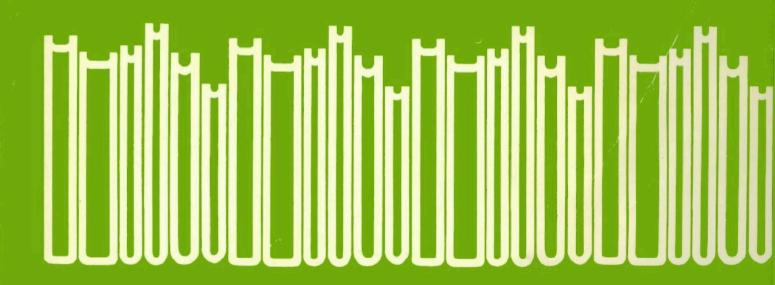
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This List of Publications has been created to anounce reports and publications of the U.S. Environmental Protection Agency's National Environmental Research Center, Cincinnati (NERC). This literature reports on results of scientific and engineering studies on pollution control technology performed by intramural activities of the NERC-Cincinnati laboratories or by cooperative activities with research and industrial organizations through contracts and grants. This publication is not intended to be a complete reference of all the technical publications of the U.S. Environmental Protection Agency. Rather, it is a selected list of those publications from the National Environmental Research Center in Cincinnati.

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PREFACE

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PUBLICATIONS

NERC-C-71-1	"Relationships of Salmonellae to Fecal Coliforms in Bottom Sediments," D. J. Van Donsel and E. E. Geldreich. Water Research. 5:1079-1087. 1971.
NERC-C-71-2	"Spectrophotometric Measurements of Metabolic Responses in Isolated Rat Brain Cortex," J. T. Cummins and R. Bull. Biochim. Biophys. Acta. 253:29-38. 1971.
NERC-C-71-3	"Integrated Approach to Problem of Viruses in Water," G. Berg. J. San. Engrg. Div., ASCE. 97(SA6):867-882. 1971. Also printed in Proc. National Specialty Conf. on Disinfection, Univ. of Mass., Amherst, Mass. July 8-10, 1970. 1971.
NERC-C-71-4	"131 _I Discharges from an Operating Boiling Water Reactor Nuclear Power Station," G. E. Stigall, T. W. Fowler and H. L. Krieger. Health Phys. 20:593-599. 1971.
NERC-C-71-5	"Coagulation-Flocculation," J. M. Cohen and S. A. Hannah. Water Quality and Treatment. Editors: AWWA. Chapter 3: 66-122. Third Edition. McGraw-Hill Book Co. 1971.
NERC-C-71-6	"Sewage Effluents and Sludge Analyses," R. L. Bunch. Treatise on Analytical Chemistry. Editors: I. M. Kolthoff, P. J. Elving and F. Stross. Chapter 47, Part III. 2:563-587. John Wiley and Sons, Inc. 1971.
NERC-C-71-7	"Factors Influencing Phosphorus Removal by Biological Treatment," R. L. Bunch. Chemical Engrg. Progress Symposium Series, Water1970. 67(107):90-94. 1971.

NERC-C-71-8

"Body Burden, Distribution and Internal Dose of 210Pb and 210Po in a Uranium Miner Population," R. L. Blanchard and J. B. Moore. Health Phys. 21:499-518.

NERC-C-71-9 "Evaluation of Ion-Exchange Surveillance Sampler for Analyzing Radioactive Liquid Effluents," H. L. Krieger and G. W. Frishkorn. Health Phys. 21:591-595. 1971.

"Land Spreading, A Conserving and Non-Polluting Method of Disposing of Oily Wastes," G. K. Dotson, R. B. Dean, B. A. Kenner and W. B. Cooke. Proc. 5th International Water Pollution Research Conf., San Francisco, Calif., July-August 1970. Sec. II, 36/1-15. Pergamon Press. 1971.

NERC-C-71-11 "Hydrolysis of Activated Sludge," R. B. Dean and R. Bouthilet. Proc. 5th International Water Pollution Research Conf. San Francisco, Calif., July-August 1970. Sec. III, 31/1-13. Pergamon Press. 1971.

NERC-C-71-12 "Sludge Handling and Ultimate Disposal,"
J. E. Smith, Jr. Third Annual Short
Course on Water Quality Control, Univ.
of Massachusetts, Amherst, Mass.
115-131. 1971.

NERC-C-71-13 "Recovery of Small Quantities of Viruses from Clean Waters on Cellulose Nitrate Membrane Filters," G. Berg, D. R. Dahling and D. Berman. Applied Microbiology. 22(4):608-614. 1971.

NERC-C-71-14 "Toxicity, Synergism, and Antagonism in Anaerobic Waste Treatment Processes,"
I. J. Kugelman and K. K. Chin. ACS
Advances in Chemistry. No. 105. 55-90.
1971.

NERC-C-71-15 "Radionuclide Release at a PWR Nuclear Power Station," B. Kahn, H. L. Krieger and H. E. Kolde. Trans. Amer. Nucl. Soc. 14:326-327. 1971.

NERC-C-71-16

as

"Removal of Organics from Wastewater by Activated Carbon," J. N. English, A. N. Masse, C. W. Carry, J. B. Pitkin and J. E. Haskins. Chemical Engrg. Progress Symposium Series, Water--1970. 67(107):147-153. 1971.

NERC-C-71-17

"Assay and Control of Marine Biotoxins," E. F. McFarren. Food Technology. 25(3):38-46. 1971.

NERC-C-71-18

"Reclamation and Revegetation of Strip-Mined Lands for Pollution and Erosion Control," R. D. Hill. Transactions of the American Society of Agricultural Engrgs. 14(2):268-272. 1971.

NERC-C-71-19

"Field Determination of Dose from 133Xe in the Plume from a Pressurized Water Reactor," G. J. Karches, H. E. Kolde, W. L. Brinck, R. L. Shearin and C. R. Phillips. Proc. International Symposium on Rapid Methods for Measuring Radioactivity in the Environment. IAEA, Vienna. 1971. 515-523.

NERC-C-71-20

"Radiological Surveillance Studies at a BWR Nuclear Power Station - Estimated Dose Rates," R. L. Blanchard, H. L. Krieger, H. E. Kolde and B. Kahn. Proc. Symposium on Health Physics Aspects of Nuclear Facility Siting. Editors: Paul G. Voilleque and Burton R. Baldwin. Burton R. Baldwin, Idaho Falls, Idaho. 1971. 372-384.

NERC-C-71-21

"Radiological Surveillance Studies at a Boiling Water Nuclear Power Reactor,"
B. Kahn, R. L. Blanchard, H. L. Krieger, H. E. Kolde, D. B. Smith, A. Martin, S. Gold, W. J. Averett, W. L. Brinck and G. J. Karches. Environmental Aspects of Nuclear Power Stations, IAEA, Vienna. 1971. 535-548.

NERC-C-71-22

"Water Physics No. 1," R. Lishka and E. F. McFarren. Anal. Ref. Service Report No. 39. 154 pp. 1971.

NERC-C-71-23	"Water Chlorine (Residual) No. 2," R. Lishka and E. F. McFarren. Anal. Ref. Service Report No. 40. 97 pp. 1971.
NERC-C-71-24	"Identification of Iron and Sulfur Bacteria," R. F. Lewis. Standard Methods for the Examination of Water and Wastewater. 13th Edition. American Public Health Association, New York. 715-721. 1971.
NERC-C-71-25	"Carbon Adsorption for Recovery of Organic Pesticides," J. W. Eichelberger and J. J. Lichtenberg. JAWWA. 63:25-27. January 1971.
NERC-C-71-26	"Solid Waste Management in the United StatesTechnological Developments," A. W. Breidenbach and H. L. Hickman, Jr. ISWA Information Bulletin No. 4. 113-130. January 1971.
NERC-C-71-27	"The Use of Collaborative Studies to Evaluate Water Analysis Instruments," E. F. McFarren and R. J. Lishka. JWPCF. 43:67-72. January 1971.
NERC-C-71-28	"Bacteriological Quality vs. Residual Chlorine," R. W. Buelow and G. Walton. JAWWA. 63:28-35. January 1971.
NERC-C-71-29	"Occurrence of Toxic Bivalve Molluscs During a Gymnodinium breve 'Red Tide'," J. M. Cummins, A. C. Jones and A. A. Stevens. Trans. American Fisheries Society. 100:112-116. January 1971.
NERC-C-71-30	"Nitrate in Drinking Water," E. F. Winton, R. G. Tardiff and L. J. McCabe. JAWWA. 63:95-98. February 1971.
NERC-C-71-31	"Removal of Viruses from Water and Waste-water," G. Berg. Proc. 13th Water Quality Conf Virus and Water Quality: Occurrence and Control, Univ. of Illinois at Urbana-Champaign, February 15-16, 1971. Univ. of Illinois Bull. 69. 126-136.

NERC-C-71-32	"Chlorination for Control of Bacteria and Viruses in Treatment Plant Effluents," C. W. Chambers. JWPCF. 43:228-241. February 1971.
NERC-C-71-33	"Chemical Characterization of Bottom Sediments," D. G. Ballinger and G. D. McKee. JWPCF. 43:216-227. February 1971.
NERC-C-71-34	"Nitrogen in Industry," J. B. Farrell. Proc. Symposium on Nitrogen in Soil and Water, Hespeler, Ontario, Canada, March 30-31, 1971. 92-108.
NERC-C-71-35	"Phosphorus Removal Practice," J. F. Kreissl. Proc. Sanitary Engrg. Institute, University of Wisconsin, Madison, Wisc., March 9-10, 1971. 28 pp.
NERC-C-71-36	"Nitrogen Removal Today," J. F. Kreissl. Proc. Sanitary Engrg. Institute, University of Wisconsin, Madison, Wisc., March 9-10, 1971. 20 pp.
NERC-C-71-37	"Collecting Ohio River Basin Chironomidae (Dipthera) with a Floating Sticky Trap," W. T. Mason, Jr. and J. E. Sublette. The Canadian Entomologist. 103:397-404. March 1971.
NERC-C-71-38	"Gas Chromatographic Analysis of Mercaptans, Phenols, and Organic Acids in Surface Waters with Use of Pentafluorobenzyl Derivatives," F. K. Kawahara. Environmental Science and Technology. 5:235-239. March 1971.
NERC-C-71-39	"Advanced Waste Treatment and Alaska's North Slope," J. F. Kreissl, S. E. Clark, J. M. Cohen and A. J. Alter. Proc. Symposium on Cold Regions Engineering. Editor: John L. Burdick. Univ. of Alaska, College, Alaska, August 17-19, 1970. 2:647-689. March 1971.
NERC-C-71-40	"Fecal Contamination of Fruits and Vegetables During Cultivation and Process- ing for Market. A Review," E. E. Geldreich and R. H. Bordner. J. Milk and Food Technology. 34:184-195. April 1971.

NERC-C-71-41	"Application of Bacteriological Data in Potable Water Surveillance," E. E. Geldreich. JAWWA. 63:225-229. April 1971.
NERC-C-71-42	"Municipal Wastewater Treatment by Physical and Chemical Methods," R. V. Villiers, E. L. Berg, C. A. Brunner and A. N. Masse. Water and Sewage Works. R-62 - R-64 and R-77 - R-81. May 1971.
NERC-C-71-43	"The Effect of Sludge Additives on Soil Fungus Populations," W. B. Cooke. Mycopathologia & Mycologia Applicata. 44(3):205-219. May 1971.
NERC-C-71-44	"Detection of Viruses in Water: A Review of Methods and Application," W. F. Hill, Jr., E. W. Akin and W. H. Benton. Water Research. 5:967-995. Pergamon Press. May 1971.
NERC-C-71-45	"Status of Advanced Waste Treatment," I. J. Kugelman. Proc. Seminar on Advanced Wastewater Treatment and Disposal, Hauppauge, New York, June 10, 1971. 19-99.
NERC-C-71-46	"Digital Computer Program for the Cost Engineer," R. Smith. American Association of Cost Engineers Bulletin. 13(3):21-27. June 1971.
NERC-C-71-47	"Decisions to be Made in the Use of Automatic Water Quality Monitors," D. G. Ballinger. Proc. International Symposium on Identification and Measurement of Environmental Pollutants, Ottawa, Canada, June 1971. 18 pp.
NERC-C-71-48	"Simulation of Ammonia Stripping from Wastewater," J. F. Roesler, R. Smith and R. G. Eilers. J. San. Engrg. Div., ASCE. Proc. Paper 8182. 97(SA3):269-286. June 1971.
NERC-C-71-49	"Persistence of Pesticides in River Water," J. W. Eichelberger and J. J. Lichtenberg. Environmental Science and Technology. 5:541-544. June 1971.

NERC-C-71-50	"Microbiology of Waste Treatment1970 - Literature Review," C. W. Chambers. JWPCF. 43:1217-1221. June 1971.
NERC-C-71-51	"Wastewater Treatment by Physical and Chemical Methods - Literature Review," J. M. Cohen. JWPCF. 43:1092-1104. June 1971.
NERC-C-71-52	"Biological Filters - Literature Review," R. L. Bunch. JWPCF. 43:1104-1107. June 1971.
NERC-C-71-53	"Limestone Treatment of Acid Mine Drainage," R. D. Hill and R. C. Wilmoth. Transactions of the Society of Mining Engineers, AIME. 250:162-166. June 1971.
NERC-C-71-54	"Restoration of a Terrestrial Environment the Surface Mine," R. D. Hill. The ASB Bulletin. 18(3):107-116. July 1971.
NERC-C-71-55	"Sludge Dewatering by High-Rate Freezing at Small Temperature Differences - Discussion," J. B. Farrell. Environmental Science and Technology. 5:716. August 1971.
NERC-C-71-56	"Radiological Surveillance Studies at a Pressurized Water Nuclear Power Reactor," B. Kahn, R. L. Blanchard, H. E. Kolde, H. L. Krieger, S. Gold, W. L. Brinck, W. J. Averett, D. B. Smith and A. Martin. NERC-Cincinnati, EPA (RD-71-1). 99 pp. August 1971.
NERC-C-71-57	"Analyzing the Effect of Fly Ash on Water Pollution," F. A. Rohrman. Power. 2 pp. August 1971.
NERC-C-71-58	"Artificial Destratification in Reservoirs," J. M. Symons. JAWWA. 63:597-604. September 1971.
NERC-C-71-59	"The 1967 Foray in Texas," W. B. Cooke. Mycologia. LXIII(5):1063-1067. September-October 1971.

NERC-C-71-60	"Nitrification and Denitrification in Activated Sludge Systems," M. C. Mulbarger. JWPCF. 43:2059-2070. October 1971.
NERC-C-71-61	"Municipal Pollution Control Technology in the United States of America," F. M. Middleton and J. J. Convery. Proc. 1st U.S./Japanese Conf. on Sewage Treatment Technology, Tokyo, Japan. October 1971. 80 pp.
NERC-C-71-62	"Modern Concept of Disinfection," S. L. Chang. J. San. Engrg. Div., ASCE Proc. Paper 8441. 97(SA5):689-707. October 1971.
NERC-C-71-63	"Viral Disinfection of Estuarine Water by UV," W. F. Hill, Jr., E. W. Akin, W. H. Benton and F. E. Hamblet. J. San. Engrg. Div., ASCE. Proc. Paper 8423. 97(SA5):601-615. October 1971.
NERC-C-71-64	"Disposal of Mercury Wastes from Water Laboratories," R. B. Dean, R. T. Williams and R. H. Wise. Environmental Science and Technology. 5:1044-1045. October 1971.
NERC-C-71-65	"Mobile Pilot Plants for the Removal of Ammonia and Phosphates from Wastewater - Discussion," J. B. Farrell. Proc. 31st International Water Conference, Engineers Society of Western Pennsylvania, Pittsburgh, Penn., October 1971. 27-28.
NERC-C-71-66	"Cost of Residential Solid Waste Collection," R. M. Clark, B. L. Grupenhoff, G. A. Garland and A. J. Klee. J. San. Engrg. Div., ASCE. 97(SA5):563-568. October 1971.
NERC-C-71-67	"Perspectives on Wastewater Treatment ProcessesPhysical-Chemical and Biological," E. F. Barth. JWPCF. 43:2189-2194. November 1971.
NERC-C-71-68	"Sludge Dewatering by Freezing," G. S. Logsdon and E. Edgerley, Jr. JAWWA. 63:734-740. November 1971.

NERC-C-71-69 "An Experimental Depuration Plant:
Operation and Evaluation," B. E. Huntley
and R. J. Hammerstrom. Chesapeake
Science. 12(4):231-239. December 1971.

NERC-C-71-70 "Methods for Organic Pesticides in Water and Wastewater," U.S. Environmental Protection Agency, National Environmental Research Center, Analytical Quality Control Laboratory, Cincinnati, Ohio. 52 pp. 1971.

NERC-C-71-71 "Methods for Chemical Analysis of Water and Wastes," U.S. Environmental Protection Agency, National Environmental Research Center, Analytical Quality Control Laboratory, Cincinnati, Ohio. 312 pp. 1971.

NERC-C-71-72 "Environmental Impact of Highway Deicing,"
E. J. Struzeski, Jr. Proc. Street
Salting Urban Water Quality Workshop,
State Univ. College of Forestry, Syracuse,
New York. May 6, 1971. 14-19.

PUBLICATIONS

NERC-C-72-1	"Design of Treatment Facilities for the Control of Nitrogenous Materials," E. F. Barth. Water Research. 6:481-483. 1972.
NERC-C-72-2	"Viruses in WaterCurrent Status," G. Berg. Air and Water Pollution. Editors: Wesley E. Brittin, Ronald West, and Robert Williams. 45-65. Colorado Assoc. Univ. Press, Boulder, CO. 1972.
NERC-C-72-3	"Saxitoxin Tetrodotoxin and the Metabolism and Cation Fluxes in Isolated Cerebral Tissues," R. J. Bull and A. J. Trevor. J. Neurochemistry. 19:999-1009. 1972.
NERC-C-72-4	"Sodium and the Flux of Calcium Ions in Electrically-Stimulated Cerebral Tissue," R. J. Bull and A. J. Trevor. J. Neurochemistry. 19:1011-1022. 1972.
NERC-C-72-5	"Pathways for the Transfer of Radionuclides from Nuclear Power Reactors Through the Environment to Man," R. L. Blanchard and B. Kahn. Proc. International Symposium on Radioecology Applied to the Protection of Man and His Environment, Rome, Italy, September 7-10, 1971. 1:175-190. 1972.
NERC-C-72-6	"Disinfection and Temperature Influences," C. W. Chambers and G. Berg. Proc. International Symposium on Water Pollution Control in Cold Climates, Fairbanks, Alaska, July 22-24, 1970. 312-328. 1972.
NERC-C-72-7	"Physical-Chemical Treatment for Wastewater," J. M. Cohen and Í. J. Kugelman. Water Research. 6:487-492. 1972.
NERC-C-72-8	"Automatic Amino Acid Analyses for Determining the Amount and Quality of Protein in Fungal Protein and in Other Protein Sources," W. E. Coleman. Symposium: Seed Proteins. Editor: G. E. Inglett. Chapter 20:277-283. Avi Publishing Co., Inc. 1972.

"The Use of Ultraviolet Absorbance for NERC-C-72-9 Monitoring the Total Organic Carbon Content of Water and Wastewater," R. A. Dobbs, R. H. Wise and R. B. Dean. Water Research. 6:1173-1180. 1972. "Buffalo Lake Recreational Water Quality: NERC-C-72-10 A Study in Bacteriological Data Interpretation, " E. E. Geldreich. Water Research. 6:913-924. "Water-Borne Pathogens," E. E. Geldreich. NERC-C-72-11 Water Pollution Microbiology. Editor: Ralph Mitchell. Chapter 9:207-241. Wiley Interscience. 1972. "Environmental Experience with Radioactive NERC-C-72-12 Effluents from Operating Nuclear Power Plants," B. Kahn, C. Weaver and B. Shleien. Proc. 4th International Conference on the Peaceful Uses of Atomic Energy, Geneva, September 6-16, 1971. 11:559-573. 1972. "Radionuclides Used in Biological Research," NERC-C-72-13 H. E. Kolde and W. E. Siri. Biology Data Book. Editors: Philip L. Altman and Dorothy S. Dittmer. 1:477-484. Edition. Federation of Societies for Experimental Biology. 1972. "Review and Comment on Waste Treatment NERC-C-72-14 Techniques for Commercial Vessels," W. Librizzi. Pollution Control in the Marine Industries. Editor: Thomas F. P. Sullivan. 163-180. International Association for Pollution Control. 1972. "New Approaches to Water Quality Control NERC-C-72-15 in Impoundments," J. E. Ridley and J. Symons. Water Pollution Microbiology. Editor: Ralph Mitchell. Chapter 17:389-412. Wiley Interscience. 1972.

6:959-965. 1972.

NERC-C-72-16

"A Comparative Study of the Inactivation

of Viruses in Water by Chlorine," P. V.

Dahling and M. Lucas. Water Research.

Scarpino, G. Berg, S. L. Chang, D.

NERC-C-72-17	"Cost to the Consumer of Collecting and Treatment Waste Water in the U.S.," R. Smith and R. G. Eilers. Man and His Environment: The Effects of Pollution on Man. Editor: T. R. Vickery. Part 3:83-132. Syracuse University Press. 1972.
NERC-C-72-18	"Coprostanol: A Positive Tracer of Fecal Pollution," H. H. Tabak, R. N. Bloomhuff and R. L. Bunch. Developments in Industrial Microbiology. 13(Chapter 25):296-307. 1972.
NERC-C-72-19 :	"Isolation and Characterization of AS-1, a Phycovirus Infecting the Blue-green Algae, Anacystis nidulans and Synechococcus cedrorum," R. S. Safferman, T. O. Diener, P. R. Desjardins, and M. E. Morris. Virology. 47:105-113. January 1972.
NERC-C-72-20	"New, Simplified Methods for Metal Analysis," E. F. McFarren. Water Technology/Quality, JAWWA. 28-31. January 1972.
NERC-C-72-21	"Mercury in Drinking-Water Supplies," R. J. Hammerstrom, D. E. Hissong, F. C. Kopfler, J. Mayer, E. F. McFarren, and B. H. Pringle. JAWWA. 64:60-61. January 1972.
NERC-C-72-22	"Economic Basis for Recycling Solid Waste," O. W. Albrecht. The Environmental Capsule. 2 pp. January and February 1972.
NERC-C-72-23	" 'Cold Vapor' Method for Determining Mercury," J. F. Kopp, M. C. Longbottom, and L. B. Lobring. JAWWA. 64:20-25. January 1972.
NERC-C-72-24	"Determination of Nitrilotriacetic Acid by High-Speed Ion Exchange Chromatography," J. E. Longbottom. Analytical Chemistry. 44:418-420. February 1972.
NERC-C-72-25	"Instruments for Water Quality Monitoring," D. G. Ballinger. Environmental Science and Technology. 6:130-133. February 1972.

NERC-C-72-26

"Present and Future Technology Requirements for the Containment of Hazardous Material Spills," I. Wilder and J. E. Brugger. Proc. 1972 Nat'l Conf. on Control of Hazardous Material Spills, Univ. of Houston, Houston, Texas, March 21-23, 1972. 77-83.

NERC-C-72-27

"In Situ Treatment Methods for Hazardous Material Spills," R. C. Ziegler and J. P. Lafornara. Proc. 1972 Nat'l Conf. on Control of Hazardous Material Spills, Univ. of Houston, Houston, Texas, March 21-23, 1972. 157-171.

NERC-C-72-28

"Hazardous Material Spills vs Oil Spills Common Biological Denominator," R. J. Nadeau and R. T. Dewling. Proc. 1972 Nat'l Conf. on Control of Hazardous Material Spills, Univ. of Houston, Houston, Texas, March 21-23, 1972. 211-216.

NERC-C-72-29

"Outbreaks of Waterborne Diseases in the United States, 1961-1970," A. Taylor, Jr., G. F. Craun, G. A. Faich, and L. L. McCabe. J. Infectious Diseases. 125:329-331. March 1972.

NERC-C-72-30

"Nitrogen Removal from Municipal Wastewater by Columnar Denitrification," J. M. Smith, A. N. Masse, W. A. Feige, and L. J. Kamphake. Environmental Science and Technology. 6:260-267. March 1972.

NERC-C-72-31

"Construction Techniques for Sanitary Landfills," N. Schomaker. Waste Age. 24-25 and 42-44. March-April 1972.

NERC-C-72-32

"Elkins Mine Drainage Pollution Control Demonstration Project--An Update," R. D. Hill and J. F. Martin. Proc. 4th Symposium on Coal Mine Drainage Research, Mellon Institute, Pittsburgh, Pennsylvania. April 26-27, 1972. 96-104.

NERC-C-72-33

"Treatment of Ferrous Iron Acid Mine Drainage by Reverse Osmosis," R. C. Wilmoth, D. G. Mason and M. Gupta. Proc. 4th Symposium on Coal Mine Drainage Research, Mellon Institute, Pittsburgh, Pennsylvania, April 26-27, 1972. 115-156.

NERC-C-72-34	"Combination Limestone-Lime Treatment of Acid Mine Drainage," R. C. Wilmoth, R. B. Scott and R. D. Hill. Proc. 4th Symposium on Coal Mine Drainage Research, Mellon Institute, Pittsburgh, Pennsylvania, April 26-27, 1972. 244-265.
NERC-C-72-35	"An Overview of Hazardous Waste Disposal," L. P. Wallace. Proc. 2nd Annual Environmental Engrg. and Science Conf., Louisville, Kentucky, April 20-21, 1972. 779-787.
NE RC-C-72-36	"Virus in Water, II. Evaluation of Membrane Cartridge Filters for Recovering Low Multiplicities of Poliovirus from Water," W. F. Hill, Jr., E. W. Akin, W. H. Benton and T. G. Metcalf. Applied Microbiology. 23:880-888. May 1972.
NERC-C-72-37	"Inexpensive Mercury-Specific Gas Chromatographic Detector," J. E. Longbottom Analytical Chemistry. 44(6):1111-1112. May 1972.
NERC-C-72-38	"Biological Filters - Literature Review," R. L. Bunch. JWPCF. 44:923-924. June 1972.
NERC-C-72-39	"Microbiology of Water - Literature Review," E. E. Geldreich. JWPCF. 44:1159-1172. June 1972.
NERC-C-72-40	"Microbiology of Waste Treatment - Literature Review," C. W. Chambers. JWPCF. 44:1172-1175. June 1972.
NERC-C-72-41	"Microbiology-Waterborne Outbreaks - Literature Review," G. F. Craun. JWPCF. 44:1175-1182. June 1972.
NERC-C-72-42	"Microbiological Pathogens in Animals and Their Detection - Literature Review," D. J. Reasoner. JWPCF. 44:1182-1193. June 1972.
NERC-C-72-43	"MicrobiologyDetection and Occurrence of Viruses, - Literature Review," G. Berg. JWPCF. 44:1193-1197. June 1972.

NERC-C-72-44

"Wastewater Treatment by Physical and Chemical Methods - Literature Review," J. M. Cohen and I. J. Kugelman. JWPCF. 44:915-923. June 1972.

NERC-C-72-45

"Reassessment of the Virus Problem in Sewage and in Surface and Renovated Waters," G. Berg. Proc. 6th International Water Pollution Research Conf., Jerusalem, June 18-23, 1972. B/14/28/1 - B/14/28/8.

NERC-C-72-46

"Cost of Reclamation and Mine Drainage Abatement, Elkins Demonstration Project," R. B. Scott, R. C. Wilmoth, and R. D. Hill. Transactions of the Society of Mining Engineers, AIME. 252:187-193. June 1972.

NERC-C-72-47

"The Federal Government's Role in Recycling," O. W. Albrecht. Univ. of Kentucky, College of Engrg. Technical Report UKY 44-72-CE 11. pp. 3. June 1972.

NERC-C-72-48

"Research Needs for Advanced Waste Treatment," F. M. Middleton and R. L. Stenburg. J. San. Engrg. Div., ASCE. 98(SA3):515-528. June 1972.

NERC-C-72-49

Ozone in Water and Wastewater Treatment, Editor: F. L. Evans III. Ann Arbor Science Publishers, Inc., Ann Arbor, Michigan. 1972. pp. 195. (Available from Ann Arbor Science Publishers, Inc., Ann Arbor, Michigan at \$14.50/copy).

NERC-C-72-50

"Ozone as a Water and Wastewater Disinfectant: A Literature Review," A. D. Venosa. Ozone in Water and Wastewater Treatment. Editor: F. L. Evans. Chapter 5:83-100. Ann Arbor Science Publishers, Inc., Ann Arbor, Michigan. 1972.

"A New Method for the Gas Chromatographic NERC-C-72-51 Separation and Detection of Dialkylmercury Compounds -- Application to River Water Analysis," R. C. Dressman. J. Chromatographic Science. 10:472-475. July 1972. "The Conversion of Phenylmercuric Salts NERC-C-72-52 Diphenylmercury and Phenylmercuric Chloride Upon Gas Chromatographic Injection," R. C. Dressman. J. Chromatographic Science. 10:468-472. July 1972. "Management and Control of Combined NERC-C-72-53 Sewer Overflows," R. Field and E. J. Struzeski, Jr. JWPCF. 44:1393-1415. July 1972. "Nitrogen Removal by Ammonia Stripping," NERC-C-72-54 T. P. Ö'Farrell, F. P. Frauson, A. F. Cassel and D. F. Bishop. JWPCF. 44:1527-1535. August 1972. "Production of Fungal Protein from NERC-C-72-55 Cellulose and Waste Cellulosics," C. J. Rogers, E. Coleman, D. F. Spino, T. C. Purcell and P. V. Scarpino. Environmental Science and Technology. 6:715-719. August 1972. "Municipal Waste Treatment by Physical-NERC-C-72-56 Chemical Methods," J. F. Kreissl and J. J. Westrick. Applications of New Concepts of Physical-Chemical Wastewater Treatment. Editor: W. W. Echenfelder, Jr. 1-11. Pergamon Press. London. "The Necessity of Controlling Bacterial Populations in Potable Waters: Community NERC-C-72-57 Water Supply," E. E. Geldreich, H. D. Nash, D. J. Reasoner and R. H. Taylor. JAWWA. 64:596-602. September 1972. "Bridging the Gap - Analysis of Federal NERC-C-72-58 Programs Affecting Solid Waste Generation and Recycling: a Summation," H. M. Freeman, D. E. Ross and R. P. Stearns. waste Age. pp. 5. September/October 1972.

NERC-C-72-59 "Automation and Control of Physical-Chemical Treatment for Municipal Wastewater," J. J. Convery, J. F. Roesler and R. H. Wise. Proc. International Conf. Applications of New Concepts of Physical-Chemical Wastewater Treatment, Vanderbilt Univ., Nashville, Tennessee, September 18-22, 1972. Pergamon Press, Inc. 199-209. NERC-C-72-60 "Impediments to Recycling Obsolete Ferrous Scrap," O. W. Albrecht. Public Works. pp. 4. October 1972. "Characterization and Identification of NERC-C-72-61 Spilled Residual Fuel Oils by Gas Chromatography and Infrared Spectrophotometry," F. K. Kawahara. J. Chromatographic Science. 10:629-636. October 1972. "The Utilization of Expert Opinion in Decision-Making," A. J. Klee. NERC-C-72-62 J. American Industrial Chemical Engrg. 18(6):1107-1115. November 1972. NERC-C-72-63 "Radiorespirometry in the Study of Biological Effects of Environmental Pollutants," S. D. Lee, K. C. Butler, R. M. Danner, L. McMillan, W. Moore and J. F. Stara. American Laboratory. 8-14. December 1972. NERC-C-72-64 "Basic Data for Solid Waste Management," R. M. Clark, J. R. Sweeten, and D. G. Greathouse. J. San. Engrg. Div., ASCE. 98(SA6):897-907. December 1972. "Prediction of Heat of Combustion of NERC-C-72-65 Solid Wastes from Ultimate Analysis," D. L. Wilson. Environmental Science and Technology. 6(13):1119-1121. December 1972.

Exposures," W. L. Wagner, V. E. Archer and R. L. Blanchard. Health Physics. 23:871-872. December 1972.

Skeletal Levels with Radon Daughter

"A Correction in the Comparison of ²¹⁰Pb

NERC-C-72-66

NERC-C-72-67

"Hexachlorophane Teratogenicity in Rats," C. A. Kimmel, W. Moore, Jr., and J. F. Stara. Lancet. 765. October 7, 1972.

NERC-C-72-68

"Advanced Waste Treatment Systems at the Environmental Protection Agency - District of Columbia Pilot Plant," D. F. Bishop, T. P. O'Farrell, J. B. Stamberg, and J. W. Porter. AIChe Symposium Series 124, Water 1971. 68:11-24. 1972.

NERC-C-72-69

"Activated Sludge Treatment with Oxygen,"
J. B. Stamberg, D. F. Bishop and G. Kumke.
AIChe Symposium Series 124, Water 1971.
68:25-34. 1972.

NERC-C-72-70

"Alum Addition to Activated Sludge with Tertiary Solids Removal," A. B. Hais, J. B. Stamberg and D. F. Bishop. AIChe Symposium Series 124, Water 1971. 68:35-42. 1972.

NERC-C-72-71

"Physical-Chemical Nitrogen Removal from Municipal Wastewater," A. F. Cassel, T. A. Pressley, W. W. Schuk, and D. F. Bishop. AIChe Symposium Series 124, Water 1971. 68:56-64. 1972.

NERC-C-72-72

"Computer Control of Physical-Chemical Wastewater Treatment," D. F. Bishop, W.W. Schuk, R. B. Samworth, R. Bernstein and E. Fein. Pollution: Engineering and Scientific Solutions. Editor: Euval S. Barrekette. 522-547. Plenum Publishing Corp., New York. 1972.

NERC-C-72-73

"Nutrient Removal from Wastewater by Physical-Chemical Processes," J. M. Cohen. Nutrients in Natural Waters. Editors: Herbert E. Allen and James R. Kramer. Chapter XII:353-389. John Wiley & Sons, Inc. 1972.

NERC-C-72-74

"Upgrading Existing Wastewater Treatment Plants," J. M. Smith, A. N. Masse and W. A. Feige. Proc. International Conf. Applications of New Concepts of Physical-Chemical Wastewater Treatment, Vanderbilt Univ., Nashville, Tennessee, September 18-22, 1972. Pergamon Press, Inc. 103-117.

NERC-C-72-75 "Active Research Projects Report--Fiscal Year 1972," U.S. Environmental Protection Agency, National Environmental Research Center, Cincinnati, Ohio. 742 pp. "Membrane Filter Technique for Enumeration NERC-C-72-76 of Pseudomonas aeruginosa," M. A. Levin and V. J. Cabelli. Applied Microbiology. 24(6):864-870. December 1972. NERC-C-72-77 "Radiological Surveillance at Pressurized Water Reactors," W. L. Brinck, H. E. Kolde, H. L. Krieger and B. Kahn. Trans. Amer. Nucl. Soc. 15:640-641. 1972. NERC-C-72-78 "Handbook for Analytical Quality Control in Water and Wastewater Laboratories," U.S. Environmental Protection Agency, National Environmental Research Center, Analytical Quality Control Laboratory, Cincinnati, Ohio. June 1972. NERC-C-72-79 "EPA's Watercraft Waste Program," W. J. Librizzi. Proc. 1972 Conf. on Sewage Control for Great Lakes Vessels, Univ. of Michigan, Ann Arbor, Mich.

January 1972. 3-12.

RESEARCH REPORTS

Environmental Monitoring Series

Report Number

fi.

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EPA-R4-72-002

"Tentative Procedure Analyzing Pesticide Residues in Solid Wastes," R. A. Carnes 15 pp. August 1972.

Source:

NERC-Cincinnati

NTIS

EPA-R4-72-006

"References for the Identification of Freshwater Macroinvertebrates," P. A. Lewis

17 pp. October 1972.

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EPA-R4-72-003

"Analyses for Mercury in Water--A Preliminary Study of Methods," J. A. Winter and H. A. Clements 58 pp. September 1972.

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NERC-Cincinnati

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"Analysis of Federal Programs Affecting Solid Waste Generation and Recycling" 153 pp. 1972.

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SW-72-3-3

"Corrosion Studies in Municipal Incinerators" 120 pp. 1972.

(Project Officer: R. Thurnau)

Source:

NERC-Cincinnati NTIS - PB 213 378 Paper Back \$3.00 Microfiche .95

SW-72-1-1

"Landfill Decomposition Gases--An Annotated Bibliography," J. A. Geyer 28 pp. June 1972.

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NERC-Cincinnati NTIS - PB 213 487 Paper Back \$3.75 Microfiche .95

EPA-R2-72-011

"Management Information for Solid Waste Collection," R. M. Clark 18 pp. August 1972.

Source:

NERC-Cincinnati NTIS - PB 213 308 Paper Back \$3.00 Microfiche .95

EPA-R2-72-012

"Urban Solid Waste Management; Economic Case Study," R. M. Clark 21 pp. August 1972.

Source:

NERC-Cincinnati NTIS - PB 213 394 Paper Back \$3.00 Microfiche .95

EPA-R2-72-046

"An Investigation of the Biodegradability of Packaging Plastics" 80 pp. August 1972. (Project Officer: C. J. Rogers)

Source:

NERC-Cincinnati NTIS - PB 213 488 Paper Back \$4.85 Microfiche .95

<u>Title</u>

EPA-R2-72-059

"The Beverage Container Problem--Analysis and Recommendations" 190 pp. September 1972.

(Project Officer: R. H. Ongerth)

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NERC-Cincinnati

GPO \$2.25

NTIS - PB 213 341 Paper Back \$6.75

Microfiche .95

already in Let.

"Identification of Polychlorinated Biphenyls in the Presence of DDT-Type Compounds"

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(Project Officer: D. G. Ballinger)

Source:

NERC-Cincinnati

GPO \$1.25

EPA-R2-72-131

"Microbiological Studies of Compost Plant Dust," D. H. Armstrong and M. L.

Peterson

13 pp. November 1972.

Source:

NERC-Cincinnati

NTIS

EPA-R2-72-055

"Biological Effects of Oil Pollution--Selected Bibliography II," R. J. Nadeau and T. H. Roush

62 pp. November 1972.

* I

Source:

NERC-Cincinnati

NTIS - PB 213 483

Paper Back \$4.50

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EPA-R2-72-031

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NERC-Cincinnati

GPO \$2.00

Title

EPA-R2-72-065

"Full Scale Parallel Activated Sludge Process Evaluation" 203 pp. November 1972.

(Project Officer: R. G. Eilers)

Source: GPO \$2.75

EPA-R2-72-123

"Ammonia Removal in a Physical-Chemical Wastewater Treatment Process"

66 pp. November 1972.

(Project Officer: F. L. Evans III)

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EPA-R2-72-053

"Initial Mixing in Coagulation Processes" 161 pp. November 1972.

(Project Officer: S. A. Hannah)

Source:

NERC-Cincinnati

GPO \$2.25

EPA-R2-72-056

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Exchange"

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(Project Officer: R. D. Hill)

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NERC-Cincinnati

GPO \$2.75

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GPO \$2.00

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"Biological Consequences of Plant Residue

Decomposition in Soil" 136 pp. November 1972.

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NTIS

Tit<u>le</u>

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(Project Officer: J. F. Kreissl)

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Wastewater Treatment" 96 pp. December 1972.

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Masters)

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GPO \$1.00

Title

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GPO \$2.50

EPA-R2-72-049

"Concept Evaluation: Recovery of Floating Oil Using Polyurethane Foam Sorbent" 97 pp. September 1972. (Project Officer: R. T. Dewling)

Source:

GPO \$1.50

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"Runoff of Oils from Rural Roads Treated to Suppress Dust," F. J. Freestone 29 pp. October 1972.

Source:

GPO \$1.00

EPA-R2-72-008

"The Swirl Concentrator as a Combined Sewer Overflow Regulator Facility" 179 pp. September 1972. (Project Officer: R. I. Field)

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NERC-Cincinnati (EWQRL)

GPO \$2.25

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1973 PUBLICATIONS

NERC-C-73-1 "Clinical Sensitivity to Green Algae Demonstrated by Nasal Challenge and in Vitro Tests of Immediate Hypersensitivity," I. L. Berstein and R. Safferman. J. Allergy and Clinical Immunology. 51:22-28. January 1973. NERC-C-73-2 "The Visibility of Oil-Water Discharges," B. Hornstein. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973. 91-99. NERC-C-73-3 "Oil Spill-Source Correlation by Gas Chromatography: An Experimental Evaluation of System Performance," O. C. Zafiriou, J. Myers, R. Bourbonniere and F. J. Freestone. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973. 153-159. NERC-C-73-4 "Identification of Oil Pollutants: A Review of Some Recent Methods," M. Gruenfeld. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973. 179-193. NERC-C-73-5 "Sorbent System Development for Oil Spill Cleanup," J. S. Dorrler. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973. 309-314.		
B. Hornstein. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973. 91-99. NERC-C-73-3 "Oil Spill-Source Correlation by Gas Chromatography: An Experimental Evaluation of System Performance," O. C. Zafiriou, J. Myers, R. Bourbonniere and F. J. Freestone. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973. 153-159. NERC-C-73-4 "Identification of Oil Pollutants: A Review of Some Recent Methods," M. Gruenfeld. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973. 179-193. NERC-C-73-5 "Sorbent System Development for Oil Spill Cleanup," J. S. Dorrler. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., Washington, D.C.,	NERC-C-73-1	Demonstrated by Nasal Challenge and in Vitro Tests of Immediate Hypersensitivity," I. L. Berstein and R. Safferman. J. Allergy and Clinical Immunology.
Chromatography: An Experimental Evaluation of System Performance," O. C. Zafiriou, J. Myers, R. Bourbonniere and F. J. Freestone. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973. 153-159. NERC-C-73-4 "Identification of Oil Pollutants: A Review of Some Recent Methods," M. Gruenfeld. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973. 179-193. NERC-C-73-5 "Sorbent System Development for Oil Spill Cleanup," J. S. Dorrler. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C.,	NERC-C-73-2	B. Hornstein. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973.
Review of Some Recent Methods," M. Gruenfeld. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973. 179-193. NERC-C-73-5 "Sorbent System Development for Oil Spill Cleanup," J. S. Dorrler. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C.,	NERC-C-73-3	Chromatography: An Experimental Evaluation of System Performance," O. C. Zafiriou, J. Myers, R. Bourbonniere and F. J. Freestone. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973.
Spill Cleanup," J. S. Dorrler. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C.,	NERC-C-73-4	Review of Some Recent Methods," M. Gruenfeld. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C., March 13-15, 1973.
	NERC-C-73-5	Spill Cleanup," J. S. Dorrler. Proc. Joint Conf. on Prevention and Control of Oil Spills, Washington, D.C.,

NERC-C-73-6

"A Salt Marsh Microcosm: An Experimental Unit for Marine Pollution Studies," R. J. Nadeau and T. H. Roush. Proc. Joint Conf. on Prevention and Control of

Oil Spills, Washington, D.C., March 13-15, 1973. 671-683.

NERC-C-73-7 "Determination of Radioactive Nuclides in Water," B. Kahn. Water and Water

Pollution Handbook. Editor: Leonard L.

Ciaccio. Marcel Dekker, Inc., New York.

1973. 1357-1388.

NERC-C-73-8 "Stable Strontium: Calcium Ratios in U.S. Bone and Total Diet Samples," A. B. Strong,

C. R. Porter and B. Kahn. Proc. Second
International Conf. on Strontium Metabolism,

Glasgow and Strontian, August 16-19, 1972. USAEC Report CONF-720818. 513-520. 1973.

NERC-C-73-9 "Review of the Causes of Waterborne-Disease Outbreaks," G. F. Craun and L. J. McCabe.

JAWWA. 65:75-84. January 1973.

NERC-C-73-10 "An Improved Method for Determining Organics by Activated Carbon Adsorption and Solvent Extraction--Part 1," R. W.

Buelow, J. K. Carswell and J. M. Symons.

JAWWA. 65:57-73. January 1973.

NERC-C-73-11 "An Improved Method for Determining
Organics by Activated Carbon Adsorption
and Solvent Extraction--Part II (Test

Method)," R. W. Buelow, J. K. Carswell and J. M. Symons. JAWWA. 65:195-199.

March 1973.

NERC-C-73-12 "The Use of a Programmable Calculator with Plotting Capabilities to Assist in the

Chromatographic Computations," J. E. Longbottom. J. Chromatographic Sciences.

11:13-16. January 1973.

NERC-C-73-13 "Polychlorinated Biphenyls in Solid Waste

and Solid Waste Related Materials,"
R. A. Carnes, J. U. Doerger, and H. L.
Sparks. Archives of Environmental

Contamination and Toxicology.

1(1):27-35. 1973.

NERC-C-73-14 "Cycling and Control of Metals," Proc. Environmental Resources Conf., Columbus, Ohio, October 31 - November 2, 1972.

U.S. Environmental Protection Agency, National Environmental Research Center, Cincinnati, Ohio. 187 pp. February 1973.

NERC-C-73-15	"Delayed Incubation Membrane Filter Test for Fecal Coliforms," R. H. Taylor, R. H. Bordner and P. V. Scarpino. Applied Microbiology. 25:363-368. March 1973.
NERC-C-73-16	"Hazardous Waste Disposal Studies," H. Johnson. Waste Age. 4(2):38 and 40. March/April 1973.
NERC-C-73-17	"Environmental Policy as Economic Policy," H. C. Goddard. Environmental Affairs. 2(3):630-637. 1973.
NERC-C-73-18	"Combined Sewer Overflows," R. I. Field. Civil Engineering-ASCE. 57-60. February 1973.
NERC-C-73-19	"Environmental Plastics Legislation in the U.S.: An Overview," A. J. Klee. SPE Journal. 29:46-48. May 1973.
NERC-C-73-20	"Recent Developments in the Measurement of the Response of Plankton and Periphyton to Changes in Their Environment, C. I. Weber. Bioassay Techniques and Environmental Chemistry. Editor: Gary Glass. Chapter 5: 119-138. Ann Arbor Science Publishers, Inc. 1973.

RESEARCH REPORTS

Environmental Monitoring Series

Report Number				Title	
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"Procedure for Radiochemical Analysis of EPA-R4-73-014 Nuclear Reactor Aqueous Solutions," H. L.

Krieger and S. Gold 174 pp. May 1973.

Source:

NERC-Cincinnati

NTIS

Environmental Protection Technology Series

Report Number	<u>Title</u>
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Report Number Title EPA-R2-73-116 "Removal of Oil from Under Piers" 29 pp. February 1973. (Project Officer: F. J. Freestone) Source: <u>GPO 6</u>5¢ EPA-R2-73-185 "Control of Hazardous Chemical Spills by Physical Barriers" 91 pp. March 1973. (Project Officer: I. Wilder) Source: GPO \$1.25 "Ultra High Rate Filtration of Activated EPA-R2-73-222 Sludge Plant Effluent" 114 pp. April 1973. (Project Officer: J. F. Kreissl) Source: GPO \$2.10 "Oil/Sorbent Harvesting System for Use on EPA-R2-73-166 Vessels of Opportunity" 99 pp. April 1973. (Project Officer: J. S. Dorrler) Source: GPO \$1.25 "Physical, Chemical, and Microbiological EPA-6700-73-01 Methods of Solid Waste Testing," U.S. Environmental Protection Agency, National Environmental Research Center, Solid Waste Research Laboratory, Cincinnati, Ohio. May 1973. Source: NERC-Cincinnati NTIS - PB 220 479 Paper Back \$6.75 Microfiche \$1.45 "A Small Vacuum Oil Skimming System" EPA-R2-73-115 19 pp. February 1973.

Source: GPO 50¢

(Project Officer: F. J. Freestone)

Title

EPA-R2-73-209

"Secondary Waste Treatment for a Small Diversified Tannery" 75 pp. April 1973 (Project Officers: J. J. Westrick and J. F. Kreissl)

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U.S. ENVIRONMENTAL PROTECTION AGENCY NATIONAL ENVIRONMENTAL RESEARCH CENTER Cincinnati, Ohio

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