



## *ORD Publications Announcement*

### May - August 1984

The Environmental Protection Agency's Office of Research and Development announces the availability of printed publications on a wide range of environmental topics. As a part of EPA's efforts to make available better information for environmental decision making, we are offering the following publications at no charge.

Project Summaries are short synopses of key findings of project reports. These reports present the results of recently completed research, development and engineering work. The summaries convey the essence of a project in terms comprehensible to the technical community at large. The complete reports are available only from the National Technical Information Service.

The *ORD Publications Announcement* is published three or four times a year to provide interested parties with access to the broad range of currently available documents produced by the Office of Research and Development. It will be mailed upon request to individuals who may wish to order this material. Orders are filled until the supply of a particular report is exhausted.

The following pages list titles of publications that are available. Project Summaries are subdivided by subject area. Publications announced for the first time are displayed in bold type. To order any publication, circle the corresponding

order number on the order form at the back of this *Announcement* and return the entire back page, with your mailing label attached, to:

ORD Publications  
P. O. Box 15948  
Cincinnati, OH 45215

Allow four weeks for delivery.

We are always interested in improving our support to the users of ORD's information. If you should experience inordinate delay or other difficulty in receiving material you have requested please contact:

Chief, ORD Publications Unit  
US EPA - CERL  
26 W. St. Clair  
Cincinnati, OH 45268  
(513) 684-7562

*The Administrator of EPA has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Agency. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through April 1, 1987.*

# Announcement for Publication Material

## Project Summaries

### Environmental Health Effects Research

- 12006 Chronic Toxicity of Lead and Cadmium III. Effects of Chronic Intoxication on the Reproductive Function of the F<sub>1</sub> Generation and on the Central Nervous System of the F<sub>2</sub> Generation of Rats (EPA-600/S1-82-006)
- 12001 Toxicology of Pesticides (EPA-600/S1-82-001)
- 12004 Short-Term Screening Test for Quick Responses to Pollutants Where Health Effects Data are Lacking (EPA-600/S1-82-004)
- 12009 Effects of Selected Organic Drinking Water Contaminants on Male Reproduction (EPA-600/S1-82-009)
- 12012 Pulmonary Function and Bronchial Reactivity in Human Subjects with Exposure to Ozone and Respirable Sulfuric Acid Aerosol: An Environmental Chamber Study (EPA-600/S1-82-012)
- 12008 Effects of Heavy Metals on the Differentiation of Metabolic Pathways in the CNS (EPA-600/S1-82-008)
- 12010 Speciation of Arsenic Compounds in Water Supplies (EPA-600/S1-82-010)
- 12013 Cross Transmission of *Giardia* (EPA-600/S1-82-013)
- 12014 Effects of 200, 591 and 2450 MHz Microwaves on Cerebral Energy Metabolism (EPA-600/S1-82-014)
- 12015 Human Epithelial Cell Activation Systems (EPA-600/S1-82-015)
- 12016 Giardiasis in Washington State (EPA-600/S1-82-016)
- 12017 Potential Human Study Populations for Non-Ionizing (Radio Frequency) Radiation Health Effects (EPA-600/S1-82-017)
- 13001 An Evaluation of the Adsorption Properties of Silicalite for Potential Application to Isolating Low-Molecular-Weight Organics from Drinking Water (EPA-600/S1-83-001)
- 13002 Development of a Model of Toluene Blood Level Following Subcutaneous Injection of Toluene in the Rat (EPA-600/S1-83-002)
- 13003 Chlorinated Hydrocarbons: Insecticide Versus Carcinogenic Action (EPA-600/S1-83-003)
- 13004 Determination of Minimal Infectious Dose of an Enterovirus in Drinking Water (EPA-600/S1-83-004)
- 13011 Studies of Waterborne Agents of Viral Gastroenteritis (EPA-600/S1-83-011)
- 12011 Chemistry and Mode of Action of Insecticides: Phase II (EPA-600/S1-82-011)
- 13005 Detection of Carcinogenicity Based on Mutagenicity in *Ara-bidopsis* (EPA-600/S1-83-005)
- 13006 The Detection of Mutagenic Properties of Pesticides Used in Commercial Corn Production (EPA-600/S1-83-006)
- 13007 Fetotoxic Effects of Nickel in Drinking Water in Mice (EPA-600/S1-83-007)
- 13008 Microwaves, Hyperthermia, and Human Leukocyte Function (EPA-600/S1-83-008)
- 13012 Enteric Virus Removal in Wastewater Treatment Lagoon Systems (EPA-600/S1-83-012)
- 13013 Study of Microbial Aerosols Emitted from a Water Reclamation Plant (EPA-600/S1-83-013)
- 13014 Determination of the Use of Solid Particle Samplers for *Giardia* Cysts in Natural Waters (EPA-600/S1-83-014)
- 13009 Immunological and Hematological Effects of Microwave Power Transmission from a Satellite Power System (EPA-600/S1-83-009)
- 13016 The Evaluation of the Mutagenicity of Municipal Sewage Sludge (EPA-600/S1-83-016)
- 13017 Inhalation Teratology Studies of Captan and Folpet in Mice (EPA-600/S1-83-017)
- 13018 Viruses in Water and Reclaimed Wastewater (EPA-600/S1-83-018)
- 14002 Interaction of Complex Pollutant Mixtures and Particulates in Causation of Pulmonary Disease (EPA-600/S1-84-002)
- 14003 *In Vitro* and *In Vivo* Mutagenicity Studies of Environmental Chemicals (EPA-600/S1-84-003)
- 14005 Validation of Chemical and Biological Techniques for Evaluation of Vapors in Ambient Air/Mutagenicity Testing of Twelve (12) Vapor-Phase Compounds (EPA-600/S1-84-005)
- 14006 Retrospective Epidemiological Study of Disease Associated with Wastewater Utilization (EPA-600/S1-84-006)
- 14007 The Effects of Cadmium on Renal Aging: A Chronic Cadmium Feeding Study in Rats (EPA-600/S1-84-007)
- 14008 Epidemiological Study of the Incidence of Cancer as Related to Industrial Emissions in Contra Costa County, California (EPA-600/S1-84-008)

### Environmental Protection Technology

- 22015 Model Protocol for the Comprehensive Evaluation of Publicly Owned Treatment Works Performance and Operation (EPA-600/S2-82-015)
- 22021 Sodium Fluxing and *In-Situ* Glassification for Hazardous Materials Disposal (EPA-600/S2-82-021)
- 22016 Evaluation and Control of Sidestreams Generated in Publicly Owned Treatment Works (EPA-600/S2-82-016)
- 22019 Spreading Lagooned Sewage Sludge on Farmland: A Case History (EPA-600/S2-82-019)

- 22025 Increasing ARCAT® Test Sensitivity for Examination of Potable Waters (EPA-600/S2-82-025)
- 22020 Biological Processes in the Treatment of Municipal Water Supplies (EPA-600/S2-82-020)
- 22023 Autoheated, Aerobic Thermophilic Digestion with Air Aeration (EPA-600/S2-82-023)
- 22014 Engineering Assessment of Hot-Acid Treatment of Municipal Sludge for Heavy Metals Removal (EPA-600/S2-82-014)
- 22029 Evaluation of Foams for Mitigating Air Pollution from Hazardous Spills (EPA-600/S2-82-029)
- 22030 Sorbent Materials for Cleanup of Hazardous Spills (EPA-600/S2-82-030)
- 22049 Toxicity of Leachates: Comparison of Extraction Procedure Extracts and Landfill Leachates (EPA-600/S2-82-049)
- 22022 Virion Aggregation and Disinfection of Water by Chlorine and Bromine (EPA-600/S2-82-022)
- 22024 Removal of Virus from Public Water Supplies (EPA-600/S2-82-024)
- 22026 Seattle Distribution System Corrosion Control Study, Volume 1. Cedar River Water Pilot Plant Study (EPA-600/S2-82-026)
- 22031 Top-Feed Vacuum Filtration of Waste-Activated Sludge (EPA-600/S2-82-031)
- 22033 Determinants and Options for Water Distribution System Management: A Cost Evaluation (EPA-600/S2-82-033)
- 22043 Water Reclamation and Automated Water Quality Monitoring (EPA-600/S2-82-043)
- 22050 Evaluation and Documentation of the Effects of Operation and Maintenance Practices on the Performance of Selected Biological Treatment Plants (EPA-600/S2-82-050)
- 22051 Chlorine Dioxide Disinfection and Granular Activated Carbon Adsorption (EPA-600/S2-82-051)
- 22054 Persistence and Detection of Coliforms in Turbid Finished Drinking Water (EPA-600/S2-82-054)
- 22010 Comparison of Ames *Salmonella typhimurium* Plate Incorporation Test Protocols (EPA-600/S2-82-010)
- 22065 Powdered Activated Carbon Adsorption Isotherms for Selected Tannery Effluents (EPA-600/S2-82-065)
- 22018 Seattle Distribution System Corrosion Control Study: Volume III. Potential for Drinking Water Contamination from Tin/ Antimony Solder (EPA-600/S2-82-018)
- 22032 Apparatus and Procedure for Determining Oil Droplet Size Distribution (EPA-600/S2-82-032)
- 22034 Chemical Composition of Produced Water at Some Offshore Oil Platforms (EPA-600/S2-82-034)
- 22036 Oil Spill Response Scenario for Remote Arctic Environments (EPA-600/S2-82-036)
- 22037 Alternative Water Disinfection Schemes for Reduced Trihalo-methane Formation: Volume 1. Prototype Studies (EPA-600/S2-82-037)
- 22044 Evaluation and Documentation of Mechanical Reliability of Conventional Wastewater Treatment Plant Components (EPA-600/S2-82-044)
- 22045 Evaluation of Secondary Environmental Impacts of Urban Runoff Pollution Control (EPA-600/S2-82-045)
- 22046 Pilot Scale Evaluation of Biological Activated Carbon for the Removal of THM Precursors (EPA-600/S2-82-046)
- 22047 Co-gasification of Densified Sludge and Solid Waste in a Downdraft Gasifier (EPA-600/S2-82-047)
- 22048 Stormwater Management to Improve Lake Water Quality (EPA-600/S2-82-048)
- 22053 An Innovative Coprecipitation Technique for Removing Heavy Metals from Wastewater (EPA-600/S2-82-053)
- 22056 Volatile Organics in Aeration Gases at Municipal Treatment Plants (EPA-600/S2-82-056)
- 22057 Full-Scale Evaluation of Activated Bio-Filter Wastewater Treatment Process (EPA-600/S2-82-057)
- 22038 Carbon Fiber Data Base: Review and Assessment of Carbon Fiber Release into the Environment (EPA-600/S2-82-038)
- 22058 Environmental Considerations for Emerging Copper-Winning Processes (EPA-600/S2-82-058)
- 22066 Development and Demonstration of Concepts for Improving Coke-Oven Door Seals: Final Report (EPA-600/S2-82-066)
- 22067 Supercritical Fluid Regeneration of Activated Carbon Used for Volatile-Organic-Compound Vapor Adsorption (EPA-600/S2-82-067)
- 22069 Interim Guidelines for the Disposal/ Destruction of PCBs and PCB Items by Non-Thermal Methods (EPA-600/S2-82-069)
- 22061 Reclamation of Toxic Mine Waste Utilizing Sewage Sludge—Contrary Creek Demonstration Project (EPA-600/S2-82-061)
- 22062 Emissions and Residue Values from Waste Disposal During Wood Preserving (EPA-600/S2-82-062)
- 22081 Effect of Aeration Basin Configuration on Bulking at Low Organic Loading (EPA-600/S2-82-081)
- 22017 Nonvolatile Organics in Disinfected Wastewater Effluents: Chemical Characterization and Mutagenicity (EPA-600/S2-82-017)
- 22027 Removal of Organic Contaminants from Drinking Water Supply at Glen Cove, NY—Phase II (EPA-600/S2-82-027)
- 22028 Collection and Treatment of Wastewater Generated by Pesticide Applicators (EPA-600/S2-82-028)
- 22059 Tomato Cleaning and Water Recycle (EPA-600/S2-82-059)
- 22071 Demonstration of Irrigation Return Flow Water Quality in the Mesilla Valley, New Mexico (EPA-600/S2-82-071)
- 22074 A Case Study of the Muncie, Indiana, Water Quality Control Program (EPA-600/S2-82-074)
- 22076 Powdered Carbon-Activated Sludge—Filtration Processes for Petroleum Refinery Wastewater (EPA-600/S2-82-076)
- 22079 Nitrates in Groundwater Resulting from Manure Applications to Irrigated Cropland (EPA-600/S2-82-079)
- 22080 Rapid-Infiltration System for Wastewater Renovation and Beneficial Reuse (EPA-600/S2-82-080)
- 22011 Emerging Technologies for the Control of Hazardous Wastes (EPA-600/S2-82-011)
- 22013 Assessment of Waste Fuel Use in Cement Kilns (EPA-600/S2-82-013)
- 22060 Evaluation of Waste Citrus Activated Sludge in Poultry Feeds (EPA-600/S2-82-060)

- 22078 Evaluating Furrow Irrigation Systems for Regional Water Quality Planning (EPA-600/S2-82-078)
- 22073 Minimizing Salt in Return Flow Through Irrigation Management (EPA-600/S2-82-073)
- 22012 Water Reuse and Alum Control on First Pass Retention (EPA-600/S2-82-012)
- 22063 Chemical Stabilizers for the Control of Fugitive Asbestos Emissions from Open Sources (EPA-600/S2-82-063)
- 22070c Acid Rain Mitigation Study: Volume III. Industrial Boilers and Processes (EPA-600/S2-82-070c)
- 22075 Treatment Compatibility of Municipal Waste and Biologically Hazardous Industrial Compounds (EPA-600/S2-82-075)
- 22082 Considerations in Selecting Conveyors for Solid Waste Applications (EPA-600/S2-82-082/083)
- 22086 The Use of Wetlands for Water Pollution Control (EPA-600/S2-82-086)
- 22087 Feasibility Study of Granular Activated Carbon Adsorption and On-Site Regeneration (EPA-600/S2-82-087)
- 22088 Testing Truck-Mounted Vacuum and Air Conveyor Systems for Oil Spill Recovery (EPA-600/S2-82-088)
- 22089 Type A Viral Hepatitis: Effects of Chlorine on Infectivity (EPA-600/S2-82-089)
- 22090 Sources of Urban Runoff Pollution and Its Effect on an Urban Creek (EPA-600/S2-82-090)
- 22007 Compilation of Ames *Salmonella typhimurium* Plate Incorporation Test Protocols (EPA-600/S2-82-007)
- 22070 Acid Rain Mitigation Study: Volumes I and II. (EPA-600/S2-82-070)
- 22091 Organic Emissions from Iron Ore Sintering Plants: Determination of Causes and Methods of Abatement (EPA-600/S2-82-091)
- 22092 A Critical Review of Wastewater Treatment Plant Sludge Disposal by Landfilling (EPA-600/S2-82-092)
- 22094 Characteristics and Treatability of Urban Runoff Residuals (EPA-600/S2-82-094)
- 22099 Physical Properties and Leach Testing of Solidified/Stabilized Industrial Wastes (EPA-600/S2-82-099)
- 22039 Operation and Maintenance Considerations for Land Treatment Systems (EPA-600/S2-82-039)
- 22077 Optimizing Salinity Control Strategies for the Upper Colorado River Basin (EPA-600/S2-82-077)
- 23006 Significance of Size Reduction in Solid Waste Management: Volume 3—Effects of Machine Parameters on Shredder Performance (EPA-600/S2-83-006)
- 22093 Leachability and Revegetation of Solid Waste from Mining (EPA-600/S2-82-093)
- 22096 Industrial Residue Management Alternatives for Allegheny County (Pittsburgh) Pennsylvania (EPA-600/S2-82-096)
- 22035 Costs of Remedial Response Actions at Uncontrolled Hazardous Waste Sites (EPA-600/S2-82-035)
- 22101 Performance Characteristics of Package Water Treatment Plants (EPA-600/S2-82-101)
- 22103 Status, Trends and Implications of Carbon Fiber Material Use (EPA-600/S2-82-103)
- 22097 Liner Materials Exposed to Municipal Solid Waste Leachate (EPA-600/S2-82-097)
- 22102 Determination of Explosion Venting Requirements for Municipal Solid Waste Shredders (EPA-600/S2-82-102)
- 23003 Trihalomethane Removal by Coagulation Techniques in a Softening Process (EPA-600/S2-83-003)
- 23007 Advanced Biological Treatment of Municipal Wastewater Through Aquaculture (EPA-600/S2-83-007)
- 23004 Swine Lagoon Effluent Applied to Coastal Bermudagrass (EPA-600/S2-83-004)
- 23005 Multiple Water Reuse in Poultry Processing: Case Study in Egypt (EPA-600/S2-83-005)
- 23009 Considerations in Granular Activated Carbon Treatment of Combined Industrial Wastewaters (EPA-600/S2-83-009)
- 23010 Environmental Assessment Data Base for Petroleum Refining Wastewaters and Residuals (EPA-600/S2-83-010)
- 23011 Effects of Livestock Pasturing on Nonpoint Runoff Surface (EPA-600/S2-83-011)
- 23012 Effects on Cattle from Exposure to Sewage Sludge (EPA-600/S2-83-012)
- 23008 Economic Benefits of Controlling Water Pollution in an Irrigated River Basin: Methodology and Application (EPA-600/S2-83-008)
- 22040 Petroleum Pipeline Leak Detection Study (EPA-600/S2-82-040)
- 22055 Drinking Water Cost Equations (EPA-600/S2-82-055)
- 22068 Preliminary Operations Plan and Guidelines for the At-Sea Incineration of Liquid PCB Wastes (EPA-600/S2-82-068)
- 23020 Full-Scale Study of Sequencing Batch Reactors (EPA-600/S2-83-020)
- 22100 Factors Influencing Metal Accumulation by Algae (EPA-600/S2-82-100)
- 23016 Effects of Organic Solvents on the Permeability of Clay Soils (EPA-600/S2-83-016)
- 23019 An Evaluation of Filter Feeding Fishes for Removing Excessive Nutrients and Algae from Wastewater (EPA-600/S2-83-019)
- 22095 Measurement of Volatile Chemical Emissions from Wastewater Basins (EPA-600/S2-82-095)
- 23002 Reduced-Pollution Corrosion-Protection Systems (EPA-600/S2-83-002)
- 23014 Evaluation of the Union Carbide PURASIV HR Vapor Recovery System (EPA-600/S2-83-014)
- 23015 Overland Flow Treatment of Municipal Sewage at Easley, South Carolina (EPA-600/S2-83-015)
- 23017 Rangeland Watershed Water Budget and Grazing Cattle Waste Nutrient Cycling (EPA-600/S2-83-017)
- 23018 Radiofrequency Radiation Exposure Facilities for Bio-Effects Research (EPA-600/S2-83-018)
- 23021 Biochemical Analyses for Detection and Assessment of Pollution in the Subsurface Environment (EPA-600/S2-83-021)
- 23022 Reducing Runoff Pollution Using Vegetated Borderland for Manure Application Sites (EPA-600/S2-83-022)
- 23023 Optimization of Wastes Treatment with Reference to Biogas and Protein Recovery (EPA-600/S2-83-023)

- 23024 Resource Conservation and Utilization in Animal Waste Management (EPA-600/S2-83-024)
- 23025 Nonpoint Sediment Production in the Colusa Basin Drainage Area, California (EPA-600/S2-83-025)
- 23026 Design Principles for Wetland Treatment Systems (EPA-600/S2-83-026)
- 23027 Closed-Cycle Textile Dyeing: Full-Scale Hyperfiltration Demonstration (EPA-600/S2-83-027)
- 23028 Impact of Coal Refuse Disposal on Groundwater (EPA-600/S2-83-028)
- 23029 User's Guide for the Automated Inhalation Exposure Methodology (IEM) (EPA-600/S2-83-029)
- 23030 Analysis of Geothermal Wastes for Hazardous Components (EPA-600/S2-83-030)
- 23031 Pilot Plant Treatment of Acid Mine Drainage by Reverse Osmosis (EPA-600/S2-83-031)
- 23032 Organic Contaminant Removal in Lower Mississippi River Drinking Water by Granular Activated Carbon Adsorption (EPA-600/S2-83-032)
- 23033 Industrial Process Profiles for Environmental Use: Chapter 30, the Electronic Component Manufacturing Industry (EPA-600/S2-83-033)
- 23038 Supercritical Fluid Regeneration of Adsorbents (EPA-600/S2-83-038)
- 23039 Test Procedure for Iodine-131 in Drinking Water: Interlaboratory Collaborative Study (EPA-600/S2-83-039)
- 23040 Extraction of Pesticides from Process Streams Using High Volatility Solvents: A Feasibility Study (EPA-600/S2-83-040)
- 23041 Control of Hydrocarbon Emissions from Cotton and Synthetic Textile Finishing Plants (EPA-600/S2-83-041)
- 23042 Optimizing Coagulation-Adsorption for Haloform and Total Organic Carbon Reduction (EPA-600/S2-83-042)
- 23043 Evaluation of Catchbasin Performance for Urban Stormwater Pollution Control (EPA-600/S2-83-043)
- 23044 Demonstration of the Use of Charged Fog in Controlling Fugitive Dust from Large-Scale Industrial Sources (EPA-600/S2-83-044)
- 23045 Development and Assessment of Procedures for Collection, Chemical Characterization and Mutagenicity Testing of Ambient Air (EPA-600/S2-83-045)
- 23046 Field Verification of Liners from Sanitary Landfills (EPA-600/S2-83-046)
- 23047 Predicting Preferential Adsorption of Organics by Activated Carbon (EPA-600/S2-83-047)
- 23048 Removing Organics from Philadelphia Drinking Water by Combined Ozonation and Adsorption (EPA-600/S2-83-048)
- 23049 Combined Sewer Overflow Characteristics from Treatment Plant Data (EPA-600/S2-83-049)
- 23050 Adaptation of the Simplex Gasification Process to the Co-Conversion of Municipal Solid Waste and Sewage Sludge (EPA-600/S2-83-050)
- 23034 Survey of Industrial Applications of Aqueous-Phase and Vapor-Phase Activated Carbon Adsorption for Control of Pollutant Compounds from Manufacture of Organic Compounds (EPA-600/S2-83-034/035)
- 23037 Emission Testing and Evaluation of the Enclosed Coke Pushing and Quenching System (EPA-600/S2-83-037)
- 23051 Removal of Metals in Combined Treatment Systems (EPA-600/S2-83-051)
- 23053 Lawrence Avenue Underflow Sewer System: Monitoring and Evaluation (EPA-600/S2-83-053)
- 23055 Standardized Procedures for Planting Vegetation on Completed Sanitary Landfills (EPA-600/S2-83-055)
- 23056 Seattle Distribution System Corrosion Control Study: Volume IV. On-Site Evaluation of Corrosion Treatment (EPA-600/S2-83-056)
- 23057 Land Treatment Field Studies (EPA-600/S2-83-057)
- 23058 Field Assessment of Site Closure, Boone County, Kentucky (EPA-600/S2-83-058)
- 23060 Wet Oxidation and Ozonation of Specific Organic Pollutants (EPA-600/S2-83-060)
- 23061 Activated Carbon Process for the Treatment of Cadmium(II)-Containing Wastewaters (EPA-600/S2-83-061)
- 23062 Microbiological Alterations in Distributed Water Treated with Granular Activated Sludge (EPA-600/S2-83-062)
- 23063 Evaluation of Alternative Wastewater Collection and Treatment Methods for Three Small Kansas Communities (EPA-600/S2-83-063)
- 23064 Demonstration of Sewer Relining by the Insituform Process, Northbrook, Illinois (EPA-600/S2-83-064)
- 23065 Treatment of Gaseous Emissions from Steelplants Containing Small Concentrations of Hydrocarbon Vapors (EPA-600/S2-83-065)
- 23067 Wastewater Treatment with Plants in Nutrient Films (EPA-600/S2-83-067)
- 23068 An Investigation of Selected Dye Carriers Used in Commercial Dyeing of Hydrophobic Fibers (EPA-600/S2-83-068)
- 23069 Development and Application of a Water Supply Financial Reporting System: Volumes I and II (EPA-600/S2-83-069)
- 23071 Effect of Animal Grazing on Water Quality of Nonpoint Runoff in the Pacific Northwest (EPA-600/S2-83-071)
- 23072 Irrigation Return Flow Water Quality Monitoring, Modeling and Variability in the Middle Rio Grande Valley, New Mexico (EPA-600/S2-83-072)
- 23074 Land Treatability of Refinery and Petrochemical Sludges (EPA-600/S2-83-074)
- 23075 Water Hyacinth Wastewater Treatment Systems: Opportunities and Constraints in Cooler Climates (EPA-600/S2-83-075)
- 23077 The Fate of Organic Pollutants in a Wastewater Land Treatment System Using Lagoon Impoundment and Spray Irrigation (EPA-600/S2-83-077)
- 23078 Swine Manure and Lagoon Effluent Applied to Fescue (EPA-600/S2-83-078)
- 23079 Evaluating Swine Drylot Runoff Impact on a Coastal Plain Stream (EPA-600/S2-83-079)
- 23083 Plant-Scale Demonstration of Sludge Incinerator Fuel Reduction (EPA-600/S2-83-083)
- 23084 Demonstrate Real Time Automatic Control of Combined Sewer Systems (EPA-600/S2-83-084)
- 23086 EPA Macroscopic Planning Model (EPAMAC) for Stormwater and Combined Sewer Overflow Control: Application Guide and User's Manual (EPA-600/S2-83-086)

- 23087 The Value of Flow Calibration for Decision Making in Infiltration/Inflow Studies (EPA-600/S2-83-087)
- 23089 Characterization and Treatment of Aqueous Wastes and Residue from Petroleum Refineries (EPA-600/S2-83-089)
- 23094 Alternate Treatment of Organic Solvents and Sludges from Metal Finishing Operations: Final Report (EPA-600/S2-83-094)
- 23101 A Study of PCB Destruction Efficiency and Performance for a Coal-Fired Utility Boiler (EPA-600/S2-83-101)
- 23108 Literature-Review Screening Techniques for the Evaluation of Land Treatment of Industrial Wastes (EPA-600/S2-83-108)
- 23052 Flare Efficiency Study (EPA-600/S2-83-052)
- 23066 Cyanide Removal from Coke Making and Blast Furnace Waste Waters (EPA-600/S2-83-066)
- 23070 Evaluation of the Efficiency of Industrial Flares: Background—Experimental Design—Facility (EPA-600/S2-83-070)
- 23073 Determination of Activated Sludge Biokinetic Constants for Chemical and Plastic Industrial Wastewaters (EPA-600/S2-83-073a/b)
- 23080 Combined Treatment of Liquid Wastes from Industrial Swine Farms Using BLWRS (EPA-600/S2-83-080)
- 23081 A Comparison of Alternative Manure Management Systems—Effect on the Environment, Total Energy Requirement, Nutrient Conservation, Contributions to Corn Silage Production and Economics (EPA-600/S2-83-081)
- 23085 Polishing Industrial Waste Stream Effluents Using Fly Ash-Natural Clay Sorbent Combination (EPA-600/S2-83-085)
- 23088 Feasibility of In-Situ Solidification/Stabilization of Landfilled Hazardous Wastes (EPA-600/S2-83-088)
- 23091 Bromination Process for Disposal of Spilled Hazardous Materials (EPA-600/S2-83-091)
- 23092 Multimedia Environmental Assessment of Electric Submerged ARC Furnaces Producing Ferroalloys (EPA-600/S2-83-092)
- 23093 Control of Air Pollution Emission from Molybdenum Roasting (EPA-600/S2-83-093)
- 23095 Application of Municipal Sludges on Energy Crops: A Feasibility Analysis (EPA-600/S2-83-095)
- 23096 An Evaluation of Subsurface Conditions at Refinery Land Treatment Sites (EPA-600/S2-83-096)
- 23097 Hydro Brake Regulated Storage System for Stormwater Management (EPA-600/S2-83-097)
- 23098 Evaluation of Deep Shaft Biological Wastewater Treatment Process at Ithaca, New York (EPA-600/S2-83-098)
- 23099 Fail-Safe Transfer Line for Hazardous Fluids (EPA-600/S2-83-099)
- 23100 Mobile System for Extracting Spilled Hazardous Materials from Excavated Soils (EPA-600/S2-83-100)
- 23102 Development of Standard Procedures for Evaluating Oxygen Transfer Devices (EPA-600/S2-83-102)
- 23104 Granular Activated Carbon Adsorption and Fuel-Bed Reactivation at Manchester, New Hampshire (EPA-600/S2-83-104)
- 23105 Sewage Sludge Incinerator Fuel Reduction at Nashville, Tennessee (EPA-600/S2-83-105)
- 23106 Stormwater Hydrological Characteristics of Porous and Conventional Paving Systems (EPA-600/S2-83-106)
- 23107 The Equilibrium Arsenic Capacity of Activated Alumina (EPA-600/S2-83-107)
- 23109 Potential Clogging of Landfill Drainage Systems (EPA-600/S2-83-109)
- 23110 Iron and Steel Plant Open Source Fugitive Emission Control Evaluation (EPA-600/S2-83-110)
- 23111 Nitrification Inhibition Biokinetics (EPA-600/S2-83-111)
- 23112 Evaluation of a Containment Barrier for Hazardous Material Spill in Watercourses (EPA-600/S2-83-112)
- 23113 Effects of Using Sewage Sludge on Agricultural and Disturbed Lands (EPA-600/S2-83-113)
- 23115 Three New Techniques for Floating Pollutant Spill Control and Recovery (EPA-600/S2-83-115)
- 23116 Design of a Remotely Controlled Hovercraft Vehicle for Spill Reconnaissance (EPA-600/S2-83-116)
- 23117 Microbial Degradation of Selected Hazardous Materials: Pentachlorophenol, Hexachlorocyclopentadiene, and Methyl Parathion (EPA-600/S2-83-117)
- 23118 Treatment of Reactive Wastes at Hazardous Waste Landfills (EPA-600/S2-83-118)
- 23121 Water Supply Simulation Model Volumes I, II, and III (EPA-600/S2-83-121)
- 23122 Electroplating Plant Operating Conditions Related to Wastewater Sludge Leachability (EPA-600/S2-83-122)
- 23123 Methods for Determining the Location of Abandoned Wells (EPA-600/S2-83-123)
- 23124 Guidelines for the Monitoring of Urban Runoff Quality (EPA-600/S2-83-124)
- 23125 Development of Methods to Define Water Quality Effects of Urban Runoff (EPA-600/S2-83-125)
- 23126 Automated Control: A Review and Applications in Industrial Environmental Protection (EPA-600/S2-83-126)
- 23127 Evaluation of Stable Labeled Compounds as Internal Standards for Quantitative GC/MS Determinations (EPA-600/S2-83-127)
- 24003 Organic Emissions from Ferrous Metallurgical Industries: Compilation of Emission Factors and Control Technologies (EPA-600/S2-84-003)
- 24005 Alternative Water Disinfection Schemes for Reduced Trihalomethane Formation: Volume II. Algae as Precursors for Trihalomethanes in Chlorinated Drinking Water (EPA-600/S2-84-005)
- 24006 Removal and Treatment of Contaminated River Bottom Muds: Field Demonstration (EPA-600/S2-84-006)
- 24007 Spill Alert Device for Earth Dam Failure Warning (EPA-600/S2-84-007)
- 24008 Retrofit Cost Relationships for Hazardous Waste Incineration (EPA-600/S2-84-008)
- 24009 Pilot Plant Project for Removing Organic Substances from Drinking Water (EPA-600/S2-84-009)
- 24010 Conversion of Sewage Sludge to Oil by Hydroliquefaction (EPA-600/S2-84-010)
- 24011 Stability and Effectiveness of Chlorine Disinfectants in Water Distribution Systems (EPA-600/S2-84-011)
- 24012 Analysis of Water-Soluble Organics (EPA-600/S2-84-012)

- 24013 Determination of Dioxin Levels in Carbon Reactivation Process Effluent Streams (EPA-600/S2-84-013)
- 24014 Control of Asbestos Fiber Loss from Asbestos-Cement Water-main (EPA-600/S2-84-014)
- 24015 Compatibility of Grouts with Hazardous Wastes (EPA-600/S2-84-015)
- 24016 Reclamation of Toxic Mine Waste Utilizing Sewage Sludge: Contrary Creek Demonstration Project, Addendum Report (EPA-600/S2-84-016)
- 24017 Biological Countermeasures for the Control of Hazardous Material Spills (EPA-600/S2-84-017)
- 24018 A Mobile Drinking Water Treatment Research Facility for Inorganic Contaminants Removal: Design, Construction, and Operation (EPA-600/S2-84-018)
- 24019 Limestone Scrubber Slurry Automatic Control Systems (EPA-600/S2-84-019)
- 24020 Procedures for Estimating Dry Weather Sewage In-Line Pollutant Deposition; Phase II (EPA-600/S2-84-020)
- 24021 Laboratory Studies of Soil Bedding Requirements for Flexible Membrane Liners (EPA-600/S2-84-021)
- 24022 Evaluation of the RCRA Extraction Procedure: Lysimeter Studies with Municipal/Industrial Wastes (EPA-600/S2-84-022)
- 24023 Sulfide Precipitation of Heavy Metals: Effect of Complexing Agents (EPA-600/S2-84-023)
- 24024 A Guide to the Selection of Materials for Monitoring Construction and Ground-Water Sampling (EPA-600/S2-84-024)
- 24026 Inspection and Operating and Maintenance Guidelines for Secondary Lead Smelter Air Pollution Control (EPA-600/S2-84-026)
- 24027 Extended Evaluation of Unpaved Road Dust Suppressants in the Iron and Steel Industry (EPA-600/S2-84-027)
- 24029 Removal of Organic Contaminants from the Drinking Water Supply at Glen Cove, NY (EPA-600/S2-84-029)
- 24030 The Rubber-Processing Chemicals Data Base (EPA-600/S2-84-030)
- 24031 Advanced Treatment for Wastewater Reclamation at Water Factory 21 (EPA-600/S2-84-031)
- 24035 Strip Mine Reclamation with Municipal Sludge (EPA-600/S2-84-035)
- 24036 Improved Techniques for Residual Ozone (EPA-600/S2-84-036)
- 24038 Analysis and Assessment of Incinerated Municipal Sludge Ashes and Leachates (EPA-600/S2-84-038)
- 24039 Sale of Surplus Digester and Landfill Gas to Public Utilities (EPA-600/S2-84-039)
- 24040 Geotechnical Quality Assurance of Construction of Disposal Facilities (EPA-600/S2-84-040)
- 24041 Assessment of Innovative Techniques to Detect Waste Impoundment Liner Failures (EPA-600/S2-84-041)
- 24042 Evaluation of an Air Curtain Hooding System for a Primary Copper Converter (EPA-600/S2-84-042)
- 24044 On-Farm Improvements to Reduce Sediment and Nutrients in Irrigation Return Flow (EPA-600/S2-84-044)
- 24045 Field Manual for Plunging Water Jet Use in Oil Spill Cleanup (EPA-600/S2-84-045)
- 24046 Characterization of Sewage Sludge and Sewage Sludge-Soil Systems (EPA-600/S2-84-046)
- 24047 Volatilization of Organic Pollutants in Wastewater Treatment-Model Studies (EPA-600/S2-84-047)
- 24050 Landfill Research at the Boone County Field Site (EPA-600/S2-84-050)
- 24051 Gaseous Emissions from Excess Air Combustion of Propellants and Explosives (EPA-600/S2-84-051)
- 24052 A Profile of Existing Hazardous Waste Incineration Facilities and Manufacturers in the United States (EPA-600/S2-84-052)
- 24053 Protocol for Establishment of a Ground Water Management and Protection Plan (EPA-600/S2-84-053)
- 24054 Acid Precipitation and Drinking Water Quality in the Eastern United States (EPA-600/S2-84-054)
- 24055 Technology Evaluation for Priority Pollutant Removal from Dye-stuff Manufacture Wastewaters (EPA-600/S2-84-055)
- 24056 Biologically Medicated Corrosion and Water Quality Deterioration in Distribution Systems (EPA-600/S2-84-056)
- 24057 Design and Development of a Hazardous Waste Reactivity Testing Protocol (EPA-600/S2-84-057)
- 24058 Innovative Concepts for Detecting and Locating Leaks in Waste Impoundment Liner Systems: Acoustic Emission Monitoring and Time Domain Reflectometry (EPA-600/S2-84-058)
- 24059 Cost Equations for Small Drinking Water Systems (EPA-600/S2-84-059)
- 24060 Equilibrium Distribution Coefficients for Extraction of Organic Priority Pollutants from Water (EPA-600/S2-84-060)
- 24061 Priority Pollutants in the Cedar Creek Reclamation-Recharge Facilities (EPA-600/S2-84-061)
- 24066 Seattle Distribution System Corrosion Control Study: Volume V. Counteractive Effects of Disinfection and Corrosion Control (EPA-600/S2-84-066)
- 24071 Report on the Feasibility of APEG Detoxification of Dioxin-Contaminated Soils (EPA-600/S2-84-071)
- 24073 Mercury Mass Distribution During Laboratory and Simulated *In-Situ* Oil Shale Retorting (EPA-600/S2-84-073)
- 21008 Multimedia Pollution Assessment of the Wood Products Industries (EPA-600/S2-81-008)
- 23082 Ground Water—Mineralogy Relationship for *In-Situ* Oil Shale Retorting (EPA-600/S2-83-082)
- 23114 Recovery, Reuse, and Recycle of Industrial Waste (EPA-600/S2-83-114)
- 23119 Management of Industrial Pollutants of Anaerobic Processes (EPA-600/S2-83-119)
- 23120 Process Modification Toward Minimization of Environmental Pollutants in the Chemical Processing Industry (EPA-600/S2-83-120)
- 24025 Research Planning Task Group Study—Thermal Destruction: Final Report (EPA-600/S2-84-025)
- 24032 The Organic Dyes and Pigments Data Base (EPA-600/S2-84-032)
- 24033 Hydrocarbon Solvent Recovery in the Presence of Resin Contaminants (EPA-600/S2-84-033)
- 24034 Organic Chemical Producers Data Base Development and Update (EPA-600/S2-84-034)

- 24043 Waste Management Control Handbook for Dairy Food Plants (EPA-600/S2-84-043)
- 24048 Trial Burn Protocol Verification at a Hazardous Waste Incinerator (EPA-600/S2-84-048)
- 24049 Evaluation of the Feasibility of Incinerating Hazardous Waste in High-Temperature Industrial Processes (EPA-600/S2-84-049)
- 24062 Restoration of Failing On-Lot Sewage Disposal Areas (EPA-600/S2-84-062)
- 24063 Performance and Economic Feasibility of a Sludge/Waste-paper Gasifier System (EPA-600/S2-84-063)
- 24064 Laboratory Feasibility Studies for the Fluidized-Bed Combustion of Spent Potlining from Aluminum Reduction (EPA-600/S2-84-064)
- 24065 Seattle Distribution System Corrosion Control Study: Volume II. Tolt River Water Pilot Plant Study (EPA-600/S2-84-065)
- 24067 Response of Crude Oil Slicks to Dispersant Treatment at Sea (EPA-600/S2-84-067)
- 24068 Removal of Trihalomethane Precursors by Direct Filtration and Conventional Treatment (EPA-600/S2-84-068)
- 24069 Removal of *Giardia lamblia* Cysts by Drinking Water Treatment Plants (EPA-600/S2-84-069)
- 24070 Wastewater Recycle and Reuse Potential for Indirect Discharge Textile Finishing Mills (EPA-600/S2-84-070)
- 24072 Assessment of Atmospheric Emissions from Quenching of Blast Furnace Slag with Blast Furnace Blowdown Water (EPA-600/S2-84-072)
- 24074 OHMSETT Test Series 77: Global Oil Recovery Skimmer, Veegarm Skimming Arm, Keba 600, Wylie Skimmer, and the Skim-Pak Cluster (EPA-600/S2-84-074)
- 24075 Effects of Sewage Sludge on Corn Silage and Animal Products (EPA-600/S2-84-075)
- 24077 Evaluation of Process Systems for Effective Management of Aluminum Finishing Wastewaters and Sludges (EPA-600/S2-84-077)
- 24078 Oxides of Nitrogen/Ammonia Control Technology for Oil Shale Retort Emissions: Interim Report (EPA-600/S2-84-078)
- 24079 Estimating Costs of Granular Activated Carbon Treatment for Water and Wastewater (EPA-600/S2-84-079)
- 24080 Evaluation of VOC Emissions from Wastewater Systems (Secondary Emissions) (EPA-600/S2-84-080)
- 24081 Characterization of Operating and Maintenance Practices for Wastewater Treatment Systems in the Iron and Steel Industry (EPA-600/S2-84-081)
- 24082 Survey of Environmental Regulations Applying to Geothermal Exploration, Development, and Use (EPA-600/S2-84-082)
- 24083 Water Filtration at Duluth (EPA-600/S2-84-083)
- 24084 Capture and Containment Systems for Hazardous Material Spills on Land (EPA-600/S2-84-084)
- 24085 Surface Treatment Agents for Protection of Shoreline from Oil Spills (EPA-600/S2-84-085)
- 24086 Laboratory-Scale Flame-Mode Hazardous Waste Thermal Destruction Research (EPA-600/S2-84-086)
- 24087 Operation and Maintenance of Selected Ozone and Ultraviolet Disinfection Systems (EPA-600/S2-84-087)
- 24088 Effective Filtration Methods for Small Water Supplies (EPA-600/S2-84-088)
- 24089 Controlled Air Incineration of Pentachlorophenol-Treated Wood (EPA-600/S2-84-089)
- 24091 Testing and Evaluation of an Alcohol Production Facility Utilizing Potatoes as a Feedstock (EPA-600/S2-84-091)
- 24095 Evaluation of the Efficiency of Industrial Flares: Test Results (EPA-600/S2-84-095)
- 24096 *In Situ* Field Portable Fine Particle Measuring Device (EPA-600/S2-84-096)
- 24098 Annotated Literature References on Land Treatment of Hazardous Waste (EPA-600/S2-84-098)
- 24099 Review of Recent Research in Indoor Air Quality (EPA-600/S2-84-099)
- 24100 Investigation of Textile Dyebath Reconstitution and Reuse (EPA-600/S2-84-100)
- 24103 The Use of Portable Instrumentation for the Monitoring of Fugitive Organic Emissions from Hazardous Waste Incinerators (EPA-600/S2-84-103)
- 24105 Synthetic Resin Adsorbents in Treatment of Industrial Waste Streams (EPA-600/S2-84-105)
- 24108 Laboratory Assessment of Potential Hydrocarbon Emissions from Land Treatment of Refinery Oily Sludges (EPA-600/S2-84-108)
- 24110 Methods of Chemical Analysis for Oil Shale Wastes (EPA-600/S2-84-110)
- 24113 Tar Sands Leachate Study (EPA-600/S2-84-113)
- ### Ecological Research
- 32006 Dependence of Nephelometer Scattering Coefficients on Relative Humidity: Fronts, Nocturnal Disturbances and Wood Smoke (EPA-600/S3-82-006)
- 32030 Persistence in Model Ecosystems (EPA-600/S3-82-030)
- 32015 Validation of the EKMA Model Using Historical Air Quality Data (EPA-600/S3-82-015)
- 32039 Design, Fabrication and Testing of Ambient Aerosol Sampler Inlets (EPA-600/S3-82-039)
- 32007 Wake of a Block Vehicle in a Shear-Free Boundary Flow—An Experimental and Theoretical Study (EPA-600/S3-82-007)
- 32009 *In Situ* Aerodynamic Sizing of Aerosol Particles with the SPART Analyzer (EPA-600/S3-82-009)
- 32040 Meteorology and Air Quality Modeling in Complex Terrain—A Literature Review (EPA-600/S3-82-040)
- 32008 Feasibility of Developing Source Sampling Methods for Asbestos Emissions (EPA-600/S3-82-008)
- 32018 Effects of Soluble Fractions of Drilling Fluids and Hexavalent Chromium on the Development of the Crabs, *Rhithropanopeus harrisi* and *Callinectes sapidus* (EPA-600/S3-82-018)
- 32010 Measurement of Loblolly Pine Terpene Emissions (EPA-600/S3-82-010)
- 32016a Outdoor Smog Chamber Experiments to Test Photochemical Models (EPA-600/S3-82-016a)
- 32017 Development of Techniques and Methodology for the Laboratory Culture of Striped Bass, *Morone saxatilis* (EPA-600/S3-82-017)



- 32056 Meteorology and Air Quality Patterns in St. Louis RAPS Program—Upper Level Analyses (EPA-600/S3-82-056)
- 32014 Smog Chamber Experiments to Test Oxidant-Related Control Strategy Issues (EPA-600/S3-82-014)
- 32019 Volatilization of Organic Pollutants from Water (EPA-600/S3-82-019)
- 32020 Laboratory Ecosystems for Studying Chemical Fate: An Evaluation Using Methyl Parathion (EPA-600/S3-82-020)
- 32002 A Review of Aquatic Habitat Assessment Methods (EPA-600/S3-82-002)
- 32058 Components Identified in Energy-Related Wastes and Effluents (EPA-600/S3-82-058)
- 32059 Maintenance and Testing of Hydrological Simulation Program—FORTRAN (HSPF) (EPA-600/S3-82-059)
- 32029 Application of Water Quality Models to a Small Forested Watershed: 1. The Nondesignated 208 Area Screening Model (EPA-600/S3-82-029)
- 32047 Feasibility of Developing a Comprehensive Methodology for Source Identification and Environmental Loading (Materials Balance) (EPA-600/S3-82-047)
- 32062 An Experimental Study of Turbulence in an Urban Environment (EPA-600/S3-82-062)
- 32027 Conservation Tillage and Conventional Tillage: A Comparative Assessment (EPA-600/S3-82-027)
- 32043 Evaluation of Four Urban-Scale Photochemical Air Quality Simulation Models (EPA-600/S3-82-043)
- 32061 Mass Spectrometric Analysis of Involatile Samples (EPA-600/S3-82-061)
- 32064 Fate and Biological Effects of Oil Well Drilling Fluids in the Marine Environment: A Literature Review (EPA-600/S3-82-064)
- 32074 Cycling of Xenobiotics Through Marine and Estuarine Species (EPA-600/S3-82-074)
- 32076 Atmospheric Turbidity over the United States from 1967 to 1976 (EPA-600/S3-82-076)
- 32012 Petroleum Contamination: Quantification and Passive Tagging in Organisms and Sediments (EPA-600/S3-82-012)
- 32028 Modeling the Fate of Toxic Organic Materials in Aquatic Environments (EPA-600/S3-82-028)
- 32041 A New Carbon-Bond Mechanism for Air Quality Simulation Modeling (EPA-600/S3-82-041)
- 32046 Executive Summary for the Hydrological Simulation Program FORTRAN (HSPF) (EPA-600/S3-82-046)
- 32049 Analysis of Mathematical Models for Pollutant Transport and Dissipation (EPA-600/S3-82-049)
- 32060 Retention and Transformations of Selected Pesticides and Phosphorus in Soil-Water Systems: A Critical Review (EPA-600/S3-82-060)
- 32063 ENAMAP—A Long-Term SO<sub>2</sub> and Sulfate Pollution Model: Refinements of Transformation and Deposition Mechanisms (EPA-600/S3-82-063)
- 32011 Estimating Cloud Parameters for Neros I (EPA-600/S3-82-011)
- 32057 River Basin Validation of Water Quality Assessment Methodology for Screening Nondesignated 208 Areas: Volumes I and II. (EPA-600/S3-82-057)
- 32013 Sublethal Effects of Number 2 Fuel Oil on Lobster Behavior and Chemoreception (EPA-600/S3-82-013)
- 32032 Field-to-Stream Transport of Agricultural Chemicals and Sediment in an Iowa Watershed. Part 1: Data Base for Model Testing (1976-1978) (EPA-600/S3-82-032)
- 32038 Experimental Protocol for Determining Hydroxyl Radical Reaction Rate Constants (EPA-600/S3-82-038)
- 32042 Determination of Dry Deposition Rates for Ozone (EPA-600/S3-82-042)
- 32075 Usefulness of the Self-Fertilizing Cyprinodontid Fish, *Rivulus marmoratus* as an Experimental Animal in Studies Involving Carcinogenesis, Teratogenesis and Mutagenesis (EPA-600/S3-82-075)
- 32051 Factors Influencing Growth and Survival of White Sucker, *Catostomus commersoni* (EPA-600/S3-82-051)
- 32053 Cadmium and Endrin Toxicity to Fish in Waters Containing Mineral Fibers (EPA-600/S3-82-053)
- 32065 Photosynthesis and Respiration Rates in the Monticello Experimental Streams: 1976/77 Diel Field Data and Computed Results (EPA-600/S3-82-065)
- 32066 An Assessment of Wind Characteristics and Wind Energy Conversion Systems for Electric Utilities: Wisconsin Power Plant Impact Study (EPA-600/S3-82-066)
- 32068 Impact of Air Pollution on Vegetation near the Columbia Generating Station: Wisconsin Power Plant Impact Study (EPA-600/S3-82-068)
- 32071 Spring and Springbrook Fauna of the Piceance Basin, Colorado (EPA-600/S3-82-071)
- 32072 Impact of a Once Through Cooling System on the Yellow Perch Stock in the Western Basin of Lake Erie (EPA-600/S3-82-072)
- 32078 Estimating Concentrations Downwind from an Instantaneous Puff Release (EPA-600/S3-82-078)
- 32084 Sediment Suspension and Resuspension from Small Craft Induced Turbulence (EPA-600/S3-82-084)
- 32085 The Characterization of the Chesapeake Bay: A Systematic Analysis of Toxic Trace Elements (EPA-600/S3-82-085)
- 32079 Analytical Solutions of a Gradient-Transfer Model for Plume Deposition and Sedimentation (EPA-600/S3-82-079)
- 32005 Preliminary Assessment of Multiphase Restoration Efforts at Liberty Lake, Washington (EPA-600/S3-82-005)
- 32050 Organization and Adaptation of Aquatic Laboratory Ecosystems Exposed to the Pesticide Dieldrin (EPA-600/S3-82-050)
- 32052 Numerical and Graphical Procedures for Estimation of Community Photosynthesis and Respiration in Experimental Streams (EPA-600/S3-82-052)
- 32080 Method for Measuring Carbon Fiber Emissions from Stationary Sources (EPA-600/S3-82-080)
- 32081 Water Quality of the Three Major Tributaries to the Chesapeake Bay, the Susquehanna, Potomac, and James Rivers, January 1979-April 1981 (EPA-600/S3-82-081)
- 32083 Historical Review of Water Quality and Climatic Data from Chesapeake Bay with Emphasis on Effect of Enrichment (EPA-600/S3-82-083)
- 32086 Development of a Charged Grid Sensor for Airborne Carbon Fibers (EPA-600/S3-82-086)
- 32082 Distribution and Abundance of Waterfowl and Submerged Aquatic Vegetation in Chesapeake Bay (EPA-600/S3-82-082)
- 32089 Fate, Transport, and Transformation of Toxics: Significance of Suspended Sediment and Fluid Mud (EPA-600/S3-82-089)

- 32003 Agricultural Runoff and Reservoir Drawdown Effects on a 2760-Hectare Reservoir (EPA-600/S3-82-003)
- 32070 Consumption Rates of Potentially Hazardous Marine Fish Caught in the Metropolitan Los Angeles Area (EPA-600/S3-82-070)
- 32090 The Biology and Propagation of Eelgrass, *Zostera marina*, in Chesapeake Bay (EPA-600/S3-82-090)
- 32088 Governing Chesapeake Waters: A History of Water Quality Controls on Chesapeake Bay, 1607-1972 (EPA-600/S3-82-088)
- 32037 Vegetative Delineation of Coastal Salt Marsh Boundaries: Evaluation of Methodology (EPA-600/S3-82-037)
- 32087 Causes of Papillomas on Fish Living in Chlorinated Sewage Effluent (EPA-600/S3-82-087)
- 32093 Community Structure, Nutrient Dynamics, and the Degradation of Diethyl Phthalate in Aquatic Laboratory Microcosms (EPA-600/S3-82-093)
- 32091 Development of a Carcinogen Assay System Utilizing Estuarine Fishes (EPA-600/S3-82-091)
- 32094 Final Evaluation of Urban-Scale Photochemical Air Quality Simulation Models (EPA-600/S3-82-094)
- 33001 Photochemical Reactivity of Perchloroethylene (EPA-600/S3-83-001)
- 33003 Evaluation of the Empirical Kinetic Modeling Approach (EKMA) (EPA-600/S3-83-003)
- 33002 Measurements of Hazardous Organic Chemicals in the Ambient Atmosphere (EPA-600/S3-83-002)
- 32096 Experiments and Experiences in Biomanipulation—Studies of Biological Ways to Reduce Algal Abundance and Eliminate Blue-Greens (EPA-600/S3-82-096)
- 33006 Habitat Preservation for Midwest Stream Fishes: Principles and Guidelines (EPA-600/S3-83-006)
- 33007 Verification of a Toxic Organic Substance Transport and Bioaccumulation Model (EPA-600/S3-83-007)
- 32092 Atmospheric Chemistry of Several Toxic Compounds (EPA-600/S3-82-092)
- 32095 Inorganic Compound Identification of Fly Ash Emissions from Municipal Incinerators (EPA-600/S3-82-095)
- 33004 Acidity, Nutrients, and Minerals in Atmospheric Precipitation Over Florida: Deposition Patterns, Mechanisms and Ecological Effects (EPA-600/S3-83-004)
- 33010 Lake Restoration: A Five-Year Evaluation of the Mirror and Shadow Lakes Project, Waupaca, Wisconsin (EPA-600/S3-83-010)
- 33011 Studies in Air Quality Meteorology at North Carolina State University (EPA-600/S3-83-011)
- 33012 Chesapeake Bay Sediment Trace Elements (EPA-600/S3-83-012)
- 33013 Physiological Effects of Drilling Muds on Reef Corals (EPA-600/S3-83-013)
- 33016 A Regional Recreation Demand and Benefits Model (EPA-600/S3-83-016)
- 33017 Bacterial Bioassay for Level I Toxicity Assessment (EPA-600/S3-83-017)
- 33018 Organic Compounds in Surface Sediments and Oyster Tissues from the Chesapeake Bay (EPA-600/S3-83-018)
- 33019 Submerged Aquatic Vegetation: Distribution and Abundance in the Lower Chesapeake Bay and the Interactive Effects of Light, Epiphytes, and Grazers (EPA-600/S3-83-019)
- 33020 Effects of Agriculture on Stream Fauna in Central Indiana (EPA-600/S3-83-020)
- 33021 Effects of Drilling Fluids on Embryo Development (EPA-600/S3-83-021)
- 33022 Volatile Organic Compounds in the Ambient Atmosphere of the New Jersey, New York Area (EPA-600/S3-83-022)
- 33023 1978 Houston Oxidant Modeling Study: Volumes I and II (EPA-600/S3-83-023a/b)
- 33023c Houston Oxidant Modeling Study—1978: Volume III. Characterization of Data Quality (EPA-600/S3-83-023c)
- 33025 Ambient Hydrocarbon and Ozone Concentrations Near a Refinery (EPA-600/S3-83-025)
- 33026 Studies of NO<sub>x</sub> Reactions and O<sub>3</sub> Transport in Southern California, Fall 1976 (EPA-600/S3-83-026)
- 33027 Volatile Organic Chemicals in the Atmosphere: An Assessment of Available Data (EPA-600/S3-83-027)
- 33029 Long Path Laser Ozone Monitor Evaluation (EPA-600/S3-83-029)
- 33033 Animal-Sediment Relationships of the Upper and Central Chesapeake Bay (EPA-600/S3-83-033)
- 33034 An Analysis of Complex I and Complex II—Candidate Screening Models (EPA-600/S3-83-034)
- 33035 A Regional Scale Model (1000 km) of Photochemical Air Pollution: Part I. Theoretical Formulation (EPA-600/S3-83-035)
- 33037 Animal-Sediment Relationships: A Case Study of the Patapsco River (EPA-600/S3-83-037)
- 33039 Implementation of Innovative Dredging Techniques in the Chesapeake Bay Region (EPA-600/S3-83-039)
- 33042 Meteorological Factors in the Formation of Regional Haze (EPA-600/S3-83-042)
- 33048 Baseline Sediment Characteristics and Sedimentation Patterns on the Virginia Portion of the Chesapeake Bay (EPA-600/S3-83-048)
- 33052 Stratigraphic Evidence of Human Disturbance in Some Chesapeake Bay Tributaries (EPA-600/S3-83-052)
- 33056 Development of Instrumentation for Monitoring Carbon Fiber Emission (EPA-600/S3-83-056)
- 33059 Acidic Deposition and the Corrosion and Deterioration of Materials in the Atmosphere: A Bibliography 1880-1982 (EPA-600/S3-83-059)
- 32031 Resource and Environmental Impacts of Trends in U.S. Agriculture (EPA-600/S3-82-031)
- 33028 Nitrogen Oxides Reactions Within Urban Plumes Transported Over the Ocean (EPA-600/S3-83-028)
- 33030 Measurements of Formaldehyde and Hydrogen Peroxide in the California South Coast Air Basin (EPA-600/S3-83-030)
- 33036 Evaluation of Management Tools in the Occoquan Watershed (EPA-600/S3-83-036)
- 33045 Modeling Fine Sediment Transport in Estuaries (EPA-600/S3-83-045)
- 33046 Analyzing Natural Systems: Analysis for Regional Residuals—Environmental Quality Management (EPA-600/S3-83-046)

- 33047 Biology of Submerged Aquatic Macrophyte Communities in the Lower Chesapeake Bay (Volume III) (EPA-600/S3-83-047)
- 33050 Love Canal Monitoring Program—Final Report: Volume 1 (EPA-600/S3-83-050)
- 33051 Interlaboratory Root Elongation Testing of Toxic Substances on Selected Plant Species (EPA-600/S3-83-051)
- 33053 Fates and Biological Effects of Polycyclic Aromatic Hydrocarbons in Aquatic Systems (EPA-600/S3-83-053)
- 33055 Experimental Marine Microcosm Test Protocol and Support Document (EPA-600/S3-83-055)
- 33058 Optimization of GC/MS Based Tenax Collection Method for Toxic Organics (EPA-600/S3-83-058)
- 33060 Effects of Suspended Sediments on Penetration of Solar Radiation into Natural Waters (EPA-600/S3-83-060)
- 33062 Evaluation of a Fathead Minnow *Pimephales promelas* Embryo-Larval Test Guideline Using Acenaphthene and Isophorone (EPA-600/S3-83-062)
- 33064 Methodology for Estimating Environmental Loadings from Manufacture of Synthetic Organic Chemicals (EPA-600/S3-83-064)
- 33065 The Potential for Biological Controls of *Cladophora glomerata* (EPA-600/S3-83-065)
- 33069 Application of Hydrologic Simulation Program—FORTRAN (HSPF) in Iowa Agricultural Watersheds (EPA-600/S3-83-069)
- 33070 An Investigation of Resonant Optoacoustic Cells (EPA-600/S3-83-070)
- 33073 Development, Design, and Operation of a Cascade Impactor to Collect Aerosol Samples for Wavelength-Dispersive X-Ray Fluorescence Analysis (EPA-600/S3-83-073)
- 33074 Changes in the Zooplankton Community in Response to Reductions in Nutrient Loading to Saginaw Bay (Lake Huron) (EPA-600/S3-83-074)
- 33075 Effects of Phosphorus Loading on Phytoplankton Distribution and Certain Aspects of Cytology in Saginaw Bay, Lake Huron (EPA-600/S3-83-075)
- 33076 Detection of Mutagenic/Carcinogenic Alteration in Fish (EPA-600/S3-83-076)
- 33077 Influence of Diet and Body Lipids on the Bioconcentration of Endrin from Water in the Fathead Minnow (*Pimephales promelas*) (EPA-600/S3-83-077)
- 33078 Ware River Intensive Watershed Study (EPA-600/S3-83-078)
- 33084 Prediction of Ecological Effects of Toxic Chemicals: Overall Strategy and Theoretical Basis for the Ecosystem Model (EPA-600/S3-83-084)
- 33086 Evaluation of Chemical Reaction Mechanisms for Photochemical Smog: Part I: Mechanism Descriptions and Documentation (EPA-600/S3-83-086)
- 33088 Adsorption and Desorption of Hexachlorobiphenyl (EPA-600/S3-83-088)
- 33091 Phytoplankton Abundance, Species Distribution, and Community Structure in Saginaw Bay and Southern Lake Huron in 1980 (EPA-600/S3-83-091)
- 33092 An Annotated Bibliography of Environmental Research Conducted Within the St. Louis River Estuary 1903-1982 (EPA-600/S3-83-092)
- 33094 Environmental Levels of PCB in Great Lakes Fish (EPA-600/S3-83-094)
- 33054 Fluvial Transport and Processing of Sediments and Nutrients in Large Agricultural River Basins (EPA-600/S3-83-054)
- 33057 Response of Skinner Lake (Indiana) to Agricultural Drainage (EPA-600/S3-83-057)
- 33079 Ecosystem Responses to Alternative Pesticides in the Terrestrial Environment (EPA-600/S3-83-079)
- 33083 Effects on Toxicity of Volatile Priority Pollutants Added to a Conventional Wastewater Treatment System (EPA-600/S3-83-083)
- 33085 The Chemistry, Physics, and Optical Properties of Plumes and Background Air in the Southwest United States (EPA-600/S3-83-085)
- 33087 Characterization of Emissions and Fuel Economy of In-Use Diesel Automobiles (EPA-600/S3-83-087)
- 33093 Chemistry and Visual Impact of the Plumes from the Four Corners Power Plant and San Manuel Copper Smelter (EPA-600/S3-83-093)
- 33097 Toxicological Studies with Herbicides, Selected EPA Priority Pollutants and Related Chemicals in Aquatic Organisms (EPA-600/S3-83-097)
- 33098 Ecological Impact of Integrated Chemical and Biological Aquatic Weed Control (EPA-600/S3-83-098)
- 33100 Experimental Protocol for Determining Photolysis Reaction Rate Constants (EPA-600/S3-83-100)
- 33102 Formation of a Detached Plume from a Cement Plant (EPA-600/S3-83-102)
- 33103 Green River Air Quality Model Development—Related Studies, General Information and Bibliography (EPA-600/S3-83-103)
- 33104 Effect of Load Simulation on Auto Emissions and Model Performance (EPA-600/S3-83-104)
- 33105 Intercomparison of Periodic Fine Particle Sulfur and Sulfate Concentration Results (EPA-600/S3-83-105)
- 33106 Exhaust Emissions from a Diesel Engine (EPA-600/S3-83-106)
- 33107 Identification of Compounds in Particulate Pollution by X-Ray Diffraction (EPA-600/S3-83-107)
- 33108 Synthesis of the Rural Model Reviews (EPA-600/S3-83-108)
- 33109 Emission Characterization of Major Fossil Fuel Power Plants in the Ohio River Valley (EPA-600/S3-83-109)
- 33110 Ozone Plumes from Small Cities and Ozone in High Pressure Weather Systems (EPA-600/S3-83-110)
- 33111 Effects of Photochemical Kinetic Mechanisms on Oxidant Model Predictions (EPA-600/S3-83-111)
- 34001 Natural Hydrocarbon Emission Rate Measurements from Selected Forest Sites (EPA-600/S3-84-001)
- 34002 Evaluation of the Methods Used to Determine Potential Health Risks Associated with Organic Contaminants in the Great Lakes Basin (EPA-600/S3-84-002)
- 34005 Interlaboratory Comparison of Continuous Flow, Early Life Stage Testing with Fathead Minnows (EPA-600/S3-84-005)
- 34007 Generalization of Water Quality Criteria Using Chemical Models: Development of the REDEQL-UMD System of Computer Programs for Aqueous Equilibria (EPA-600/S3-84-007)
- 34008 PCBs in Saginaw Bay: Development of Functional Indices to Estimate Inhibition of Ecosystem Fluxes (EPA-600/S3-84-008)

- 34009 Aquatic Toxicity Tests to Characterize the Hazard of Volatile Organic Chemicals in Water: A Toxicity Data Summary (EPA-600/S3-84-009)
- 34010 Data Base for Plumes with Significant Plume and Background Particle Scattering (EPA-600/S3-84-010)
- 34011 Watershed Sensitivity Measurement Strategy for Identifying Resources at Risk from Acidic Deposition (EPA-600/S3-84-011)
- 34012 Damage Cost Models for Pollution Effects on Material (EPA-600/S3-84-012)
- 34013 Structure and Organization of Persistent Aquatic Laboratory Communities Exposed to the Insecticide Dieldrin (EPA-600/S3-84-013)
- 34014 Documentation of the Data Base—Wisconsin Power Plant Impact Study (EPA-600/S3-84-014)
- 34015 Submerged Aquatic Vegetation in Upper Chesapeake Bay: Studies Related to Possible Causes of the Recent Decline in Abundance (EPA-600/S3-84-015)
- 34016 The Nutritional Ecology of Great Lakes *Cladophora glomerata* (EPA-600/S3-84-016)
- 34017 Distribution, Abundance and Entrainment of Larval Fishes in the Western and Central Basins of Lake Erie (EPA-600/S3-84-017)
- 34018 Fate of Selected Toxic Compounds Under Controlled Redox Potential and pH Conditions in Soil and Sediment-Water Systems (EPA-600/S3-84-018)
- 34019 Estimation of Parameters for Modeling the Behavior of Selected Pesticides and Orthophosphate (EPA-600/S3-84-019)
- 34021 Characterization of Carbon Fiber Emissions from Current and Projected Activities for the Manufacture and Disposal of Carbon Fiber Products (EPA-600/S3-84-021)
- 34022 Atmospheric Fluxes and Geochemistries of Stable Pb, Pb-210, and Po-210 in Crystal Lake, Wisconsin (EPA-600/S3-84-022)
- 34023 Source Receptor Methodology for Some Chlorinated Hydrocarbons (EPA-600/S3-84-023)
- 34025 The Limnetic Zooplankton of Lakes in Katmai National Monument, Alaska (EPA-600/S3-84-025)
- 34026 An Age-Dependent Model of PCB in a Lake Michigan Food Chain (EPA-600/S3-84-026)
- 34028 Simulation Model for Watershed Management Planning (EPA-600/S3-84-028)
- 34029 Derivation of Site-Specific Water Quality Criteria for Cadmium and the St. Louis River Basin, Duluth, Minnesota (EPA-600/S3-84-029)
- 34030 Totally Optical Technique for Monitoring Ambient Non-Methane Hydrocarbons (EPA-600/S3-84-030)
- 34033 Modeling the Transport, Speciation, and Fate of Heavy Metals in Aquatic Systems (EPA-600/S3-84-033)
- 34034 Water Treatment Model for Pollutant Exposure Assessment: System Documentation and Users Manual (EPA-600/S3-84-034)
- 34036 Disposition of Anthracene in Water and Aufwuchs Matrices of a Large Outdoor Channel Microcosm: A Data Set for Mathematical Simulation Models (EPA-600/S3-84-036)
- 34038 EPA Complex Terrain Model Development: Description of a Computer Data Base from Small Hill Impaction Study No. 1 Cinder Cone Butte, Idaho (EPA-600/S3-84-038)
- 34040 Regional Acid Deposition: Design and Management Plan for a Comprehensive Modeling System (EPA-600/S3-84-040)
- 34048 Drill Mud Assessment Chemical Analysis Reference Volume (EPA-600/S3-84-048)
- 34041 Regional Acid Deposition: Models and Physical Processes (EPA-600/S3-84-041)
- 34042 Plume Concentration Algorithms with Deposition, Sedimentation, and Chemical Transformation (EPA-600/S3-84-042)
- 34044 Determination of Cloud Parameters for NEROS II from Digital Satellite Data (EPA-600/S3-84-044)
- 32069 Trends in U.S. Irrigation: Three Regional Studies (EPA-600/S3-82-069)
- 33061 A Simple Transmission Network Planning Method: Wisconsin Power Plant Impact Study (EPA-600/S3-83-061)
- 33080 Intensive Watershed Study: The Patuxent River Estuary (EPA-600/S3-83-080)
- 33081 Response of *Carex*-Dominated Wetlands to Altered Temperature and Flooding Patterns: Wisconsin Power Plant Impact Study (EPA-600/S3-83-081)
- 33082 Effects of Thermal Additions on the Dynamics of Fouling Communities at Beaufort, North Carolina (EPA-600/S3-83-082)
- 34027 Impact of Algal-Available Phosphorus on Lake Erie Water Quality: Mathematical Modeling (EPA-600/S3-84-027)
- 34035 Estimation Methods for Process Constants and Properties Used in Fate Assessment (EPA-600/S3-84-035)
- 34043 Microbial Transformation Kinetics of Xenobiotics in Aquatic Environment (EPA-600/S3-84-043)
- 34045 Development and Evaluation of Dilution Probes Used for Sampling to Determine Source Signatures (EPA-600/S3-84-045)
- 34046 Examination of One-Hour NO<sub>2</sub> Predictions from Photochemical Air Quality Models (EPA-600/S3-84-046)
- 34047 Chemical and Physical Characterization of Municipal Sludge Incinerator Emissions (EPA-600/S3-84-047)
- 34050 Physico-Chemical Model of Toxic Substances in the Great Lakes (EPA-60/S3-84-050)
- 34051 Changes in Terrestrial Ecology Related to a Coal-Fired Power Plant: Wisconsin Power Plant Impact Study (EPA-600/S3-84-051)
- 34052 Air Land Water Analysis System (ALWAS): A Multi-Media Model for Toxic Substances (EPA-600/S3-84-052)
- 34053 Instrumentation, Recording, and Processing of Meteorological Data Near Portage, Wisconsin: Wisconsin Power Plant Impact Study (EPA-600/S3-84-053)
- 34054 Insect Interlaboratory Toxicity Test Comparison Study for the Chironomid (*Paratanytarsus* sp.) Procedure (EPA-600/S3-84-054)
- 34055 Field-to-Stream Transport of Agricultural Chemicals and Sediment in an Iowa Watershed: Part II. Data Base for Model Testing (1979-1980) (EPA-600/S3-84-055)
- 34056 Miniature Acid-Condensation System: Design and Operation (EPA-600/S3-84-056)
- 34057 Development of the MESOPUFF II Dispersion Model (EPA-600/S3-84-057)

- 34058 Method of Collection and Analysis of Chlorobenzenes (EPA-600/S3-84-058)**
- 34060 Intrauterine Exposure of Humans to PCBs: Newborn Effects (EPA-600/S3-84-060)**
- 34061 Intermediate-Range Grid Model and User's Guide for Atmospheric Sulfur Dioxide and Sulfate Concentrations and Depositions: Wisconsin Power Plant Impact Study (EPA-600/S3-84-061)**
- 34062 Evaluation of Sampling Methods for Gaseous Atmospheric Samples (EPA-600/S3-84-062)**
- 34063 Evaluation of Chemical Reaction Mechanisms for Photochemical Smog. Part II. Quantitative Evaluation of the Mechanisms (EPA-600/S3-84-063)**
- 34064 Chemical and Biological Studies Related to the Water Quality of St. Louis Bay of Lake Superior (EPA-600/S3-84-064)**
- 34067 Acute Toxicity of Eight Laboratory-Prepared Generic Drilling Fluids to Mysids (*Mysidopsis bahia*) (EPA-600/S3-84-067)**
- 34069 Partitioning of Cadmium, Copper, Lead and Zinc Among Particulate Fractions and Water in Saginaw Bay (Lake Huron) (EPA-600/S3-84-069)**
- 34070 Impacts of Coal Combustion on Trace Elements in the Environment: Wisconsin Power Plant Impact Study (EPA-600/S3-84-070)**
- 34071 A Survey of the Toxicity and Chemical Composition of Used Drilling Muds (EPA-600/S3-84-071)**

## Environmental Monitoring

- 42026 Polynuclear Aromatic Hydrocarbons and Cellular Proliferative Disorders in Bivalve Molluscs from Oregon Estuaries (EPA-600/S4-82-026)**
- 42034 Determination of an Empirically Derived IP/TSP Relationship (EPA-600/S4-82-034)**
- 42022 Determination of Benzidines in Industrial and Municipal Wastewaters (EPA-600/S4-82-022)**
- 42016 Determination of Nitrosamines in Industrial and Municipal Wastewaters (EPA-600/S4-82-016)**
- 42021 Bulk Sample Analysis for Asbestos Content: Evaluation of the Tentative Method (EPA-600/S4-82-021)**
- 42017 The Standard Calibration Instrument Automation System for the Atomic Absorption Spectrophotometer (EPA-600/S4-82-017)**
- 42023 Determination of Pesticides and PCBs in Industrial and Municipal Wastewaters (EPA-600/S4-82-023)**
- 42028 Determination of TCDD in Industrial and Municipal Wastewaters (EPA-600/S4-82-028)**
- 42024 Determination of Nitroaromatic Compounds and Isophorone in Industrial and Municipal Wastewaters (EPA-600/S4-82-024)**
- 42038 Analytical Methods for Hazardous Organics in Liquid Wastes from Coal Gasification and Liquefaction Processes (EPA-600/S4-82-038)**
- 42019 Laboratory Evaluation of Nonmethane Organic Carbon Determination in Ambient Air by Cryogenic Preconcentration and Flame Ionization Detection (EPA-600/S4-82-019)**
- 42015 Direct Measurement of Volatile Organic Compounds in Breathing-Zone Air, Drinking Water, Breath, Blood and Urine (EPA-600/S4-82-015)**
- 42001 Application and Evaluation of Analytical Procedures for Trace Metals, Total Cyanide and Phenolics (EPA-600/S4-82-001)**
- 42018 Techniques to Determine a Company's Ability to Conduct a Quality Stack Test (EPA-600/S4-82-018)**
- 42031 Laboratory Evaluation of Commercially Available Passive Organic Personal Monitors (EPA-600/S4-82-031)**
- 42044 Application of Methods 606 and 608 for Analysis of PCBs, Organochlorine Pesticides and Phthalate Esters Contained in Landfill Leachates (EPA-600/S4-82-044)**
- 42032 Ambient Perchloroethylene Levels Inside Coin-Operated Laundries with Drycleaning Machines on the Premises (EPA-600/S4-82-032)**
- 42039 Drilling Fluid Effects to Developmental Stages of the American Lobster (EPA-600/S4-82-039)**
- 42046 A Comparative Evaluation of Seven Automated Ambient Non-Methane Organic Compound Analyzers (EPA-600/S4-82-046)**
- 42050 A Computer Interface for a Perkin-Elmer 5000 Atomic Absorption Instrument (EPA-600/S4-82-050)**
- 42041 Application of EPA Method 610 to the Analysis of Polynuclear Aromatic Hydrocarbons in Leachate Samples (EPA-600/S4-82-041)**
- 42048 Literature Review of Personal Air Monitors for Potential Use in Ambient Air Monitoring of Organic Compounds (EPA-600/S4-82-048)**
- 42054 Field Evaluation of Carbon Monoxide and Hydrogen Sulfide Continuous Emission Monitors at an Oil Refinery (EPA-600/S4-82-054)**
- 42035 Method Development for Determination of Polychlorinated Hydrocarbons in Municipal Sludge (EPA-600/S4-82-035)**
- 42036 Quality Assurance in Support of Energy Related Monitoring Activities: Annual Report Number 3 (EPA-600/S4-82-036)**
- 42037 Quality Assurance in Support of Energy Related Monitoring Activities: Final Report (EPA-600/S4-82-037)**
- 42051 A Microprocessor ASCII Character Buffering System (EPA-600/S4-82-051)**
- 42053 An Ultraviolet-Visible Spectrophotometer Automation System (EPA-600/S4-82-053)**
- 42025 Determination of Polynuclear Aromatic Hydrocarbons in Industrial and Municipal Wastewaters (EPA-600/S4-82-025)**
- 42040 Wide Range Aerosol Classifier (EPA-600/S4-82-040)**
- 42052 Determination of the Environmental Impact of Several Substitute Chemicals in Agriculturally Affected Wetlands (EPA-600/S4-82-052)**
- 42062 Techniques to Measure Volumetric Flow and Particulate Concentrations in Stacks with Cyclonic Flow (EPA-600/S4-82-062)**
- 42058 The National Air Pollution Background Network: 1976-1980 (EPA-600/S4-82-058)**
- 42059 Sampling Air for Gaseous Organic Chemicals Using Solid Adsorbents. Application to Tenax (EPA-600/S4-82-059)**
- 42064 Stability of Organic Audit Materials and Results of Source Test Analysis Audits (EPA-600/S4-82-064)**
- 42067 Development of a Tunable Zeeman Spectrometer for Analysis of Toxic Organic Compounds (EPA-600/S4-82-067)**
- 42069 Plutonium Burdens in People Living Around the Rocky Flats Plant (EPA-600/S4-82-069)**
- 42072 Analysis of Chlorinated Organic Compounds Formed During Chlorination of Wastewater Products (EPA-600/S4-82-072)**
- 42043 A Study to Evaluate and Improve EPA Reference Method 16 (EPA-600/S4-82-043)**

- 43001 Mobility of Organic Compounds from Hazardous Wastes (EPA-600/S4-83-001)
- 43002 Development and Evaluation of Analytical Test Procedures for Priority Pollutants (EPA-600/S4-83-002)
- 43003 Performance Test Results and Comparative Data for Designated Reference and Equivalent Methods for Ozone (EPA-600/S4-83-003)
- 43006 Preconcentration Methods for Trace Element Determination (EPA-600/S4-83-006)
- 43005 Air Quality Data for Nonmetallic Inorganic Ions: Nitrate and Sulfate for 1979 from the National Air Surveillance Networks (EPA-600/S4-83-005)
- 43008 Validation and Improvement of EPA Reference Method 25—Determination of Gaseous Nonmethane Organic Emissions as Carbon (EPA-600/S4-83-008)
- 43010 Validation of Samples for Inhaled Particulate Matter (EPA-600/S4-83-010)
- 43011 Technical Assistance Document: Quality Assurance Guideline for Visible Emission Training Programs (EPA-600/S4-83-011)
- 43012 Quantitation of Viruses in Waste and Other Waters (EPA-600/S4-83-012)
- 43013 Performance Test Results and Comparative Data for Designated Reference Methods for Carbon Monoxide (EPA-600/S4-83-013)
- 43014 Evaluation of a Passive Monitor for Volatile Organics (EPA-600/S4-83-014)
- 43015 Preparation and Evaluation of New Sorbents for Environmental Monitoring: Volume I and Volume II (EPA-600/S4-83-015a/b)
- 43016 Ambient Acrylonitrile Levels Near Major Acrylonitrile Production and Use Facilities (EPA-600/S4-83-016)
- 43017 A Prototype Computer-Interactive Groundwater Monitoring Methodology: An Example for Sedimentation Ponds (EPA-600/S4-83-017)
- 43018 Test Procedure for Gamma Emitters in Drinking Water: Interlaboratory Collaborative Study (EPA-600/S4-83-018)
- 43019 Performance Test Results and Comparative Data for Designated Reference and Equivalent Methods for Nitrogen Dioxide (EPA-600/S4-83-019)
- 43020 Preparation of Soil Sampling Protocol: Techniques and Strategies (EPA-600/S4-83-020)
- 43021 Mathematical Models Associated with Point and Line Source Discharges in Rivers (EPA-600/S4-83-021)
- 43022 ARMCO Special Study Report (EPA-600/S4-83-022)
- 43024 Field Validation of EPA Reference Method 23 (EPA-600/S4-83-024)
- 43030 Guidelines for Field Testing Aquatic Fate and Transport Models: Final Report (EPA-600/S4-83-030)
- 43033 Computer Simulation of the EPA Provisional Method for Measuring Airborne Asbestos (EPA-600/S4-83-033)
- 43025 Carbon Monoxide Concentrations in Four U.S. Cities During the Winter of 1981 (EPA-600/S4-83-025)
- 43026 A Summary of the 1981 EPA National Performance Audit Program on Source Measurements (EPA-600/S4-83-026)
- 43027 Technical Assistance Document for Sampling and Analysis of Toxic Organic Compounds in Ambient Air (EPA-600/S4-83-027)
- 43028 Analysis of Industrial Wastewater for Organic Pollutants in Consent Decree Survey Samples (EPA-600/S4-83-028)
- 43029 A Computer Survey of GC/MS Data Acquired in EPA's Priority Pollutant Screening Analysis: System and Results (EPA-600/S4-83-029)
- 43031 Laboratory Evaluation of an Impinger Collection/Ion Chromatographic Source Test Method for Formaldehyde (EPA-600/S4-83-031)
- 43034 Development of a Continuous Monitor for Detection of Toxic Organic Compounds (EPA-600/S4-83-034)
- 43035 Statistical Correlations of Surface Wind Data: A Comparison Between a National Weather Service Station and a Nearby Aerometric Monitoring Network (EPA-600/S4-83-035)
- 43036 Measurement of Mass Spectra for the EPA Toxic Substances Data Base (EPA-600/S4-83-036)
- 43038 Test Procedure for Uranium in Drinking Water: Interlaboratory Collaborative Study (EPA-600/S4-83-038)
- 43044 Asbestos Fiber Determination in Water Samples: Preparation Techniques, Improved Analytical Method, and Rapid Screening (EPA-600/S4-83-044)
- 43051 Technical Assistance Document: Quality Assurance Guideline for Process Feed Rate Monitors in the Portland Cement and Lime Industries (EPA-600/S4-83-051)
- 43054 Development and Evaluation of Procedures for the Analysis of Simple Cyanides, Total Cyanide, and Thiocyanate in Water and Wastewater (EPA-600/S4-83-054)
- 43040 Characterization of Hazardous Waste Sites—A Methods Manual, Volume II, Available Sampling Methods (EPA-600/S4-83-040)
- 43046 Guidelines for Monitoring Indoor Air Quality (EPA-600/S4-83-046)
- 43047 Assessment of the Adequacy of the Appendix F Quality Assurance Procedures for Maintaining CEMS Data Accuracy (EPA-600/S4-83-047)
- 43049 A Summary of the 1982 EPA National Performance Audit Program on Sources Measurements (EPA-600/S4-83-049)
- 43050 A Methodology to Inventory, Classify, and Prioritize Uncontrolled Waste Disposal Sites (EPA-600/S4-83-050)
- 43052 Optimization of Liquid-Liquid Extraction Methods for Analysis of Organics in Water (EPA-600/S4-83-052)
- 43053 Air Quality Data for Metals 1977 through 1979 from the National Air Surveillance Networks (EPA-600/S4-83-053)
- 43056 Guidelines for Conducting Single Laboratory Evaluations of Biological Methods (EPA-600/S4-83-056)
- 43057 Groundwater Quality Monitoring Recommendations for Western Surface Coal Mines (EPA-600/S4-83-057)
- 44001 Development of Analytical Test Procedures for the Measurement of Organic Priority Pollutants in Sludge (EPA-600/S4-84-001)
- 44002 Stability of Organic Audit Materials and Results of Source Test Analysis Audits—Status Report #5 (EPA-600/S4-84-002)
- 44003 Direct Determination of Total Organic Chlorine in Water Without Preconcentration (EPA-600/S4-84-003)
- 44004 Evaluation of Capillary Systems for the Analysis of Environmental Extracts (EPA-600/S4-84-004)
- 44006 Analysis of the NBS Sediment by the MRI Sludge Protocol (EPA-600/S4-84-006)
- 44007 Screening Methods for PAH Priority Pollutants in Wastewater (EPA-600/S4-84-007)
- 44008 Development and Evaluation of Methods for Total Organic Halide and Purgeable Organic Halide in Wastewater (EPA-600/S4-84-008)

44009 Analytical Procedures for Aniline and Selected Derivatives in Wastewater and Sludge (EPA-600/S4-84-009)

44012 Documentation of EMSL-LV Contribution to Dallas Lead Study (EPA-600/S4-84-012)

44014 A Study of Personal Exposure to Carbon Monoxide in Denver, Colorado (EPA-600/S4-84-014)

44015 Performance Test Results and Comparative Data for Designated Equivalent Methods for Sulfur Dioxide (EPA-600/S4-84-015)

44016 Survey of Direct Analysis Methods for Organic Compounds in Particulate Matter (EPA-600/S4-84-016)

43055 Groundwater Monitoring Recommendations for Oil Shale Development (EPA-600/S4-83-055)

44011 Application of a Spray Deposition Method for Reversed Phase Liquid Chromatography-Mass Spectrometry (EPA-60/S4-84-011)

44018 EPA Method Study 19, Method 609 (Nitroaromatics and Isophorone) (EPA-600/S4-84-018)

44022 Two Methods for Analyzing Trihalomethanes in Drinking Water by Purge and Trap and Liquid-Liquid Extraction Techniques (EPA-600/S4-84-022)

44024 Technical Assistance Document: The Use of Portable Volatile Organic Compound Analyzers for Leak Detection (EPA-600/S4-84-024)

44025 A New Audit Method for EPA Reference Method 6 (EPA-600/S4-84-025)

44026 A Literature Review on Occurrence and Methodology for Determination of Nickel, Chromium, Manganese, and Arsenic Species in Air (EPA-600/S4-84-026)

44027 Interlaboratory Comparisons Study: Methods for Volatile and Semivolatile Compounds (EPA-600/S4-84-027)

44028 Multielemental Analytical Techniques for Hazardous Waste Analysis: The State-of-the-Art (EPA-600/S4-84-028)

44029 Report on Analytical Methodology for Purgeable and Semi-volatile Components in Leachates and Solid Wastes (EPA-600/S4-84-029)

44030 Laboratory Evaluation of Tunable Atomic Line Molecular Spectrometers for Benzene Analysis (EPA-600/S4-84-030)

44031 Study of Carbon Monoxide Exposure of Residents of Washington, DC and Denver, Colorado (EPA-600/S4-84-031)

44032 Summary of Precision and Accuracy Assessments for the State and Local Air Monitoring Networks—1981 (EPA-600/S4-84-032)

44033 Analysis of Polynuclear Aromatic Hydrocarbons in Particulate Matter by Luminescence Techniques (EPA-600/S4-84-033)

44034 Final Sampling Report for the Study of Personal CO Exposure (EPA-600/S4-84-034)

44035 Guidelines for Determination of Laboratory Acceptability for Analysis of Volatile Organic Pollutants Collected on Tenax GC® Adsorbant (EPA-600/S4-84-035)

44036 Performance Audit Results for POHC: VOST and Bag Measurement Methods (EPA-600/S4-84-036)

44037 EPA Method Study 26, Method 613: 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (EPA-600/S4-84-037)

44038 Characterization of Hazardous Waste Sites—A Methods Manual: Volume III. Available Laboratory Analytical Methods (EPA-600/S4-84-038)

44039 EPA Method Study 22, Method 612—Chlorinated Hydrocarbons (EPA-600/S4-84-039)

44042 EPA Method Study 25, Method 602—Purgeable Aromatics (EPA-600/S4-84-042)

44043 Soil Sampling Quality Assurance User's Guide (EPA-600/S4-84-043)

44044 EPA Method Study 14, Method 604—Phenols (EPA-600/S4-84-044)

44045 EPA Method Study 12, Cyanide in Water (EPA-600/S4-84-045)

44046 Geothermal Environmental Impact Assessment: An Approach to Groundwater Impacts from Development, Conversion, and Waste Disposal (EPA-600/S4-84-046)

44049 Compendium of Selected Methods for Sampling and Analysis at Geothermal Facilities (EPA-600/S4-84-049)

44051 EPA Method Study 17, Method 607—Nitrosamines (EPA-600/S4-84-051)

44052 EPA Method Study 21, Method 611—Haloethers (EPA-600/S4-84-052)

44053 EPA Method Study 30, Method 625—Base/Neutrals, Acids, and Pesticides (EPA-600/S4-84-053)

44054 EPA Method Study 29, Method 624—Purgeables (EPA-600/S4-84-054)

44057 Single Laboratory Evaluation of the Hydrogen Oxidation Soil Bioassay (EPA-600/S4-84-057)

44065 Geophysical Methods for Locating Abandoned Wells (EPA-600/S4-84-065)

## Socioeconomic Environmental Studies

52001 Socioeconomic Impacts of Water Quality Strategies (EPA-600/S5-82-001)

52002 Formulating Agricultural Nonpoint Source Policy: Analysis and Issues (EPA-600/S5-82-002)

53001 Effect of Agricultural Land Use Practices on Stream Water Quality: Economic Analysis (EPA-600/S5-83-001)

54001 Sociological Factors in the Adoption of Agricultural Best Management Practices (EPA-600/S5-84-001)

## Scientific & Technical Assessment Reports

63001 The Direct Biological Effects of Increased Atmospheric Carbon Dioxide Levels (EPA-600/S6-83-001)

63002 Assessment of Potential Environmental Problems Concerning Water Availability (EPA-600/S6-83-002)

64001 Assessment for Future Environmental Problems—Ocean Dumping (EPA-600/S6-84-001)

64002 Mini-Assessment: Total Exposure Assessment and Exposure-Dose Relationships (EPA-600/S6-84-002)

64004 Institutional Responses to Contamination of Ground Water Used for Public Water Supplies: Implications for EPA R&D Programs (EPA-600/S6-84-004)

64005 Assessment for Future Environmental Problems—Agricultural Residues (EPA-600/S6-84-005)

## Interagency Energy-Environment Research and Development

- 72022 Description and Analysis of Inspection/Maintenance Programs for Oil-Fired Heating Systems in Switzerland and West Germany (EPA-600/S7-82-022)
- 72025a Ammonium Sulfate and Bisulfate Formation in Air Preheaters (EPA-600/S7-82-025a)
- 72025b Impact of NO<sub>x</sub> Selective Catalytic Reduction Processes on Flue Gas Cleaning Systems (EPA-600/S7-82-025b)
- 72028 Pilot-Scale Assessment of Conventional Particulate Control Technology for Pressurized Fluidized-Bed Combustion Emissions (EPA-600/S7-82-028)
- 72033 Interpretation of Low Resolution Mass Spectra for Level 1 Analysis of Environmental Mixtures (EPA-600/S7-82-033)
- 72035 A Compendium of Synfuel End-Use Testing Programs (EPA-600/S7-82-035)
- 72040 Environmental Assessment Measurement Methods for Organic Species (EPA-600/S7-82-040)
- 72018 Source Test and Evaluation Report: Alcohol Facility for Gasohol Production (EPA-600/S7-82-018)
- 72044 Augmentation of Fine Particle Collection in the EPxP Scrubber (EPA-600/S7-82-044)
- 72045 Combustion of Oil Shale in Fluidized-Bed Combustors—An Overview (EPA-600/S7-82-045)
- 72021 Application of Advanced Combustion Modifications to Industrial Process Equipment—Subscale Test Results (EPA-600/S7-82-021)
- 72036 Sampling and Data Handling Methods for Inhalable Particulate Sampling (EPA-600/S7-82-036)
- 72038 Environmental Assessment of a Low-Emission Oil-Fired Residential Hot Water Condensing Heating System (EPA-600/S7-82-038)
- 72048 Laboratory Evaluation of Level 1 Organic Analysis Procedures (EPA-600/S7-82-048)
- 72049 Evaluation of the Maintenance Effect on Fugitive Emissions from Refineries in the South Coast Air Quality Management District (EPA-600/S7-82-049)
- 72052 Further Characterization of Sorbents for Environmental Sampling—II (EPA-600/S7-82-052)
- 72034 Environmental Assessment of Stationary Source NO<sub>x</sub> Control Technologies: Final Report (EPA-600/S7-82-034)
- 72051 Technology Overview: Circulating Fluidized-Bed Combustion (EPA-600/S7-82-051)
- 72027 Rates and Equilibria of Devolatilization and Trace Element Evolution in Coal Pyrolysis (EPA-600/S7-82-027)
- 72047 Green River Air Quality Model Development Meteorological Data—August 1980 Field Study in the Piceance Creek Basin Oil Shale Resources Area (EPA-600/S7-82-047)
- 72029 Effects of Fuel Properties and Atomization Parameters on NO<sub>x</sub> Control for Heavy Liquid Fuel-Fired Package Boilers (EPA-600/S7-82-029)
- 72032 Studies of Flue Gas Desulfurization at Louisville Gas and Electric's Paddy's Run Station (EPA-600/S7-82-032)
- 72046 Prospects for Increasing the Direct Use of Coal in Industrial Boilers (EPA-600/S7-82-046)
- 72030 Waste Heat Recovery Potential in Selected Industries (EPA-600/S7-82-030)
- 72054 Coal Gasification/Gas Cleanup Test Facility: Volume III. Environmental Assessment of Operation with New Mexico Sub-bituminous Coal and Chilled Methanol (EPA-600/S7-82-054)
- 72037 Verification and Transfer of Thermal Pollution Models (EPA-600/S7-82-037)
- 72059 Application of LIMB to Pulverized Coal Boilers—A Systems Analysis. Limestone Feed and Boiler Systems (EPA-600/S7-82-059)
- 72055 Procedures for Predictive Analysis of Selected Hydrologic Impacts of Surface Mining (EPA-600/S7-82-055)
- 72060 Use of Sorbents to Reduce SO<sub>2</sub> Emissions from Pulverized Coal Flames Under Low-NO<sub>x</sub> Conditions (EPA-600/S7-82-060)
- 72053 Unconventional Natural Gas Resources: An Overview Covering the Resources and Environmental Aspects of Production (EPA-600/S7-82-053)
- 72063 Evaluation of Potential VOC Screening Instruments (EPA-600/S7-82-063)
- 72068 Comparison of Automated and Manual Sulfuric Acid Sampling Systems (EPA-600/S7-82-068)
- 72065b The Adipic Acid Enhanced Flue Gas Desulfurization Process for Industrial Boilers: Volume 2. Technical Assessment (EPA-600/S7-82-065b)
- 72057a Hitachi Zosen NO<sub>x</sub> Flue Gas Treatment Process: Volume 1. Pilot Plant Evaluation (EPA-600/S7-82-057a)
- 72057b Hitachi Zosen NO<sub>x</sub> Flue Gas Treatment Process: Volume 2. Independent Evaluation (EPA-600/S7-82-057b)
- 72064 Shell NO<sub>x</sub>/SO<sub>2</sub> Flue Gas Treatment Process: Independent Evaluation (EPA-600/S7-82-064)
- 72066 Photovoltaic Energy Systems: Environmental Concerns and Control Technology Needs (EPA-600/S7-82-066)
- 72065a The Adipic Acid Enhanced Flue Gas Desulfurization Process for Industrial Boilers: Volume 1. Field Test Results (EPA-600/S7-82-065a)
- 72067 Effect of Trace Metals and Sulfite Oxidation on Adipic Acid Degradation in FGD Systems (EPA-600/S7-82-067)
- 73005 Trace and Potentially Toxic Elements Associated with Uranium Deposits in South Texas (EPA-600/S7-83-005)
- 73006 Survey and Analysis of Current European Technologies for Wood Combustion (EPA-600/S7-83-006)
- 72061 Estimates of Sulfur Oxide Emissions from the Electric Utility Industry: Volume I and Volume II (EPA-600/S7-82-061)
- 73007 Waste and Water Management for Conventional Coal Combustion: Assessment Report—1980 (EPA-600/S7-83-007)
- 73009 Disposal of Spent Sorbent from Dry FGD Processes (EPA-600/S7-83-009)
- 72062 Electrostatic Augmentation of Fabric Filtration: Pulse-Jet Pilot Unit Experience (EPA-600/S7-82-062)
- 73008 An Assessment of the Effects of Active Solar Thermal Technologies on Urban Emissions (EPA-600/S7-83-008)
- 73010 Thirty-Day Field Test of a Refinery Process Heater Equipped with Low-NO<sub>x</sub> Burners (EPA-600/S7-83-010)
- 73012 Analysis of Long-Term NO Emission Data from Pulverized Coal-Fired Utility Boilers (EPA-600/S7-83-012)
- 73021 Preliminary Assessment of the Use of Heat Transfer Fluids for Solar Thermal Energy Systems (EPA-600/S7-83-021)
- 72058 EPA Utility FGD Survey October-December 1981 (EPA-600/S7-82-058a/b)



- 73022 Refinery Process Heater NO<sub>x</sub> Reductions Using Staged Combustion Air Lances (EPA-600/S7-83-022)
- 73023 Audit of the Vulcanus Incineration Ship Prior to the August 1982 PCB Burn, Mobile, Alabama (EPA-600/S7-83-023)
- 73024 At-Sea Incineration of PCB-Containing Wastes Onboard the M/T VULCANUS (EPA-600/S7-83-024)
- 73025 Bench-Scale Evaluation of Non-U.S. Coals for NO<sub>x</sub> Formation Under Excess Air and Staged Combustion Conditions (EPA-600/S7-83-025)
- 73026 Chemical Analysis of Waste Crankcase Oil Combustion Samples (EPA-600/S7-83-026)
- 73027 NO<sub>x</sub> Abatement for Stationary Sources in Japan (EPA-600/S7-83-027)
- 73028 SO<sub>2</sub> Abatement for Coal-Fired Boilers in Japan (EPA-600/S7-83-028)
- 73035 Full-Scale Utility FGD System Adipic Acid Demonstration Program (EPA-600/S7-83-035)
- 73036 Fugitive Emission Testing at the Kosovo Coal Gasification Plant (EPA-600/S7-83-036)
- 73037 Environmental and Energy Benefits of Microprocessor Control of Oven Airflows from Metal Painting Operations (EPA-600/S7-83-037)
- 73038 Characterization of the NO<sub>x</sub> and SO<sub>2</sub> Control Performance; Southern Indiana Gas and Electric Company, A. B. Brown Unit 1 (EPA-600/S7-83-038)
- 73039 Full-Scale Dual Alkali FGD Demonstration at Louisville Gas and Electric Company (EPA-600/S7-83-039)
- 73040 Control of Criteria and Non-Criteria Pollutants from Coal/Oil Mixture Combustion (EPA-600/S7-83-040)
- 73041 Status of Dry SO<sub>2</sub> Control Systems: Fall 1982 (EPA-600/S7-83-041)
- 73042 Evaluation of Combustion Modification Effects on Emissions and Efficiency of Wood-Fired Industrial Boilers (EPA-600/S7-83-042)
- 73043 Limestone Dissolution in Flue Gas Desulfurization Processes (EPA-600/S7-83-043)
- 73044 Assessment of Discharges from SASOL 1 Lurgi-Based Coal Gasification Plant (EPA-600/S7-83-044)
- 73045 Evaluation of Combustion Variable Effects on NO<sub>x</sub> Emissions from Mineral Kilns (EPA-600/S7-83-045)
- 73047 Theoretical Investigation of Selected Trace Elements in Coal Gasification Plants (EPA-600/S7-83-047)
- 73029 Economic Evaluation of Limestone and Lime Flue Gas Desulfurization Processes (EPA-600/S7-83-029)
- 73046 Preliminary Environmental Assessment on Formcoke Cokemaking Process (EPA-600/S7-83-046)
- 73048 Shell NO<sub>x</sub>/SO<sub>2</sub> Flue Gas Treatment Process: Pilot Plant Evaluation (EPA-600/S7-83-048)
- 73049 Long Term Optimum Performance/Corrosion Tests of Combustion Modifications for Utility Boilers—Host Site: Columbus and Southern Ohio Electric Company, Conesville No. 5 (EPA-600/S7-83-049)
- 73050 A Mathematical Model of Electrostatic Precipitation for the Texas Instruments Programmable 59 Calculator (EPA-600/S7-83-050)
- 73052 Coal Gasification/Gas Clean-up Test Facility: Volume V. Preliminary Environmental Assessment of the Gasification and Gas Cleaning of North Carolina Peat (EPA-600/S7-83-052)
- 73053 Coal Gasification/Gas Clean-up Test Facility: Volume IV. A Mathematical Model of the Packed Column Acid Gas Absorber (EPA-600/S7-83-053)
- 73054 Evaluation of Tubewall Corrosion Rates on a Coal-Fired Utility Boiler Using Staged Combustion for NO<sub>x</sub> Reduction (EPA-600/S7-83-054)
- 73055 Variability and Correlation in Raw and Clean Coal: Measurement and Analysis (EPA-600/S7-83-055)
- 73056 Analysis of Low NO<sub>x</sub> Operation of Two Pulverized-Coal-Fired Utility Boilers (EPA-600/S7-83-056)
- 73057 Evaluation of Low Gravity Dense Media Cyclone Performance in Cleaning Fine Coal (EPA-600/S7-83-057)
- 73058 Sulfur Deposition Modeling in Support of the U.S./Canadian Memorandum of Intent on Acid Rain (EPA-600/S7-83-058)
- 73059 The ENAMAP-2 Air Pollution Model for Long-Range Transport of Sulfur and Nitrogen Compounds (EPA-600/S7-83-059)
- 73060 Analysis of Residential Coal Stove Emissions (EPA-600/S7-83-060)
- 73061 Evaluation and Demonstration of Low NO<sub>x</sub> Burner Systems for TEOR Steam Generators—Test Report: Preliminary Evaluation of Commercial Prototype Burner (EPA-600/S7-83-061)
- 73062 The Current Status of Commercial Utility Flue Gas Desulfurization Systems (EPA-600/S7-83-062)
- 74001 Control of Criteria and Non-Criteria Pollutants from Coal/ Liquid Mixture Combustion (EPA-600/S7-84-001)
- 74002 Fabric Filter System Study: Third Annual Report (EPA-600/S7-84-002)
- 74003 Long-Term Optimum Performance/Corrosion Tests of Combustion Modifications for Utility Boilers. Host Site: Louisville Gas and Electric Company, Mill Creek No. 3 (EPA-600/S7-84-003)
- 74005 An Evaluation of the Disposal of Flue Gas Cleaning Wastes in Coal Mines and at Sea: Refined Assessment (EPA-600/S7-84-005)
- 74007 Process Gas Chromatography Study of a Selexol Acid Gas Removal System (EPA-600/S7-84-007)
- 74009 A Study of the Steam Gasification of Organic Wastes (EPA-600/S7-84-009)
- 74011 Pilot Demonstration of Magnetic Filtration with Continuous Media Regeneration (EPA-600/S7-84-011)
- 74012 Pollution Control Techniques for Package Boilers: Hardware Modifications and Alternate Fuels (EPA-600/S7-84-012)
- 74013 Design Optimization and Field Verification of an Integrated Residential Furnace (EPA-600/S7-84-013)
- 74014 Environmental Assessment: Source Test and Evaluation Report—Rectisol Acid Gas Removal (EPA-600/S7-84-014)
- 74015a Burner Criteria for NO<sub>x</sub> Control Volume II. Heavy-Oil and Coal-Fired Furnaces and the Evaluation of Radioactive Heat Transfer Models (EPA-600/S7-84-015a)
- 74016 A New Charged Fog Generator for Inhalable Particle Control (EPA-600/S7-84-016)
- 74017a Development of Criteria for Extension of Applicability of Low Emission, High Efficiency Coal Burners: First Annual Report (EPA-600/S7-84-017a)
- 74017b Development of Criteria for Extension of Applicability of Low Emission, High Efficiency Coal Burners: Second Annual Report (EPA-600/S7-84-017b)
- 74018 Fluidized-Bed Gasification of Peat, Lignite, Subbituminous, and Pretreated Bituminous Coal (EPA-600/S7-84-018)

- 74020 Industrial Waste Heat Recovery and the Potential for Emissions Reduction (EPA-600/S7-84-020)
- 74023 Cogeneration: Status and Environmental Issues (EPA-600/S7-84-023)
- 74024b Evaluation of Low Emission Coal Burner Technology on Industrial Boilers: Second Annual Report (1980) (EPA-600/ S7-84-024b)
- 74026 Pollutant Formation During Fixed-Bed and Suspension Coal Combustion (EPA-600/S7-84-026)
- 74027 Distributed Mixing Burner (DMB) Engineering Design for Application to Industrial and Utility Boilers (EPA-600/S7-84-027)
- 74028 Experimental and Engineering Support for the CFB Demonstration: Residue Disposal/Utilization (EPA-600/S7-84-028)
- 74031 Evaluation and Demonstration of the Chemically Active Fluid Bed (EPA-600/S7-84-031)
- 74010 Environmental Assessment of Surface Mining Methods: Head-of-Hollow Fill and Mountaintop Removal (EPA-600/S7-84-010)
- 74015b Burner Criteria for NO<sub>x</sub> Control: Volume III. Heavy-Oil- and Coal-Fired Furnaces and Further Furnace Investigations (EPA-600/S7-84-015b)
- 74021 Improved Street Sweepers for Controlling Urban Inhalable Particulate Matter (EPA-600/S7-84-021)
- 74022 Coal Mine Related Stream Sediment Geochemistry in Southern Illinois (EPA-600/S7-84-022)
- 74029 Studies of Particulate Removal from Diesel Exhaust (EPA-600/S7-84-029)
- 74030 Effects of Temperature and Pressure on Particle Collection Mechanisms: Experimental Program (EPA-600/S7-84-030)
- 74036 Mineral Matter and Trace Elements in the Herrin and Springfield Coals, Illinois Basin Coal Field (EPA-600/S7-84-036)
- 74037 Continued Assessment of a High Velocity Fabric Filtration System Used to Control Fly Ash Emissions (EPA-600/S7-84-037)
- 74038 Characterization of Emissions from a Fluidized-Bed Wood-Chip Home Heating Furnace (EPA-600/S7-84-038)
- 74039 Pilot Plant Tests of Chloride Ion Effects on Wet FGD System Performance (EAP-600/S7-84-039)
- 74045 Pilot-Scale Parametric Testing of Spray Dryer SO<sub>2</sub> Scrubber for Low-to-Moderate Sulfur Coal Utility Applications (EPA-600/S7-84-045)
- 74046 Study of the Effectiveness of a Catalytic Combustion Device on a Wood Burning Appliance (EPA-600/S7-84-046)
- 74047 Long-Term Continuous Monitor Demonstration Program: Columbus and Southern Ohio Electric Company, Conesville Unit 6 (EPA-600/S7-84-047)
- 74048 Improved Emission Factors for Fugitive Dust from Western Surface Coal Mining Sources (EPA-600/S7-84-048)
- 74049 Fundamental Study of Sulfate Aerosol Formation, Condensation, and Growth (EPA-600/S7-84-049)
- 74050 Infiltration and Permeability Testing at Geokinetics Oil Shale Site (EPA-600/S7-84-050)
- 74051 Investigation of Coal Mine Effluents—Regrade to Bond Release (EPA-600/S7-84-051)
- 74052 Buffer Additives for Lime/Limestone Slurry Scrubbing Synthesis, Mass Transfer, and Degradation (EPA-600/S7-84-052)
- 74053 Flare Efficiency Monitoring by Remote Infrared Sensing: A Feasibility Demonstration (EPA-600/S7-84-053)
- 74054 Computer Programs for Estimating the Cost of Particulate Control Equipment (EPA-600/S7-84-054)
- 74055 Procedures for Comparing Combustion Emissions from Synthetic and Petroleum Fuels: Phase I (EPA-600/S7-84-055)
- 74056 Comparative Analysis of Contaminated Heating Oils (EPA-600/S7-84-056)
- 74057 Stable Isotope Dilution for Hazardous Waste Incineration (EPA-600/S7-84-057)
- 74058 Buffer Additives for Lime/Limestone Slurry Scrubbing: Sulfite Oxidation with Enhanced Oxygen Absorption Catalyzed by Transition Metals (EPA-600/S7-84-058)
- 74059 Methodology for Development of an Independent Combustion Source NO<sub>x</sub> Inventory: And Its Application to 150 Counties in the Northeastern United States (EPA-600/S7-84-059)
- 74061 Control of Wood Stove Emissions Using Improved Secondary Combustion (EPA-600/S7-84-061)
- 74062 Feasibility of Ultrasonic and Other Methods for Direct Measurement of Condenser Biofouling (EPA-600/S7-84-062)
- 74063 Macroinvertebrate Inventories of the White River, Colorado and Utah: Significance of Annual, Seasonal, and Spatial Variation in the Design of Biomonitoring Networks for Pollution Detection (EPA-600/S7-84-063)
- 74065 Results of the First 2 Years of Commercial Operation of an Organic-Acid-Enhanced FGD System (EPA-600/S7-84-065)
- 74066 Correlation of Coal Properties with Environmental Control Technology Needs for Sulfur and Trace Elements (EPA-600/S7-84-066)
- 74067 The Feasibility of Using Fiber Optics for Monitoring Groundwater Contaminants (EPA-600/S7-84-067)
- 74068 A Mathematical Model for a Fluidized-Bed Coal Gasifier (EPA-600/S7-84-068)
- 74070 Kinetic Studies Related to the LIMB Burner (EPA-600/S7-84-070)
- “Special” Project Summaries**
- 82020 Environmental Implications of Changes in the Brominated Chemicals Industry (EPA-600/S8-82-020)
- 89029 Distribution and Abundance of Submerged Aquatic Vegetation in the Lower Chesapeake Bay, Virginia (EPA-600/S8-79-029)
- 82019 Assessment of Future Environmental Trends and Problems of Increased Use, Recycling, and Combustion of Fiber-Reinforced, Plastic and Metal Composite Materials (EPA-600/S8-82-019)
- 82015 CHAVG—A Program for Computing Averages of Hourly Air Pollutant Concentrations: User’s Guide (EPA-600/S8-82-015)
- 82023 PAL-DS Model: The PAL Model Including Deposition and Sedimentation—User’s Guide (EPA-600/S8-82-023)
- 82024 MPTER-DS: The MPTER Model Including Deposition and Sedimentation—User’s Guide (EPA-600/S8-82-024)
- 82028 Engineering Design Manual for Solid Waste Size Reduction Equipment (EPA-600/S8-82-028)
- 83010 Synthetic Fuel Pollution Control Technical Manuals (EPA-600/S8-83-010)
- 83015 Complex/PFM Air Quality Model User’s Guide (EPA-600/S8-83-015)

- 83017** Guidelines for the Reduction of Emissions and Efficiency Improvement for Refinery Process Heaters (EPA-600/S8-83-017)
- 83022** Commuter Exposure Model: Description of Model Methodology and Code, and User's Guide (EPA-600/S8-83-022/023)
- 80039** Distribution of Submerged Vascular Plants, Chesapeake Bay, Maryland (EPA-600/S8-80-039)
- 82008** Health Assessment Document for Toluene (EPA-600/S8-82-008F)
- 83027** Environmental Monitoring Reference Manual for Synthetic Fuels Facilities (EPA-600/S8-83-027)
- 83029** VOC Fugitive Emission Predictive Model—User's Guide (EPA-600/S8-83-029)
- 83034** Quality Control and Quality Assurance Procedure for Level 1 Health Effects Bioassays (EPA-600/S8-83-034)
- 82002** Health Assessment Document for 1,1,2-Trichloro-1,2,2-Trifluoroethane (Chlorofluorocarbon (CFC-113)—Final Report (EPA-600/S8-82-002F)
- 83030** Rapid Assessment of Potential Ground-Water Contamination Under Emergency Response Conditions (EPA-600/S8-83-030)
- 84002** Sampling and Analysis Methods for Hazardous Waste Combustion (EPA-600/S8-84-002)
- 84005** User's Manual for the Plume Visibility Model (PLUVUE II) (EPA-600/S8-84-005)
- 84007** Protocol for the Collection and Analysis of Volatile POHCs Using VOST (EPA-600/S8-84-007)
- 84008** Pollution Episodic Model User's Guide (EPA-600/S8-84-008)
- 82007** Health Assessment Document for Acrylonitrile: Final Report (EPA-600/S8-82-007F)
- 84011** Feasibility Study for Adapting Present Combustion Source Continuous Monitoring Systems to Hazardous Waste Incinerators (EPA-600/S8-84-011)
- 84012** Particulate Data Reduction System (PADRE) User Guide (EPA-600/S8-84-012)
- 84013** User's Guide to the MESOPUFF II Model and Related Processor Programs (EPA-600/S8-84-013)
- 84016** Cost and Performance Models for Electrostatically Stimulated Fabric Filtration (EPA-600/S8-84-016)
- 84017** Particulate Data Reduction (PADRE) System Reference Manual (EPA-600/S8-84-017)
- 92021** Proceedings: Symposium on Iron and Steel Pollution Abatement for 1981 (EPA-600/S9-82-021)
- 93001** Proceedings of the Fifth Fundamental Combustion Research Contractors Workshop (EPA-600/S9-83-001)
- 92005a** Third Symposium on the Transfer and Utilization of Particulate Control Technology: Vol. I. Control of Emissions from Coal-Fired Boilers (EPA-600/S9-82-005a)
- 92005b** Third Symposium on the Transfer and Utilization of Particulate Control Technology: Vol. II. Electrostatic Precipitators (EPA-600/S9-82-005b)
- 92005c** Third Symposium on the Transfer and Utilization of Particulate Control Technology: Vol. III. Particulate Control Devices (EPA-600/S9-82-005c)
- 92005d** Third Symposium on the Transfer and Utilization of Particulate Control Technology: Vol. IV. Atypical Applications (EPA-600/S9-82-005d)
- 93016** Proceedings: Symposium on Iron and Steel Pollution Abatement Technology for 1982 (EPA-600/S9-83-016)
- 93020** Proceedings: Symposium on Flue Gas Desulfurization, Hollywood, Florida, May 1982 (EPA-600/S9-83-020)
- 94002** Proceedings: Fifth Workshop on Catalytic Combustion (San Antonio, Texas, September 1981) (EPA-600/S9-84-002)
- 94003** Utilization of Municipal Wastewater and Sludge on Land: Proceedings of the 1983 Workshop (EPA-600/S9-84-003)
- 94007** Land Disposal of Hazardous Waste. Proceedings of the Tenth Annual Research Symposium (EPA-600/S9-84-007)
- 94011** EADS Gaseous Emissions Data System: 1982 Annual Report (EPA-600/S9-84-011)
- 94012** EADS Liquid Effluents Data System: 1982 Annual Report (EPA-600/S9-84-012)
- 94013** EADS Solid Discharge Data System: 1982 Annual Report (EPA-600/S9-84-013)

## Miscellaneous Project Summaries

- 92010** Mini-Assessment of Environmental Trends and Problems: Alternative Feedstocks (EPA-600/S9-82-010)
- 92008** Proceedings: Third Conference on Waste Heat Management and Utilization (May 1981, Miami Beach, FL) (EPA-600/S9-82-008)
- 92012** Proceedings: EPA's Industry Briefing on the Adipic Acid Enhanced Limestone FGD Process (July 1981) (EPA-600/S9-82-012)
- 92011** Nineteenth Century Technology—Twentieth Century Problems: A Retrospective Mini-Assessment (EPA-600/S9-82-011)
- 92017** Proceedings: Symposium on Environmental Aspects of Fuel Conversion Technology—VI, A Symposium on Coal-Based Synfuels—October 1981 (EPA-600/S9-82-017)
- 92022** Fourth Conference on Advanced Pollution Control for the Metal Finishing Industry (Proceedings) (EPA-600/S9-82-022)

# Reader's Publication Form

The numbers of this form correspond to those given to each publication. Circle the number of the publication(s) you want to receive and return this page to:

ORD Publications  
P.O. Box 15948  
Cincinnati, OH 45215

12001	22022	22076	23029	23084	24012	24064	32016a	32084	33051	34002	34063	43006	44012	72015	73007
12004	22023	22077	23030	23085	24013	24065	32017	32085	33052	34005	34064	43008	44014	72017	73008
12006	22024	22078	23031	23086	24014	24066	32018	32086	33053	34007	34067	43010	44015	72018	73009
12008	22025	22079	23032	23087	24015	24067	32019	32087	33054	34008	34069	43011	44016	72021	73010
12009	22026	22080	23033	23088	24016	24068	32020	32088	33055	34009	34070	43012	44018	72022	73012
12010	22027	22081	23034	23089	24017	24069	32027	32089	33056	34010	34071	43013	44022	72024	73021
12011	22028	22082	23037	23091	24018	24070	32028	32090	33057	34011		43014	44024	72025a	73022
12012	22029	22086	23038	23092	24019	24071	32029	32091	33058	34012	42001	43015	44025	72025b	73023
12013	22030	22087	23039	23093	24020	24072	32030	32092	33059	34013	42015	43016	44026	72026	73024
12014	22031	22088	23040	23094	24021	24073	32031	32093	33060	34014	42016	43017	44027	72027	73025
12015	22032	22089	23041	23095	24022	24074	32032	32094	33061	34015	42017	43018	44028	72028	73026
12016	22033	22090	23042	23096	24023	24075	32037	32095	33062	34016	42018	43019	44029	72029	73027
12017	22034	22091	23043	23097	24024	24077	32038	32096	33064	34017	42019	43020	44030	72030	73028
13001	22035	22092	23044	23098	24025	24078	32039	33001	33065	34018	42021	43021	44031	72031	73029
13002	22036	22093	23045	23099	24026	24079	32040	33002	33069	34019	42022	43022	44032	72032	73035
13003	22037	22094	23046	23100	24027	24080	32041	33003	33070	34021	42023	43024	44033	72033	73036
13004	22038	22095	23047	23101	24029	24081	32042	33004	33073	34022	42024	43025	44034	72034	73037
13005	22039	22096	23048	23102	24030	24082	32043	33006	33074	34023	42025	43026	44035	72035	73038
13006	22040	22097	23049	23104	24031	24083	32046	33007	33075	34025	42026	43027	44036	72036	73039
13007	22043	22099	23050	23105	24032	24084	32047	33010	33076	34026	42028	43028	44037	72037	73040
13008	22044	22100	23051	23106	24033	24085	32049	33011	33077	34027	42031	43029	44038	72038	73041
13009	22045	22101	23052	23107	24034	24086	32050	33012	33078	34028	42032	43030	44039	72039	73042
13011	22046	22102	23053	23108	24035	24087	32051	33013	33079	34029	42034	43031	44042	72040	73043
13012	22047	22103	23055	23109	24036	24088	32052	33016	33080	34030	42035	43033	44043	72044	73044
13013	22048	23002	23056	23110	24038	24089	32053	33017	33081	34033	42036	43034	44044	72045	73045
13014	22049	23003	23057	23111	24039	24091	32056	33018	33082	34034	42037	43035	44045	72046	73046
13016	22050	23004	23058	23112	24040	24095	32057	33019	33083	34035	42038	43036	44046	72047	73047
13017	22051	23005	23060	23113	24041	24096	32058	33020	33084	34036	42039	43038	44049	72048	73048
13018	22053	23006	23061	23114	24042	24098	32059	33021	33085	34038	42040	43040	44051	72049	73049
14002	22054	23007	23062	23115	24043	24099	32060	33022	33086	34040	42041	43044	44052	72051	73050
14003	22055	23008	23063	23116	24044	24100	32061	33023	33087	34041	42043	43046	44053	72052	73052
14005	22056	23009	23064	23117	24045	24103	32062	33023c	33088	34042	42044	43047	44054	72053	73053
14006	22057	23010	23065	23118	24046	24105	32063	33025	33091	34043	42046	43049	44057	72054	73054
14007	22058	23011	23066	23119	24047	24108	32064	33026	33092	34044	42048	43050	44065	72055	73055
14008	22059	23012	23067	23120	24048	24110	32065	33027	33093	34045	42050	43051		72057a	73056
	22060	23014	23068	23121	24049	24113	32066	33028	33094	34046	42051	43052	52001	72057b	73057
21008	22061	23015	23069	23122	24050		32068	33029	33097	34047	42052	43053	52002	72058	73058
22007	22062	23016	23070	23123	24051	32002	32069	33030	33098	34048	42053	43054	53001	72059	73059
22010	22063	23017	23071	23124	24052	32003	32070	33033	33100	34050	42054	43055	54001	72060	73060
22011	22065	23018	23072	23125	24053	32005	32071	33034	33102	34051	42058	43056		72061	73061
22012	22066	23019	23073	23126	24054	32006	32072	33035	33103	34052	42059	43057	63001	72062	73062
22013	22067	23020	23074	23127	24055	32007	32074	33036	33104	34053	42062	44001	63002	72063	74001
22014	22068	23021	23075	24003	24056	32008	32075	33037	33105	34054	42064	44002	64001	72064	74002
22015	22069	23022	23077	24005	24057	32009	32076	33039	33106	34055	42067	44003	64002	72065a	74003
22016	22070	23023	23078	24006	24058	32010	32078	33042	33107	34056	42069	44004	64004	72065b	74005
22017	22070c	23024	23079	24007	24059	32011	32079	33045	33108	34057	42072	44006	64005	72066	74007
22018	22071	23025	23080	24008	24060	32012	32080	33046	33109	34058	43001	44007		72067	74009
22019	22073	23026	23081	24009	24061	32013	32081	33047	33110	34060	43002	44008	72009	72068	74010
22020	22074	23027	23082	24010	24062	32014	32082	33048	33111	34061	43003	44009	72010	73005	74011
22021	22075	23028	23083	24011	24063	32015	32083	33050	34001	34062	43005	44011	72014	73006	74012

(Order numbers continued on next page.)

**IMPORTANT NOTICE - This order form expires March 30, 1985.**

**Please return this completed page to the address given above.**

74013	74017b	74024b	74031	74046	74052	74058	74066	82002	82023	83022	84005	84016	92005c	92017	94002
74014	74018	74026	74036	74047	74053	74059	74067	82007	82024	83027	84007	84017	92005d	92021	94003
74015a	74020	74027	74037	74048	74054	74061	74068	82008	82028	83029	84008	89029	92008	92022	94007
74015b	74021	74028	74038	74049	74055	74062	74070	82015	83010	83030	84011		92010	93001	94011
74016	74022	74029	74039	74050	74056	74063		82019	83015	83034	84012	92005a	92011	93016	94012
74017a	74023	74030	74045	74051	74057	74065	80039	82020	83017	84002	84013	92005b	92012	93020	94013

If you are not currently on the mailing list for the ORD Publications Announcement, do you want to be added?

yes ☐ no ☐

It is not necessary to fill in this block if your name and address are correct on the mailing label.

Name \_\_\_\_\_

Employer \_\_\_\_\_

Street \_\_\_\_\_

City, State, Zip Code \_\_\_\_\_

United States  
Environmental Protection  
Agency

Center for Environmental Research  
Information  
Cincinnati OH 45268

BULK RATE  
POSTAGE & FEES PAID  
EPA  
PERMIT No. G-35

Official Business  
Penalty for Private Use \$300

If your address is incorrect, please change on the above label and return to:  
ORD Publications, P. O. Box 15948, Cincinnati, OH 45215

ORD 0130087  
LOU W TILLEY  
ENVIRONMENTAL PROTECTION AGENCY  
LIBRARIAN  
230 S DEARBORN ST  
CHICAGO IL 60604