Simulation of the Hydrologic-Salinity Flow System Within the Upper Colorado River Basin</u> ; by Utah State Univ., Logan, UT	NTIS - PB 203 674
16090DWR06/70	<u>Development of a Hydro-Quality Simulation Model</u> ; by Utah Research Lab., Utah State University, Logan, UT	NTIS - PB 194 065
16090FPW03/70	<u>Legal Aspects of Water Storage for Flow Augmentation</u> ; by Virginia Polytechnic Institute, Blacksburg, VA	GPO - \$1.75 NTIS - PB 195 170

1610 - Cold Climate Research

16100---06/70	<u>Biological Waste Treatment in the Far North</u> ; by FWQA, Alaska Water Lab., College, AK	NTIS - PB 195 673
16100---10/70	<u>The Chena River - A Study of a Subarctic Stream</u> ; by Alaska Water Lab., FWQA, College, AK	NTIS - PB 197 857
16100EXH11/71	<u>International Symposium on Water Pollution Control in Cold Climates</u> ; by Univ. of Alaska, College, AK	GPO - \$2.50 NTIS - PB 211 316
16100GOI09/71	<u>Environmental Guidelines for Road Construction in Alaska</u> ; by F. B. Lotspeich, Alaska Water Lab., EPA, College, AK	NTIS - PB 206 155

1611 - Water Resources Planning

16110DAJ12/70	<u>Benefits of Water Quality Enhancement</u> ; by Syracuse University, Syracuse, NY	GPO - \$1.75 NTIS - PB 207 358
16110DTF02/71	<u>The Economics of Water Supply and Quality</u> ; by Harvard University, Cambridge, MA	GPO - 50¢ NTIS - PB 202 698

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
16110EAX02/72	<u>Basin Management for Water Reuse</u> ; by Alamo Area Council of Governments, San Anotonio, TX	GPO - \$2.25 NTIS - PB 209 932
16110EGQ04/72	<u>Extensions of Mathematical Programming for Regional Water Quality Management</u> ; by Univ. of California, Los Angeles, CA	GPO - \$1.00 NTIS - PB 212 008
16110EXW06/71	<u>Factors Affecting Pollution Referenda</u> ; by ABT Associates, Inc., Cambridge, MA	GPO - \$2.50 NTIS - PB 207 350
16110FI001/72	<u>Use of General Equilibrium in Regional Water Resource Planning</u> ; by Georgetown University, Washington, D.C.	GPO - \$1.50 NTIS - PB 209 893
16110FPP11/71	<u>Interstate Planning for Regional Water Supply and Pollution Control</u> ; by Delaware River Basin Commission, Trenton, NJ	GPO - \$3.00
16110FPX08/70	<u>Mathematical Programming for Regional Water Quality Management</u> ; by Univ. of California Los Angeles, CA	GPO - \$1.25 NTIS - PB 195 830
16110FRU12/71-1	<u>The River Basin Model: An Overview</u>	GPO - \$1.00
16110FRU12/71-2	<u>The River Basin Model: Director's Guide</u>	NTIS - PB 210 409
16110FRU12/71-3	<u>The River Basin Model: Economic Sector</u>	GPO - \$1.75
16110FRU12/71-4	<u>The River Basin Model: Social Sector</u>	NTIS - PB 210 855
16110FRU12/71-5	<u>The River Basin Model: Chairman and Council</u>	GPO - \$1.25
16110FRU12/71-6	<u>The River Basin Model: Assessment Department</u>	NTIS - PB 210 861
16110FRU12/71-7	<u>The River Basin Model: School Department</u>	GPO - \$1.25
16110FRU12/71-8	<u>The River Basin Model: Municipal Services Department</u>	NTIS - PB 210 860
16110FRU12/71-9	<u>The River Basin Model: Utility Department</u>	GPO - 70¢
16110FRU12/71-10	<u>The River Basin Model: Highway Department</u>	NTIS - PB 212 007
16110FRU12/71-11	<u>The River Basin Model: Planning and Zoning Department</u>	GPO - 75¢
16110FRU12/71-12	<u>The River Basin Model: Computer Output</u>	NTIS - PB 211 143
16110FRU12/71-13	<u>The River Basin Model: The Social Science Laboratory</u>	GPO - \$1.00
16110FRU12/71-14	<u>The River Basin Model: The Transportation Sector</u> ; by Envirometrics, Inc., Washington, D.C.	NTIS - PB 210 859
16110FZE09/70	<u>Use of New Analytical Methods in Water Resource Development</u> ; by University of Texas at Austin	GPO - \$1.00
16110GNT02/72	<u>Development of a State Effluent Charge System</u> ; by Vermont Dept. of Water Resources, Agency of Environmental Conservation, Montpelier, VT	NTIS - PB 210 410
		NTIS - PB 210 411
		GPO - 75¢
		NTIS - PB 211 146
		GPO - \$2.00
		NTIS - PB 210 703
		GPO - \$2.00
		NTIS - PB 213 657
		GPO - \$1.25
		NTIS - PB 211 147
		NTIS - PB 195 829
		GPO - \$1.75
		NTIS - PB 210 711

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
<u>1613 - Thermal Pollution</u>		
16130---09/68	<u>Industrial Waste Guide on Thermal Pollution</u> ; by Pacific Northwest Water Lab., FWPCA, Corvallis, OR	NTIS - PB 197 262
16130---12/68	<u>Experimental Study of Warm Water Flow Into Impoundments - Part I;</u> <u>Part II;</u> <u>Part III;</u> by St. Anthony Falls Hydraulic Lab., University of Minnesota, Minneapolis, MN	NTIS - PB 188 512 NTIS - PB 188 513 NTIS - PB 188 514
16130---09/69	<u>Working Paper No. 67: Economic Aspects of Thermal Pollution Control in the Electric Power Industry</u> ; by A. G. Christianson and B. A. Tichenor, Pacific Northwest Water Lab., FWPCA, Corvallis, OR	NTIS - PB 208 434
16130---04/70	<u>Guidelines: Biological Surveys at Proposed Heat Discharge Sites</u> ; by R. R. Garton, Pacific Northwest Water Lab., FWQA, Corvallis, Oregon and R. D. Harkins, Robert S. Kerr Water Research Center, FWQA, Ada, OK	GPO - \$1.00 NTIS - PB 206 815
16130---10/70	<u>Thermoelectric Generators Powered by Thermal Waste From Electric Power Plants</u> ; by M. A. Shirazi, Pacific Northwest Water Lab., FWQA, Corvallis, OR	GPO - 45¢ NTIS - PB 207 870
16130DFX05/70	<u>An Engineering-Economic Study of Cooling Pond Performance</u> ; by Littleton Research and Engr., Littleton, MA	GPO - \$1.50 NTIS - PB 206 817
16130DHS07/69	<u>A Survey of Alternate Methods for Cooling Condenser Discharge Water - Large Scale Heat Rejection Equipment</u> ; by Dynatech R/D Company, Cambridge, MA	GPO - \$1.25 NTIS - PB 208 036
16130DHS08/70	<u>A Survey of Alternate Methods for Cooling Condenser Discharge Water - Operating Characteristics and Design Criteria</u> ; by Dynatech R/D Company, Cambridge, MA	GPO - \$1.00 NTIS - PB 208 035
16130DHS11/70	<u>A Survey of Alternate Methods for Cooling Condenser Discharge Water - Total Community Considerations in the Utilization of Rejected Heat</u> ; by Dynatech R/D Company, Cambridge, MA	GPO - 65¢ NTIS - PB 206 816
16130DHS01/71	<u>A Survey of Alternate Methods for Cooling Condenser Discharge Water - System Selection, Design and Optimization</u> ; by Dynatech R/D Company, Cambridge, MA	GPO - \$1.00 NTIS - PB 212 392
16130DJH01/71	<u>A Predictive Model for Thermal Stratification and Water Quality in Reservoirs</u> ; by Massachusetts Institute of Technology, Cambridge, MA	GPO - \$2.00 NTIS - PB 211 621

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
16130DJH04/71	<u>Temperature Prediction in Stratified Water: Mathematical Model - User's Manual</u> ; by Ralph M. Parsons Lab., Massachusetts Institute of Technology, Cambridge, MA	GPO - \$1.25 NTIS - PB 210 701
16130DJU02/71	<u>An Analytical and Experimental Investigation of Surface Discharge of Heated Water</u> ; by Massachusetts Institute of Technology, Cambridge, MA	GPO - \$1.75 NTIS - PB 210 134
16130DNE03/71	<u>Advanced Nonthermally Polluting Gas Turbines in Utility Application</u> ; by United Aircraft Corp., East Hartford, CT	GPO - \$2.00 NTIS - PB 211 283
16130DNH01/71	<u>Potential Environmental Modifications Produced by Large Evaporative Cooling Towers</u> ; by E G & G, Inc., Boulder, CO	GPO - 75¢ NTIS - PB 210 702
16130DPU02/71	<u>Research on the Physical Aspects of Thermal Pollution</u> ; by Cornell Aeronautical Lab., Inc., Buffalo, NY	GPO - \$1.75 NTIS - PB 210 124
16130DWO10/70	<u>Mathematical Models for the Prediction of Temperature Distributions Resulting from the Discharge of Heated Water into Large Bodies of Water</u> ; by Tetra Tech. Inc., Pasadena, CA	GPO - \$1.75 NTIS - PB 208 034
16130EES11/70	<u>Research on Dry-Type Cooling Towers for Thermal Electric Generation, Part I</u> ; <u>Part II</u> ; by R. W. Beck & Associates, Denver, CO	GPO - \$2.50 NTIS - PB 206 954 GPO - \$1.00 NTIS - PB 210 778
16130ENT12/69	<u>Thermal Pollution: Status of the Art</u> ; by Vanderbilt University, Nashville, TN	(Vanderbilt - \$4.00)
16130EXT12/69	<u>Mathematical Models for the Prediction of Thermal Energy Change in Impoundments</u> ; by Water Resources Engineers Inc., Walnut Creek, CA	GPO - \$1.50 NTIS - PB 210 126
16130FDQ03/71	<u>Effect of Geographical Location on Cooling Pond Requirements and Performance</u> ; by Vanderbilt University, Nashville, TN	GPO - \$2.00 NTIS - PB 208 031
16130FDQ03/71	<u>Heated Surface Jet Discharged into a Flowing Ambient Stream</u> ; by L. H. Motz and B. A. Benedict, Vanderbilt University, Nashville, TN	GPO - \$1.75 NTIS - PB 211 284
16130FHJ09/70	<u>Beneficial Uses of Waste Heat - An Evaluation</u> ; by Northwest Water Research Lab., FWQA, Corvallis, OR	NTIS - PB 201 724
16130FSU12/71	<u>Surface Discharge of Heated Water</u> ; by H. Stefan, N. Hayakawa, and F. R. Schiebe, St. Anthony Falls Hydraulic Lab., Univ. of Minnesota, Minneapolis, MN	GPO - \$2.00 NTIS - PB 211 285

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
16130GFI06/71	Potential Environmental Effects of an Offshore Submerged Nuclear Power Plant, Vol. II Vol. III by General Dynamics, Electric Boat Div., Groton, CT	GPO - \$2.50 NTIS - PB 208 281 GPO - \$2.25 NTIS - PB 208 282
16130GKF12/70	A Method for Predicting the Performance of Natural Draft Cooling Towers; by Pacific Northwest Water Lab., EPA, Corvallis, OR	GPO - 70¢ NTIS - PB 210 125
16130GNK10/71	Development and Demonstration of Low-Level Drift Instrumentation; by Environmental Systems Corp., Knoxville, TN	GPO - 65¢ NTIS - PB 210 759

Waste Treatment and Ultimate Disposal

1701 - Dissolved Nutrient Removal

17010---10/68	Dilute Solution Reactions of the Nitrate Ion as Applied to Water Reclamation; by Rocketdyne, Div. of North American Rockwell Corporation, Canoga Park, CA	NTIS - PB 190 195
17010---01/70	Treatment Techniques for Removing Phosphorus from Municipal Wastewaters; by J. J. Convery, AWTR Lab., FWQA, Cinn., OH	GPO - 50¢ NTIS - PB 199 072
17010---02/70	An Electrochemical Method for Removal of Phosphates from Wastewater; by Dynatech Corp., Cambridge, MA	GPO - 50¢
17010---10/70	Nitrogen Removal from Wastewaters; by Advanced Waste Treatment Lab., FWQA, Cincinnati, OH	NTIS - PB 212 280
17010DBL12/70	Colloid Flotation and Adsorbing Colloid Flotation; by Northeastern University, Boston, MA	NTIS - PB 205 001
17010DDQ11/71	Mechanisms of Biological Luxury Phosphate Uptake; by Dept. of Microbiology and Medical Technology, Univ. of Arizona, Tucson, AZ	GPO - \$1.00 NTIS - PB 201 465
17010DFV09/70	Phosphate Study at the Baltimore Back River Wastewater Treatment Plant; by City of Baltimore, MD	GPO - \$1.50 NTIS - PB 199 363
17010DHK08/69	Chemical Exfoliated Vermiculite for Removal of Phosphate from Wastewaters; by J. Block, W. R. Grace & Co., Clarksville, MD	GPO - 50¢ NTIS - PB 196 740

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
17010DHT09/70	<u>Methanol Requirement and Temperature Effects in Wastewater Denitrification;</u> by Gulf South Research Institute, New Iberia, LA	GPO - 50¢ NTIS - PB 198 221
17010DJA11/70	<u>Investigation of a New Phosphate Removal Process;</u> by Envirogenics Co., El Monte, CA	GPO - \$1.00 NTIS - PB 203 069
17010DRD07/70	<u>A Study of Nitrification & Denitrification;</u> by Aerojet-General Corp., El Monte, CA	GPO - \$1.00 NTIS - PB 197 658
17010DXD08/70	<u>Phosphorus Removal by an Activated Sludge Plant;</u> by Sewerage Commission of the City of Milwaukee, WI	GPO - \$1.00
17010DYB02/71	<u>Phosphorus Removal and Disposal from Municipal Wastewater;</u> by Univ. of Texas Medical Branch, Galveston, TX	GPO - \$1.25
17010EAP10/70	<u>Feasibility of Liquid Ion Exchange for Extracting Phosphate from Wastewater;</u> by General Mills Chemicals Inc., Minneapolis, MN	GPO - 50¢ NTIS - PB 205 360
17010ECZ03/69	<u>Ammonia Removal from Agricultural Runoff and Secondary Effluents by Selected Ion Exchange;</u> by Battelle Memorial Institute, Richland, WA	NTIS - PB 187 759
17010ECZ02/71	<u>Wastewater Ammonia Removal by Ion Exchange;</u> by Battelle Northwest, Richland, Washington, and South Tahoe Public Utility District, South Lake Tahoe, CA	GPO - \$1.25 NTIS - PB 209 934
17010ED006/70	<u>Phosphorus Removal Using Chemical Coagulation and a Continuous Countercurrent Filtration Process;</u> by Johns-Manville Products Corp., Manville, NJ	GPO - 65¢ NTIS - PB 196 734
17010EED07/70	<u>The Electro-Oxidation of Ammonia in Sewage to Nitrogen;</u> by Ionics, Inc., Watertown, MA	GPO - 55¢ NTIS - PB 204 526
17010EER06/70	<u>Mobile Pilot Plant for Removal of Phosphate from Wastewaters by Adsorption on Alumina;</u> by Battelle Institute, Richland, WA	NTIS - PB 212 374
17010EEX10/70	<u>Development of a Chemical Denitrification Process;</u> by Rocketdyne Research, North American Rockwell, Canoga Park, CA	GPO - 65¢ NTIS - PB 203 597
17010EFX04/70	<u>Phosphate Removal from Wastewaters Using Lanthanum Precipitation;</u> by Atomics International, Div. of North American Rockwell Corp., Canoga Park, CA	GPO - 55¢ NTIS - PB 196 738
17010EIP05/71	<u>Soluble Phosphorus Removal in the Activated Sludge Process, Part I: Chemical-Biological Process Performance;</u> by The Soap and Detergent Association, New York, NY	GPO - \$1.25 NTIS - PB 211 563

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
17010EIP10/71	<u>Soluble Phosphorus Removal in the Activated Sludge Process, Part II: Sludge Digestion Study;</u> by The Soap and Detergent Asso., New York, NY	GPO - 65¢ NTIS - PB 211 564
17010EKI04/70	<u>Kinetics and Mechanism of Precipitation and Nature of the Precipitate Obtained in Phosphate Removal from Wastewater Using Aluminum (III) and Iron (III) Salts;</u> by Atomics International, Div. of North American Rockwell Corp., Canoga Park, CA	GPO - 75¢ NTIS - PB 196 737
17010EKI09/71	<u>Phosphate Precipitation with Ferrous Iron;</u> by M. Ghassimi and H. L. Recht, Atomics International, Div. of North American Rockwell Corp., Canoga Park, CA	GPO - 70¢ NTIS - PB 209 939
17010ELQ08/71	<u>Advanced Wastewater Treatment as Practiced at South Tahoe;</u> by South Tahoe Public Utility District, South Lake Tahoe, CA	GPO - \$3.25 NTIS - PB 204 525
17010EVB11/70	<u>Process Alternatives for Removal of Carbonaceous, Nitrogenous, and Phosphorus Materials from Concentrated Waste Streams;</u> by Engineering-Science, Inc., Oakland, CA	GPO - 35¢
17010FAH07/70	<u>Development of Phosphate Removal Processes;</u> by Detroit Metro. Water Dept., Detroit, MI	GPO - 65¢ NTIS - PB 203 192
17010FJY02/69	<u>Alumina Columns for Selective Removal of Phosphorus from Wastewater;</u> by Pacific Northwest Lab., Battelle Memorial Inst., Richland, WA	NTIS - PB 189 405
17010FKA05/70	<u>Development of a Pilot Plant to Demonstrate Removal of Carbonaceous, Nitrogenous and Phosphorus Materials from Anaerobic Digester Supernatant and Related Process Streams;</u> by FMC Corp., Santa Clara, CA	GPO - \$1.00 NTIS - PB 196 733
17010FKF12/69	<u>Basic Salinogen Ion-Exchange Resin for Selected Nitrate Removal from Potable and Effluent Waters;</u> by Tyco Labs, Waltham, MA	GPO - \$1.00 NTIS - PB 196 735
17010FMX01/71	<u>Nitrification and Denitrification of Wastewaters;</u> by University of Minnesota, Minneapolis, MN	NTIS - PB 202 350
17010FSJ01/71	<u>Nitrate Removal from Wastewater by Ion Exchange;</u> by Dow Chemical Co., Walnut Creek, CA	GPO - \$1.00 NTIS - PB 204 527
<u>1702 - Dissolved Refractory Organics Removal</u>		
17020---12/68	<u>An Investigation of Light-Catalyzed Chlorine Oxidation for Treatment of Wastewater;</u> by Midwest Research Institute, Kansas City, MO	NTIS - PB 187 757
17020---12/68	<u>A Comparison of Expanded-Bed and Packed-Bed Adsorption Systems;</u> by FMC Corporation Santa Clara, CA	NTIS - PB 187 756

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
17020---04/69	<u>Ozone Treatment of Secondary Effluent from Wastewater Treatment Plants; by Air Reduction Co., Inc., Murray Hill, NJ</u>	NTIS - PB 187 758
17020---02/70	<u>The Soil Filter: A Treatment Process for Removal of Odorous Gases; by University of Washington, Seattle, WA</u>	NTIS - PB 202 580
17020---06/70	<u>Effect of Surface Groups on Adsorption of Pollutants; by Lehigh Univ., Bethlehem, PA</u>	GPO - 40¢ NTIS - PB 198 519
17020DAO02/69	<u>Regeneration of Spent Granular Activated Carbon; by MSA Research Corp., Evans City, PA</u>	NTIS - PB 189 955
17020DAO07/70	<u>Optimization of the Regeneration Procedure for Granular Activated Carbon; by Mine Safety Appliances Research Corp., Evans City, PA</u>	GPO - \$1.25 NTIS - PB 208 205
17020DBA03/70	<u>Ultrafiltrative Dewatering of Spent Powdered Carbon; by Amicon Corporation, Lexington, MA</u>	GPO - 70¢ NTIS - PB 197 865
17020DDC06/71	<u>Effect of Porous Structure on Carbon Activation; by Chemical Engineering Dept., University of Colorado, Boulder, CO</u>	GPO - \$1.00 NTIS - PB 210 145
17020DHR12/70	<u>Use of Improved Membranes in Tertiary Treatment by Reverse Osmosis; by McDonnell Douglas Corp., Newport Beach, CA</u>	NTIS - PB 203 206
17020DNQ09/69	<u>Study of Powdered Carbons for Waste Water Treatment and Methods for Their Applications; by West Virginia Pulp and Paper Co., Covington, WV</u>	NTIS - PB 191 538
17020DUD09/70	<u>New Technology for Treatment of Wastewater by Reverse Osmosis; by Envirogenics Co, Div. of Aerojet-General, El Monte, CA</u>	GPO - 70¢ NTIS - PB 199 362
17020DUE09/70	<u>Light-Catalyzed Chlorine Oxidation for Treatment of Wastewater; by Midwest Research Institute, Kansas City, MO</u>	GPO - \$1.00 NTIS - PB 202 230
17020DVJ05/69	<u>Appraisal of Granular Carbon Contacting: Phase I & II; Phase III; by Swindell-Dressler Co., Pittsburgh, PA</u>	NTIS - PB 190 168 NTIS - PB 190 167
17020DZ011/70	<u>Carbon Column Operation in Waste Water Treatment; by Syracuse Univ., Syracuse, NY</u>	NTIS - PB 202 579
17020ECI11/71	<u>Feasibility Studies of Applications of Catalytic Oxidation in Wastewater; by Southern Illinois University, Carbondale, IL</u>	GPO - 75¢ NTIS - PB 208 348
17020EFA10/70	<u>New and Ultrathin Membranes for Municipal Wastewater Treatment by Reverse Osmosis; by North Star Research & Development Institute, Minneapolis, MN</u>	GPO - 70¢ NTIS - PB 202 237

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
17020FBD03/70	<u>The Development of a Fluidized-Bed Technique for the Regeneration of Powdered Activated Carbon; by Battelle Memorial Institute, Columbus, OH</u>	GPO - 55¢ NTIS - PB 197 892
17020FKB07/70	<u>Advanced Wastewater Treatment Using Powdered Activated Carbon in Recirculating Slurry Contactor-Clarifiers; by C. F. Garland and R. L. Beebe, Infilco, Tucson, AZ</u>	GPO - 75¢ NTIS - PB 197 890
17020GDN07/71	<u>Improving Granular Carbon Treatment; by FMC Corp., Princeton, NJ</u>	GPO - \$1.00

1703 - Suspended and Colloidal Solids Removal

17030EOH01/70	<u>Application of Hyperfiltration to Treatment of Municipal Sewage Effluents; by Oak Ridge National Lab., Oak Ridge, TN</u>	GPO - 70¢ NTIS - PB 197 671
17030ESX04/70	<u>Investigation of a High-Pressure Foam Wastewater Treatment Process; by Garrett Research and Development Co., Inc., LaVerne, CA</u>	GPO - 45¢ NTIS - PB 197 863
17030FEB02/72	<u>Fluidic Vortex Bubble Generator; by Bowles Fluidics Corp., Silver Spring, MD</u>	GPO - \$1.00 NTIS - PB 210 808
17030FWH01/72	<u>Filtration of Municipal Waste With a Moving Bed Contactor; by F. O. Mixon, Research Triangle Institute, Environmental Studies Center, Research Triangle Park, NC</u>	GPO - 60¢ NTIS - PB 211 244

1704 - Dissolved Inorganics Removal

17040---05/70	<u>Study and Experiments in Waste Water Reclamation by Reverse Osmosis; by Gulf General Atomic, Inc., San Diego, CA</u>	GPO - \$1.25 NTIS - PB 198 092
17040---05/70	<u>Renovation of Municipal Wastewater by Reverse Osmosis; by AWTR Lab., FWQA, Cincinnati, OH and Los Angeles County Sanitation District, Los Angeles, CA</u>	GPO - 65¢ NTIS - PB 199 067
17040DFC10/70	<u>Feasibility Study of Regenerative Fibers for Water Pollution Control; by Uniroyal, Inc., Wayne, NJ</u>	GPO - 75¢ NTIS - PB 208 821
17040DNM02/71	<u>Feasibility of Treating Wastewater by Distillation; by University of Florida, Gainesville, FL</u>	GPO - \$1.00 NTIS - PB 206 145
17040EEE12/71	<u>Wastewater Demineralization by Ion Exchange; by E. Kreusch and K. Schmidt, Culligan International Co., Northbrook, IL</u>	GPO - \$1.25 NTIS - PB 209 935
17040EFO06/70	<u>Membrane Materials for Wastewater Reclamation by Reverse Osmosis; by Gulf General Atomic, San Diego, CA</u>	GPO - 65¢ NTIS - PB 197 448

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
17040EFQ12/69	<u>Reverse Osmosis Renovation of Municipal Wastewater;</u> by Aerojet-General Corp., El Monte, CA	GPO - \$1.50 NTIS - PB 197 659
17040EFQ02/71	<u>Reverse Osmosis Renovation of Primary Sewage;</u> by Aerojet-General Corp., El Monte, CA	GPO - 65¢ NTIS - PB 207 645
17040EUE07/71	<u>Amenability of Reverse Osmosis Concentrate to Activated Sludge Treatment;</u> by Rex Chainbelt, Inc., Milwaukee, WI	GPO - \$1.25 NTIS - PB 211 027
17040EUN02/71	<u>Demineralization of Wastewater by the Transport-Depletion Process;</u> by Southern Research Institute, Birmingham, AL	GPO - 65¢ NTIS - PB 206 191

1705 - Dissolved Biodegradable Organics Removal

17050---07/68	<u>Evaluation of Waste Treatment System Chemawa Indian School;</u> by B. D. Clark and K. A. Dostal, Pacific Northwest Water Lab., FWPCA, Corvallis, OR	NTIS - PB 208 435
17050---10/69	<u>Photolysis Mechanisms for Pollution Abatement;</u> by IIT Research Institute, Chicago, IL	NTIS - PB 190 169
17050---00/70	<u>Characteristics and Kinetics of Biological Fixed Film Reactors;</u> by Clemson Univ., Clemson, SC	NTIS - PB 199 834
17050DAL05/70	<u>Granular Carbon Treatment of Raw Sewage;</u> by FMC Corporation, Princeton, NJ	GPO - \$1.00 NTIS - PB 197 864
17050DAM05/69	<u>Municipal Sewage Treatment with a Rotating Biological Contactor;</u> by Allis-Chalmers Research Div., Milwaukee, WI	NTIS - PB 201 701
17050DAM11/71	<u>Application of Rotating Disc Process to Municipal Wastewater Treatment;</u> by Autotrol Corp., Milwaukee, WI	GPO - 75¢ NTIS - PB 211 463
17050DDY12/71	<u>A Literature Search and Critical Analysis of Biological Trickling Filter Studies, Vol. I;</u> by Functional Products and Systems Dept., The Dow Chemical Co., Midland, MI	GPO - \$2.50 NTIS - PB 211 909
17050DDY12/71	<u>A Literature Search and Critical Analysis of Biological Trickling Filter Studies, Vol. II;</u> by Functional Products and Systems Dept., The Dow Chemical Co., Midland, MI	GPO - \$2.75 NTIS - PB 211 910
17050DHI09/70	<u>Isolation of Lytic Agents Related to Sphaerotilus;</u> by D. J. Geason, Randolph-Macon Woman's College, Lynchburg, VA	NTIS - PB 211 186
17050DJS05/71	<u>Oxygen Consumption in Continuous Biological Culture;</u> by Center for Research, Inc., University of Kansas, Lawrence, KS	GPO - \$1.25 NTIS - PB 208 349

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
17050DNW05/70	<u>Investigation of the Use of High-Purity Oxygen Aeration in the Conventional Activated Sludge Process;</u> by Union Carbide Corp., Linde Div., Tonawanda, NY	NTIS - PB 194 241
17050DNW02/72	<u>Continued Evaluation of Oxygen Use in Conventional Activated Sludge Processing;</u> by Union Carbide Corp., Linde Division, Tonawanda, NY	GPO - \$1.50 NTIS - PB 209 940
17050DVO09/71	<u>Water Budget for the City of Laramie, Wyoming;</u> by P. A. Rechard, Water Resources Research Inst., University of Wyoming, Laramie, WY	GPO - 50¢ NTIS - PB 208 819
17050DVO10/71	<u>Supplementary Aeration of Lagoons in Rigorous Climate Areas;</u> by R. L. Champlin, Dept. of Civil Engineering, Univ. of Wyoming, Laramie, WY	GPO - 75¢ NTIS - PB 208 204
17050EE003/71	<u>Integrated Activated Sludge Biological Filter Process;</u> by City of San Buenaventura, CA	NTIS - PB 206 794
17050EJB11/70	<u>Full-Scale Raw Wastewater Flocculation with Polymers;</u> by P. V. Freese and E. Hicks, D. C. Dept. of Sanitary Engineering, Washington, D.C.	GPO - 60¢ NTIS - PB 211 240
17050EOY01/72	<u>Biomass Determination - A New Technique for Activated Sludge Control;</u> by Biospherics, Inc., Rockville, MD	GPO - \$1.25 NTIS - PB 211 127
17050EVF02/71	<u>Automatic Control of an Activated Sludge Reactor;</u> by University of Connecticut, Storrs, CT	NTIS - PB 211 334
17050FIM05/70	<u>Optimizing Lipid Biostabilization;</u> by Midwest Research Institute, Kansas City, MO	GPO - 60¢ NTIS - PB 197 893

1707 - Ultimate Disposal

17070---05/68	<u>A Study of Sludge Handling and Disposal;</u> by R. S. Burd, FWPCA, Washington, D.C. (formerly with Dow Chemical Co.)	NTIS - PB 179 514
17070---09/69	<u>Controlling Factors in Methane Fermentation;</u> by New Mexico State University, Las Cruces, NM	NTIS - PB 206 237
17070DAU12/71	<u>Aerobic Digestion of Organic Waste Sludge;</u> by College of Engineering, Oklahoma State University, Stillwater, OK	GPO - \$1.50 NTIS - PB 211 024
17070DFK02/70	<u>The Biochemistry of Anaerobic Digestion;</u> by Manhattan College, Bronx, NY	NTIS - PB 198 655
17070DHO02/71	<u>DNA Concentration as an Estimate of Sludge Biomass;</u> by Southwest Missouri State College, Springfield, MO	GPO - 40¢ NTIS - PB 203 070

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
17070DJW11/69	<u>State of the Art Review on Product Recovery;</u> by Resources Engineering Association, Wilton, CT	NTIS - PB 192 634
17070DLV04/70	<u>State of the Art Review on Sludge Incineration Practice;</u> by Resources Engineering Associates, Wilton, CT	GPO - \$1.25 NTIS - PB 197 888
17070DLY05/70	<u>Disposal of Brines Produced in Renovation of Municipal Wastewater;</u> by Burns and Roe, Inc., Oradell, NJ	GPO - \$1.25 NTIS - PB 197 597
17070DRP12/70	<u>Development of Techniques for Estimating the Bacterial Population of Sewage Sludge;</u> by W. Spangler, and W. Langston, Midwest Research Institute, Kansas City, MO	GPO - \$1.00 NTIS - PB 211 246
17070DUQ07/70	<u>Pipeline Flow of Solids-Liquid Suspensions;</u> by Syracuse University, Syracuse, NY	NTIS - PB 199 708
17070DYF09/70	<u>A Study of Sludge Digestion with Sodium Chloride and Sulfate;</u> by Georgia Institute of Technology, Atlanta, GA	NTIS - PB 196 732
17070EBP07/71	<u>Computerized Design and Cost Estimation for Multiple-Hearth Sludge Incinerators;</u> by Dr. W. Unterberg, R. J. Sherwood, and Dr. G. R. Schneider, Rocketdyne Div., North American Rockwell Corp., Canoga Park, CA	GPO - \$1.50 NTIS - PB 211 264
17070EHE07/70	<u>Electroosmotic Pumping for Dewatering Sewage Sludge;</u> by Rocketdyne Div. of North American Rockwell Corp., Canoga Park, CA	GPO - 65¢ NTIS - PB 197 889
17070EKN12/69	<u>Feasibility of Hydrolysis of Sludge Using Low Pressure Steam with SO₂ as a Hydralytic Adjunct and Utilization of the Resulting Hydrosate;</u> by Foster D. Snell, Inc., Florham Park, NJ	NTIS - PB 194 784
17070ESJ01/70	<u>Ultimate Disposal of Phosphate from Waste Water by Recovery as Fertilizer;</u> by Dearborn Chemical Div., W. R. Grace and Co., Chicago, IL	GPO - 70¢ NTIS - PB 196 739
17070EVY08/71	<u>Biological Methods of Sludge Dewatering;</u> by Envirogenics Co., Div. of Aerojet-General Corp., El Monte, CA	NTIS - PB 207 480
<u>1708 - Waste Water Renovation and Reuse</u>		
17080DAR09/71	<u>Optimization of Ammonia Removal by Ion Exchange Using Clinoptilolite;</u> by Sanitary Engineering Research Lab., College of Engineering, and School of Public Health, Univ. of California, Berkeley, CA	GPO - \$1.50 NTIS - PB 211 605
17080ESH08/68	<u>Waste Water Reclamation Project for Antelope Valley Area;</u> by Dept. of County Engineer, County of Los Angeles, CA	NTIS - PB 191 067

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
<u>1709 - Waste Treatment Optimization</u>		
17090---12/67	<u>A Compilation of Cost Information for Conventional and Advanced Wastewater Treatment Plants and Processes;</u> by R. Smith, AWTR Lab., FWPCA, Cincinnati, OH	NTIS - PB 206 430
17090---12/68	<u>Cost of Wastewater Treatment Processes;</u> by Dorr-Oliver, Inc., Stamford, CT	NTIS - PB 187 760
17090---06/69	<u>Cost and Performance Estimates for Tertiary Wastewater Treating Processes;</u> by Robert A. Taft Water Research Center, Cincinnati, OH	NTIS - PB 189 953
17090---10/69	<u>A Generalized Computer Model for Steady-State Performance of the Activated Sludge Process;</u> by Robert A. Taft Water Research Center, Cincinnati, OH	NTIS - PB 192 764
17090---07/70	<u>Cost to the Consumer for Collection and Treatment of Wastewater;</u> by R. Smith and R. G. Eilers, The AWTR Lab., EPA, Cincinnati, OH	GPO - \$1.00 NTIS - PB 210 199
17090DAN10/71	<u>Estimating Costs and Manpower Requirements for Conventional Wastewater Treatment Facilities;</u> by W. L. Patterson, R. F. Bunker; Black & Veatch Consulting Engineers, Kansas City, MO	GPO - \$2.85 NTIS - PB 211 132
17090DOY12/70	<u>Feasibility of Computer Control of Wastewater Treatment;</u> by American Public Works Association, Chicago, IL	GPO - \$1.00 NTIS - PB 203 962
17090EEM12/71	<u>Investigation of Response Surfaces of the Microscreen Process;</u> by Engineering-Science, Inc., Cincinnati, OH	GPO - \$1.25 NTIS - PB 211 451
17090EHQ09/69	<u>Mathematical Model of Sewage Sludge Fluidized Bed Incinerator Capacities and Costs;</u> by General American Transportation Corp. and General American Research Div., Niles, IL	NTIS - PB 189 295
17090EHQ09/70	<u>Mathematical Model of Recalcination of Lime Sludge with Fluidized Bed Reactors;</u> by General American Transportation Corp., Niles, IL	GPO - 55¢ NTIS - PB 197 891
17090EHX07/71	<u>Waste Treatment Lagoons - State of the Art;</u> by Missouri Basin Engineering Health Council, Cheyenne, WY	GPO - \$1.25 NTIS - PB 209 937
17090FJW02/72	<u>A Mathematical Model of a Final Clarifier;</u> by Rex Chainbelt, Inc., Milwaukee, WI	GPO - \$1.00 NTIS - PB 209 933
17090FKC09/69	<u>Mathematical Model of Tertiary Treatment by Lime Addition;</u> by General American Transportation Corp., General American Research Division, Niles, IL	NTIS - PB 190 170

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
17090FQJ09/71	<u>Biological Concepts for Design and Operation of the Activated Sludge Process;</u> by A. F. Gaudy, Jr., and E. T. Gaudy, Oklahoma State University, Stillwater, OK	GPO - \$1.25 NTIS - PB 211 131
17090FTA07/69	<u>Mathematical Model of Electrodialysis Process;</u> by Process Research Inc., Cambridge, MA	GPO - 70¢ NTIS - PB 200 721

Water Quality Requirements Research

1801 - Municipal Uses

18010DPV12/70	<u>Water Quality Criteria Data Book, Vol. 1 - Organic Chemical Pollution of Freshwater;</u> by Arthur D. Little, Inc., Cambridge, MA	GPO - \$3.50 NTIS - PB 208 987
18010DPV07/71	<u>Water Quality Criteria Data Book, Vol. 2 - Inorganic Chemical Pollution of Freshwater;</u> by Arthur D. Little, Inc., Cambridge, MA	GPO - \$2.25 NTIS - PB 208 988
18040DAZ04/72	<u>Water Quality Criteria Data Book, Vol. 4 - An Investigation into Recreational Water Quality;</u> by B. J. Mechala, K. K. Hekimian, L. A. Schinazi, and R. H. Dudley, Envirogenics Co., Div. of Aerojet-General Corp., El Monte, CA	GPO - \$3.00 NTIS - PB 214 154

1805 - Freshwater Fishes, Other Freshwater Life and Wildlife

18050---03/70	<u>Effects of Abatement of Domestic Sewage Pollution on the Benthos, Volumes of Zooplankton, and the Fouling Organisms of Biscayne Bay, Florida;</u> by K. McNulty, Institute of Marine and Atmospheric Sciences, Univ. of Miami, Miami, FL	(Univ. of Miami)
18050DAI02/70	<u>Biological Effects of Effluent from a Desalination Plant at Key West, Florida;</u> by Westinghouse Electric Corp., Pittsburgh, PA	GPO - \$1.00 NTIS - PB 195 677
18050DBB12/71	<u>Industrial Wastes: Effects on Trinity River Ecology, Fort Worth, Texas;</u> by Texas Christian Univ., Dept. of Biology, Fort Worth, TX	GPO - \$1.50 NTIS - PB 211 167
18050DBM02/72	<u>Lake Superior Periphyton in Relation to Water Quality;</u> by T. A. Olson and T. O. Odlang, University of Minnesota, Minneapolis, MN	GPO - \$2.00 NTIS - PB 211 185
18050DIE12/71	<u>The Ecology of Diatoms in Hardwater Habitats;</u> by J. D. Dodd, Dept. of Botany and Plant Pathology, Iowa State University, Ames, IA	GPO - 65¢ NTIS - PB 213 005

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
18050DKC12/69	<u>Plankton Diatom Assemblages in Lake Michigan</u> ; by Univ. of Michigan, Ann Arbor, MI	GPO - \$2.00 NTIS - PB 198 087
18050DLW04/71	<u>Biological Effects of Copper and Arsenic Pollution</u> ; by University of Alaska, College, AK	NTIS - PB 201 648
18050DOH06/71	<u>Stream Faunal Recovery After Manganese Strip Mine Reclamation</u> ; by Bureau of Sport Fisheries, Virginia Polytechnic Institute, Blacksburg, VA	GPO - 50¢ NTIS - PB 206 184
18050DOL03/70	<u>Bactericidal Effects of Algae on Enteric Organisms</u> ; by Univ. of Texas, Austin, TX	GPO - \$1.25 NTIS - PB 197 862
18050DST12/70	<u>Toxic Action of Water Soluble Pollutants on Freshwater Fish</u> ; by Michigan State University, East Lansing, MI	GPO - 65¢ NTIS - PB 201 650
18050DWC12/70	<u>The Effect of Inorganic Sediment on Stream Biota</u> ; by DePauw Univ., Greencastle, IN	GPO - \$1.25 NTIS - PB 204 236
18050DXJ05/71	<u>Histochemical and Cytophotometric Assay of Acid Stress in Freshwater Fish</u> ; by Pennsylvania State Univ., University Park, PA	GPO - \$1.25
18050DXU06/70	<u>Sensitivity of Benthic Microflora to Pollution Gradients</u> ; by Prof. N. Marshal, Univ. of Rhode Island; Prof. D. M. Skauen, Univ. of Connecticut; Dr. C. A. Orviatt, Univ. of Rhode Island	NTIS - PB 192 853
18050DZZ06/71	<u>Biological Survey of Streams of Coles County, Illinois, 1967-1970</u> ; by Eastern Illinois Univ., Charleston, IL	GPO - \$1.25
18050EBK02/71	<u>Responses of Teleost Fish to Environmental Stress</u> ; by University of Washington, Seattle, WA	GPO - \$1.25 NTIS - PB 208 968
18050EDP12/71	<u>The Use of Fish Movement Patterns to Monitor Zinc</u> ; by J. Cairns, Jr. and W. T. Waller, Virginia Polytechnic Inst. and State Univ., Blacksburg, VA	GPO - 55¢ NTIS - PB 211 333
18050EDQ12/71	<u>The Use of Bluegills to Detect Zinc</u> ; by J. Cairns, Jr. and R. E. Sparks, Virginia Polytechnic Institute and State University, Blacksburg, VA	GPO - 55¢ NTIS - PB 211 332
18050EEC12/71	<u>Acid Mine Pollution Effects on Lake Biology</u> ; by R. W. Smith and D. G. Frey, Water Resources Research Center, Indiana Univ., Bloomington, IN	GPO - \$1.25 NTIS - PB 210 709
18050ELD02/72	<u>Biota of Freshwater Ecosystems - Identification Manual No. 1 - Freshwater Planarians (Turbellaria) of North America</u> ; by R. Kenk, Dept. of Invertebrate Zoology, Smithsonian Institution, Washington, D.C.	GPO - \$2.50

<u>Report Number</u>	<u>Title/Author</u>	<u>Source</u>
18050ELD02/72	<u>Biota of Freshwater Ecosystems - Identification Manual No. 2 - The Genus Arqulus (Crustacea; Branchitura) of The United States;</u> by R. F. Cressey, Smithsonian Institute, Washington, D.C.	GPO - \$2.50
18050ELD03/72	<u>Biota of Freshwater Ecosystems - Identification Manual No. 3 - Freshwater Sphaeriacean Clams (Mollusca: Pelecypoda) of North America;</u> by J. B. Burch, Museum of Zoology, Univ. of Michigan, Ann Arbor, MI	GPO - \$2.50
18050ELD03/72	<u>Biota of Freshwater Ecosystems - Identification Manual No. 4 - Freshwater Polychaetes (Annelida) of North America;</u> by N. Foster, Dept. of Biology, Dunbarton College, Washington, D.C.	GPO - \$2.50
18050ELD04/72	<u>Biota of Freshwater Ecosystems - Identification Manual No. 5 - The Freshwater Amphipod Crustaceans (Gammaridae) of North America;</u> by J. R. Holsinger, Dept. of Biology, Old Dominion University, Norfolk, VA	GPO - \$2.75
18050ELD04/72	<u>Biota of Freshwater Ecosystems - Identification Manual No. 6 - Aquatic Dryopoid Beetles (Coleoptera) of the United States;</u> by H. P. Brown, Dept. of Zoology, Univ. of Oklahoma, Norman, OK	GPO - \$2.50
18050ELD05/72	<u>Biota of Freshwater Ecosystems - Identification Manual No. 7 - Freshwater Isopods (Asellidae) of North America;</u> by W. D. Williams, Dept. of Zoology, Monash Univ., Clayton, Victoria, Australia	GPO - \$2.50
18050ELD05/72	<u>Biota of Freshwater Ecosystems - Identification Manual No. 8 - Freshwater Leeches (Annelida: Hirudinea) of North America;</u> by D. J. Klemm, Museum of Zoology, Univ. of Michigan, Ann Arbor, MI	GPO - \$2.50
18050ELD05/72	<u>Biota of Freshwater Ecosystems - Identification Manual No. 9 - Crayfishes (Astacidae) of North and Middle America;</u> by H. H. Hobbs, Jr., Dept. of Invertebrate Zoology, Smithsonian Inst., Washington, DC	GPO - \$3.25
18050ELD01/73	<u>Biota of Freshwater Ecosystems - Identification Manual No. 10 - Genera of Freshwater Nematodes (Nematoda) of Eastern North America;</u> by V. R. Ferris, J. M. Ferris, and J. P. Tjepkema, Purdue Univ., West Lafayette, IN	(Pending)
18050ELD03/73	<u>Biota of Freshwater Ecosystems - Identification Manual No. 11 - Freshwater Unionacean Clams (Mollusca: Pelecypoda) of North America;</u> by J. B. Burch, Univ. of Michigan, Ann Arbor, MI	GPO - \$4.10

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18050EUJ12/70	<u>Temperature Control in Outdoor Experimental Ponds</u> ; by Univ. of Minnesota, St. Anthony Falls Hydraulic Lab., Minneapolis, MN	NTIS - PB 199 364
18050GWW05/71	<u>Water Quality Criteria Data Book, Vol. 3 - Effects of Chemicals on Aquatic Life</u> ; by Battelle Columbus Lab., Columbus, OH	GPO - \$4.80 NTIS - PB 231 210
18050GZZ10/71	<u>Chlorinated Municipal Waste Toxicities to Rainbow Trout and Fathead Minnows</u> ; by Michigan Department of Natural Resources, Lansing, MI	GPO - 60¢ NTIS - PB 209 890

1808 - Marine Fishes, Other Marine Life and Wildlife

18080GBX12/71	<u>Biological Impact of a Large-Scale Desalination Plant at Key West</u> ; by R. H. Chesher, Westinghouse Ocean Research Laboratory, Annapolis, MD	GPO - \$1.25 NTIS - PB 211 183
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