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IDENTIFIERS *Environmental Quality

ABSTRACT

The Environmental Quality Instructional Resources Center in Columbus, Ohio, acquires, reviews, indexes, and announces both print (bocks, modules, units, etc.) and non-print (films, slides, video tapes, etc.) materials related to water quality and water resources education and instruction. In addition some materials related to hazardous materials, solid wastes, and public participation are included. Each entry in the resume section of this document provides, where appropriate: (1) the title; (2) the publication date; (3) the name(s) of the author(s); (4) a set of descriptors assigned to the entry for the purpose of indexing; (5) the number of pages; (6) an abstract describing the entry; and (7) information on the availability of the complete document. Also included in this publication are procedures to illustrate how instructors and curriculum developers can locate instructional materials which meet general or highly specific requirements of their programs. This publication supplements, but does not replace, supplements 1-31. (CW)

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Prepared by

Environmental Quality Instructional Resources Center SMEAC Information Reference Center The Ohio State University 1200 Chambers Road, Room 310 Columbus, OH 43212

WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS)

A Compilation of Abstracts to Water Quality and Water Resources Materials

Supplement 33, 1988

U S DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

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March 1988



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Preface

This publication contains abstracts and indexes to selected materials related to wastewater treatment and water quality education and instruction. In addition, some materials related to pesticides, hazardous and toxic wastes, solid wastes and public participation are included. Also included are procedures to illustrate how instructors and curriculum developers in the water quality control field can locate instructional materials to meet very general or highly specific requirements in their programs.

Supplements to this publication will be issued periodically.

For further information about these materials contact:

Environmental Quality Instructional Resources Center 1200 Chambers Road, Room 310 Columbus, Ohio 43212

(614) 292-6717



I. General Information about Materials in IRIS

A. What types of materials are included in IRIS?

The Environmental Quality Instructional Resources Center (water) acquires, reviews, indexes, and announces both print (books, modules, units, etc.) and non-print (films, slides, video tapes, etc.) materials related to water quality and water resources education and instruction and other materials.

Materials selected must be available from some source for announcement. When materials are not readily available we attempt to make the materials available through some national information service for easier acquisition. In several cases the Environmental Quality Instructional Resources Center is the source of the materials.

B. How are materials entered into IRIS?

We request that people assist us in locating materials for the system. If you have materials you believe to be useful to others, please send two copies if possible to the:

EQ Instructional Resources Center 1200 Chambers Road, Room 310 Columbus, Ohio 43212

Materials are reviewed by the project staff. Availability of the materials is checked, and the materials are abstracted and indexed. The abstract describes the contents of the material. The index terms (descriptors) are concepts or terms used to describe the contents and the form of the document. (See the Subject Index for a listing of those that have been used.) The index terms are useful for locating materials manually, such as with this compilation, and also by computer.

When items are processed they are entered on the IRIS computer tape. This tape is maintained by the EQ Instructional Resources Center at The Ohio State University and is used for producing tapes for other information systems, publications, and for computer searches conducted at The Ohio State University.

- C. How can a user locate materials in IRIS?
 - 1. All materials placed in IRIS (water) collection.

Materials entered into the IRIS (water) collection can be located in two ways: (1) by manual search of this compilation and similar ones to follow and (2) by computer.



The first compilation (1979) contained resumes of selected materials processed for the previous IRIS (water) collection and resumes of selected materials of items added to the IRIS (water) collection.

Quarterly updates of the compilation have been available by subscription on a yearly basis since November, 1979. Information regarding an annual subscription to IRIS (water) Quarterly Compilations can be obtained by writing to the EQ Instructional Resources Center. A subscription to the quarterly supplements for 1988 is \$12.00 (within the U.S.). Price to Canada and Mexico is \$14.00. Prices in other Countries is \$18.00. Separate quarterly supplements are \$5.00 each. Supplements can be purchased to keep up-to-date on current publications. In addition a previous compilation for supplements 1-15 is evailable.

The compilations and the quarterly supplements can be scanned and the subject index can be used for manual searches.

Computer tapes of the IRIS (water) collection can also be searched by computer. The IRIS tapes are available for searching by the EQ/IRC.

EQ/IRC 1200 Chambers Road, Room 310 Columbus, Ohio 43212

2. Materials placed in the Educational Resources Information System (ERIC).

A number of materials processed for the IRIS (water) system are entered into the ERIC system and announced in Resources in Education (RIE). Resources in Education (RIE) is published monthly and is available from:

Superintendent of Documents U.S. Government Printing Office Washington, DC 20402

The current price is listed in the most recent issue of RIE. Check if a college or university library close to you has a copy. If they do not, contact the EQ Instructional Resources Center for assistance.

Many libraries subscribe to RIE. Materials announced in RIE can be searched manually each month by scanning RIE or by checking the index terms in the back of each issue. Materials announced in RIE can be searched by computer also.



3

ERIC Computer tapes may be purchased outright, but most users of the tapes gain access to them through two major database vendors: Dialog and Bibliographic Retrieval Services (BRS). For the addresses of search services in your state that can search these databases, contact the:

EQ Instructional Resources Center 1200 Chambers Road, Room 310 Columbus, Ohio 43212 (614) 292-6717

ERIC materials can also be searched by CD RQM. CD RQM disks are available from three vendors. Contact the EQ/IRC if you desire information on these.

Most of the materials announced in RIE are available on microfiche (micro $^{\circ}$ lm) at over 700 sites throughout the United States and the world. Users can view these materials on site at many locations to identify what they believe will be useful to them at no cost. Microfiche copies (or in most cases Xerox copies) can be ordered through the ERIC Document Reproduction Service. The address and order information is in the back of each issue of RIE. Xerox copies of many items related to water quality and resource education and training can also be ordered through the EQ Instructional Resources Center for 0.06 per page plus 1.06 per document.

For information about location of ERIC microfiche sites in your state, contact the EQ Instructional Resources Center.

II. How to Use the Compilation

A. Description of Information in Resumes

Each resume is listed by EW number in numerical order in the resume section.

Sample Resume

- a. IRIS NUMBER: EW006023
- b. PUBLICATION DATE: FEB 81
- c. TITLE: PROGRAMMED APPROACH TO WATER/MASS ANALYSES.
- d. PERSONAL AUTHOR: SPENCE, GEORGE R., JR.
- e. DESCRIPTOR: *DESIGN; *ENGINEERING; *EQUIPMENT; *MASS BALANCE; *PROJECT DESIGN; *POLLUTION ENGINEERING; *PIPES; *WATER RESOURCES
- f. DESCRIPTIVE NOTE: 30-33P.



- 9. ABSTRACT: DURING THE ENGINEERING PHASE OF A PROJECT DESIGN, WATER REQUIREMENTS OFTEN CHANGE AS NEW INFORMATION BECOMES AVAILABLE. THIS ARTICLE DETAILS A PROGRAMMED APPROACH TO CALCULATION OF A WATER/MASS BALANCE WHICH PROVIDES THE USER WITH THE ABILITY TO READILY ASSESS THE IMPACT OF VARYING WATER QUALITIES, FLOW PATTERNS, AND FLOW RATES. THIS INFORMATION IS THEN USED IN DETERMINING PIPE AND EQUIPMENT SIZES.
- h. AVAILABILITY: POLLUTION ENGINEERING; V13 N2
- a. IRIS NUMBER -- this is the identification number sequentially assigned to materials as they are processed. Gaps in numbers mean that some items have been deleted, are being processed to add new information, or have been delayed in processing for some reason.
- b. PUBLICATION DATE -- date material was published according to information on the material.
- c. TITLE
- d. PERSONAL AUTHOR -- person or persons who wrote, compiled, or edited the material. Up to two personal authors can be listed.
- e. DESCRIPTOR -- subject terms which characterize . substantive contents and form of the materials. The major terms are preceded by an asterisk. Terms used to index all resumes in this compilation can be reviewed in the Subject Index.
- f. DESCRIPTIVE NOTE -- various items of information may be contained in this section. For print materials the number of pages is usually listed. The price of the material quoted is the last time information was received from the source. Please note: Prices of nearly all materials are subject to changes and may not be accurate at the time a person orders a specific item.
- g. ABSTRACT -- some early materials entered into IRIS in the 1970's did not have abstract information. All materials currently being entered into IRIS have an informative abstract that describes the contents of the item.
- h. AVAILABILITY -- information in this field indicates where the material can be obtained.



B. How to Locate Desired Materials

Users can identify materials of interest by scanning the resume listings, or using the Subject Index or Author Index.

1. Subject Index

The Subject Index is designed to enable the user to search for information on either a broad subject or a narrow information concern. An EW number is included for each item listed under the subject heading. The EW number refers to the abstract entry in the resume section where complete bibliographic information, an abstract of the item, and availability information can be found.

A user can also coordinate a search by checking EW numbers that appear under two or more subject headings. For example, you could check all the EW numbers under Water Treatment and all the EW numbers under Films. EW numbers included under both subject headings would include information relevant to Water Treatment that were films. EW numbers under wastewater treatment and laboratory techniques would provide a list of materials related to Laboratory Techniques and to Wastewater Treatment. Similar techniques could be used to identify other information desired.

Users with ERIC microfiche should check the resume entry. If the document is available on microfiche from the ERIC Document Reproduction Service, the availability will be indicated by "MF" on the resume by "EDRS Price." This means libraries with ERIC microfiche collections should have the document on microfiche.

If you want a document available through the ERIC Document Reproduction Service (EDRS) see the section on ordering documents.

2. Author Index

If you desire to locate a document by the name of the author, you can use the Author Index. EW numbers are provided under the author in the Author Index as in the Subject Index. Some documents do not have a listed author; hence, they are not listed in this index.



III. Correcting an Existing IRIS Record

The IRIS data base will be updated periodically. You can help improve IRIS by sending corrections for items you find to be in error.

We request that you duplicate (copy) the resume from the compilation, mark the information you believe to be wrong (or incomplete), and send the marked resume to:

EQ Instructional Resources Center 1200 Chambers Road, Room 310 Columbus, Ohio 43212 (614) 292-6717

If you have difficulty obtaining materials from the listed source in the AVAILABILITY section of the resume, please let us know. We will contact the sources to verify whether the materials are available, but your assistance will provide corrections between availability checks.

If you are the <u>supplier</u> of materials in IRIS, please let us know if you remove a product from your list, modify a product on your list, or change the price of the product.

IV. Requests to Receive Information about IRIS and the IRC Bulletin

Information regarding IRIS, materials in IRIS, and modifications in the system will be announced in the <u>IRC Bulletin</u>. The <u>Bulletin</u> is produced once a year.

If you need information about IRIS you can also phone (614) 292-6717 with your questions.

V. Requests for Assistance in Using IRIS

If you need help in using the IRIS manuals, phone (614) 292-6717 or write to the Environmental Quality Instructional Resources Center. Staff are normally available from about 8:30 a.m. to 4:30 p.m. Eastern time to answer your questions.

VI. How to Structure a Computer Search of IRIS

This explanation relates to the IRIS data base that can be searched by the EQ/IRC.

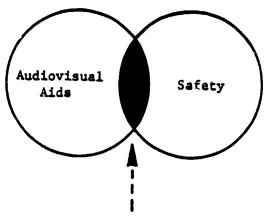


A few notes about the service are important. The following fields are searchable by computer: (1) Authors, (2) Title, and (3) Subject index terms.

Several sample searches are listed below and on the following pages.

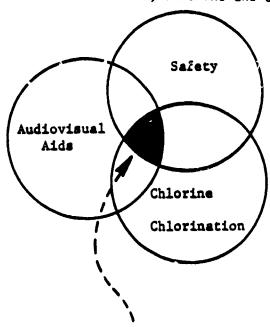
A. Sample 1

If you want to locate audiovisual aids that relate to safety you would submit a search with audiovisual aids and safety. Materials that included the terms both audiovisual aids and safety in the subject index field would be identified by computer.



Items Identified

The computer program can tell you the number of items, the title of the items, and the authors. If you were primarily interested in audiovisual aids, safety, and chlorine you would submit a search of these three terms. You might want to include chlorides and chlorination as well as chlorine in the search. This search would identify materials that contained audiovisual aids, safety, and one or more of the words, chlorine and chlorination.

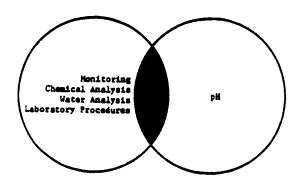


Items Identified



B. Sample 2

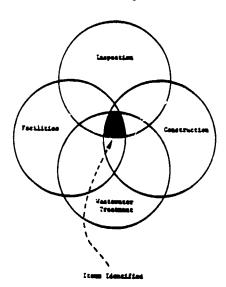
If you want to identify materials related to monitoring, you should include several related terms and the chemical, material, or situation that is being monitored. See the example below.



This search would identify all the items that included any cf the terms on the left and pH_{\bullet}

C. Sample 3

If you are interested in materials related to inspection and construction you could conduct a search of these two terms. The search would identify all materials that included both terms. If you were interested in only wastewater treatment facilities you would construct a search as diagrammed.



This search would yield specific materials and demonstrate how a computer search can help you locate materials you want.



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The subject index can also be used to help you select words to include in a search. Words listed in the subject index are the subject index that is searched by the computer. Therefore, selecting these terms to use in structuring a search will increase the probability of locating materials. Searches cost a minimum of \$25.00 plus \$.50 tor each entry identified over 50.

VII. How to Order Materiais

The AVAILABILITY field in the resume indicates where materials can be obtained. A few of the sources are explained.

- A. A number of audiovisual materials can be obtained on a rembal basis or purchased from the EC Instructional Resources Center. Most items previously available from the NTOTC office are available from the EQ Instructional Resources Center at The Ohio State University. For further information write or call.
- B. Some of the print materials are available from the EQ/IRC. These can be ordered. Note: Prices are subject to change and will be provided at current prices.
- C. The EQ Instructional Resources Center will provide Xerox copies of materials that are not copyrighted for \$1.00 per document plus \$0.06 per page.

If you can not obtain materials that are listed or have difficulty obtaining materials, please contact the EQ Instructional Resources Center. We can provide assistance in obtaining materials from some sources. If materials become unavailable, we will remove them from the 'RIS data base.



RESUME SECTION



IRIS ACCESSION NUMBER: EW015080

PUBLICATION DATE: 86

TITLE: HAZARDS IN THE CHEMICAL LABORATORY, 4TH EDITION.

PERSONAL AUTHOR: BRETHERICK, LESLIE

DESCRIPTOR: *ACCIDENT PREVENTION; *CHEMICALS; *CHEMICAL HAZARDS; *CHEMICAL PROPERTIES; *HAZARDOUS MATERIALS; *SAFETY; *LABORATORIES; *LEGISLATION; *TOXIC SUBSTANCES; *OCCUPATIONAL SAFETY; *LABORATORY SAFETY

DESCRIPTIVE NOTE: 604P. \$54.00

ABSTRACT: THIS HANDBOOK ON HAZARDOUS CHEMICALS DESCRIBES THE HAZARDOUS PROPERTIES AND EFFECTS OF 500 FLAMMABLE, EXPLOSIVE, CORROSIVE, AND/OR TOXIC SUBSTANCES OR GROUPS OF CHEMICALS USED IN LABORATORIES. THE BOOK CONCLUDES WITH SOME OF THE PRINCIPAL DISTINCTIONS BETWEEN U.S. AND UNITED KINGDOM LEGISLATION AND PRACTICE IN CHEMICAL LABORATORIES.

AVAILABILITY: THE ROYAL SOCIETY OF CHEMISTRY, BURLINGTON HOUSE, PICCADILLY, LONDON WIV OBN, UNITED KINGDOM

IRIS ACCESSION NUMBER: EW015091

PUBLICATION DATE: MOV 87

TITLE: REPORT TO CONGRESS: MUNICIPAL WASTEWATER LAGDON STUDY. VOLUME I.

DESCRIPTOR: *CONTAMINATION; *FACILITIES; *PROCESS CONTROL; *LAGOONS; *PERFORMANCE EVALUATION; *LITERATURE REVIEWS; *OPERATIONS (WASTEWATER); *PUBLIC HEALTH; *RESEARCH REPORTS; *SURVEYS; *TRENDS; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 101P. \$7.06

ABSTRACT: THIS REPORT IS ONE OF TWO VOLUMES THAT PRESENTS THE RESULTS OF THE MUNICIPAL WASTEWATER LAGOON STUDY PERFORMED BY THE USEPA. THE OBJECTIVES OF THE STUDY WERE TO DETERMINE: (1) THE NUMBER AND SIZE OF MUNICIPAL LAGOONS; (2) THE TYPES AND QUANTITIES OF WASTE CONTAINED IN SUCH LAGOONS; (3) THE EXTENT TO WHICH SUCH WASTE HAS BEEN OR MAY BE RELEASED FROM SUCH LAGOONS AND CONTAMINATES GROUNDWATER; AND AVAILABLE ALTERNATIVES FOR PREVENTING OR CONTROLLING SUCH RELEASES. THE REPORT CONTAINS: (1) A DESCRIPTION OF THE STUDY METHODOLOGY AND LIMITATIONS; (2) LAGOON DESIGN, INVENTORY, AND CHARACTERIZATION; (3) RESULTS OF ASSESSMENT OF POTENTIAL GROUNDWATER IMPACTS; (4) ASSESSMENT OF HUMAN HEALTH RISK; AND (5) ALTERNATIVES TO PREVENT AND CONTROL GROUNDWATER CONTAMINATION. VOLUME II (EW 15092) CONTAINS THE APPENDICES.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015092

PUBLICATION DATE: NOV 87

TITLE: REPORT TO CONGRESS: MUNICIPA! WASTEWATER LAGOON STUDY. VOLUME 2.

DESCRIPTOR: *DATA; *DATA ANALYSES; *LAGOONS; *OPERATIONS (WASTEWATER); *RESEARCH REPORTS; *PERFORMANCE EVALUATION; *SURVEYS; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 411P. \$25.66

ABSTRACT: THIS REPORT IS VOLUME II OF TWO VOLUMES THAT PRESENTS THE RESULTS OF THE MUNICIPAL WASTEWATER LAGOON STUDY PERFORMED BY USEPA. VOLUME I (EW 15091) CONTAINS THE REPORT. THIS VOLUME CONTAINS THE APPENDICES. THE APPENDICES CONTAIN DATA OBTAINED IN THE STUDY AND SOME ANALYSES FROM THE STUDY.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015095

PUBLICATION DATE: MAY 85

TITLE: HAZARDOUS CHEMICALS.

PERSONAL AUTHOR: HUISMANS, JAN W.

DESCRIPTOR: *ACCIDENT PREVENTION; *CHEMICALS; *CHEMICAL REGISTERS; *HAZARDOUS MATERIALS; *HAZARDOUS WASTES; *POLICIES; *F'BLIC HEALTH; *TOXIC SUBSTANCES; *UNITED NATIONS; *WORLD PROBLEMS

DESCRIPTIVE NOTE: 8P.

ABSTRACT: THIS IS AN ENVIRONMENT BRIEF PRODUCED BY THE UNITED NATIONS ENVIRONMENT PROGRAMME ON HAZARDOUS CHEMICALS. SECTIONS ARE INCLUDED ON: (1) THE THREAT; (2) HAZARDOUS WASTES; (3) A DATA BANK FOR SAFETY (THE INTERNATIONAL REGISTER OF POTENTIALLY TOXIC CHEMICALS); (4) DEALING WITH QUERIES; (5) IMPROVING POLICIES; AND (6) TOWARDS A SAFER FUTURE.

AVAILABILITY: UNEP, P.O. BOX 30552, NAIROBI, KENYA

IRIS ACCESSION NUMBER: EW015096

PUBLICATION DATE: SEPT 87

TITLE: SAFE DRINKING WATER ACT COST IMPACTS ON SELECTED WATER SYSTEMS: PROJECT SUMMARY.

PERSONAL AUTHOR: BURRIS, BRUCE E.; GUMERMAN. ROBERT C.

DESCRIPTOR: *COSTS; *DRINKING WATER; *COMPLIANCE; *FACILITIES; *OPERATIONS (WATER); *CASE STUDIES; *SAFE

ERIC*

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DRINKING WATER ACT; *MAINTENANCE; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 2P.

ABSTRACT: DETAILED SITE VISITS TO EIGHT U.S. WATER UTILITIES ASSESSED THE CAPITAL AND DPERATION AND MAINTENANCE (QMM) COST IMPACTS OF MAKING TREATMENT CHANGES DUE TO THE EXISTING AND PROPOSED REQUIREMENTS OF THE SAFE DRINKING WATER ACT (SDWA). HEW TREATMENT FACILITIES WERE CONSTRUCTED AT EACH UTILITY TO CORRECT WATER QUALITY PROBLEMS THAT HAD RESULTED IN VIOLATIONS OR CONCERNS UNDER THE NATIONAL PRIMARY DRINKING WATER REGULATIONS (NPDWR). IN ADDITION TO DOCUMENTS COSTS, THE REPORTS FOR EACH UTILITY CONTAIN 10 YEARS WORTH OF DATA ON MANY WATER SYSTEM ACTIVITIES. THESE DATA INCLUDE CAPITAL AND O AND M COSTS, DETAILED WATER QUANTITY INFORMATION, SPECIFIC O AND M INFORMATION, AS WELL AS MANY OTHER DETAILS ON EACH UTILITY.

AVAILABILITY: U.S. EPA, WATER ENGINEERING, RESEARCH LABORATORY, 26 W. MARTÍN LUTHER KING DR., CINCINNATI, OH 45268

IRIS ACCESSION NUMBER: EW015097

PUBLICATION DATE: NDV 87

TITLE: CORROSION IN WATER DISTRIBUTION SYSTEMS OF THE PACIFIC NORTHWEST.

PERSONAL AUTHOR: REIBER, STEVE H.; AND OTHERS

DESCRI. OR: *COPPER CORROSION; *CDRROSIGN; *CORKOSION CONTROL; *DRINKING WATER; *MONITORING; *WASHINGTON; *PH; *WATER QUALITY; *WATER TREATMENT; *WATER DISTRIBUTION; *CHLORINE; *TURBIDITY

DESCRIPTIVE NOTE: 6P.

ABSTRACT: THE GENERAL OBJECTIVE OF THIS STUDY WAS TO DEMONSTRATE THE EFFECTIVENESS AND CAPABILITIES OF THE USEPA MOBIL! WATER QUALITY MONITORING LABORATORY IN MONITORING THE VARIATION OF WATER QUALITY PARAMETERS AND THE IMPACT OF CHEMICAL DOSING ON CORROSION RATES IN WATER SYSTEMS OF THE PACIFIC NORTHWEST. THE COMMUNITIES OF SEATTLE, TACOMA, AND ANACORTES COOPERATED IN THIS STUDY. OTHER CORROSION RELATED TO COPPER CORROSION ARE REPORTED.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS RD., RM 310, COLUMBUS, pH 43212

IRIS ACCESSION NUMBER: EW015161

PUBLICATION DATE: JAN 88

TITLE: AN EXPERT SYSTEM FOR HAZARDOUS WASTE SITE CLEANUP. PART I.

PERSONAL AUTHOR: SHIH, CHIA SHUN; BERNARD, HAL

DESCRIPTOR: *COMPUTER APPLICATIONS; *C'EANUP; *EXPERT SYSTEMS; *HAZARDOUS WASTES; *MANAGEMENT; *SITE CLEANUP; *EMERGENCY RESPONSE; *KISK ESTIMATION

DESCRIPTIVE NOTE: 19-28, 47-52P.

ABSTRACT: DESCRIBED IS A SYSTEM FOR HAZARDOUS WASTE SITE CLEANUP. PART I OF THE REPORT PRESENTS THE ELEMENTS OF THE SYSTEM AND FOCUSES ON ITS PRIMARY COMPONENT, THE RISK/DECISION ANALYSIS MODULE.

AVAILABILITY: CONTROL HAZARDOUS MATERIALS; V1 M1.

IRIS ACCESSION NUMBER: EW015102

PUBLICATION DATE: JAN 88

TITLE: EFFECTIVE STRATEGIES FOR DEALING WITH SUPERFUND'S LIABILITY POTENTIAL.

PERSONAL AUTHOR: HALLER, PETER H.

DESCRIPTOR: *CLEANUP; *HAZARDOUS MATERIALS; *LIABILITY; *COMMERCIAL ACTIVITIES; *PLANNING; *REGULATIONS; *SUPERFUND; *RISK ASSESSMENT; *POLLUTION CONTROL

DESCRIPTIVE NOTE: 30-42, 60-61P.

ABSTRACT: DESCRIBED ARE THE GENERAL ELEMENTS OF A LONG-TERM LIABILITY STRATEGY TO DEAL WITH SUPERFUND AND ITS STATE COUNTERPARTS. INCLUDED ARE TRENDS, CONCEPTS, AND TOOLS THAT WILL HELP CONSTRUCT SUCH A STRATEGY.

AVAILABILITY: CONTROL HAZARDOUS MATERIALS; V1 N1

IRIS ACCESSION NUMBER: EW015103

PUBLICATION DATE: 87

TITLE: TOWARDS A HOLISTIC APPRECIATION OF RISK: THE CHALLENGE FOR COMMUNICATORS AND POLICYMAKERS.

PERSONAL AUTHOR: ALLEN, FREDERICK W.

DESCRIPTOR: *ATTITUDES; *COMMUNICATION; ENVIRONMENT; *ENVIRONMENTAL IMPACT; *PUBLIC OPINION; *PDLICIES; *PUBLIC HEALTH; *RISK ASSESSMENT; *POLLUTION CONTROL; USEPA; POLLUTION

DESCRIPTIVE NDTE: 138-143P.

ABSTRACT: THE QUEST FDR A COMMON, HOLISTIC APPRECIATION OF RISK IS IMPORTANT. NOT DNLY ARE PUBLIC AND ECOLOGICAL HEALTH AND WELFARE AT STAKE, BUT ALSO MASSIVE AMOUNTS DF SDCIETAL RESOURCES. AN EPA STUDY DF RISKS AND A ROPER POLL DF PUBLIC DPINIONS RELATED TO RISKS ARE COMPARED. IMPLICATIONS FOR RISK COMMUNICATORS AND POLICYMAKERS ARE DISCUSSED.

AVAILABILITY: SCIENCE, TECHNOLOGY, & HUMAN VALUES; V12 N3&4.



IRIS ACCESSION NUMBER: EW015106

PUBLICATION DATE: OCT 87

TITLE: DEVELOPING AN OUTREACH PROGRAM FOR SHALL COMMUNITIES.

DESCRIPTOR: *ASSISTANCE PROGRAMS; *CASE STUDIES: *STATE ROLE; *COMPLIANCE; *INFORMATION SOURCES; FEDERAL ROLE; *SHALL COMMUNITIES; *OUTREACH PROGRAMS; *SHALL FLOWS; *RURAL AREAS; *WASTEWATER TREATHENT; *WATER POLLUTION CONTROL; -WATER QUALITY: *OPERATIONS (WASTEWATER); *PLANNING: *FINANCES

DESCRIPTIVE NOTE: 75P. \$5.50

ABSTRACT: SMALL COMMUNITIES FACE MANY DIFFICULTIES WITH DEVELOPMENT AND OPERATION OF WASTEWATER TREATMENT SYSTEMS CONTINUES TO THIS PRESENT CHALLENGES TO STATE GOVERNMENT. THIS PUBLICATION IS DESIGNED TO PROVIDE STATE AGENCIES WITH A FRANEWORK FOR DEVELOPING AN OUTREACH PROGRAM TO ASSIST SHALL COMMUNITIES. IT INCLUDES SUGGESTIONS FOR PLANNING AND IMPLEMENTING A PROGRAM AS WELL AS EXAMPLES OF SELECTED OUTREACH PROGRAMS CURRENTLY WORKING WITH SMALL COMMUNITIES.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015107

PUBLICATION DATE: SEPT 87

TITLE: LOOKING AT USER CHARGES. A STATE SURVEY AND REPORT.

DESCRIPTOR: *DATA COLLECTION; *COSTS; *FINANCES; *OPERATIONS (WASTEWATER); *SURVEYS; *USER *MANAGEMENT: CHARGES: *WASTEWATER TREATMENT: *SURVEY TECHNIQUES

DESCRIPTIVE NOTE: 37P. \$3.22

ABSTRACT: THIS PUBLICATION IS DESIGNED TO HELP STATE REGULATORS AND OTHERS CONDUCT A THOROUGH SURVEY OF USER CHARGES RELATED TO WASTEWATER TREATMENT SYSTEMS. THE FOLLOWING INFORMATION IS INCLUDED: (1) HOW THE SURVEY WAS DESIGNED; (2) SPECIFIC PURPOSE FOR EACH QUESTION; (3) SUGGESTIONS ON CONDUCTING THE SURVEY: (4) ENSURING A GOOD RESPONSE; (5) PACKAGING THE SURVEY ANALYSIS REPORT; AND (6) PRESENTING THE SURVEY DATA. THE APPENDICES INCLUDE: (1) A COVER LETTER, SURVEY FORM, AND INSTRUCTIONS AND (2) DATA ANALYSIS WORKSHEETS.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015108

PUBLICATION DATE: OCT 87

MUNICIPAL

FACILITY/WATERBODY

COMPUTERIZED

INFORMATION. AN INTRODUCTION.

DESCRIPTOR: *COMPUTER APPLICATIONS: *COMPUTER SOFTWARE; *DATABASES; *DATABASE MANAGEMENT; *FACILITIES; *INFORMATION SOURCES: *INFORMATION SOURCES: *INFORMATION RETRIEVAL: *OPERATIONS (WATER): *OPERATIONS (WASTEWATER): *WATER TREATMENT: *WASTEWATER TREATMENT: *TRENDS; *WATER QUALITY; *USEPA; *DATA SOURCES; RETRIEVAL; *DATA ACCESS

DESCRIPTIVE NOTE: 33P. \$2.98

ABSTRACT: THE PURPOSE OF THIS DOCUMENT IS TO INTRODUCE INTERESTED EPA AND STATE JSERS TO SOME OF THE DATA AND DATA MANAGEMENT TOOLS THAT ARE AVAILABLE FOR MUNICIPAL FACILITY/WATERBODY APPLICATIONS. PART I DISCUSSES METHODS OF USING DATA FROM EPA MAINFRAME DATABASES; DESCRIBES THE DEVELOPMENT OF USER CAPABILITIES, AND HOW THOSE CAPABILITIES ARE BEING IMPROVED; AND EXPLAINS WHAT IS NEEDED TO USE THE DATABASES THAT ARE AVAILABLE. PART II IS A DESCRIPTIVE INVENTORY OF KEY DATABASES AVAILABLE. PART III IS A DESCRIPTIVE INVENTORY OF KEY SOFTWARE AVAILABLE, INCLUDING SAMPLES OF OUTPUT GENERATED USING THESE TOOLS.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015109

PUBLICATION DATE: 86

TITLE: PROCEEDINGS OF FINANCING FOR THE NEXT GENERATION. NATIONAL CONFERENCE ON INNOVATIONS IN FINANCING WASTEWATER TREATMENT.

DESCRIPTOR: *CONFERENCE PROCEEDINGS: COSTS; ECONOMICS; *FINANCIAL PLANNING; FACILITIES; BONDS; FEDERAL ROLE; STATE ROLE; MANAGEMENT; PLANNING; DESIGN; CONSTRUCTION; USER CHARGES; *WASTEWATER TREATMENT; OPERATIONS (WASTEWATER)

DESCRIPTIVE NOTE: 212P. \$13.72

ABSTRACT: PURPOSE OF THIS CONFERENCE WAS TO SHARE ACCUMULATED EXPERIENCE REGARDING FINANCING OF WASTEWATER TREATMENT FACILITIES NEEDED TO ACHIEVE THE OBJECTIONS OF THE CLEAN WATER ACT AND TO PRESERVE THE QUALITY OF THE WATER IN THE U.S.A. TOPICS INCLUDED IN THE PROCEEDINGS INCLUDED: (1) STATE REVOLVING FUNDS; (2) TECHNICAL ASSISTANCE; (3) BONÓ MARKETS; (4) STATE LOAN PROGRAMS; (5) O AND M PRIVATIZATION; LOW-COST TECHNOLOGIES; (7) USER CHARGES; (8) FINANCIAL CAPITAL PLANNING/FORECASTING: (9) ENVIRONMENTAL ÀÑĎ AND CAPITAL PLANNING/FÖRÈCÁSTING; (9) ÈNVIRONMENTAL PLANNING; (10) MUNICIPAL ENFORCEMENT; AND (11) INNOVATIVE FINANCING.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EWG15110

PUBLICATION DATE: 85

TITLE: LAKE ERIE.

DESCRIPTOR: *ECONOMICS; *INFORMATION SOURCES; *GREAT LAKES; *LAND USE; *LAKE ERIE; *MAPS; *RESOURCES; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: FOLDOUT, \$0.25

ABSTRACT: THIS BULLETIN ON LAKE ERIE IS ONE IN A SERIES ON THE GREAT LAKES. INFORMATION IS INCLUDED ON THE WATERSHED OF LAKE ERIE, WATER USE, LAND AND SHORELINE USE, ECONOMIC IMPORTANCE OF THE REGION, RESOURCE PROBLEMS, AND RESOURCE IMPROVEMENTS. A MAP OF THE LAKE AND SELECT LAKE ERIE FACTS ARE INCLUDED.

AVAILABILITY: MICHIGAN SEA GRANT COLLEGE PROGRAM. UNIVERSITY OF MICHIGAN, 2200 BONISTEEL BLVD., ANN ARBOR, MI 48109

IRIS ACCESSION NUMBER: EW015111

PUBLICATION DATE: 85

TITLE: LAKE HURON.

DESCRIPTOR: *ECONOMICS; *INFORMATION SOURCES; *GREAT LAKES; *LAND USE; *MAPS; *LAKE HURON; *RESOURCES; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: FOLDOUT, \$0.25

ABSTRACT: THIS BULLETIN ON LAKE HURON IS ONE IN A SERIES ON THE GREAT LAKES. INFORMATION IS INCLUDED ON THE WATERSHED ON LAKE HUROK, WATER USE, LAND AND SHORELINE USE, ECONOMIC IMPORTANCE OF THE REGION, RESOURCE PROBLEMS, AND RESOURCE IMPROVEMENTS. 4 MAP OF THE LAKE AND SELECT LAKE HURON FACTS ARE INCLUDED.

AVAILABILITY: MICHIGAN SEA GRANT COLLEGE PROGRAM, UNIVERSITY OF MICHIGAN, 2200 BONISTEEL BLVD, ANN ARBOR, MI 48109

IRIS ACCESSION NUMBER: EW015112

PUBLICATION DATE: 85

TITLE: LAKE MICHIGAN.

ERIC

DESCRIPTOR: *ECONOMICS; *INFORMATION SOURCES; *GREAT LAKES; *LAND USE; *LAKE MICHIGAN; *MAPS; *RESOURCES; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: FOLDOUT, \$0.25

ABSTRACT: THIS BULLETIN IS ON LAKE MICHIGAN - ONE IN A SERIES ON THE GREAT LAKES. INFORMATION IS INCLUDED ON THE

WATERSHED OF LAKE MICHIGAN, WATER USE. LAND AND SHORELINE USE, ECONOMIC IMPORTANCE OF THE REGION, RESOURCE PROBLEMS. AMAP OF THE LAKE AND LAKE MICHIGAN FACTS ARE INCLUDED.

AVAILABILITY: MICHIGAN SEA GRANT COLLEGE PROGRAM, UNIVERSITY OF MICHIGAN, 2200 BONISTEEL BLVD., ANN ARBOR, MI 48109

IRIS ACCESSION NUMBER: EW015113

PUBLICATION DATE: 85

TITLE: LAKE ONTARIO.

DESCRIPTOR: *ECONOMICS; *INFORMATION SOURCES; *GREAT LAKES; *LAND USE; *LAKE ONTARIO; *MAPS; *RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: FOLDOUT, \$0.25

ABSTRACT: THIS BULLETIN ON LAKE ONTARIO IS ONE IN A SERIES ON THE GREAT LAKES. INFORMATION IS INCLUDED ON THE WATERSHED OF LAKE ONTARIO, WATER USE, LAND AND SHURELINE USE, ECONOMIC IMPORTANCE OF THE REGION, KESOURCE PROBLEMS, AND RESOURCE IMPRCYEMENTS. A MAP OF THE LAKE AND SELECT LAKE ONTARIO FACTS ARE INCLUDED.

AVAILABILITY: MICHIGAN SEA GRANT COLLEGE PROGRAM, UNIVERSITY OF MICHIGAN, 2200 BONISTEEL BLVD., ANN ARBOR, MI 48109

IRIS ACCESSION NUMBER: EW015114

PUBLICATION DATE: 85

TITLE: LAKE SUPERIOR.

DESCRIPTOR: *ECONOMICS; *INFORMATION SOURCES; *GREAT LAKES; *LAND USE; *MAPS; *RESOURCES; *WATER RESOURCES; *WATER SUPPLY; *LAKE SUPERIOR

DESCRIPTIVE NOTE: FOLDOUT, \$0.25

ABSTRACT: THIS BULLETIN ON LAKE SUPERIOR IS ONE IN A SERIES ON THE GREAT LAKES. INFORMATION IS INCLUDED ON THE WATERSHED OF LAKE SUPERIOR, WATER USE, LAND AND SHORELINE USE, ECONOMIC IMPORTANCE OF THE REGION, RESOURCE PROBLEMS, AND RESOURCE IMPROVEMENTS. A MAP OF THE LAKE AND SELECT LAKE SUPERIOR FACTS ARE INCLUDED.

AVAILABILITY: MICHIGAN SEA GRANT COLLEGE PRUGRAM, UNIVERSITY OF MICHIGAN, 2200 BONISTEEL BLVD., ANN ARBOR, MI 48109

IRIS ACCESSION NUMBER: EV015115

PUBLICATION DATE: 84

TITLE: TOXIC AND HAZARDOUS WASTES: PROCEEDINGS OF THE 16TH MID-ATLANTIC INDUSTRIAL WASTE CONFERENCE, JUNE 24-26, 1984.

PERSONAL AUTHOR: LA GREGA. MICHAEL D.: LONG. DAVID A.

DESCRIPTOR: *BIOLOGICAL WASTE TREATMENT; *HAZARDOUS MATERIALS: *HAZARDOUS WASTES; *CHEMICAL TREATMENT; *PHYSICAL TREATMENT; *REGULATIONS; *TOXIC SUBSTANCES; *TOXIC WASTES; *WASTE DISPOSAL; *WASTE TREATMENT; *WASTE STORAGE; *GROUNDWATER: *POLLUTION CONTROL

DESCRIPTIVE NOTE: 587P. \$45.00 SOFTCOVER

ABSTRACT: THIS PUBLICATION IS THE PROCEEDINGS OF THE 16TH MID-ATLANTIC INDUSTRIAL WASTE CONFERENCE HELD JUNE 24-26. 1984. THE PROCEEDINGS CONTAIN PAPERS ON THE FOLLOWING TOPICS: (1) HAZARDOUS WASTE SITING; (2) BIOLOGICAL WASTE TREATMENT; (3) WASTE INCINERATION AND EMERGY RECOVERY; (4) REGULATORY COMPLIANCE; (5) RECYCLE/REUSE; (6) HEAVY METALS CONTROL; (7) PHYSICAL-CHEMICAL PROCESSES; (8) SLUDGE MANAGEMENT; (9) HAZARDOUS WASTE SITE CLEANUP; AND (10) GROUNDWATER PROTECTION.

AVAILABILITY: TECHNOMIC PUBLISHING CO., INC., 851 NEW HOLLAND AVE., BOX 3535, LANCASTER, PENNSYLVANIA 17604

IRIS ACCESSION NUMBER: EW015116

PUBLICATION DATE: 85

TITLE: TOXIC AND HAZARDOUS WASTES: PROCEEDINGS OF THE 17TH MID-ATLANTIC INDUSTRIAL WASTE CONFERENCE, JUNE 23-25, 1985.

PERSONAL AUTHOR: KUGELMAN. IRWIN J.

DESCRIPTOR: *COMFERENCE PROCEEDINGS; *HAZARDOUS WASTES; *BIOLOGICAL TREATMENT; *CHEMICAL TREATMENT; *INDUSTRIAL WASTES; *PHYSICAL TREATMENT; *METALS; *TOXIC WASTES; *LAND USE; *TREATMENT; *SAFETY; *GROUNDWATER; *WASTE STORAGE; *WATER QUALITY

DESCRIPTIVE NOTE: 602P. \$49.00 SOFTCOVER

ABSTRACT: THIS IS THE PROCEEDINGS OF THE 17TH MID-ATLANTIC INDUSTRIAL WASTE CONFERENCE HELD JUNE 23-25, 1985. PAPERS ARE INCLUDED ON: (1) HAZARDOUS WASTE SITING; (2) BIOLOGICAL TREATMENT; (3) PRETREATMENT; (4) PHYSICAL CHEMICAL TREATMENT; (5) GROUNDWATER; (6) LAND APPLICATION AND LINERS; (7) RESOURCE RECOVERY; (8) HAZARDOUS WASTE; (9) METALS AND INDUSTRIAL WASTE; (10) SLUDGE MANAGEMENT; AND (11) SAFETY AND RIGHT-TO-KNOW.

AVAILABILITY: TECHNOMIC PUBLISHING CO., INC.. 851 NEW HOLLAND AVE., BOX 3535, LANCASTER, PA 17604

IRIS ACCESSION NUMBER: EW015117

PUBLICATION DATE: 85

TITLE: TOXIC AND HAZARDOUS WASTES: PROCEEDINGS OF THE 18TH MID-ATLANTIC INDUSTRIAL WASTE CONFERENCE. JUNE 29-JULY 1.

PERSONAL AUTHOR: BOARDMAN, GREGORY D.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *BIOLOGICAL TREATMENT; *HAZARDOUS WASTES; *GROUNDWATER; *LAND APPLICATION; WASTES; *GROUNDWATER; *LAND APPLICATION; RECOVERY; *SLUDGE MANAGEMENT; *TOXIC WASTES; *RESOURCE *TREATMENT: *ANALYTICAL METHODS; *CHEMICAL TREATMENT; *PHYSICAL TREATMENT

DESCRIPTIVE NOTE: 656P. \$55.00 SOFTCOVER

ABSTRACT: THIS IS THE PROCEEDINGS OF THE 18TH MID-ATLANTIC ABSTRACT: INTO 15 THE PROCEEDINGS OF THE 18TH MID-ATLANTIC INDUSTRIAL WASTE CONFERENCE HELD JUNE 29-JULY 1, 1986. PAPERS ARE INCLUDED ON: (1) LEAKING UNDERGROUND STORAGE TANKS; (2) BIOLOGICAL TREATMENT; (3) TOXIC AND HAZARDOUS MATERIALS; (4) SOLIDIFICATION/STABILIZATION; (5) INDUSTRIAL RESIDUES; (6) PRETREATMENT AND RESOURCE RECOVERY; (7) LAND APPLICATION AND SLUDGE MANAGEMENT; (8) GROUNDWATER AND CONTAMINANT TRANSPORT; (9) PUBLIC RELATIONS AND ANALYTICAL METHODS: AND (10) PUBLIC RELATIONS AND ANALYTICAL METHODS; AND (10) PHYSIOCHEMICAL TREATMENT.

AVAILABILITY: TECHNOMIC PUBLISHING CO., INC., 851 NEW HOLLAND AVE., BOX 3535, LANCASTER, PA 17604

IRIS ACCESSION NUMBER: EW015120

PUBLICATION DATE: 87

TITLE: INCINERATING HAZARDOUS WASTES.

PERSONAL AUTHOR: FREEMAN. HARRY M.

DESCRIPTOR: *EQUIPMENT; *HAZARDOUS WASTES; *INDUSTRIAL WASTES; *INCINERATION; *MANAGEMENT; *THERMAL PROCESSES; *TECHNOLOGY; *RESEARCH; *WASTE TREATMENT

DESCRIPTIVE NOTE: 380P. \$49.00 SOFTCOVER

ABSTRACT: THIS BOOK CONTAINS 45 REPORTS ON THERMAL PROCESS TEC MOLOGY FOR TREATING HAZARDOUS WASTES. SECTIONS IN THE PUBLICATION ARE: (1) OVERVIEW; (2) INCINERATION PROCESSES; (3) BOILERS AND INDUSTRIAL PROCESSES; (4) NEWER THERMAL PROCESSES; AND (5) LABORATORY/PILOT-SCALE RESEARCH.

AVAILABILITY: TECHNOMIC PUBLISHING CO., HOLLAND AVE., BOX 3535, LANCASTER, PA 17604 INC., 851 NEW

IRIS ACCESSION NUMBER: EW015133

PUBLICATION DATE: JAN 88

TITLE: FAST-GROWING FIELD: MATERIALS RECOVERY FACILITIES.

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PERSONAL AUTHOR: GLENN. JIM

DESCRIPTOR: *CONSERVATION; *COSTS; *FACILITIES; *RESOURCE RECOVERY; *SOLID WASTES: *WASTE REDUCTION: *WASTE DISPOSAL

DESCRIPTIVE MOTE: 24-27P.

ABSTRACT: DESCRIBED ARE MATERIALS RECOVERY FACILITIES DESIGNED TO PROCESS SOLID WASTES FOR RECYCLING. MOST OF THE FACILITIES ARE DESIGNED TO PROCESS CO-MINGLED RECYCLABLES. ALSO INCLUDED IS A DIRECTORY TO PROJECTS OPERATING OR UNDER CONSTRUCTION AND VENDORS OF FACILITIES AND SERVICES.

AVAILABILITY: BIOCYCLE: V29 N1

IRIS ACCESSION NUMBER: EW015'34

PUBLICATION DATE: JAN 88

TITLE: IN-VESSEL START-UP: A NEW APPROACH IN SCHENECTADY.

PERSONAL AUTHOR: GOLDSTEIN. NORA

DESCRIPTOR: *AERATION; *COMPOSTING; *COSTS; *FACILITIES; *MEW YORK; *OPERATIONS (WASTEWATER); *RESOURCE RECOVERY; *SEWAGE SLUDGE; *SLUDGE; *WASTE REDUCTION; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 28-30P.

ABSTRACT: DESCRIBED IS A NEW SLUDGE COMPOSTING FACILITY IN UPSTATE NEW YORK. THE SYSTEM IS THE FIRST TO USE A NEW AERATION TECHNOLOGY.

AVAILABILITY: BIOCYCLE: V29 N1

IRIS ACCESSION NUMBER: EW015135

PUBLICATION DATE: JAN 88

TITLE: SLUDGE MANAGEMENT SUCCESS: SCRANTON EXPANDS COMPOST FACILITY.

PERSONAL AUTHOR: ELLIOTT, JAMES C.: POLIDORI, ALFRED J.

DESCRIPTOR: *COMPOSTING; *COSTS; *FACILITIES; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RESOURCE RECOVERY; *SEWAGE SLUDGE; *SLUDGE; *WASTEWATER TREATMENT; *PENNSYLVANIA; *WASTE DISPOSAL; *WASTE REDUCTION

DESCRIPTIVE NOTE: 44-48P.

ABSTRACT: DESCRIBED IS A SEWAGE SLUDGE COMPOSTING FACILITY IN PENNSYLVANIA. OPERATING PROCEDURES AND MANAGEMENT PRACTICES ARE DISCUSSED.

AVAILABILITY: BIOCYCLE; V29 N1

IRIS ACCESSION NUMBER: EW015156

PUBLICATION DATE: JAN 88

TITLE: INITIAL GUIDANCE--STATE WATER POLLUTION CONTROL REVOLVING FUND.

PERSONAL AUTHOR: JENSEN, LAWRENCE J.

DESCRIPTOR: *CLEAN WATER ACT; *COMPLIANCE; *FINANCING; *GRANTS; *FACILITIES; *LOANS; *FEDERAL ROLE; *LOCAL GOVERNMENTS; *OPERATIONS (WASTEWATER); *REGULATIONS; *STANDARDS; *STATE ROLE: *WASTEWATER TREATMENT; *USEPA

DESCRIPTIVE NOTE: 102P. \$7.12

ABSTRACT: THIS DOCUMENT IS A & SULT OF PUBLIC COMMENT ON A CONCEPT PLAN ISSUED EARLIER, COMMENTS ON DRAFT EDITIONS OF THIS DOCUMENT, COMMENTS ON A FINAL DRAFT, AND A PUBLIC MEETING. THE DOCUMENT WILL ASSIST EPA REGIONS IN THEIR REVIEW OF PROPOSED STATE WATER POLLUTION CONTROL REVOLVING FUND (SRF) PROGRAMS AND PROVIDE STATES WITH INITIAL GUIDANCE ON APPLYING FOR CAPITALIZATION GRANTS. HE GUIDANCE IMPOSES VERY FEW REQUIREMENTS ON STATES AND MUNICIPALITIES BEYOND THOSE IMPOSED BY THE CLEAN WATER ACT. MAJOR SECTIONS ARE INCLUDED ON: (1) FISCAL AUTHORIZATIONS AND RESERVES; (2) USES OF STATE REVOLVING LOAN FUNDS; (3) MAJOR LEGISLATIVE PROVISIONS AFFECTING CAPITALIZATION GRANT AMENDMENTS; (4) APPLICATION FOR A CAPITALIZATION GRANT; (5) CAPITALIZATION GRANT AGREEMENT; (6) REPORTING AND OVERSIGHT OF SRF ACTIVITIES; AND (7) APPENDICES.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015158

PUBLICATION DATE: 84

TITLE: ABSTRACTS OF TECHNICAL PAPERS. 57TH ANNUAL CONFERENCE.

DESCRIPTOR: *COMPUTER APPLICATIONS; *FACILITIES; *EQUIPMENT; *MAINTENANCE; *MANAGEMENT; *OPERATIONS (WASTEWATER); *HYDROLOGY; *WATER REUSE; *TECHNOLOGY; *WASTEWATER TREATMENT; *WATER QUALITY; *WATER POLLUTION CONTROL; *COSTS; *FINANCING; *GROUNDWATER; *RESOURCE RECOVERY; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 243P. \$5.00

ABSTRACT: THIS PUBLICATION CONTAINS ABSTRACTS OF TECHNICAL PAPERS PRESENTED AT THE 57TH ANNUAL CONFERENCE OF THE WATER POLLUTION CONTROL FEDERATION HELD IN NEW ORLEANS IN 1984. PRESENTATIONS WERE ON A VARIETY OF TOPICS RELATED TO WATER POLLUTION CONTROL.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION, 2626 PENNSYLVANIA AVE., N.W., WASHINGTON, D.C. 20037

IRIS ACCESSION NUMBER: EW015159

PUBLICATION DATE: 87

TITLE: ENVIRONMENTAL HEALTH #27. DRINKING-WATER QUALITY: QUIDELINES FOR SELECTED HERBICIDES.

DESCRIPTOR: *CARCINOGENS; *CHIMICALS; *DRINKING WATER; *HAZARDOUS MATERIALS; *HERBICIDES; *ENVIRONMENT; *GUIDELIMES: *PUBLIC HEALTH; *STANDARDS; *WATER TREATMENT; *WATER QUALITY; *RECOMMENDATIONS

DESCRIPTIVE NOTE: 30P.

ABSTRACT: GUIDELINES FOR DRINKING WATER QUALITY WERE DEVELOPED FOR 11 SELECTED HERBICIDES. THE GUIDELINES ARE INTENDED TO ASSIST COUNTRIES OF THE EUROPEAN REGIOM IN SETTING STANDARDS OR IN THE DEVELOPMENT OF ALTERNATIVE CONTROL PROCEDURES WHERE THE IMPLEMENTATION OF STANDARDS IS NOT FEASIBLE.

AVAILABILITY: WORLD HEALTH ORGANIZATION, REGIONAL OFFICE FOR EUROPE, SCHERFIGSVEJ 8, DK-2100 COPENHAGEN, DENMARK

IRIS ACCESSION MUMBER: EW015160

PUBLICATION DATE: SEPT 87

TITLE: IT'S YOUR CHOICE. A GUIDEBOOK FOR LOCAL OFFICIALS ON SMALL COMMUNITY WASTEWATER MANAGEMENT OPTIONS.

DESCRIPTOR: *ALTERNATIVE TECHNOLOGIES; *ECONOMICS; *FINANCING; *PERFORMANCE EVALUATION; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PLANNING; *SMALL FLOWS; *SMALL COMMUNITIES; *WASTEWATER TREATMENT; *RURAL ALEAS; *WATER QUALITY; *INFORMATION SOURCES; *ONSITE WASTEWATER TREATMENT; *WASTEW-TER COLLECTION

DESCRIPTIVE NOTE: 78P. \$4.00

ABSTRACT: THIS PUBLICATION WAS PREPARED BY USEPA FOR LOCAL OFFICIALS FROM COMMUNITIES OF LESS THAN 10,000 PEOPLE. THE DOCUMENT FOCUSES ON CHOICES A SMALL COMMUNITY WILL HAVE TO MAKE IN SOLVING EXISTING WASTEWATER PROBLEMS OR CONSIDERING FUTURE WASTEWATER TREATMENT NEEDS. SECTIONS ARE INCLUDED ON THE FOLLOWING: (1) DEFINING THE PROBLEM; (2) SELECTING YOUR CONSULTING ENGINEER; (3) WAYS TO COLLECT AND TREAT WASTEWATER; (4) PLANNING A SOLUTION TO YOUR PROBLEMS; (5) PAYING THE BILL; AND (6) IN SUMMARY. THE APPENDICES INCLUDE: (1) CHOOSING THE RIGHT TECHNOLOGY; (2) RURAL COMMUNITY ASSISTANCE PROGRAM NETWORK; AND (3) WHAT TO READ NEXT.

AVAILABILITY: NATIONAL SMALL FLOWS CLEARINGHOUSE, WEST VIRGINIA U., 258 STEWART ST., MORGANTOWN, WV 26506

IRIS ACCESSION NUMBER: EW015161

PUBLICATION DATE: 88

ERIC: NATURAL SYSTEMS FOR WASTE MANAGEMENT AND TREATMENT.

PERSONAL AUTHOR: REED, SHERWOOD C.; AND OTHERS

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *ENERGY CONSERVATION; *INDUSTRIAL WASTES; *MANAGEMENT; *MATURAL SYSTEMS; *OPERATIONS (WASTEWATER); *MUNICIPAL WASTES; *SLUDGE; *WASTES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 288P. \$34.95

ABSTRACT: THIS PUBLICATION PROVIDES DESIGN INFORMATION ON INNOVATIVE LOW-COST, LOW ENERGY NATURAL TREATMENT METHODS FOR WASTE. INCLUDED ARE BOTH MUNICIPAL AND INDUSTRIAL SETTINGS. WAYS TO TREAT WASTEWATER AND SLUDGE ARE DESCRIBED.

AVAILABILITY: MCGRAW-HILL BOOK COMPANY, P.O. BOX 400, HIGHSTOWN. NJ 08520-9989

IRIS ACCESSION NUMBER: EW015162

PUBLICATION DATE: 86

TITLE: SILENT SPRING REVISITED.

PERSONAL AUTHOR: MARCO, G.J.; AND OTHERS

DESCRIPTOR: *AGRICULTURE; *CHEMICALS; *ENVIRONMENT; *ENVIRONMENTAL IMPACT; *HAZARDOUS MATERIALS; *HERBICIDES; *PESTICIDES; *PUBLIC HEALTH; *RISK ASSESSMENT; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 195P. CLOTH - \$29.95, EXPORT - \$35.95; PAPER - \$17.95, EXPORT - \$21.95

ABSTRACT: THIS BOOK WAS BASED ON A SYMPOSIUM SPONSORED BY A COMMITTEE OF THE AMERICAN CHEMICAL SOCIETY. THE PUBLICATION PRESENTS INFORMATION ON THE CURRENT STATUS OF ENVIRONMENTAL PROBLEMS RELATED TO CHEMICALS AND PRESENTS BOTH SIDES OF THE DANGERS AND BENEFITS OF PESTICIDES AND OTHER AGRICULTURAL CHEMICALS.

AVAILABILITY: AMERICAN CHEMICAL SOCIETY, DISTRIBUTION OFFICE DEPT. 221, 1155 SIXTEENTH STREET, N.W., WASHINGTON, D.C. 20036-9976

IRIS ACCESSION NUMBER: EW015163

PUBLICATION DATE: 87

TITLE: MAKING SOIL AND WATER CONSERVATION WORK: SCIENTIFIC AND POLICY PERSPECTIVES.

PERSONAL AUTHOR: HALBACH, DANIEL W.; AND OTHERS

DESCRIPTOR: *FEDERAL ROLE; *GOVERNMENT ROLE; *CONSERVATION; *POLICIES; *PLANNING; *STATE ROLE; *SOIL CONSERVATION; *WATER CONSERVATION; *WATER SUPPLY; *WATER RESOURCES

DESCRIPTIVE NOTE: 174P. \$10.00 POSTPAID

ABSTRACT: THE DILEMMA OF HOW TO APPLY SCIENTIFIC KNOWLEDGE

28 5

100

IMPROVE SOIL AND WATER CONSERVATION EFFORTS WHILE RECOGNIZING POLITICAL REALITIES IS ADDRESSED IN THIS BOOK. IT PROVIDES A FRAMEWORK FOR ESTABLISHING AND IMPLEMENTING IT PROVIDES A FRAMEWORK FOR ESTABLISHING AND IMPLEMENTING CONSERVATION POLICY IN THE FACE OF CONFLICTING POLITICAL INFLUENCES, ASSESSES CURRENT FEDERAL CONSERVATION EFFORTS, AND LOOKS AT HOW FEDERAL AND STATE GOVERNMENTS SHARE AUTHORITIES ON CONSERVATION MATTERS.

AVAILABILITY: SOIL AND WATER CONSERVATION SOCIETY, 7515 NORTHEAST ANKENY ROAD. ANKENY. IOWA 50021-9764

IRIS ACCESSION NUMBER: EW015164

PUBLICATION DATE: 87

. Y.

TITLE: STORAGE AND TREATMENT OF HAZARDOUS WASTES IN TANK SYSTEMS. POLLUTION TECHNOLOGY REVIEW NO. 146.

DESCRIPTOR: *COMPLIANCE: *CONTAINMENT: *MAZARDOUS WASTES: *INSPECTION: *STORAGE TANKS: *TANK SYSTEMS: *PUBLIC HEALTH; *WASTES: *WASTE STORAGE: *WASTE DISPOSAL; *MONITORING: *WASTE TREATMENT: *POLLUTION CONTROL

DESCRIPTIVE NOTE: 428P. \$54.00

ABSTRACT: THIS BOOK PROVIDES GUIDANCE TO OWNERS AND ABSTRACT: THIS BOOK PROVIDES GUIDANCE TO OWNERS AND OPERATORS OF HAZARDOUS WASTE STORAGE TANKS REGARDING STORAGE AND TREATMENT METHODS FOR COMPLIANCE WITH USEPA STANDAROS AND REGULATIONS. TYPES OF WASTES COVERED IN THE BOOK INCLUDE LIQUID HAZARDOUS WASTES, MON-LIQUID WASTES, AND GASEOUS HAZARDOUS WASTES. CHAPTERS INCLUDED ARE: (1) THE PERMITTING PROCESS; (2) DESIGN OF NEW TANK SYSTEMS OR COMPONENTS; (3) INSTALLATION OF NEW TANK SYSTEMS OR COMPONENTS; (4) SECONDARY CONTAINMENT SYSTEMS AND RELEASE DETECTION; (5) VARIANCES FROM SECONDARY CONTAINMENT; (6) CONTROL AND PRACTICES TO PREVENT SPILLS AND OVERFILLS; (7) INSPECTIONS; (8) RESPONSE TO LEAKS OR SPILLS AND DISPOSITION OF LEAKING OR UNFIT-FOR-USE TANK SYSTEMS: (9) CLOSURE AND POST-CLOSURE OR UNFIT-FOR-USE TANK SYSTEMS; (9) CLOSURE AND POST-CLOSURE REQUIREMENTS; AND (10) PROCEDURES FOR TANK SYSTEMS THAT STORE OR TREAT IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES.

AVAILABILITY: NOYES PUBLICATIONS. NOYES DATA CORPORATION. MILL ROAD AT GRAND AVENUE. PARK RIDGE. NJ 07656

IRIS ACCESSION NUMBER: EW015165

PUBLICATION DATE: 87

TITLE: DRUM HANDLING MANUAL FOR HAZAROOUS WASTE SITES. POLLUTION TECHNOLOGY REVIEW NO. 143.

PERSONAL AUTHOR: WAGNER, K.; AND OTHERS

DESCRIPTOR: *ORUMS: *HAZARDOUS WASTES: *HAZARDOUS *HANDLING PROCEDURES; *MONITORING; *SITE *WASTE OISPOSAL; *WASTE SITES; *WASTES; MATERIALS: *HANDLING PREPARATION: *INSPECTION; *WASTE STORAGE

DESCRIPTIVE NOTE: 177P. \$36.00

PLANNING AND INPLEMENTING SAFE AND COST-EFFECTIVE RESPONSE ACTIONS APPLICABLE TO HAZARDOUS WASTE SITES CONTAINING DRUMS. THE MANUAL PROVIDES DETAILED TECHNICAL GUIDANCE ON METHODS, PROCEDURES, AND EQUIPMENT SUITABLE FOR REMOVING DRUMMED WASTES. INFORMATION IS INCLUDED ON: ONSITE TRANSFER; DRUM STAGING, OPENING, AND SAMPLING; WASTE CONSOLIDATION; AND TEMPORARY STORAGE AND SHIPPING. EACH OF THESE OPERATIONS IS DISCUSSED IN TERMS OF THE EQUIPMENT AND PROCEDURES USED IN CARRYING OUT SPECIFIC ACTIVITIES, HEALTH AND SAFETY PROCEDURES, MEASURES FOR PROTECTING THE ENVIRONMENT AND PUBLIC WELFARE, AND FACTORS AFFECTING COSTS. INFORMATION IS ALSO INCLUDED ON THE APPLICATIONS AND LIMITATIONS OF SEVERAL REMEDIAL MEASURES FOR CONTROLLING OR CONTAINING MIGRATION OF WASTES: SURFACE CAPPING, SURFACE WATER CONTROLS, GROUNDWATER SUBSURFACE DRAINS. SLURRY WALLS. AND IN-SITU TREATMENT TECHNIQUES. AVAILABILITY: NOYES PUBLICATIONS. NOYES DATA CORPORATION. MILL ROAD AT GRANO AVENUE. PARK RIDGE. NJ 07656

ABSTRACT: THIS BOOK IS A TECHNICAL GUIDANCE MANUAL ON

IRIS ACCESSION NUMBER: EW015166

PUBLICATION DATE: 87

TITLE: OECONTAMINATION TECHNIQUES FOR BUILDINGS. STRUCTURES AND EQUIPMENT. POLLUTION TECHNOLOGY REVIEW NO. 142.

PERSONAL AUTHOR: ESPOSITO. M.P.: AND OTHERS

DESCRIPTOR: *BUILDINGS; *DECONTAMINATION; *OECONTAMINATION TECHNIQUES; *HANDBOOKS; *HAZAROOUS MATERIALS; *OCCUPATIONAL HEALTH: *OCCUPATIONAL SAFETY: *POLLUTION CONTROL

OESCRIPTIVE NOTE: 252P. \$36.00

ABSTRACT: THIS HANDBOOK DESCRIBES DECONTAMINATING BUILDINGS, STRUCTURES, AND EQUIPMENT TYPES OF CONTAMINANTS MOST LIKELY TO OCCUR IN BUILDINGS AND OF CONTAMINANTS MOST LIKELY TO OCCUR IN BUILDINGS AND STRUCTURES AT REMEDIAL SITES OR ON REMOVAL EQUIPMENT (SUCH AS DRUM GRAPPLERS OR BULLDOZERS) INCLUDE ASBESTOS, ACIOS, ALKALIS, CIOXINS, EXPLOSIVES, HEAVY METALS AND CYANIOES, LOW-LEVEL RADIATION, ORGANIC SOLVENTS, PESTICIDES, POLYCHLORINATED BIPHENYLS, AND OTHER HAZARDOUS ORGANIC OR INDRGANIC CHEMICALS. USE OF THIS GENERAL GUIDE FOR OEVELOPING A DECONTAMINATION STRATEGY WILL ASSIST PERSONNEL IN DETERMINING AN EFFICIENT, PRACTICAL, AND SAFE COURSE OF ACTION IN A GIVEN SITUATION. STEPS IN THE PROCESS INCLUDE: (1) DETERMINING THE NATURE AND EXTENT OF CONTAMINATION. DEVELOPING AND IMPLEMENTING A SITE-SPECIFIC DECONTAMINATION PLAN, AND (3) EVALUATING DECONTAMINATION EFFECTIVENESS. THE BOOK PRESENTS DESCRIPTIONS OF 21 EXAMPLE METHODS FOR DECONTAMINATING BUILDINGS, STRUCTURES, AND EQUIPMENT THE METHODS ARE GROUPED ACCORDING TO THEIR MODE OF ACTION-PHYSICAL/MECHANICAL, SOLVENT/EXTRACTION, CHEMICAL, AND THERMAL. DEVELOPMENTAL METHOOS ARE ALSO DESCRIBED. THE FOLLOWING ASPECTS ARE DISCUSSED FOR EACH METHOO: GENERAL DESCRIPTION, ADVANTAGES, DISADVANTAGES, STATE OF THE ART, VARIATIONS, APPLICABILITY, EFFECTIVENESS, ENGINEERING, SAFETY, WASTE DISPOSAL, COSTS, AND FUTURE WORK REQUIRED. DESCRIPTIONS OF ACTUAL BUILDING DECONTAMINATION EFFORTS AT CHIPFERFIRM. SUPERFUND AND NON/SUPERFUNO SITES ARE INCLUDED AS CASE

STUDIES.

AVAILABILITY: MOYES PUBLICATIONS, NOYES DATA CORPORATION, MILL ROAD AT GRAND AVENUE, PARK RIDGE, NJ 07656

IRIS ACCESSION NUMBER: EW015167

PUBLICATION DATE: 86

TITLE: DISPOSAL OF HAZARDOUS WASTES IN INDUSTRIAL BOILERS AND FURNACES. PULLUTION TECHNOLOGY REVIEW NO. 129.

PERSONAL AUTHOR: CASTALDINI, C.; AND OTHERS

DESCRIPTOR: *BOXLERS; *FURNACES; *HAZARDOUS WASTES; *INDUSTRY; *IMCINERATION; *THERMAL DESTRUCTION; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 429P. \$48.00

ABSTRACT: THE DISPOSAL OF HAZARDOUS WASTES IN INDUSTRIAL BOILERS AND FURNACES IS DESCRIBED. SECTIONS ARE INCLUDED ON THE FOLLOWING TOPICS: (1) SURVEY OF HAZARDOUS WASTE GENERATION AND DISPOSAL; (2)INDUSTRIAL BOILERS; (3) CHARACTERIZATION OF INDUSTRIAL BOILERS; (4) THEORETICAL APPROACH TO THERMAL DESTRUCTION OF HAZARDOUS WASTES; (5) USE OF INDUSTRIAL BOILERS TO BURN HAZARDOUS WASTE; (6) SECONDARY IMPACTS OF HAZARDOUS WASTE COFIRING; (7) HAZARDOUS WASTE DESTRUCTION HODEL FOR IDENTIFYING WASTE CATEGORIES DESTRUCTIBLE IN INDUSTRIAL PROCESSES; AND (8) PROCESS ASSESSMENT.

AVAILABILITY: NOYES PUBLICATIONS, NOYES DATA CORPORATION, MILL ROAD AT GRAND AVENUE, PARK RIDGE, NJ 07656

IRIS ACCESSION NUMBER: EW015168

PUBLICATION DATE: 87

TITLE: UNDERGROUND TANK LEAK DETECTION METHODS. POLLUTION TECHNOLOGY REVIEW NO. 139.

PERSONAL AUTHOR: NIAKI, SHAHZAD; BROSCIOUS, JOHN A.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *LEAKS; *LEAK DETECTION TECHNIQUES; *MONITORING; *PERFORMANCE EVALUATION; *POLLUTION CONTROL; *UNDERGROUND TANKS

DESCRIPTIVE NOTE: 123P. \$36.00

ABSTRACT: THIS STATE-OF-THE-ART REVIEW DETAILS AVAILABLE AND DEVELOPING METHODS FOR DETECTING LEAKS IN UNDERGROUND STORAGE TANKS. THIRTY-SIX VOLUMETRIC, NON-VOLUMETRIC, INVENTORY MONITORING, AND LEAK EFFECTS MONITORING DETECTION METHODS ARE DESCRIBED FOR UNDERGROUND TANKS USED PRIMARILY FOR LIQUID HYDROCARBONS AND PRODUCTS. COMMENTS ARE PROVIDED ON THE METHODS AND VARIABLES THAT MAY INFLUENCE ACCURACY ARE DISCUSSED.

MILL ROAD AT GRAND AVENUE, PARK RIDGE, NJ 07656

IRIS ACCESSION NUMBER: EW015169

PUBLICATION DATE: 87

TITLE: PROTECTION OF PUBLIC WATER SUPPLIES FROM GROUND-WATER CONTAMINATION. POLLUTION TECHNOLOGY REVIEW NO. 141.

PERSONAL AUTHOR: PETTYJOHN, WAYNE A.

DESCRIPTOR: *CONTAMINATION; *GROUNDWATER; *HYDROLOGY; *MANAGEMENT; *WATER POLLUTION CONTROL; *WATER RESOURCES; *WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: 177P. \$36.00

ABSTRACT: THIS BOOK PROVIDES BASIC INFORMATION ON KNOWLEDGE NECESSARY FOR EFFECTIVE AND EFFICIENT MANAGEMENT OF GROUNDWATER SUPPLIES. THE INFORMATION PROVIDED IS APPLICABLE TO ALL REGIONS OF THE UNITED STATES. SECTIONS INCLUDE THE FOLLOWING: (1) INTRODUCTION; (*) BASIC GROUND-WATER HYDROLOGY; (3) CLASSIFICATION OF ...OUND-WATER REGIONS; (4) GROUND-WATER - SURFACE WATER RELATIONSHIPS; (5) GROUND-WATER POLLUTION; (6) MANAGEMENT ALTERNATIVES; (7) CONTROLLING VOLATILE ORGANIC COMPOUNDS IN GROUND-WATER USED FOR DRINKING; AND (8) INGROUND TREATMENT, RESTORATION, AND RECLAMATION.

AVAILABILITY: NOYES PUBLICATIONS, MOYES DATA CORPORATION, MILL ROAD AT GRAND AVENUE, PARK RIDGE, NJ 07656

IRIS ACCESSION NUMBER: 2W015170

PUBLICATION DATE: 85

TITLE: RECYCLING: WASTE INTO WEALTH.

PERSONAL AUTHOR: HERTZBERG, RICHARD; AND OTHERS

DESCRIPTOR: *AUDIOVISUAL AIDS; *ECONOMICS; *FILMS; *SOLID WASTES; *INSTRUCTIONAL MATERIALS; *ELEMENTARY EDUCATION; *SECONDARY EDUCATION; *RESOURCE RECOVERY; *POLLUTION CONTROL; *WASTE REDUCTION

DESCRIPTIVE NOTE: 29 MIN. VIDEO; PURCHASE - \$175.00, RENTAL - \$50.00

ABSTRACT: THIS FILM FEATURES STATE-OF-THE- ART RECYCLING TECHNIQUES INCLUDING CURBSIDE PICK-UP SERVICES, DROP-OFF RECYCLING CENTERS, MATERIAL SEPARATION AND PROCESSING INTO NEW PRODUCTS. A RESOURCE AND STUDY GUIDE ACCOMPANIES THE FILM.

AVAILABILITY: BULLFROG FILMS, INC., OLEY, PENNSYLVANIA 19547

IRIS ACCESSION NUMBER: EW015171

TITLE: IN OUR OWN BACKYARD: THE FIRST LOVE CANAL.

PERSONAL AUTHOR: CORCORAN, LYNN

DESCRIPTOR: *AUDIOVISUAL AIDS; *EMERGENCY RESPONSE; *HAZARDOUS MATERIALS; *ENVIRONMENT; *LOVE CANAL; *PUBLIC HEALTH; *TOXIC SUBSTANCES; *TOXIC WASTES; *VIDEO TAPE; *WASTES; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 59 MIN. VIDEO; PURCHASE - \$200.00, RENTAL - \$75.00

ABSTRACT: THIS FILM IS A VIDEO DOCUMENTARY ON THE NATION'S FIRST ENCOUNTER WITH TOXIC WASTE. IT PROVIDES AN ACCOUNT OF THE WAY PEOPLE INVOLVED, BOTH IN GOVERNMENT AND IN THE COMMUNITY, RESPONDED TO THE SITUATION. THE FILM CAN BE USED IN A VARIETY OF CLASSES OR COMMUNITY SITUATIONS.

AVAILABILITY: BULLFROG FILMS, INC., OLEY, PA 19547

IRIS ACCESSION NUMBER: EW015172

PUBLICATION DATE: 86

TITLE: TOXIC CHEMICALS: INFORMATION IS THE BEST DEFENSE.

DESCRIPTOR: *AUDIOVISUAL AIDS; *COMPLIANCE; *ACCIDENT PREVENTION; *CHEMICALS; *FILMS; *HAZARDOUS MATERIALS; *EMERGENCIES; *PLANNING; *TOXIC SUBSTANCES; *PUBLIC HEALTH; *SAFETY; *WASTES; *WASTE DISPOSAL; *LEGISLATION

DESCRIPTIVE NOTE: 26 MIN. VIDEO EACH, PART I ONLY-\$95 PURCHASE, \$30 RENTAL; BOTH-\$175 PURCHASE, \$55 RENTAL;

ABSTRACT: THIS TWO-PART DOCUMENTARY SHOWS WHY IT IS IMPORTANT FOR COMMUNITIES TO PLAN FOR CHEMICAL EMERGENCIES AND TO FIND OUT WHERE CHEMICALS ARE BEING USED. IT ALSO SHOWS HOW BUSINESS LEADERS, LOCAL OFFICIALS, AND CONCERNED CITIZENS IN ONE COMMUNITY WORKED TOGETHER TO CREATE A MODEL HAZARDOUS MATERIALS DISCLOSURE ORDINANCE. A HANDBOOK IS INCLUDED.

AVAILABILITY: BULLFROG FILMS, INC., OLEY, PA 19547

IRIS ACCESSION NUMBER: EW015173

PUBLICATION DATE: SEPT 87

TITLE: 8TH AESF/EPA CONFERENCE ON POLLUTION CONTROL FOR THE METAL FINISHING INDUSTRY.

PERSONAL AUTHOR: SCHUMACHER, J. HOWARD; WILMOYH, ROGER C.

DESCRIPTOR: *AIR POLLUTION: *CASE HISTORIES: *HAZARDOUS WASTES: *METALS: *INDUSTRIAL WASTES; *REGULATIONS: *WATER "G' 'TION; *POLLUTION CONTROL; *RESEARCH REPORTS;

*CONFERENCE PROCEEDINGS

DESCRIPTIVE NOTE: \$30.95; ORDER NUMBER: PB87-208807/AS

ABSTRACT: THIS PUBLICATION CONTAINS 28 PAPERS PRESENTED AT THE 8TH ANNUAL AESF/EPA COMFERENCE AND EXHIBIT ON POLLUTION CONTROL FOR THE METAL FINISHING INDUSTRY HELD IN SAN DIEGO, CA IN FEB, 1987. THE PRESENTATIONS RANGED FORM UPDATES ON THE AIR, WATER, AND HAZARDOUS WASTE REGULATIONS TO THE RESULTS OF RESEARCH STUDIES AND CASE HISTORIES OF WASTE REDUCTION EFFORTS IN METAL FINISHING FACILITIES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015174

PUBLICATION DATE: SEPT 87

TITLE: INFLUENCE OF PHOSPHATE CORROSION CONTROL COMPOUNDS ON BACTERIAL GROWTH.

PERSONAL AUTHOR: ROSENZWEIG, WILLIAM D.

DESCRIPTOR: *BACTERIAL GROWTH; *BACTERIA; *CORROSION CONTROL; *SHAN-NO-CORR; *VIRCHEM 932; *PHOSPHATES; *PUBLIC HEALTH; *WATER DISTRIBUTION; *WATER POLLUTION CONTROL

DESCRIPTIVE MOTE: \$13.95; ORDER NUMBER: PB87-198297/AS

ABSTRACT: INVESTIGATED WAS THE INFLUENCE OF TWO PHOSPHATE CORROSION CONTROL COMPOUNDS ON THE GROWTH AND SURVIVAL OF COLIFORM AND OTHER HETEROTROPHIC BACTERIA. THE COMPOUNDS STUDIED WERE SHAN-NO-CORR AND VIRCHEM 932. RESULTS PRESENTED NO EVIDENCE THAT THE CORROSION CONTROL COMPOUNDS STIMULATED COLIFORM GROWTH AND SOME EVIDENCE THAT THEY LIGHT INHIBIT GROWTH.

AVAILABILITY: MATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015175

PUBLICATION DATE: DEC 87

TITLE: REMOVAL OF URANIUM FROM DRINKING WATER BY ION EXCHANGE AND CHEMICAL CLARIFICATION.

PERSONAL AUTHOR: HAMSON, STEVEN W.; AND OTHERS

DESCRIPTOR: *DRINKING WATER: *COSTS; *ION EXCHANGE: *CHEMICAL CLARIFICATION; *EQUIPMENT: *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *URANIUM; *WATER TREATMENT

DESCRIPTIVE NOTE: \$13.95; ORDER NUMBER: PB88-102900/AS

ABSTRACT: A PILOT DEMONSTRATION WAS CONDUCTED OF ION EXCHANGE AND CHEMICAL CLARIFICATION EQUIPMENT FOR REMOVING URANIUM FROM DRINKING WATER. IN ADDITION TO THE PILOT STUDY, THE REPORT ANALYZES SEVERAL CURRENT OPERATING WATER.

TREATMENT SYSTEMS WHOSE FEED SUPPLIES CONTAIN URANIUM. COST ANALYSIS DATA FOR CAPITAL EQUIPMENT IS ALSO INCLUDED IN THE REPORT ALDNG WITH A DISCUSSION OF ULTIMATE DISPOSAL METHODS FOR URANIUM-CONTAINING WATER TREATMENT WASTES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015176

PUBLICATION DATE: JAN 38

TITLE: PLANNING MODELS FOR URBAN WATER SUPPLY EXPANSION.

PERSONAL AUTHOR: MARKS, DAVID H.: AND OTHERS

DESCRIPTOR: *COSTS; *ECONOMICS; *FINANCING; OPERATIONS (WATER); *POLICIES; *PLANNING; DRINKING WATER; *URBAN AREAS; WATER DISTRIBUTION; *WATER SUPPLY; WATER TREATMENT

DESCRIPTIVE NOTE: \$53.50, ORDER NUMBER: P8 88-109 590/AS

ABSTRACT: A THREE-VOLUME REPORT WAS DEVELOPED RELATIVE TO THE MODELLING OF INVESTMENT STRATEGIES FOR REGIONAL WATER SUPPLY PLANNING. VOLUME 1 IS THE STUDY OF CAPACITY EXPANSION OVER TIME. VOLUMES 2 AND 3 ARE SUCCESSIVE PARTS OF THIS RESEARCH RELATED TO THE STUDY OF COST ALLOCATIONS POLICIES AMONG PARTICIPANTS IN A REGIONAL SYSTEM. POLICIES ARE EVALUATED AND TWO METHODS ARE GIVEN EXTENSIVE REVIEW.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE. 5285 PORT ROYAL ROAD. SPRINGFIELD. VA 22161

IRIS ACCESSION NUMBER: EW015177

PUBLICATION DATE: SEPT 87

TITLE: PRELIMINARY TREATMENT FACILITIES: DESIGN AND OPERATIONAL CONSIDERATIONS.

*EQUIPMENT; DESCRIPTOR: *DESIGN; *FACILITIES: *GRIT REMOVAL; *PRELIMINARY TREATMENT; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 70P. \$4.20

ABSTRACT: THIS REPORT PROVIDES A BASIC UNDERSTANDING OF PRELIMINARY TREATMENT SYSTEMS AND PRESENTS CONCISE INFORMATION ON DESIGN CONSIDERATIONS. OPERATIONAL CHARACTERISTICS, AND PROCE'S AND EQUIPMENT PROBLEMS AND POSSIBLE SOLUTIONS. THE REPORT ALSO ADDRESSES GUIDELINES FOR THE DESIGN OF NEW GRIT HANDLING AND SCREENINGS REMOVAL FACILITIES AND UPGRADING OF EXISTING FACILITIES. THE DATA FOR THE PROJECT WERE OBTAINED FROM EXPERIENCE, A LITERATURE REVIEW, INFORMATION FROM MANUFACTURERS, AND SITE VISITS TO TREATMENT PLANTS.

ERIC 25 AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES IRIS ACCESSION NUMBER: EW015178

PUBLICATION DATE: FEB 88

TITLE: CASEBOOK. NEW LOW-COST WASTEWATER RECOVERY PROCESS.

PERSONAL AUTHOR: BOYNTO", MARGE

DESCRIPTOR: *ACID: COSTS; HAZARDOUS MATERIALS; HEAVY AL WASTES; *METALS; *OPERATIONS METALS; *INDUSTRIAL WASTES; *METALS; *UPERALLUMS (WASTEWATER); *TECHNOLOGY; RESOURCE RECOVERY; *WASTEWATER

DESCRIPTIVE NOTE: 32, 34P.

ABSTRACT: DESCRIBED IS A LOW-COST PROCESS FOR REMOVING HEAVY METAL AND ACID CONTAMINANTS FROM WASTEWATER. THE PROCESS IS USED AT A BATTERY PRODUCTION PLANT.

AVAILABILITY: POLLUTION ENGINEERING: V20 N2

IRIS ACCESSION NUMBER: EW015179

PUBLICATION DATE: FEB 8B

TITLE: HAZ WASTE TREATMENT AND RECOVERY SYSTEMS.

PERSONAL AUTHOR: CHEREMISINOFF, PAUL N.

DESCRIPTOR: *HAZARDOUS WASTES; *REGULATIONS; *RESOURCE RECOVERY: *TECHNOLOGY: *WASTE REDUCTION: *WASTE TREATMENT

DESCRIPTIVE NOTE: 52-61P.

ABSTRACT: DESCRIBED ARE A VARIETY OF TREATMENT AND RECOVERY SYSTEMS TO MINIMIZE AND TREAT HAZARDOUS WASTES.

AVAILABILITY: POLLUTION ENGINEERING: V20 N2

IRIS ACCESSICN NUMBER: EW0151B0

PUBLICATION DATE: FEB 8B

TITLE: EVALUATING ABSORBENT MATERIALS.

PERSONAL AUTHOR: EHREDT, JESSE

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY: *ABSORBENT MATERIALS: *CLEAN-UP; *COSTS; *HAZARDOUS MATERIALS: *PERFORMANCE EVALUATION; *TECHNOLOGY; *WASTE REDUCTION; *WASTE TREATMENT

DESCRIPTIVE NOTE: 62-65P.

ABSTRACT: DESCRIBED AND EVALUATED ARE ABSORBENT MATERIALS FOR CONTAINING, ABSORBING, AND CLEANING HAZARDOUS MATERIALS.

AVAILABILITY: POLLUTION ENGINEERING; V20 N2

Full Text Provided by ERIC

IRIS ACCESSION NUMBER: EV015181

PUBLICATION DATE: FEB 88

TITLE: RELEASE PREVENTION, CONTROL AND COUNTERMEASURE

PLANS.

PERSONAL AUTHOR: BOWMAN, V.A.

DESCRIPTOR: *ACCIDENT PREVENTION; *AIR POLLUTION CONTROL; *HAZARDOUS HATERIALS; *CLEAN-UP; *EMERGENCY RESPONSE; *PLANMING; *POLLUTION CONTROL; *TOXIC SUBSTANCES; *WATER

POLLUTION CONTROL

DESCRIPTIVE NOTE: 66-67P.

ABSTRACT: DISCUSSED ARE PLANS TO PREVENT AND CONTROL TOXIC AND HAZARDOUS EMISSIONS AND SPILLS. ALSO CONSIDERED ARE COUNTERMEASURES TO TAKE WHEN A SPILL OR AN EMISSION OCCURS.

AVAILABILITY: POLLUTION ENGINEERING; V20 N2

IRIS ACCESSION NUMBER: EW015182

PUBLICATION DATE: FEB 88

TITLE: TOXICITY REDUCTION IN INDUSTRIAL WASTEWATER

DISCHARGES.

PERSONAL AUTHOR: BOWERS, A.R.: AND OTHERS

DESCRIPTOR: *CHEMICAL OXIDATION; *INDUSTRIAL WASTES; *INDUSTRIAL WASTEWATER; *OPERATIONS (WASTEWATER); *ORGANIC COMPOUNDS; *PRETREATMENT; *TECHNOLOGY; *TOXIC SUBSTANCES;

*WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 68-72F.

ABSTRACT: THIS PAPER REVIEWS CURRENT TECHNOLOGIES FOR REMOVAL OR DESTRUCTION OF TOXIC ORGANIC COMPOUNDS IN COMPLEX INDUSTRIAL WASTEWATERS. IN ADDITION, METHODS OF PRETREATMENT TO PRODUCE BIOLOGICALLY ACCEPTABLE COMPOUNDS, PARTICULARLY BY CHEMICAL OXIDATION. ARE DISCUSSED.

VI CHEHICAE DAIDHILDR, ARE DIJCOJJED.

A. AILABILITY: POLLUTION ENGINEERING: V20 N2

IRIS ACCESSION NUMBER: EW015183

PUBLICATION DATE: FEB 88

TITLE: THE CHMM EXAM.

PERSONAL AUTHOR: SHIELDS, J.; AND OTHERS

DESCRIPTOR: *CERTIFICATION: *CERTIFIED HAZARDOUS MATERIALS MANAGERS EXAM; *CHMM EXAM; *EXAMINATIONS; *EVALUATION;

*HAZARDOUS MATERIALS; *MANAGEMENT; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 73-75P.

ABSTRACT: THIS PAPER REVIEWS SEVERAL QUESTIONS RELATED TO THE CERTIFIED HAZARDOUS MATERIALS MANAGERS EXAM. QUESTIONS ANSWERED RELATE TO HISTORY, PRODUCTION, AND CONTENT OF THE EXAM. IN ADDITION, SOME SUGGESTIONS FOR STUDYING FOR THE EXAM ARE PROVIDED.

AVAILABILITY: POLLUTION ENGINEERING; V20 N2

IRIS ACCESSION NUMBER: EW015184

PUBLICATION DATE: DEC 87

TITLE: DEVELOPMENT OF A DISPERSANT-USE DECISION-MAKING SYSTEM FOR OIL SPILLS IN THE U.S. GULF OF MEXICO.

PERSONAL AUTHOR: TRUDEL, B.K.; AND OTHERS

DESCRIPTOR: *COMPUTER APPLICATIONS; *CLEAN-UP; *DECISION-MAKING; *GULF OF MEXICO; *OIL SPILLS; *MANAGEMENT; *REGULATIONS; *PLANNING; *WATER POLLUTION CONTROL; *IMPACT ASSESSMENT

DESCRIPTIVE NOTE: 101-110P.

ABSTRACT: DESCRIBED IS A COMPUTERIZED SYSTEM TO AID IN MAKING REAL-TIME DISPERSANT-USE DECISIONS FOR OIL SPILLS IN THE U.S. GULF OF MEXICO. IT IS DUE 10 BE COMPLETED IN EARLY 1988.

AVAILABILITY: SPILL TECHNOLOGY NEWSLETTER; V12 N4

IRIS ACCESSION NUMBER: EW015185

PUBLICATION DATE: DEC 87

TITLE: SELECTION OF CHEMICAL PROTECTIVE CLOTHING FOR SPILL EMERGENCIES.

PERSONAL AUTHOR: FINGAS. MERVIN F.

DESCRIPTOR: *ACCIDENT PREVENTION; *CHEMICAL PROTECTIVE CLOTHING; *CLOTHING; *EMERGENCY FESPONSE; *PERFORMANCE EVALUATION; *PROTECTIVE CLOTHING; *SAFETY; *SPILL EMERGENCIES

DESCRIPTIVE NOTE: 111-124P.

ABSTRACT: DESCRIBED ARE CRITERIA FOR SELECTING CHEMICAL PROTECTIVE CLOTHING FOR SPILL EMERGENCIES. SEVERAL TABLES ARE INCLUDED THAT LIST TYPES OF SPILLS AND TYPES OF PROTECTIVE CLOTHING MEEDED. A SELECTED REFERENCE LIST IS INCLUDED.

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AVAILABILITY: SPILL TECHNOLOGY NEWSLETTER: V12 N4

IRIS ACCESSION NUMBER: EW015186

PUBLICATION DATE: FEB 88

TITLE: TO COVER OR NOT TO COVER.

PERSONAL AUTHOR: GOLDSTEIN. NORA

DESCRIPTOR: *COMPOSTING: *PERFORMANCE **EVALUATION:** *FACILITIES: **OPERATIONS** (WASTEWATER): *OPERATIONS (COMPOSTING): *SLUDGE DISPOSAL; WASTE DISPOSAL; WASTEWATER TREATMENT: RÉSOURCE RECOVERY

DESCRIPTIVE NOTE: 34-36P.

ABSTRACT: MANAGERS OF NON-REACTOR COMPOSTING FACILITIES DEBATE THE MERITS OF ENCLOSING SELECTED COMPONENTS OF THEIR DPERATIONS.

AVAILABILITY: BIOCYCLE; V29 N2

IRIS ACCESSION NUMBER: EW015187

PUBLICATION DATE: FEB 88

TITLE: SOLAR AQUATIC WASTEWATER TREATMENT.

PERSONAL AUTHOR: TODD. JOHN

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *COSTS; *ECOLOGY; *AQUATIC WASTEWATER TREATMENT: *OPERATIONS (WASTEWATER) *SOLAR ENERGY: *TECHNOLOGY: *WASTEWATER TREATMENT: *RESOURCE RECOVERY

DESCRIPTIVE NOTE: 38-40P.

ABSTRACT: DESCRIBED ARE WASTEWATER TREATMENT FACILITIES DESIGNED TO OPERATE WITH SOLAR POWER. PROCESSES USED IN THE OPERATIONS ARE DISCUSSED.

AVAILABILITY: BIOCYCLE: V29 N2

IRIS ACCESSION NUMBER: EW015188

PUBLICATION DATE: FEB 88

TITLE: TEMPERATURE, PATHOGEN CONTROL AND PRODUCT QUALITY.

PERSONAL AUTHOR: DE BERTOLDI, MARCO

DESCRIPTOR: *PATHOGEN REDUCTION; BACTERIA; *COMPOST; FUNGI; *PERFORMANCE EVALUATION; *PATHOGENS; *PUBLIC HEALTH; *SL"?GE; *OPERATIONS (COMPOSTING); *WASTEWATER TREATMENT; VIRUSES; HELMINTHS

DESCRIPTIVE NOTE: 43-47. 50P.

Full Text Provided by ERIC

ABSTRACT: DISCUSSED IS THE EFFECTIVENESS OF VARIOUS SYSTEMS REDUCING THE PATHOGEN CONTENT OF COMPOST PRODUCED FROM ERICIE SLUDGE. 39

AVAILABILITY: BIOCYCLE; V29 N2

IRIS ACCESSION NUMBER: EW015189

PUBLICATION DATE: JAN 88

TITLE: RECLAMATION OF ALUMINUM FINISHING SLUDGES.

PERSONAL AUTHOR: SAUNDERS. F. MICHAEL

DESCRIPTOR: *ALUMINUM: *ALUMINUM FINISHING SLUDGE: *DEWATERING; *ACIDIC EXTRACTION; *METALS; *SLUDGE; *RESOURCÉ RECOVERY; *WASTE REDUCTION

DESCRIPTIVE NOTE: PRICE: \$19.95; ORDER NUMBER: PB 88-133 566/AS

ABSTRACT: THE PURPOSE OF THIS STUDY WAS TO CONDUCT EXTRACTIONS WITH THREE TYPES OF ALUMINUM-ANODIZING WASTES TO ESTABLISH THE KINETICS OF THE ACIDIC EXTRACTION, AND TO EVALUATE THE QUALITY OF THE PRODUCTS PRODUCED. RESULTS ARE REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015190

PUBLICATION DATE: JAN 88

TITLE: SAMPLING REGIMES AND BACTERIOLOGICAL TESTS FOR COLIFORM DETECTION IN GROUNDWATER.

PERSONAL AUTHOR: CALDWELL, R.A.: MORITA, R.Y.

*COLIFORM; DESCRIPTOR: *BACTERIA: *DRINKING *GROUNDWATER: *OPERATIONS TECHNIQUES; *WATER QUALITY (WATER); *SAMPLING; *ANALYTICAL

DESCRIPTIVE NOTE: PRICE: \$11.95; ORDER NUMBER: PB 88-107 230/AS

ABSTRACT: THE TWO OBJECTIVES OF THIS STUDY WERE TO DETERMINE (1) IF A FIVEFOLD INCREASE IN SAMPLING USING THREE ALTERNATIVE SAMPLING REGIMES WOULD SIGNIFICANTLY INCREASE COLIFORM DETECTION AND (2) TO COMPARE COLIFORM DETECTION BY THE CONVENTIONAL AEROBIC MEMBRANE FILTRATION TEST AND FIVE ALTERNATIVE PROCEDURES. RESULTS ARE REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015191

PUBLICATION DATE: 87

TITLE: COMMUNICATING ENVIRONMENTAL HAZARD INFORMATION: A HAZARD ADAPTATION DECISION-MAKING MODEL.

PERSONAL AUTHOR: CVETKOVICH, GEORGE; EARLE, TIMOTHY C.

DESCRIPTOR: *CF MUNICATION; *OECISION MAKING; *PUBLIC MEALTH; *ENVIRONMENTAL MAZARDS; *ENVIRONMENT; *HAZARD COMMUNICATION, *RISK ANALYSIS; *MODELS; *EARTHQUAKES; *WATER CONTAMINATION; *WATER QUALITY

DESCRIPTIVE NOTE: 15P. \$1.90

ABSTRACT: THE COMMUNICATION OF ENVIRONMENTAL "AZARO INFORMATION IS OFTEN BASED ON A "SIMULUS" D'FINITION OF RISK. RISK IS CONSIDERED TO BE AN OBJECTIVE SINGLE-DIMENSIONEO QUALITY OF THE ENVIRONMENT INDICATED BY A HIGH PROBABLILITY OF LOSSES OF LIFE, HEALTH OR PROPERTY AND WHICH MOTIVATES PEOPLE TO SEEK HAZARD INFORMATION AND TO LEARN ABOUT HAZARD MITIGATION. IT FOLLOWS FROM THIS POINT OF VIEW THAT IT IS THE HAZARD COMMUNICATOR'S JOB TO DEAL WITH THE PUBLIC'S ASSUMMED LACK OF. OR MISUNDERSTANDING OF, INFORMATION ABOUT PROBABILITIES AND POSSIBLE LOSSES, OR ITS INALILITY TO UNDERSTAND THE PERSONAL UTILITY OF INFORMATION. WHILE SOMETIMES HELPFUL, THIS APPROACH IS SUSCEPTIBLE TO CREATING MISTRUST SINCE IT MAY FAIL TO ADEQUATELY REPRESENT RISK FROM THE PERSPECTIVE OF THE AUDIENCE. A "RESPONSE" DEFINITION OF RISK BASED ON PERSUNAL SUBJECTIVE APPRAISALS IN RESPONSE TO ENVIRONMENTAL THREATS IS PROPOSED. RESULTS FROM PUBLIC SURVEYS ON TWO ENVIRONMENTAL HAZARDS, WATER CONTAMINATION AND EARTHQUAKES, ARE PRESENTED AND FOUND TO BE SUPPORTIVE OF THE RISK-AS-RESPONSE POSITION. A HAZARD ADAPTATION DECISION-MAKING MODEL, BASED ON THE RESPONSE DEFINITION OF RISK, IS PROPOSED AS A FRAMEWORK FGR ORDERING OBSERVATIONS AND DIRECTING EFFORTS AT HAZARD COMMUNICATION.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015192

PUBLICATION DATE: OEC 87

TITLE: HAZARDOUS WASTE. CORRECTIVE ACTION CLEANUPS WILL TAKE YEARS TO COMPLETE.

DESCRIPTOR: *HAZARDOUS WASTES: *HAZAROOUS MATERIALS: *LEGISLATIVE AMENOMENTS; *ENVIRONMENT; *RCRA: *RESOURCE CONSERVATION AND RECOVERY ACT; *WASTE OISPOSAL; *WASTE CLEANUP; *COMPLIANCE; *CLEANUP; *FACILITIES; *SUPERFUND

DESCRIPTIVE NOTE: 44P.

ABSTRACT: THIS IS A REVIEW OF USE; S PROGRESS IN IMPLEMENTING THE CORRECTIVE ACTION PROVISIONS OF THE 1984 AMENDMENTS TO THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) OF 1976. THE REPORT RESPONDS TO FIVE QUESTIONS: (1) HOW MANY RCRA FACILITIES ARE LIKELY TO REQUIRE CORRECTIVE ACTION?; (2) HOW LONG WILL IT TAKE TO IMPLEMENT CORRECTIVE ACTION?; (3) WHAT CLEANUP STANDARDS WILL BE APPLIED TO CORRECTIVE ACTION AT SUCH FACILITIES, AND HOW DO THESE STANDARDS COMPARE WITH THE STANDARDS APPLICABLE TO SUPERFUND C: SANUP ACTIONS?; (4) WHAT SYSTEM WILL BE USED TO IDENTIFY PRIORITIES AMONG THE RCRA FACILITIES AWAITING CORRECTIVE ACTION?; AND (5) HOW AND WHEN WILL A DECISION BE MADE THAT A FACILITY CANNOT BE ADDRESSED BY CORRECTIVE ACTION AND SHOULD

INSTEAD BE TRANSFERRED TO THE SUPERFUND PROGRAM?

AVAILABILITY: UNITED STATES GENERAL ACCOUNTING OFFICE, POST OFFICE BOX 6015, GAITHERSBURG, MARYLAND 20877

IRIS ACCESSION NUMBER: EW015193

PUBLICATION DATE: DEC 87

TITLE: SUPERFUNO. EXTENT OF NATION'S POTENTIAL HAZARDOUS WASTE PROBLEM STILL UNKNOWN.

OESCRIPTOR: *CLEANUP: *GAO REPORT: *HAZARDOUS WASTES: *HAZARDOUS WASTE SITES: *PERFORMANCE EVALUATION: *POLLUTION CONTROL: *SUPERFUNO: *USEPA: *SITE IDENTIFICATION: *WASTE OISPOSAL: *HAZARDOUS WASTE SITE INVENTORIES

OESCRIPTIVE NOTE: 43P.

ABSTRACT: THIS REPORT ESTIMATES THE POTENTIAL UNIVERSE OF HAZARDOUS WASTE SITES, OISCUSSES THE EFFORTS OF EPA AND THE STATES IN IOENTIFYING AND REPORTING POTENTIAL HAZARDOUS WASTE SITES, AND REPORTS ON THE STATUS OF SITES GAD REPORTED IN 1985 AS MISSING FROM EPA'S INVENTORY.

AVAILABILITY: U.S. GENERAL ACCOUNTING OFFICE, POST OFFICE BOX 6015, GAITHERSBURG, MARYLAND 20877

IRIS ACCESSION NUMBER: EW015194

PUBLICATION DATE: JAN 88

TITLE: SUPERFUND. INSURING UNDERGROUND PETROLEUM TANKS.

OESCRIPTOR: *COMPLIANCE; *GENERAL ACCOUNTING OFFICE; *HAZAROOUS MATERIALS; *INSURANCE; *LIABILITY; *PETROLEUM; *STORAGE TANKS; *RISK ASSESSMENT; *PETROLEUM DISTRIBUTION; *POLLUTION CONTROL; *SUPERFUND

OESCRIPTIVE NOTE: 73P.

ABSTRACT: THIS REPORT IS A REPORT BY THE GENERAL ACCOUNTING OFFICE TO CONGRESS REGARDING THE AVAILABILITY OF INSURANCE FOR OWNERS AND OPERATORS OF PETROLEUM STORAGE AND DISTRIBUTION FACILITIES. THE REPORT PRESENTS ANALYSES OF LIABILITY AND OPTIONS AVAILABLE.

AVAILABILITY: U.S. GENERAL ACCOUNTING OFFICE, POST OFFICE BOX 6015, GAITHERSBURG, MARYLANO 20877

IRIS ACCESSION NUMBER: EW015195

PUBLICATION DATE: JAN 88

TITLE: MANAGING FARM NUTRIENTS. TRACEOFFS FOR SURFACE- AND GROUND-WATER QUALITY. AGRICULTURAL ECONOMIC REPORT NO. 583

PERSONAL AUTHOR: CROWDER, BRADLEY; YOUNG, C. EDWIN

DESCRIPTOR: *HUTRIENT MANAGEMENT; *WATER QUALITY; *AGRICULTURAL MONPOINT POLLUTION; *GROUNDWATER: *SOIL CONSERVATION; *CREAMS; *MODELS; *COMPUTER APPLICATIONS; *COMPUTER SIMULATION; *COSTS; *RURAL AREAS; *WATER POLLUTION CONTROL; *WATER SUPPLY

DESCRIPTIVE NOTE: 26P.

ABSTRACT: COMPREHENSIVE SOIL AND NUTRIENT MANAGEMENT ON THE FARM CAN REDUCE WATER POLLUTION. MATCHING THE AMOUNT AND TIMING OF NUTRIENT APPLICATIONS TO THE NEEDS OF CROPS IS THE MOST COST-EFFECTIVE AND EFFICIENT WAY TO CONTROL NUTRIENT CONTAMINATION OF SURFACE AND GROUNDWATER. SOIL CONSERVATION PRACTICES REDUCE SURFACE -WATER POLLUTION, BUT CAN INCREASE NITRATE LEACHING THROUGH THE SOIL. MISDIRECTED PRACTICES, SUCH AS EXCESSIVE OR MISTIMED MANURE APPLICATIONS, CAN INCREASE NUTRIENT CONTAMINATION OF SURFACE AND GROUNDWATER. THIS REPORT USES A FIELD-SCALE COMPUTER SIMULATION MODEL, CREAMS (CHEMICALS, RUNOFF, AND EROSION FROM AGRICULTURAL MANAGEMENT SYSTEMS), TO ASSESS POLLUTANT LOSSES FROM AGRICULTURAL LAND TO WATER. A CENTRAL THEME OF THE ANALYSIS IS THE TRADEOFF BETWEEN NUTRIENT LOADINGS IN SURFACE WATER VERSUS GROUNDWATER.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402

IRIS ACCESSION NUMBER: EW015196

PUBLICATION DATE: 87

TITLE: TRACE ELEMENTS IN HUMAN HEALTH AND DISEASE: SYMPOSIUM REPORT. ENVIRONMENTAL HEALTH #26.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *DISEASE; *HEALTH; *DIAGNOSIS; *NUTRITION; *PUBLIC HEALTH; *TRACE ELEMENTS; *PREVENTION; *THERAPY; *ENVIRONMENT

DESCRIPTIVE NOTE: 143P.

ABSTRACT: THIS PUBLICATION ON TRACE ELEMENTS CONTAINS REPORTS FROM A SYMPOSIUM HELD IN DENMARK IN 1987. THE REPORTS WERE PREPARED BY PANELS AND THE PANEL MEMBERS ARE IDENTIFIED. SECTIONS ARE INCLUDED ON: (1) EXPOSURES AND CHEMOBIOKINETICS; (2) ANALYTICAL ASPECTS; (3) MECHANISMS; (4) DISEASE ETIOLOGIES; AND (5) PREVENTION, DIAGNOSIS, AND THERAPY.

AVAILABILITY: U.S. EPA, ENVIRONMENTAL CRITERIA AND ASSESSMENT OFFICE, RESEARCH TRIANGLE PARK, NORTH CAROLINA

IRIS ACCESSION NUMBER: EW015197

PUBLICATION DATE: APRIL 87

TITLE: THE STATE OF THE WORLD ENVIRONMENT. APRIL, 1987.

TOR: *ANNUAL REPORTS; AGRICULTURE; AIR POLLUTION: ERIC MENT; *ENVIRONMENTAL QUALITY; ECOLOGY; *ECONOMIC MENT; *GLOBAL APPROACH; *INTERNATIONAL ORGANIZATIONS;

*INTERNATIONAL PROGRAMS; POPULATION; *WATER QUALITY; *UNITED NATIONS ENVIRONMENT PROGRAM

DESCRIPTIVE NOTE: 87P. ISBN-92-807-11342

ABSTRACT: ONE OF THE MAIN ACTIVITIES ASSIGNED TO THE GOVERNING COUNCIL OF THE UNITED MATIONS ENVIRONMENT PROGRAM (UNEP) IS TO REVIEW T'TWORLD ENVIRONMENTAL SITUATION TO INSURE THAT EMERGING ENVIRONMENTAL PROBLEMS OF WIDE INTERNATIONAL SIGNIFICANCE RECEIVE APPROPRIATE AND ADEQUATE CONSIDERATION BY GOVERNMENTS. ACCORDINGLY, UNEP HAS ASSESSED THE STATE OF THE GLOBAL ENVIRONMENT FOR 1988. CHAPTER I, "ENVIRONMENTAL QUALITY," ADDRESSES SUCH ISSUES AS AR QUALITY AND ATMOSPHERIC ISSUES, WATER QUALITY, THE MARINE ENVIRONMENT, LAND, AND TERRESTRIAL BIOTA. CHAPTER II, "DEVELOPMENT AND ENVIRONMENT," CONTAINS SECTIONS ON POPULATION GROWTH, HUMAN SETTLEMENTS, TRANSPORT AND TOURISM, AGRICULTURE AND FOOD PRODUCTION, INDUSTRIAL DEVELOPMENT AND EMERGY. CHAPTER III, "ENVIRONMENTAL PROTECTION MEASURES," DEALS WITH PUBLIC PERCEPTION AND ATTITUDES, NATIONAL AND INTERNATIONAL RESPONSES. ALSO INCLUDED IS A SHMMARY OF THE 1987 STATUS REPORT AND AN EXTENSIVE LIST OF REF_RENCES.

AVAILABILITY: UNITED NATIONS ENVIRONMENT PROGRAMME, P.O. BOX 30552, NAIROBI, KENYA

IRIS ACCESSION NUMBER: EW015198

PUBLICATION DATE: 87

TITLE: PLASTIC POLLUTION IN THE MARINE ENVIRONMENT.

DESCRIPTOR: *CONGRESSIONAL HEARINGS; *ENVIRONMENT: *HOUSE OF REPRESENTATIVES; *MARINE ENVIRONMENT; *LEGISLATION; *REGULATIONS; *PLASTICS; *POLLUTION; *POLLUTION CONTROL; *WATER POLLUTION CONTROL; *WASTE DISPOSAL; *SOLID WASTES

OESCRIPTIVE NOTE: 505P.

ABSTRACT: THIS PUBLICATION IS THE HEARINGS HELD JULY 17 AND 23, 1987 RELATED TO PLASTIC POLLUTION IN THE MARINE ENVIRONMENT HELD BEFORE THE SUBCOMMITTEE ON COAST GUARD AND NAVIGATION AND THE SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT OF THE HOUSE OF REPRESENTATIVES COMMITTEE ON MERCHANT MARINE AND FISHERIES. THE HEARINGS ARE RELATED TO H.R. 940. INCLUDED ARE TESTIMONY AND COMMUNICATIONS.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, CONGRESSIONAL SALES OFFICE, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402

IRIS ACCESSION NUMBER: EW015199

PUBLICATION DATE: 87

TITLE: DRINKING WATER AND HEALTH: DISINFECTANTS AND DISINFECTANT BY-PRODUCTS.

DESCRIPTOR: *DRINKING WATER; *CHLORINATION; *DISINFECTION;

*OPERATIONS (WATER): *PERFORMANCE EVALUATION; *PUBLIC MEALTH; *WATER TREATMENT

DESCRIPTIVE NOTE: 207P. \$19.95

ABSTRACT: THIS STUDY FOUND THAT CHLORINATION IS AN EFFECTIVE METHOD OF DISINFECTION AND THAT THE RESULTING CANCER RISKS ARE SMALL, CAUSING PERHAPS ONE CANCER IN 10 MILLION LIFETIMES. PRECIPITOUS CHANGE TO SOME OTHER MEANS OF DISINFECTION WOULD ENTAIL MUCH GREATER RISK.

AVAILABILITY: NATIONAL ACADEMY PRESS, 2101 CONSTITUTION AVE. N.W. WASHINGTON, D.C. 20418

IRIS ACCESSION NUMBER: EW015200

PUBLICATION DATE: 87

TITLE: WASTEWATER TREATMENT: OPERATOR INTRODUCTION TO WASTEWATER TREATMENT.

DESCRIPTOR: *AUDIOVISUAL AIDS; *INSTRUCTIONAL MATERIALS; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *OPERATOR TRAINING; *VIDEOTAPES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 70 MIN. V-TAPE. PRICE: \$700.00 FOR ALL FOUR TAPES - \$2,800.00

ABSTRACT: THIS TAPE IS ONE OF FOUR VIDEOTAPES ON WASTEWATER TREATMENT SYSTEMS AND HOW THEY WORK. SEE ALSO EW 015201, 202, AND 203. THIS VIDEOTAPE PROVIDES AN INTRODUCTION TO THE BASIC PRINCIPLES OF WASTEWATER STABILIZATION. THE TAPE IS DIVIDED INTO FOUR PARTS: (1) THE NEED FOR WASTEWATER TREATMENT; (2) WASTEWATER COLLECTION SYSTEMS; (3) INTRODUCTION TO WASTEWATER TREATMENT PROCESSES; AND (4) WASTEWATER SAMPLING, ROLE AND FUNCTION OF TREATMENT PLANT OPERATORS. INCLUDED ARE A STUDENT WORKBOOK AND INSTRUCORS GUIDE.

AVAILABILITY: LEIGHTON & KIDD, CONSULTING ENGINEERS, 295 EVANS AVE., BOX 940, STATION U, TORONTO, ONTARIO, CANADA M8Z 5P9

IRIS ACCESSION NUMBER: EW015201

PUBLICATION DATE: 87

TITLE: WASTEWATER TREATMENT: ACTIVATED SLUDGE & CLARIFICATION PR CESSES.

DESCRIPTOR: *ACTIVATED SLUDGE; *AUDIOVISUAL AIDS; *CLARIFICATION; *INSTRUCTIONAL MATERIALS; *OPERATIONS (WASTEWATER); *OPERATOR TRAINING; *POSTSECONDARY EDUCATION; *VIDEOTAPES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 90 MIN V-TAPE PRICE: \$700.00. FOR ALL FOUR TAPES -\$2,800.00

015202, AND 015203. THIS VIDEOTAPE IS CO'CERNED WITH ACTIVATED SLUDGE AND CLARIFICATION PROCESSES. THE TAPE IS DIVIDED INTO FOUR PARTS: (1) GENERAL BIOLOGICAL TREATMENT REQUIREMENTS; (2) THE ACTIVATED SLUDGE PROCESS; (3) THE CONTROL OF ACTIVATED SLUDGE PROCESSES; AND (4) CLARIFICATION PROCESSES. INCLUDED ARE A STUDENT WORKBOOK AND INSTRUCTORS GUIDE.

AVAILABILITY: LEIGHTON & KIDD, CONSULTING ENGINEERS, 295 EVANS AVE., BOX 940, STATION U, TORONTO, ONTARIO, CANADA M8Z 5P9

IRIS ACCESSION NUMBER: EW015202

PUBLICATION DAYE: 87

TITLE: WASTEWATER TREATMENT: ROTATING BIOLOGICAL CONTACTORS & TRICKLING FILTERS.

DESCRIPTOR: *AUDIOVISUAL AIDS; *BIOLOGICAL TREATMENT; *INSTRUCTIONAL MATERIALS; *FILTRATION; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *OPERATOR TRAINING; *VIDEOTAPES; *WASTEWATER TREATMENT; *ROTATING BIOLOGICAL CONTACTORS; *TRICKLING FILTERS

DESCRIPTIVE NOTE: 1 HR. V-TAPE PRICE: \$700.00. FOR ALL FOUR TAPES -\$2,800.00

ABSTRACT: THIS TAPE IS ONE OF FOUR VIDEOTAPES ON WASTEWATER TREATMENT SYSTEMS AND HOW THEY WORK. SEF ALSO EW 015200, 015201, AND 015203. THIS VIDEOTAPE IS CONCERNED WITH ROTATING BIOLOGICAL CONTACTORS AND TRICKLING FILTERS. EMPHASIZED ARE OPERATING PRINCIPLES, OPERATOR CONTROLS, AND NECESSARY PROCEDURES FOR SAFE AND EFFECTIVE OPERATION. INCLUDED ARE A STUDENT WORKBOOK AND INSTRUCTOR GUIDE.

AVAILABILITY: LEIGHTON & KIDD, CONSULTING ENGINEERS, 295 EVANS AVE., BOX 940, STATION U, TORONTO, ONTARIO, CANADA M8Z 5P9

IRIS ACCESSION NUMBER: EW015203

PUBLICATION DATE: 87

TITLE: WASTEWATER TREATMENT: SLUDGE HANDLING.

DESCRIPTOR: *AUDIOVISUAL AIDS; *INSTRUCTIONAL MATERIALS; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *OPERATOR TRAINING; *VIDÉOTAPES; *WASTEWATER TREATMENT; *SLUDGE HANDLING; *SLUDGE DISPOSAL

DFSCRIPTIVE NOTE: 1 HR. V-TAPE PRICE: \$700.00. FOR ALL FOUR TAPES- \$2,800.00

ABSTRACT: 'HIS TAPE IS ONE OF FOUR VIDEOTAPES ON WASTEWATER TREATMEN' SYSTEMS AND HOW THEY WORK. SEE ALSO EW 015200, 015201, AND 015202. THIS VIDEOTAPE IS CONCERNED WITH VARIOUS ASPECTS OF SLUDGE HANDLING. OPICS INCLUDED ARE PROCESSING, HANDLING, AND DISPOSAL OF SLUDGES. SPECIAL EMPHASIS IS GIVEN TO CHEMICAL CONDITIONING, THICKENING, AEROBIC DIGESTION,

SLUDGE DEWATERING, AEROBIC DIGESTION, AND FINAL DISPOSAL ALTERNATIVES. INCLUDED ARE A STUDENT WORKBOOK AND INSTRUCTORS GUIDE.

AVAILABILITY: LEIGHTON & KIDD, CONSULTING ENGINEERS, 295 EVANS AVE., BOX 940, STATION U, TORONTO, ONTARIO, CANADA M8Z 5P9

IRIS ACCESSION NUMBER: EW015204

PUBLICATION DATE: 87

TITLE: ENVIRONMENTAL MONITORING, ASSESSMENT, AND MANAGEMENT: THE AGENDA FOR LONG-TERM RESEARCH AND DEVELOPMENT.

PERSONAL AUTHOR: DRAGGAN, SIDNEY; AND OTHERS

DESCRIPTOR: *ENVIRONMENTAL ASSESSMENT; *ENVIRONMENT; *ECOLOGY; *MANAGEMENT; *MONITORING; *PLANNING; *DATABASES; *RISK ASSESSMENT; *RESEARCH NEEDS; *NATURAL RESOURCES

DESCRIPTIVE NOTE: 176P. \$39.95, ISBN 0-275-92336-3

ABSTRACT: THIS PUBLICATION SUGGESTS AN AGNEDA FOR RESEARCH AND DEVELOPMENT RELATED TO THE ENVIRONMENT. INCLUDED ARE SECTIONS ON: (1) DEVELOPMENT OF ENVIRONMENTAL DATABASES AND INVENTORIES; (2) IMPROVING METHODS OF DATA AMALYSIS AND INTERPRETATION OF ENVIRONMENTAL MANAGEMENT PROGRAMS; (3) IMPROVING QUANTITATIVE HEALTH RISK ASSESSMENT TECHNIQUES; (4) LONG-TERM RESEARCH IN ECOLOGICAL MODELS FOR ENVIRONMENTAL MANAGEMENT; (3) ROLE OF INTERDISCIPLINARY ENVIRONMENTAL MANAGEMENT; AND (6) INNOVATIVE ENVIRONMENTAL MANAGEMENT APPROACHES FOR COST-EFFECTIVE CONTROL OF INDUSTRIAL RESIDUALS.

AVAILABILITY: GREENWOOD PRESS, INC., 88 POST ROAD WEST, P.O. BOX 5007, WESTPORT, CT 06881-9990

IRIS ACCESSION NUMBER: EW015205

PUBLICATION DATE: 87

TITLE: ENVIRONMENTAL IMPACTS ON HUMAN HEALTH: THE AGENDA FOR LONG-TERM RESEARCH AND DEVELOPMENT.

PERSONAL AUTHOR: DRAGGAN, SIDNEY; AND OTHERS

DESCRIPTOR: *DISEASES; *ENVIRONMENT; *ENVIRONMENTAL IMPACTS; *HAZARDOUS MATERIALS; *PUBLIC HEALTH; *RESEARCH MEEDS; *MONITORING; *POLLUTION CONTROL; *RISK ASSESSMENT; *TECHNOLOGY; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 264P. \$39.95, ISBN 0-275-92338-X

ABSTRACT: THIS PUBLICATION IS CONCERNED WITH AN AGENDA FOR RESEARCH AND DEVELOPMENT RELATED TO ENVIRONMENTAL IMPACTS ON HEALTH. SECTIONS ARE INCLUDED ON: (1) PRIORITY NEEDS IN DEVELOPMENT OF GENETIC EPIDEMIOLOGY: (2) EFFECTS OF PHYSIOLOGIC AND GENETIC VARIABILITY ON THE DEVELOPMENT

AND EXPRESSION OF POLLUTANT RELATED DISEASES; (3) MOLECULAR EPIDEMIOLOGY; (4) THE VALUE OF MOLECULAR EPIDEMIOLOGY IN QUANTITATIVE RISK ASSESSMENT; (5) PROBLEMS IN DEMONSTRATING DISEASE CAUSATION FOLLOWING MULTIPLE EXPOSURE TO TOXIC OR HAZARDOUS SUBSTANCES; (6) THE VALUE OF HEALTH REGISTRIES IN MONITORING POLLUTANT-RELATED DISEASE; (7) IMPROVED METHODS FOR DISCERNING HEALTH IMPACTS OF CURRENT TECHNOLOGIES; AND (8) IDENTIFICATION AND CONTROL OF HUMAN HEALTH HAZARDS ASSOCIATED WITH CURRENT AND EMERGING BIOTECHNOLOGY.

AVAILABILITY: GREENWOOD PRESS, INC. 88 POST ROAD WEST, P.O. BOX 5007, WESTPORT, CT 06881-9990

IRIS ACCESSION NUMBER: EW015206

PUBLICATION DATE: 87

TITLE: GEOCHEMICAL AND HYDROLIC PROCESSES AND THEIR PROTECTION: THE AGENDA FOR LONG-TERM RESEARCH AND DEVELOPMENT.

PERSONAL AUTHOR: DRAGGAN, SIDNEY; AND OTHERS

DESCRIPTOR: *AIR POLLUTION CONTROL; *HAZARDOUS WASTES; *ENVIRONMENTAL IMPACT; *GROUNDWATER; *GEOCHEMICAL PROCESSES; *HYDROLIC PROCESSES; *LAND; *SOIL; *POLLUTION CONTROL; *WATER POLLUTION CONTROL; *TOXIC SUBSTANCES; *RESEARCH

DESCRIPTIVE NOTE: 244P. \$39.95, ISBN 0-275-92339-8

ABSTRACT: THIS PUBLICATION PRESENTS A LONG-TERM RESEARCH AND DEVELOPMEN) AGENDA RELATED TO GEOCHEMICAL AND HYDROLIC PROCESSES. SECTIONS ARE INCLUDED ON: (1) SURFACE WATER AND GROUNDWATER PROCESSES AND POLLUTION; (2) LAND/SOIL PROCESSES AND POLLUTION; (3) ATMOSPHERIC/OCEANIC PROCESSES AND POLLUTION; AND (4) MULTIMEDIA TOXIC SUBSTANCES/HAZARDOUS WASTE RESEARCH.

AVAILABILITY: GREENWOOD PRESS, INC., 88 POST ROAD WEST, P.O. BOX 5007, WESTPORT, CT 06881-9990

IRIS ACCESSION NUMBER: EW015207

PUBLICATION DATE: 87

TITLE: HAZARDOUS WASTE: CONFRONTING THE CHALLENGE.

PERSONAL AUTHOR: HARRIS, CHRISTOPHER; AND OTHERS

DESCRIPTOR: *COMPLIANCE; *HAZARDOUS WASTES; *HAZARDOUS AND SOLID WASTE AMENDMENTS; *ENVIRONMENTAL IMPACT; *MANAGEMENT; *LEGISLATION; *REGULATIONS; *SOLID WASTES; *POLLUTION CONTROL; *USEPA

DESCRIPTIVE NOTE: 273P. \$37.95, ISBN 0-89930-223-8

ABSTRACT: THIS IS AN ANALYSIS OF THE 1984 HAZARDOUS AND SOLID WASTE AMENDMENTS, THE SUCCESSOR TO THE 1976 RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), AND, PERHAPS, THE MOST IMPORTANT ENVIRONMENTAL LAW OF THE PAST DECADE AND A HALF.

THIS MANUAL INTERPRETS AND EXPLAINS THE AMENDMENTS. AS WELL AS THEIR INTERDED AND UNINTENDED SIDE EFFECTS. IT SHOWS HOW THE NEW LEGISLATION BROADENED THE SIZE OF THE REGULATED COMMUNITY. EXPLAINS THE NEW RESPONSIBILITIES FOR POLLUTERS NOT PREYIOUSLY COVERED BY THE LAW, AND OUTLINES THE NEW, HORE STRINGENT REQUIREMENTS CONCERNING EVERY ASPECT OF HAZARDOUS AND SOLID WASTE MANAGEMENT.

AVAILABILITY: GREENWOOD PRESS, INC., 88 POST ROAD WEST, P.O. BOX 5007, WESTPORT, CT 06881-9990

IRIS ACCESSION NUMBER: EW015208

PUBLICATION DATE: 87

TITLE: TOXIC AND HAZARDOUS MATERIALS: A SOURCEBOOK AND GUIDE TO INFORMATION SOURCES.

PERSONAL AUTHOR: WEBSTER, JAMES K.

DESCRIPTOR: *AIR POLLUTION; *HAZARDOUS MATERIALS; *INFORMATION SOURCES; *ENVIRONMENTAL IMPACT; *LAND POLLUTION; *PUBLIC HEALTH; *TOXIC SUBSTANCES; *REGULATIONS; *WATER POLLUTION

DESCRIPTIVE NOTE: 444P. \$49.95. ISBN 0-313-24575-4

ABSTRACT: THIS PUBLICATION INCLUDES MORE THAN 1,600 SOURCES OF INFORMATION: REFERENCE BOOKS, PERIODICALS, REPORTS, PROCEEDINGS, DATABASES, LIBRARIES, ASSOCIATIONS, RESEARCH CENTERS, AND AUDIOVISUAL MATERIALS. THERE ARE SEPERATELY AUTHORED CHAPTERS ON THE EFFECTS OF HAZARDOUS AND TOXIC MATERIALS ON THE AIR, LAND, WATER, AND HEALTH; ON ACID RAIN; ON THE TRANSPORTATION AND DISPOSAL OF RADIOACTIVE AND MONRADIOACTIVE MATERIALS; ON TESTING AND AMALYSIS; ON SPILLS; AND ON LAWS AND REGULATIONS. THERE IS A TITLE INDEX AND LISTING OF THE ADDRESSES OF CITED PUBLISHERS AND VENDORS.

AVAILABILITY: GREENWOOD PRESS, INC., 88 POST ROAD WEST, P.O. BOX 5007, WESTPORT, CT 06881-9990

IRIS ACCESSION NUMBER: EW015209

PUBLICATION DATE: 88

TITLE: POLLUTION LAW HANDBOOK: A GUIDE TO FEDERAL ENVIRONMENTAL LAWS.

PERSONAL AUTHOR: WOLF, SIDNEY M.

DESCRIPTOR: *AIR POLLUTION: *ENVIRONMENTAL LAWS; *FEDERAL LAWS; *GUIDES; *LAND POLLUTION; *LEGISLATION; *POLLUTION CONTROL; *REGULATIONS; *TOXIC WASTES; *WATER POLLUTION

DESCRIPTIVE NOTE: 296P. \$49.95, ISBN 0-89930-141-X

ABSTRACT: THIS PUBLICATION IS A COMPREHENSIVE YET ACCESSIBLE GUIDE TO EIGHT MAJOR FEDERAL STATUTES CONCERNED WITH CONTROLLING POLLUTION. WRITTEN FOR ATTORNEYS AND THEIR

CORPORATE CLIENTS CONCERNED WITH ENVIRONMENTAL MATTERS. THE HANDGOOK IS DESIGNED TO HELP THE READER COMPREHEND BOTH THE GENERAL INTENT AND THE ESSENTIAL PROVISIONS OF EACH STATUTE. THE EIGHT STATUTES SELECTED FOR INCLUSION ARE THOSE WHICH PROVIDE THE PRINCIPLE AUTHORITY FOR REGULATING AIR, WATER, AND LAND POLLUTION, AND TOXIC WASTE.

AVAILABILITY: GREENWOOD PRESS, INC., 88 POST ROAD WEST, P.O. BOX 5007, WESTPORT, CT 06881-9990

IRIS ACCESSION NUMBER: EW015210

PUBLICATION DATE: APRIL 88

TITLE: A GUIDE TO HAZARDOUS MATERIALS MANAGEMENT: PHYSICAL CHARACTERISTICS, FEDERAL REGULATIONS, AND RESPONSE ALTERNATIVES.

PERSONAL AUTHOR: SCHUMACHER, AILEEN

DESCRIPTOR: *HAZARDOUS MATERIALS; *EMERGENCY RESPONSE; *MANAGEMENT; *POLICIES; *REGULATIONS; *TECHNOLOGY

DESCRIPTIVE NOTE: \$40.00, ISBN 0-89930-255-6

ABSTRACT: THIS BOOK EXPLAINS THE FUNDAMENTAL PRINCIPLES INVOLVED IN HAZARDOUS MATERIALS MANAGEMENT. IT PROVIDES A THOROUGH AND READABLE EXPLANATION OF THE LAWS GOVERNING THE MANAGEMENT OF HAZARDOUS MATERIALS AND POTENTIAL MANAGEMENT RESPONSES, INCLUDING BOTH TECHNICAL AND POLICY-RELATED ALTERNATIVES. INTEGRATED THROUGHOUT THE TEXT ARE DEFINITIONS OF NUMEROUS TECHNICAL AND LEGAL TERMS INVOLVED IN HAZARDOUS MATERIALS MANAGEMENT, AS PERCEIVED BY THE PROFESSIONAL COMMUNITY AND INVOLVED REGULATORY AGENCIES.

AVAILABILITY: GREENWOOD PRESS, INC., 88 POST ROAD WEST, P.O. BOX 5007, WESTPORT, CT 06881-9990

IRIS ACCESSION NUMBER: EW015211

PUBLICATION DATE: 88

TITLE: CURRENT TRENDS IN WATER SUPPLY PLANNING. ISSUES. CONCEPTS, AND RISKS.

PERSONAL AUTHOR: PRASIFKA, DAVID W.

DESCRIPTOR: *COSTS; *FACILITIES; *PLANNING; *WATER RATES; *WATER SUPPLY; *WATER TREATMENT; *WATER NEEDS

DESCRIPTIVE NOTE: 224P. \$32.95

ABSTRACT: THIS PUBLICATION PROVIDES A STRATEGY FOR PREDICTING COMMUNITY WATER DEMANDS, OFFERS CRITERIA FOR DESIGNING WATER SUPPLY FACILITIES THAT MEET COMMUNITY NEEDS AS COST-EFFECTIVELY AS POSSIBLE, AND INCLUDES A PROCEDURE FOR IMPLEMENTING A SELF-SUSTAINING WATER-PRICING POLICY. IT ALSO IDENTIFIES NATURAL AND MAN-MADE HAZARDS TO WATER S'PPLIES AND EVALUATES THEIR SOCIAL AND ECONOMICAL CONSEQUENCES.



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AVAILABILITY: VAN MOSTRAND REINHOLD MAIL ORDER DEPT., P.O. 80X 668, FLORENCE, KENTUCKY 41042-9979

IRIS ACCESSION NUMBER: EW015212

PUBLICATION DATE: 87

TITLE: ACTIVATED SLUDGE.

SLUDGE; "EQUATION NATERIALS; *EQUIPMENT; *ENERGY
*ATERIALS; *OPERATIONS DESCRIPTOR: *ACTIV/TED CONSERVATION; *INSTRUCTIONAL MATERIALS; *OPERATIONS (WASTEWATER); *PROCESS CONTROL; *TROUBLE SHOOTING; *DPERATOR *INSTRUCTIONAL TRAINING: *POSTSECONDARY EDUCATION: *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 182P. MEMBER - \$25.00, NDN-MEMBER -\$33.50; ORDER# MOM9DS

ABSTRACT: THIS MANUAL IS DESIGNED TO GIVE THE OPERATOR A FRAMEWORK FOR DECISION-MAKING BASED ON AN UNDERSTANDING OF THE BIOLOGICAL AND CHEMICAL PRINCIPLES AT WORK AND EXPERIENCES OF THE WRITERS. SECTIONS ARE INCLUDED ON: (1) PROCESS AND EQUIPMENT DESCRIPTIONS; (2) PPCSS CONTROL; (3) ENERGY CONSERVATION; AND (4) TROUBLE SHOOL...G.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION, PUBLICATION ORDER DEPT., 601 WYTHE STREET, ALEXANDRIA, VA 22314-1994

IRIS ACCESSION NUMBER: EW015213

PUBLICATION DATE: 87

TITLE: AMAEROBIC SLUDGE DIGESTION.

DESCRIPTOR: *ANAEROBIC SLUDGE DIGESTION; COSTS; ENERGY CONSERVATION; *INSTRUCTIONAL MATERIALS; MANAGEMENT; *MAINTENANCE: *OPERATIONS (WASTEWATER): *OPERATOR TRAINING: *PROCESS CONTROL: *SLUDGE DIGESTION: SLUDGE DISPOSAL; POSTSECONDARY EDUCATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 118P. MEMBER - \$28.00, NON-MEMBER -\$37.50, ORDER# M0024DS

ABSTRACT: THIS MANUAL WAS WRITTEN TO HELP WASTEWATER TREATMENT PERSONNEL OPERATE AND MAINTAIN ANAEROBIC SLUDGE DIGESTERS. THE CHAPTERS ARE ORGANIZED SO THAT THE MANUAL CAN BE USED AS A GUIDE TO OPERATION AND MAINTENANCE OF AMAEROBIC SLUDGE DIGESTERS.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION, PUBLICATION ORDER DEPT., 601 WYTHE ST., ALEXANDRIA, VA 22314-1994

IRIS ACCESSION NUMBER: EW015214

PUBLICATION DATE: 88

ERIC: INTRODUCTION TO HAZARDOUS SUBSTANCES.

DESCRIPTOR: *AUDIOVISUAL AIDS; *HAZARDOUS *INSTRUCTIONAL MATERIALS: *FLAMMABLE MATERIALS; *INSTRUCTIONAL MATERIALS; *POSTSECONDARY EDUCATION; *RADIDACTIVE MATERIALS; *TOXIC SUBSTANCES; *VIDEOTAPES; *PUBLIC HEALTH; *PUBLIC SAFETY; *ENVIRONMENT; *OCCUPATIONAL SAFETY

DESCRIPTIVE NOTE: VIDEOTAPE, PURCHASE- \$295.00, RENT-\$150.00. UNIT CODE: SPIHS

ABSTRACT: INTRODUCTION TO HAZARDOUS SUBSTANCES IS DESIGNED TO HEIGHTEN EMPLOYEE AWARENESS OF THE DANGERS CONNECTED WITH THREE BASIC CATEGORIES OF HAZARDOUS SUBSTANCES: TOXIC, FLAMMABLE, AND RADIOACTIVE. EXAMPLES OF SUBSTANCES FROM EACH CATEGORY ARE GIVEN, AND THE DIFFERENCE BETWEEN ACUTE AND CHRONIC EFFECTS IS EXPLAINED.

AVAILABILITY: NUS TRAINING CORPORATION, ATTN: CUSTOMER SERVICE, 910 CLOPPER ROAD, GAITHERSBURG, MD 20878-1399

IRIS ACCESSION NUMBER: EW015215

TITLE: I & C SAFETY--THE DIESEL EFFECT, CHLORINE, AMMONIA.

DESCRIPTOR: *AMMONIA: *CHLORINE; *AUDIOVISUAL *INSTRUCTIONAL MATERIALS; *LEAK DETECTION; *MATERIALS HANDLING; *MAINTENANCE; *OCCUPATIONAL SAFETY; *OPERATOR TRAINING; *POSTSECONDARY EDUCATION; *VIDEOTAPES

DESCRIPTIVE NOTE: VIDEOTAPE. PURCHASE- \$295.00, RENT-\$150.00, UNIT CODE: SPDEC

ABSTRACT: WHEN PROPERLY HANDLED CHLORINE AND AMMONIA ARE ASSIRACI: WHEN PROPERTY HANDLED CHILDRANE AND ANNUALA ARE SAFE, USEFUL CHEMICALS. BUT IF A LEAK DOES OCCUR, WILL WORKERS KNOW HOW TO TRACE THE LEAK, MAKE APPROPRIATE REPAIRS, AND PROTECT THEMSELVES IN THE PROCESS? THIS PROGRAM PRESENTS LEAK DETECTION, PROTECTIVE EQUIPMENT USE, AND REPAIR TECHNIQUES ASSOCIATED WITH CHLORINE AND AMMONIA. IT ALSO EXPLAINS THE EXPLOSIVE HAZARDS ASSOCIATED WITH THE DIESEL EFFECT AND HOW TO AVOID THEM.

AVAILABILITY: NUS TRAINING CORPORATION, ATTN: CUSTOMER SERVICE, 910 CLOPPER ROAD, GAITHERSBURG, MD 20878-1399

IRIS ACCESSION NUMBER: EW015216

PUBLICATION DATE: 88

TITLE: INTRODUCTION TO CHEMICAL SAFETY.

DESCRIPTOR: *AUDIOVISUAL AIDS; *CHEMICALS; *HAZAROJUS MATERIALS; *INSTRUCTIONAL MATERIALS; *MATERIALS HANDLING; *OCCUPATIONAL SAFETY; *POSTSECONDARY EDUCATION

DESCRIPTIVE NOTE: VIDEOTAPE PURCHASE- \$495.00. RENT-\$250.00. UNIT CODE: SPICS

A8STRACT: THIS PROGRAM IS DESIGNED TO MAKE VIEWERS AWARE OF TYPES OF HAZARDS, TYPES OF CONTAINER LABELING, EQUIPMENT USED FOR HANDLING CHEMICALS, AND EASILY-ACCESSED SOURCES OF INFORMATION ON SPECIFIC CHEMICALS.

AVAILABILITY: NUS TRAINING CORPORATION, ATTN: CUSTOMER SERVICE, 91D CLOPPER ROAD, GAITHERSBURG, MD 20878-1399

IRIS ACCESSION NUMBER: EW015217

PUBLICATION DATE: 88

TITLE: WASTE MINIMIZATION -- IT'S EVERYONE'S JOB.

DESCRIPTOR: *AUDIOVISUAL AIDS: *INSTRUCTIONAL MATERIALS: *MATERIALS HANDLING; *OCCUPATIONAL SAFETY: *POSTSECONDARY EDUCATION: *WASTE DISPOSAL; *WASTE HANDLING; *WASTE REDUCTION: *VIDEOTAPES

DESCRIPTIVE NOTE: VIDEOTAPE PURCHASE- \$495.00, RENT-\$25D.0D, UNIT CODE: SPWHI

ABSTRACT: KEEPING WASTE TO A MINIMUM NOT ONLY PROTECTS WORKERS AND THE ENVIRONMENT, IT MAKES GOOD BUSINESS SENSE AS WELL. BY ALERTING ALL WORKERS TO THEIR RESPONSIBILITIES FOR MINIMIZING WASTE, COMPANIES CAN REALIZE A SAFER, MORE EFFICIENT OPERATION-ONE WHERE MAZARDOUS WASTE IS MINIMIZED AND ASSOCIATED ACCIDENTS REDUCED. THIS PROGRAM SHOWS WORKERS IN A REAL-LIFE SETTING DOING THEIR PART TO MAXIMIZE SAFETY AND IMPROVE PRODUCTIVITY BY APPLYING PRACTICAL WASTE MINIMIZATION TECHNIQUES.

AVAILABILITY: NUS TRAINING CORPORATION, ATTN: CUSTOMER SERVICE, 91D CLOPPER ROAD, GAITHERSBURG, MD 20878-1399

IRIS ACCESSION NUMBER: EW015218

TITLE: I & C SAFETY--MERCURY, ACIDS, CAUSTICS.

DESCRIPTOR: *AUDIOVISUAL AIDS; *ACIDS; *CAUSTICS; *HAZARDOUS MATERIALS; *INSTRUCTIONAL MATERIALS; *MATERIALS HANDLING; *MERCURY; *FIRST AID; *OCCUPATIONAL SAFETY; *POSTSECONDARY EDUCATION; *VIDEOTAPES

DESCRIPTIVE NOTE: VIDEOTAPE, PURCHASE- \$295.00, RENT-\$15D.0D, UNIT CODE: SPMAC

ABSTRACT: THIS PROGRAM EXPLAINS THE HAZARDS ASSOCIATED WITH MERCURY, ACIDS, AND CAUSTICS AND TECHNIQUES FOR MINIMIZING THESE HAZARDS. THE PROGRAM COVERS SPECIAL PRECAUTIONS FOR DEALING WITH THESE SUBSTANCES, ALONG WITH FIRST-AID TECHNIQUES SHOULD WORKERS BE EXPOSED. THIS PROGRAM IS PRIMARILY AIMED AT I&C TECHNICIANS, BUT ANY WORKER WHO MAY ENCOUNTER THESE HAZARDS WILL BENEFIT FROM VIEWING THIS PRESENTATION.

AVAILABILITY: NUS TRAINING CORPORATION, ATTN: CUSTOMER SERVICE, 910 CLOPPER ROAD, GAITHERSBURG, MD 20878-1399

IRIS ACCESSION NUMBER: EW015219

PUBLICATION DATE: 87

TITLE: SOLID WASTE ACTION GUIDEBOOK.

DESCRIPTOR: *COSTS; *ENVIRONMENT; *MUNICIPAL WASTES; *PUBLIC PARTICIPATION; *SOLID WASTES; *RESOURCE RECOVERY; *WASTE DISPOSAL; *WASTE REDUCTION

DESCRIPTIVE K'TE: \$8.98, ORBER# 47

ABSTRACT: THIS IS A TACTICAL MANUAL ON HOW GRASSROOTS COMMUNITY GROUPS CAN TAKE ACTION TO DEAL WITH MUNICIPAL SOLID WASTE PROBLEMS. THIS GUIDEBOOK SERVES AS A COMPANION VOLUME, A SUPPLEMENT, TO THEIR TECHNICALLY WRITTEN MANUALS ON LANDFILLS, INCINERATORS AND RECYCLING.

AVAILABILITY: CITIZEN'S CLEARINGHOUSE FOR HAZARDOUS WASTES, INC., P.O. BOX 926, ARLINGTON, VA 22216

IRIS ACCESSION NUMBER: EW015220

PUBLICATION DATE: 88

TITLE: DRINKING WATER: AN ENDANGERED RESOURCE.

DESCRIPTOR: *DRINKING WATER; *CONTAMINATION; *PUBLIC HEALTH; *PUBLIC PARTICIPATION; *WATER TREATMENT; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: \$6.95, ORDER# 49

ABSTRACT: THIS REPORT LOOKS AT THE NATIONWIDE CRISIS AFFECTING DRINKING WATER. SOURCES OF DRINKING WATER AND DRINKING WATER CONTAMINATION ARE DETAILED SHOWING PEOPLE STEP-BY-STEP HOW THEY CAN GO ABOUT CHECKING THE SAFETY OF THEIR WATER SUPPLY. THE DOCUMENT ALSO EXPLAINS WHAT PEOPLE CAN DO TO PROTECT DRINKING WATER SUPPLIES AND GET CLEAN ONES WHEN THEY ARE BAD.

AVAILABILITY: CITIZEN'S CLEARINGHOUSE FOR HAZARDOUS WASTES, INC., P.O. BOX 926, ARLINGTON, VA 22216

IRIS ACCESSION NUMBER: EW015221

PUBLICATION DATE: 87

TITLE: RECYCLING...THE ANSWER TO OUR GARBAGE PROBLEM.

DESCRIPTOR: *COSTS; *CONSERVATION; *ENVIRONMENT; *RESOURCE RECOVERY; *RECYCLING; *TECHNOLOGY; *WASTE DISPOSAL; *WASTE HANDLING; *WASTE REDUCTION; *NATURAL RESOURCES

DESCRIPTIVE NOTE: \$8.98, ORDER# 32

ABSTRACT: THIS GUIDEBOOK DETAILS HOW RECYCLING CAN ACHIEVE WASTE REDUCTION LEVELS COMPARABLE TO INCINERATORS (50-65%). CASE STUDIES OF SUCCESSFUL RECYCLING PROGRAMS ARE DESCRIBED (ALONG WITH A DETAILED CHART LISTING PROGRAMS ACROSS THE



COUNTRY). BARRIERS TO RECYCLING AND IDEAS OF WHAT YOU CAN DO TO MAKE RECYCLENG A REALITY IN YOUR COMMUNITY ARE IDENTIFIED. THIS GUIDEBOOK ALSO LOOKS AT EACH SOLID WASTE GIVING UP-T()-DATE SUMMARIES OF HOW AND TO WHAT EXTENT EACH CAM BE RECYCLED. ALSO DISCUSSED ARE WASTE PROCESSING SYSTEMS AND ADVICE ON HOW TO AVOID FALLING PREY TO THE "MAGIC MACHINES." NO DISCUSSION OF RECYCLING WOULD BE COMPLETE WITHOUT ADDRESSING THE GP ING DESIRE BY GOVERNMENT AT ALL LFVELS TO BUILD INCINERATION.

AVAILABILITY: CITIZEN'S CLEARINGHOUSE FOR HAZARDOUS WASTES, INC., P.O. BOX 926, ARLINGTON, VA 22216

IRIS ACCESSION NUMBER: EW015222

PUBLICATION DATE: 87

TITLE: ADVANCED TREATMENT TECHNOLOGIES.

DESCRIPTOR: *ADVANCED TREATMENT TECHNOLOGIES; *COSTS; *HAZARDOUS WASTES; *PERFORMANCE EVALUATION; *TECHNOLOGY; *WASTE DISPOSAL, *WASTE REDUCTION; *WASTE TREATMENT

DESCRIPTIVE NOTE: \$8.95, ORDER# 34

ABSTRACT: SEVENTEEN ADVANCED TREATMENT TECHNOLOGIES THAT CAN PERMANENTLY DESTROY HAZARDOUS WASTE ARE DESCRIBED. DESCRIBED ARE WHAT THESE TECHNOLOGIES ARE CAPABLE OF DOING; WHAT THEIR STRENGTHS AND LIMITATIONS ARE; WHAT THEY COST AND WHAT BARRIERS PREVENT THEM FROM BEING USED. IN ADDITION, MORE THAN 40 TECHNOLOGIES ARE LISTED ALONG WITH ADDRESSES, PHONE NUMBER AND COST OF THE PERSON.

AVAILABILITY: CITIZEN'S CLEARINGHOUSE FOR HAZARDOUS WASTES, INC., P.O. BOX 926, ARLINGTON, VA 22216

IRIS ACCESSION NUMBER: EW015223

PUBLICATION DATE: MARCH 88

TITLE: ADVANCES IN PACKAGE TREATMENT SYSTEMS.

PERSONAL AUTHOR: CHEREMISINOFF, PAUL

DESCRIPTOR: *AIR POLLUTION; *EQUIPMENT; *HAZARDOUS WASTES; *FACILITIES; *PACKAGE TREATMENT SYSTEMS; *TECHNOLOGY; *WASTEWATER; *WASTEWATER TREATMENT; *WASTEWATER TREATMENT; *POLLUTION CONTROL

DESCRIPTIVE NOTE: 40-47P.

ABSTRACT: THIS REPORT HIGHLIGHTS SOME OF THE MANY CURRENTLY AVAILABLE PACKAGE TREATMENT SYSTEMS FOR AIR, WATER, AND HAZARDOUS WASTE MANAGEMENT.

AVAILABILITY: POLLUTION ENGINEERING; V20 N3

RIC*

IRIS ACCESSION NUMBER: EW015224

PUBLICATION DATE: MARCH &B

TITLE: OCPSF EFFLUENT LIMITS, PRETREATMENT, AND MSPS.

PERSONAL AUTHOR: NEWTON, JIM

DESCRIPTOR: *EFFLUENT LIMITS; *NEW SOURCE PERFORMANCE STANDARDS; *PRETREATMENT; *REGULATIONS; *STANDARDS; *USEPA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 48-51P.

ABSTRACT: SUMMARIZED ARE THE EPA REGULATIONS OF NOV. 5, 1987 FOR EFFLUENT LIMITS, PRETREATMENT STANDARDS, AND NEW SOURCE PERFORMANCE STANDARDS. BRIEF IMPACT ANALYSES ARE ALSO PRESENTED.

AVAILABILITY: POLLUTION ENGINEERING: V20 N3

IRIS ACCESSION NUMBER: EW015225

PUBLICATION DATE: MARCH 88

TITLE: LOW-COST, LOW TECHNOLOGY AERASION OF RADON IN DRINKING WATER.

PERSONAL AUTHOR: KINNER, NANCY; AND OTHERS

DESCRIPTOR: *DRINKING #ATER; *CARCINOGENS; *EQUIPMENT; *OPERATIONS (WATER); *PUBLIC HEALTH; *RADON; *WATER TREATMENT

DESCRIPTIVE NOTE: 52-54P.

ABSTRACT: DESCRIBED ARE SIMPLE TREATMENT TECHNIQUES FOR THE REMOVAL OF RADON FROM DRINKING WATER.

AVAILABILITY: POLLUTION ENGINEERING: V20 N3

IRIS ACCESSION NUMPER: EW015226

PUBLICATION DATE: MARCH 88

TITLE: INTRACHANNEL CLARIFIER SOLVES PROBLEMS FOR SMALLER COMMUNITIES.

PERSONAL AUTHOR: MCMAHAN, ANTHONY A.

DESCRIPTOR: *COSTS; *EQUIPMENT; *FACILITIES; *INTERCHANNEL CLARIFIERS; *MAINTENANCE; *OPERATIONS (WASTEWATER); *SMALL FLOWS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 60-62P.

ABSTRACT: DESCRIBED ARE INTERCHANNEL CLARIFERS FOR WASTEWATER TREATMENT FACILITIES FOR SMALL COMMUNITIES. A SYSTEM THAT ELIMINATES PREVIOUSLY REPORTED PROBLEMS IS DISCUSSED. THE SYSTEM COSTS LESS TO BUILD, OPERATE, AND

MAINTAIN. THE SYSTEM ALSO PRODUCES EFFLUENT WITH BETTER CUALITY THAN OTHERS.

AVAILABILITY: POLLUTION ENGINEERING; V2D N3

IRIS ACCESSION NUMBER: EW015228

PUBLICATION DATE: MARCH 88

TITLE: STATE CRITERIA FOR SLUDGE COMPOSTS.

PERSONAL AUTHOR: GOLDSTEIN, NORA

DESCRIPTOR: *COMPOST; *COMPOST DISTRIBUTION; *COMPOST USE; *PATHOGENS; *PUBLIC HEALTH; *REGULATIONS; *STATE REGULATIONS; *RESOURCE RECOVERY; *SEWAGE SLUDGE; *SLUDGE COMPOST

DESCRIPTIVE NOTE: 24-25P.

ABSTRACT: DISCUSSED ARE STATE CRITERIA FOR COMPOST CREATED FROM SEWAGE SLUDGE. MOST STATES HAVE RELIED ON USEPA GUIDANCE. SEVERAL STATES HAVE ALSO RELIED ON OTHER RECENT RESEARCH.

AVAILABILITY: BIOCYCLE: V29 N3

IRIS ACCESSION NUMBER: EW015229

PUBLICATION DATE: MARCH 88

TITLE: CONTAINERS AT CURBSIDE.

PERSONAL AUTHOR: GLEKN, JIM

DESCRIPTOR: *CONTAINERS; GLASS; PAPER; *PUBLIC PARTICIPATION; METALS; *RESOURCE RECOVERY; *SOLID WASTES; *WASTE RECOVERY; *WASTE REDUCTION; *WASTE COLLECTION

DESCRIPTIVE NOTE: 26-28P.

ABSTRACT: PROVIDING CONTAINERS FOR HOMES HELPS TO INCREASE PARTICIPATION IN RECYCLING PROGRAMS. PROGRAMS FOR SEVERAL CITIES ARE DESCRIBED AND COMPANIES THAT PROVIDE CONTAINERS ARE LISTED.

AVAILABILITY: BIDCYCLE: V29 N3

IRIS ACCESSION NUMBER: EW015230

PUBLICATION DATE: MARCH 88

TITLE: EFFICIENCY ON THE PROCESSING LINE.

PERSONAL AUTHOR: SCHEINBERG, ANNE

DESCRIPTOR: *COSTS; *FACILITIES; *OPERATIONS (SOLID WASTES); *RESOURCE RECOVERY; *SOLID WASTES; *WASTE RECOVERY;

*WASTE SEPARATIONS: *NEW JERSEY

DESCRIPTIVE NOTE: 36-37P.

ABSTRACT: DESCRIBED IS A FACILITY FOR SEPARATING COMMINGLED SOLID WASTES. THE FACILITY LOCATED IN NEW JERSEY IS OPERATING EFFECTIVELY.

AVAILABILITY: BIOCYCLE; V29 N3

IRIS ACCESSION NUMBER: EW015231

PUBLICATION DATE: MARCH 88

TITLE: EMPLOYMENT IMPACT OF RECYCLING.

PERSONAL AUTHOR: QUIGLEY, JIM

DESCRIPTOR: *ECONOMICS; *EMPLOYMENT; *EMPLOYMENT TRENDS: *RESOURCE RECOVERY; *RECYCLING; *SOLID WASTES; *WASTE REDUCTION

DESCRIPTIVE NOTE: 44-47P.

ABSTRACT: DISCUSSED IS THE EMPLOYMENT IMPACT OF RECYCLING. RECYCLING HAS BEEN SHOWN TO CREATE JOBS, BUT IT ALSO REDUCES SOME JOB NEEDS IN SOME SECTORS.

AVAILABILITY: BIOCYCLE: V29 N3

IRIS ACCESSION NUMBER: EW015232

PUBLICATION DATE: MARCH 88

TITLE: REVOLUTION IN WASTEWATER TREATMENT.

PERSONAL AUTHOR: GILLETTE, BECKY

DESCRIPTOR: *APPROPRIATE TECHNOLOGY; *ARTIFICIAL WETLANDS; *BIOLOGICAL TREATMENT; *FACILITIES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 48-51P.

ABSTRACT: DISCUSSED ARE SEVERAL COMMUNITIES THAT USE ARTIFICIAL WETLANDS. THE SYSTEM DESIGNS AND MATERIALS USUALLY USED ARE DISCUSSED.

AVAILABILITY: BIOCYCLE: V29 N3

IRIS ACCESSION NUMBER: EW015233

PUBLICATION DATE: MARCH 88

TITLE: SLUDGE INCREASES PULPWOOD PRODUCTION.

PERSONAL AUTHOR: BOCKHEIM, JAMES G.: AND OTHERS

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DESCRIPTOR: *AGRICULTURE; *ECONOMICS: *PLANT GROWTH: *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *SLUDGA,; *SLUDGE APPLICATION; *TREES; *WISCONSIN

DESCRIPTIVE NOTE: 57-59P.

ABSTRACT: DISCUSSED IS RESEARCH ON THE IMPACT OF SLUDGE APPLICATION ON THE NUTRITION AND GROWTH OF RED PINE TREES IN WISCONSIN

AVAILABILITY: BIOCYCLE; V29 N3

IRIS ACCESSION NUMBER: EW015234

PUBLICATION DATE: JAN 88

TITLE: STATISTICAL MODELS FOR WATER MAIN FAILURES. PROJECT SUMMARY.

PERSONAL AUTHOR: MARKS, D.H.; AND OTHERS

DESCRIPTOR: *MAINTENANCE; *MANAGEMENT; *MODELS; *OPERATIONS (WATER); *PLANNING; *PIPES; *PIPE REPAIR; *WATER DISTRIBUTION; *WATER PIPES; *WATER MAINS; *CATER UTILITIES; *CONNECTICUT: *OHIO

DE3CRIPTIVE NOTE: \$18.95, ORDER# PB 88-103 775/AS

ABSTRACT: HODELS TO DESCRIBE PIPE BREAKS AND THE FAILURE PROCESS WERE DEVELOPED FROM ANALYSES OF WATER DISTRIBUTION SYSTEMS IN CONNECTICUT AND OHIO. WATER UTILITIES CAN USE THIS DETAILED MODELING TO FORMULATE IMPROVED STRATEGIES FOR REPAIR, REPLACEMENT, AND REHABILITATION OF WATER PIPES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015235

PUBLICATION DATE: JUNE 86

TITLE: MANUAL FOR THE IDENTIFICATION AND ABATEMENT OF ENVIRONMENTAL LEAD HAZARDS.

PERSONAL AUTHOR: CHADZYNSKI. LAWRENCE

DESCRIPTOR: *ANALYTICAL TECHNIQUES: *HAZARDOUS MATERIALS; *LEAD; "HAZARD ABATEMENT; *PUBLIC HEALTH; *TOXIC SUBSTANCES; *INSTRUCTIONAL MATERIALS

DESCRIPTIVE NOTE: 79P.

Full Text Provided by ERIC

ABSTRACT: THIS MANUAL WAS PREPARED WITH THE INTENT THAT IT BE USED PRIMARILY IN CHILDHOOD LEAD POISONING PREVENTION PROGRAMS AND BY OTHER PUBLIC HEALTH PERSONNEL CHARGED WITH THE INVESTIGATION OF THE ENVIRONMENT OF CHILDREN IDENTIFIED WITH ELEVATED BLOOD LEAD LEVELS. THE DOCUMENT CONTAINS DURES, ACTIVITIES, AND INSTRUCTIONS ON ENVIRONMENTAL HAZARO IDENTIFICATION AND ABATEMENT. 59

AVAILABILITY: DIVISION OF MATERNAL AND CHILD HEALTH. HEALTH RESOURCES AND SERVICES ADMINISTRATION, UNITED STATES PUBLIC **HEALTH SERVICE.**

IRIS ACCESSION NUMBER: EW015236

PUBLICATION DATE: 87

TITLE: NUCLEAR IMPERATIVES AND PUBLIC TRUST.

PERSONAL AUTHOR: CARTER. LUTHER J.

DESCRIPTOR: ENERGY: *HAZARDOUS MATERIALS: *NUCLEAR POWER: *RADIOACTIVE MATERIALS: *POLICIES: *PUBLIC HEALTH: *RISK ASSESSMENT: *RADIOACTIVE WASTES; *WASTE DISPOSAL; *POLLUTION CONTROL; *WORLD PROBLEMS

DESCRIPTIVE NOTE: 473P.

ABSTRACT: THIS BOOK ATTEMPTS TO SORT OUT POLITICAL AND TECHNICAL ISSUES SURROUNDING NUCLEAR POWER AND THE DEMANDS IMPOSED BY THE PUBLIC. THE BOOK IS DIVIDED INTO FOUR PARTS. PART I DOCUMENTS SOURCES OF PUBLIC UNEASE. PART II CONTAINS A DISCUSSION OF THE SEARCH FOR A WASTE POLICY AND PROBLEMS RELATED TO THE ACTIVITY. PART III DEALS WITH THE INTERNATIONAL ASPECTS OF NUCLEAR WASTE DISPOSAL. PART IV IS A SUMMARY AND CONSIDERS WHAT THE AUTHOR BELIEVES IS NEEDED FOR A NEW NUCLEAR WASTE POLICY.

AVAILABILITY: RESOURCES FOR THE FUTURE, 1616 T STREET, N.W., WASHINGTON, D.C. 20009

IRIS ACCESSION NUMBER: EW015237

PUBLICATION DATE: 85

TITLE: LONG TERM EFFECTS OF SEWAGE SLUDGE AND FARM SLURRIES APPLICATIONS.

PERSONAL AUTHOR: WILLIAMS, J.H.; AND OTHERS

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *AGRICULTURE; *FARM SLURRIES; *ENVIRONMENTAL IMPACT; *LAND APPLICATION; *SEWAGE SLUDGE: *WASTE DISPOSAL; *RESGURCE RECOVERY

OESCRIPTIVE NOTE: 235P. \$41.95

ABSTRACT: THIS VOLUME CONSTITUTES THE PROCEEDINGS OF A ROUND-TABLE SEMINAR HELD IN PISA, ITALY (25-27 SEPT. 1984) UNDER THE AUSPICES OF THE COMMITTEE OF THE EUROPEAN COMMUNITIES, DIRECTORATE-GENERAL SCIENCE, RESEARCH AND DEVELOPMENT ENVIRONMENT RESEARCH PROGRAMME. THE 20 PAPERS PRESENTED IN THE VOLUME ARE GROUPED INTO THREE MAIN SECTIONS THAT DEAL IN WITH THE CUMULATIVE AND RESIDUAL EFFECTS OF SLUDGE AND FARM SLURRIES.

AVAILABILITY: ELSEVIER SCIENCE, 52 VANDERBILT AVE., NEW YORK. NY 10017

PUBLICATION DATE: 87

TITLE: GROUNDWATER CONTAMINATION IN THE UNITED STATES.

PERSONAL AUTHOR: PATRICK, R.; AND OTHERS

DESCRIPTOR: *ENVIRONMENTAL IMPACT; *GROUNDWATER; *MANAGEMENT; *PUBLIC HEALTH; *WATER POLLUTION CONTROL; *WATER QUALITY: *WATER SUPPLY

DESCRIPTIVE NOTE: 513P. \$18.95

ABSTRACT: THIS SECOND EDITION UPDATES STATISTICS PRESENTED IN THE FIRST AND MORE FULLY DESCRIBES MANAGEMENT STRATEGIES OF AQUIFERS BY STATES AND CONTAMINATION-CONTROL LAWS. CHARACTERISTICS OF GROUNDWATER ARE DISCUSSED AS WELL AS AQUIFER TYPES, FLOW FALTORS, AND NATURAL CHARACTERISTICS. TYPES AND EXTENT OF GROUNDWATER CONTAMINANTS ARE DETAILED, AND SOME ATTENTION IS FOCUSED ON HUMAN HEALTH AND ENVIRONMENTAL IMPACTS.

AVAILABILITY: UNIVERSITY OF PENNSYLVANIA PRESS. PHILADELPHIA, PA

IRIS ACCESSION NUMBER: EW015240

PUBLICATION DATE: MR/AP 88

TITLE: SURFACE AND DOWNHOLE GEOPHYSICAL TECHNIQUES FOR HAZARDOUS WASTE SITE INVESTIGATION.

PERSONAL AUTHOR: BENSON, RICHARD C.

DESCRIPTOR: *GEOPHYSICAL TECHNIQUES; *HAZARDOUS WASTES; *HONITORING; *POLLUTION CONTROL; *SITE INVESTIGATIONS; SYSTEMS APPROACH; ELECTROMAGNETIC TECHNIQUES; RESISTIVITY TECHNIQUES; SEISMIC TECHNIQUES; METAL DETECTION; ORGANIC VAPOR ANALYSIS; RISK ASSESSMENT

DESCRIPTIVE NOTE: 7-18, 53-60P.

ABSTRACT: DESCRIBED IS AN INTEGRATED SYSTEMS APPROACH FOR HAZARDOUS WASTE SITE INVESTIGATION THAT MAKES USE OF GEOPHYSICAL AS WELL AS OTHER TECHNIQUES. THESE TECHNIQUES PROVIDE A COST-EFFECTIVE WAY TO OBTAIN SUBSURFACE CONDITIONS ON THE ENTIRE SITE.

AVAILABILITY: CONTROL HAZARDOUS MATERIALS: V1 N2

IRIS ACCESSION NUMBER: EW015241

PUBLICATION DATE: MR/AP 88

TITLE: AN EXPERT SYSTEM FOR HAZARDOUS WASTE SITE CLEANUP. PART 2.

PERSONAL AUTHOR. SHIH, CHIA SHUN; BERNARD, HAL.

DESCRIPTOR: *DECISION MAKING; *DECISION TREES; *DIOXIN; *EXPERT SYSTEMS; *HAZARDOUS WASTES; *MANAGEMENT; *RISK ASSESSMENT; *POLLUTION CONTROL

DESCRIPTIVE NOTE: 19-28, 62-69P.

ABSTRACT: THIS ARTICLE, PART TWO IN A TWO-PART SERIES, PRESENTS SYSTEMATIC METHODOLIGIES OF THE RISK ESTIMATION AND RISK ACCEPTABILITY ANALYSIS ADAPTED FOR RIDAM (RISK/DECISION ANALYSIS MODULE). THE PRIMARY MODULE FOR THE HAZARDOUS WASTES AND MANAGEMENT EXPERT SYSTEM.

AVA LABILITY: CONTROL HAZARDOUS MATERIALS; V1 N2

IRIS ACCESSION NUMBER: EW015242

PUBLICATION DATE: MR/AP 88

TITLE: THE FATE OF HAZARDOUS MATERIALS IN SOIL. (WHAT EVERY GEOLOGIST AND HYDROGEOLOGIST SHOULD KNOW). PART I.

PERSONAL AUTHOR: DRAGUN, JAMES

DESCRIPTOR: *INORGANIC SOIL COMPONENTS; *ORGANIC SOIL COMPONENTS; *SOILS; *SOIL CLASSIFICATION SYSTEMS

DESCRIPTIVE NOTE: 31-43, 70-78P.

ABSTRACT: THIS ARTICLE IS PART 1 OF A THREE PART SERIES. PART 1 DESCRIBES THE COMPOSITION OF SOIL INCLUDING COMPONENTS AND CLASSIFICATION SYSTEMS.

AVAILABILITY: CONTROL HAZARDOUS MATERIALS; V1 N2

IRIS ACCESSION NUMBER: EW015244

PUBLICATION DATE: FEB 88

TITLE: FOCUS ON HAZARDOUS MATERIALS: METHYL ETHYL KETONE (ALSO KNOWN AS MEK, ETHYL METHYL KETONE).

DESCRIPTOR: *ACCIDENT PREVENTION; *FIRE HAZARDS; *HAZARDOUS MATERIALS; *HEALTH HAZARDS; *METHYL ETHYL KETONE; *EMERGENCY RESPONSE; *PUBLIC HEALTH

DESCRIPTIVE NOTE: 23-24P.

ABSTRACT: DESCRIBED ARE CHARACTERISTICS OF METHYL ETHYL KETONE, A COMMON SOLVENT USED IN MANY INDUSTRIAL APPLICATIONS. INFORMATION IS INCLUDED ON HEALTH HAZARDS, FIRE HAZARDS, AND EXPOSURE DANGERS.

AVAILABILITY: INDUSTRIAL FIRE WORLD; V3 N1

PUBLICATION DATE: MR/AP 88

TITLE: HAZARDOUS MATERIALS HANDLING - TRAINING REQUIRED UNDER THE OSHA/SARA REGULATIONS.

PF^<ONAL AUTHOR: SHORT, KAREN

DESCRIPTOR: *OSHA; *HAZARDOUS MATERIALS; *HAZARDOUS MATERIALS HANDLING; *REGULATIONS; *TRAINING; *SUPERFUND

DESCRIPTIVE NOTE: 268-271P.

ABSTRACT: NEW TRAINING REQUIREMENTS FOR WORKERS AT MAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE PERSONNEL ARE IN THE PROCESS OF BEING FINALIZED. THIS ARTICLE ADDRESSES SOME REQUIREMENTS AND FOCUS SPECIFICALLY ON THE TRAINING REQUIREMENTS AND HOW THEY APPLY TO DIFFERENT CATEGORIES OF WORKERS.

AVAILABILITY: JOURNAL OF ENVIRINMENTAL HEALTH; V50 N5

IRIS ACCESSION NUMBER: EW015246

PUBLICATION DATE: MR/AP 88

TITLE: WELL CONTAMINATION BY WATER SOFTENER REGENERATION DISCHARGE WATER.

PERSONAL AUTHOR: ROWE, GARY W.

DESCRIPTOR: *CONTAMINATION: *CHLORIDES; *GROUNDWATER; *RESEARCH REPORTS; *SODIUM; *WATER SOFTENERS; *WATER POLLUTION CONTROL; *WATER WELLS; WATER SUPPLY; *WATER QUALITY

DESCRIPTIVE NOTE: 272-276P.

ABSTRACT: THIS STUDY FOCUSED ON THREE PRIVATE WELLS THAT WERE FOUND TO HAVE ELEVATED LEVELS OF SODIUM AND CHLORIDE. THE CONTAMINATION WAS THOUGHT TO BE DUE TO DISCHARGE FROM WATER SOFTENERS. RECOMMENDATIONS FOR IMPROVING THE SITUATION ARE INCLUDED.

AVAILABILITY: JOURNAL OF ENVIRONMENTAL HEALTH: V50 N5

IRIS ACCESSION NUMBER: EW015251

PUBLICATION DATE: MAR 86

TITLE: THE BIOCYCLE GUIDE TO IN-VESSEL COMPOSTING.

DESCRIPTOR: *COMPOSTING; *COMPOST; *DESIGN: *ECONOMICS; *GUIDES: *DIRECTORIES; *FACILITIES; *IN-VESSEL COMPOSTING; *MARKETING; *RESOURCE RECOVERY; *RESEARCH REPORTS; *SEWAGE SLUDGE; *WASTE DISPOSAL; *SOLID WASTES

ERIC IPTIVE NOTE: 208P. \$44.95

ABSTRACT: THIS GUIDE PRESENTS COMPREHENSIVE DATA ON THE RATIONALE, DESIGN, SELECTION CRITERIA, AND OPERATION OF INVESSEL COMPOSTING FACILITIES. INCLUDED ARE DESCRIPTIONS OF FACILITIES IN THE UNITED STATES AS WELL AS OVERSEAS. CHAPTERS CONSIDER THE APPLICATION OF IN-VESSEL SYSTEMS TO MUNICIPAL SOLID WASTE AS WELL AS SLUDGE. THE CRITICAL ISSUE OF PUBLIC ACCEPTANCE IS DISCUSSED AS ARE EXPERIENCES IN MARKETING THE FINISHED COMPOST. RESEARCH FINDINGS ARE INCLUDED, AND THE APPENDIX PROVIDES A DIRECTORY OF SUPPLIERS AND FACILITIES.

AVAILABILITY: THE JG PRESS, INC., BOX 351, EMMAUS, PA 18049

IRIS ACCESSION NUMBER: EW015252

PUBLICATION DATE: SEP 87

TITLE: ANALYTICAL LABORATORY GUIDEBOOK FOR ENVIRONMENTAL PROFESSIONALS.

DESCRIPTOR: *ANALYTICAL TECHNIQUES: *ENVIRONMENTAL STUDIES; *EQUIPMENT: *GUIDEBOOKS: *LABORATORY PROCEDURES; *LABORATORIES: *REGULATIONS; *SAMPLING

DESCRIPTIVE NOTE: 175P. <165.00

ABSTRACT: THIS GUIDEBOOK PROVICES INFORMATION ON A VARIETY OF TOPICS RELATED TO ANALYTICAL LABORATORIES INCLUDING REGULATIONS, CONTAINERS, HOLDING TIMES, APPROVED PROCEDURES, AND ANALYTICAL METHODS.

AVAILABILITY: ROSE ANN COCHRAN, NUS CORPORATION, PARK WEST TWO, PITTSBURGH, PA 15275

IRIS ACCESSION NUMBER: EW015254

PUBLICATION DATE: MAR 88

TITLE: THE CLEAN WATER ACT AS AMENDED BY THE WATER QUALITY ACT OF 1987. PUBLIC LAW 100-4.

DESCRIPTOR: *AMENDMENTS; *CLEAN WATER ACT; *CONSTRUCTION; *FACILITIES; ENFORCEMENT; *LICENSES; *RESEARCH; *REGULATIONS; *STANDAROS; *PERMITS; *FUNDING; *PUBLIC LAW 100-4; *FEDERAL ROLE; *STATE ROLE

DESCRIPTIVE NOTE: 218P. PRICE: \$6.00 ORDER NO.: 552-070-03685-7

ABSTRACT: THIS DOCUMENT PRESENTS THE CLEAN WATER ACT AS AMENDED BY THE WATER QUALITY ACT OF 1987, PUBLIC LAW 100-4. THE FIRST PART PRESENTS RESEARCH AND RELATED PROGRAMS. PART II PRESENTS INFORMATION ON GRANTS FOR CONSTRUCTION OF TREATMENT WORKS. PART III PRESENTS STANDARDS AND ENFORCEMENT. PART IV PRESENTS PERMITS AND LICENSES AND PART V CONTAINS INFORMATION ON GENERAL PROVISIONS. PART VI PRESENTS INFORMATION ON STATE WATER POLLUTION CONTROL REVOLVING FUNDS.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, CONGRESSIONAL

SALES OFFICE, US. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402

IRIS ACCESSION NUMBER: EW015255

(1

PUBLICATION DATE: NOV 87

TITLE: FEASIBILITY OF TAX INCENTIVES FOR PURCHASES OF RECYCLING EQUIPMENT OR RECYCLED PRODUCTS. FINAL REPORT.

PERSONAL AUTHOR: SELLERS, JERE

DESCRIPTOR: *CONSERVATION; *MARKETING; *ECONOMICS; *ILLINOIS; *RECYCLING; *RESOURCE RECOVERY; *SOLID WASTES; *POLICIES; *TAX INCENTIVES; *WASTE DISPOSAL; *WASTE MANAGEMENT; OIL

DESCRIPTIVE MOTE: 170P.

ABSTRACT: THIS STUDY WAS UNDERTAKEN IN RESPONSE TO QUESTIONS RAISED BY THE ILLINOIS SOLID WASTE MANAGEMENT ACT PASSED IN 1986. INVESTIGATED WERE TAX INCENTIVE OPTIONS TO SEE IF TAX INCENTIVES WERE A VIABLE MECHANISM FOR REDUCING THE DISPOSAL OF MATERIALS THROUGH INCREASED RECYCLING. SEVEN CONCLUSIONS ARE PRESENTED. POSSIBLE MARKETS, INCENTIVES, AND IMPACTS OF RECYCLING ARE CONSIDERED.

AVAILABILITY: FRANKLIN ASSOCIATES, LTD., 4121 WEST 83RD STREET, SUITE 108, PRAIRIE VILLAGE, KS 66208

IRIS ACCESSION NUMBER: EW015256

PUBLICATION DATE: 88

TITLE: HEALTH RISKS OF RADON AND OTHER INTERNALLY DEPOSITED ALPHA - EMITTERS (BEIR IV).

DESCRIPTOR: *CANCER; *PUBLIC HEALTH; *RADIOACTIVE MATERIALS: *RADIATION: *RADON; *RISK ASSESSMENT; *RESEARCH

DESCRIPTIVE NOTE: 602P. PAPERBACK: \$32.50 CLOTHBOUND: \$42.50 ISBN #: 0-309-03789-1

ABSTRACT: THIS REPORT ESTIMATES THE RISK OF LUNG CANCER FROM RADON AND EXAMINES HEALTH EFFECTS OF POLONIUM, RADIUM, THORIUM, URANIUM, AND TRANSURANIC ELEMENTS. THE REPORT ADDRESSES HEALTH EFFECTS ONLY; A LARGE PORTION OF THE REPORT DISCUSSES RADON AND ITS EFFECTS.

AVAILABILITY: NATIONAL ACADEMY PRESS, 2101 CONSTITUTION AVE., N.W., WASHINGTON, D.C. 20428

IRIS ACCESSION NUMBER: EW015257

PUBLICATION DATE: 88

ERIC

TITLE: PREVENTION OF ACUTE CHEMICAL POISONINGS: HIGH - RISK STANCES ENVIRONMENTAL HEALTH #28.

DESCRIPTOR: *ACCIDENT PREVENTION; *CHEMICALS; *CASE STUDIES; *HAZARDOUS MATERIALS; *POISONS; *RECOMMENDATIONS; *RISK ASSESSMENT; *PUBLIC HEALTH; *TOXIC SUBSTANCES; *POISON PREVENTION PROGRAMS; *WORLD PROBLEMS; *OCCUPATIONAL HEALTH

DESCRIPTIVE NOTE: 50P.

ABSTRACT: THIS PUBLICATION WAS PRODUCED BY A WORKING GROUP OF THE WORLD HEALTH ORGANIZATION. THE MAIN TASKS OF THE GROUP WERE TO DEVELOP A METHODOLOGY FOR IDENTIFYING AND PREDICTING THE CIRCUMSTANCES UNDER WHICH ACUTE POISONINGS MAY OCCUR AND TO POINT OUT THE AVAILABLE OPTIONS FOR PREVENTING ACUTE POISONINGS BY IDENTIFYING THE ROLE OF VARIOUS PARTNERS IN UNDERTAKING PREVENTIVE MEASURES. SECTIONS ARE INCLUDED ON THE FOLLOWING TOPICS: (1) HIGH-RISK CIRCUMSTANCES- IDENTIFICATION AND CONSIDERATIONS; (2) OPTIONS FOR PREVENTING ACUTE POISONINGS AND ROLES OF VARIOUS PARTNERS; (3) MEASURES FOR PREVENTION; (4) ROLE OF VARIOUS PARTNERS; (1) IMPLEMENTING POISON PREVENTION PROGRAMS; AND (5) CONCLUSIONS AND RECOMMENDATIONS.

AVAILABILITY: ENVIRONMENTAL HEALTH SERVICE, WHO REGIONAL OFFICE FOR EUROPE, SCHERFIGSVEJ 8, DK-2100 COPENHAGEN, DENMARK

IRIS ACCESSION NUMBER: EW015258

PUBLICATION DATE: 88

TITLE: PCBS, PCDDS, AND PCDFS IN BREAST MILK: ASSESSMENT OF HEALTH RISKS. ENVIRONMENTAL HEALTH #29.

DESCRIPTOR: *BREAST-FEEDING: *CHEMICALS: *CONTAMINATION: *HAZARDOUS MATERIALS; *HUMAN MILK; *PCBS; *PCDDS: *PCDFS; *PUBLIC HEALTH; *RECOMMENDATIONS; *WORLD PROBLEMS; *POLLUTION CONTROL; *WORLD HEALTH ORGANIZATION

DESCRIPTIVE NOTE: 125P.

ABSTRACT: THIS PUBLICATION PRESENTS DATA AND RECOMMENDATIONS COMPILED BY A WORKING GROUP OF THE WORLD HEALTH ORGANIZATION. THE EVALUATION PRESENTED WAS BASED ON AVAILABLE SCIENTIFIC DATA. THE WORKING GROUP CONCLUDED THAT CURRENT LEVELS OF THE CHEMICALS IN HUMAN MILK DID NOT JUSTIFY LIMITING BREAST-FEEDING.

AVAILABILITY: ENVIRONMENTAL HEALTH SERVICE, WHO REGIONAL OFFICE FOR EUROPE, SCHERFIGSVEJ 8, DK-2100 COPENHAGEN, DENMARK

IRIS ACCESSION NUMBER: EW015259

PUBLICATION DATE: 87

TITLE: OCCUPATIONAL AND ENVIRONMENTAL CHEMICAL HAZARDS.

PERSONAL AUTHOR: FOA, VITO; AND OTHERS

DESCRIPTOR: *CONFERENCE PROCEEDINGS: *CHEMICALS; *ENVIRONMENTAL MEDICINE; *HAZARDOUS MATERIALS; *MEDICINE;

*PUBLIC HEALTH; *TOXIC SUBSTANCES; *ANALYTICAL TECHNIQUES; *TOXIC EFFECTS: *RESEARCH

DESCRIPTIVE NOTE: 558P. \$79.95

ABSTRACT: THIS BOOK CONTAINS THE PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON BIOCHEMICAL AND CELLULAR STUDIES OF HUMAN TOXICITY IN OCCUPATIONAL AND ENVIRONMENTAL MEDICINE HELD IN MILAN, ITALY, JUNE 1986. THE PROCEEDINGS ARE DIVIDED INTO AN INTRODUCTORY SECTION DEALING WITH GENERAL CONCEPTS, EMPHASIZING VALIDATION AND USER INTERPRETATION OF TESTS. THIS IS FOLLOWED BY DISCUSSIONS OF MOLECULAR TARGETS AND MECHANISMS OF ACTION OF MANY ENVIRONMENTAL AND OCCUPATIONAL CHEMICALS, AND THE DEVELOPMENT OF KNOWLEDGE ON BIOCHEMICAL CHANGES TO THOSE EXPOSED TO A VARIETY OF ENVIRONMENTAL OR OCCUPATIONAL OF THE BOOK DEALS EXTENSIVELY AND THE OCCUPATIONAL CHEMICALS. THE BOOK DEALS EXTENSIVELY WITH THE MEW INDICATORS THAT ARE AVAILABLE IN AREAS SUCH AS LIVER TOXICITY, NEPHROTOXICITY, GENOTOXICITY, AND NERVOUS SYSTEM TOXICITY, AS WELL AS THE MEASUREMENT OF TOXIC SUBSTANCES IN HUMAN TISSUES. EACH SECTION COVERS AN ORGAN SYSTEM ON SPECIFIC TOXIC EFFECTS WITH RESPECT TO CURRENT KNOWLEDGE AND THE VALIDITY OF THE ANALYTICAL METHODS INVOLVED. PARTICULAR EMPHASIS IS GIVEN TO THE ISSUES CONCERNING INTERPRETATION OF RESULTS AND THE AREAS OF FUTURE RESEARCH.

AVAILABILITY: JOHN WILEY & SONS, INC., 605 THIRD AVENUE. NEW YORK. NY 10158

IRIS ACCESSION NUMBER: EW015260

PUBLICATION DATE: 87

TITLE: SAFEGUARDING THE WORLD'S WATER. UNEP ENVIRONMENT BRIEF NO. 6.

DESCRIPTOR: *CLIMATE; *DRINKING WATER; *ENVIRONMENT; *ECOLOGY; *GLOBAL APPROACH; *NATURAL RESOURCES; *WATER RESOURCES; *WATER QUALITY; *WATER SUPPLY; *MANAGEMENT; *INDUSTRY; *UNITED NATIONS ENVIRONMENT PROGRAM

DESCRIPTIVE NOTE: 8P.

ABSTRACT: TWO THINGS MAKE WATER A UNIQUE NATURAL RESOURCE: (1) WATER IS ESSENTIAL FOR HUMAN SURVIVAL; AND (2) THE TOTAL AMOUNT OF WATER IN THE WORLD IS CONSTANT. THIS DOCUMENT FOCUSES ON THE INCREASINGLY DIFFICULT TASK OF SATISFYING THE COLLECTIVE THIRST OF PEOPLE, INDUSTRY, AND AGRICULTURE WITHOUT DAMAGING THE WORLD'S LIMITED RESOURCES OF FRESH WATER. IT PRESENTS A SET OF KEY FACTS REGARDING THE PLANET'S FRESH WATER SUPPLIES AND SUMMARIZES WHAT THE UNITED NATIONS ENVIRONMENT PROGRAM (UNEP) HAS BEEN DOING TO DEAL WITH THIS PROBLEM SINCE THE UN CONFERENCE ON THE HUMAN ENVIRONMENT IN 1972. THE ENVIRONMENTALLY SOUND MANAGEMENT OF INLAND WATER RESOURCES (EMINWA) PROGRAM IS DESCRIBED AND EMINWA'S ACTION PLAN FOR THE ZAMBEZI RIVER IS DISCUSSED. THE PROBLEMS OF DROUGHT AND DESERTIFICATION ARE CONSIDERED.

AVAILABILITY: UNEP, P.O. BOX 30552, NAIROBI, KENYA.

IRIS ACCESSION NUMBER: EW015261

PUBLICATION DATE: NOV 87

TITLE: WASTES FROM WATER TREATMENT PLANTS: LITERATURE REVIEW, RESULTS OF AN ILLINOIS SURVEY AND EFFECTS OF ALUM SLUDGE APPLICATION.

PERSONAL AUTHOR: LIN, S.D.; GREEN, C.D.

DESCRIPTOR: *AGRICULTURE; *ALUM SLUDGE; *ILLINGIS; *LAND APPLICATION; LITERATURE REVIEWS; SURVEYS; SLUDGE; *WATER TREATMENT; *WASTE DISPOSAL; PUBLIC HEALTH; RESOURCE RECOVERY; *RISK ASSESSMENT

DESCRIPTIVE NOTE: 192P.

ABSTRACT: THE OBJECTIVES OF THIS STUDY WERE TO UPDATE INFORMATION ON THE CHARACTERISTICS AND MANAGEMENT OF WASTES FROM WATER TREATMENT PLANTS AND TO ASSESS THE BENEFITS AND RISKS OF ALUM SLUDGE APPLICATION TO CROPLAND. THE REPORT HAS THREE MAJOR SECTIONS: (1) A LITERATURE REVIEW: (2) A SUMMARY OF RESULTS OF A SURVEY OF ILLINOIS WATER FLANT WASTES; AND (3) A DISCUSSION OF FINDINGS FROM A STUDY OF ALUM SLUDGE FOR AGRICULTURAL USES. IT WAS CONCLUDED THAT THE APPLICATION OF ALUM SLUDGE TO FARMLAND HAD NEITHER BENEFICIAL NOR ADVERSE EFFECTS ON SOILS AND CROPS.

AVAILABILITY: ILLINOIS STATE WATER STRVEY, WATER QUALITY SECTION, P.O. BOX 697, PEORIA, IL 61652

IPIS ACCESSION NUMBER: EW015262

PUBLICATION DATE: B7

TITLE: MUNICIPAL SEWAGE TREATMENT PLANT SLUDGE MAMAGEMENT -1987. PROCEEDINGS OF THE NATIONAL CONFERENCE.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *COSTS: *EQUIPMENT: *MANAGEMENT: *OPERATIONS (WASTEWATER): *SLUDGE MANAGEMENT: *REGULATIONS: *SLUDGE DISPOSAL; *WASTEWATER TREATMENT; *LAND APPLICATION: *PUBLIC HEALTH; *COMPOSTING

DESCRIPTIVE NOTE: 286P. SOFTBOUND: \$40.00 ISBN: 0-944989-44-6 ORDER NO.: 030087

ABSTRACT: THIS IS THE PROCEEDINGS OF A NATIONAL CONFERENCE. CONTENTS INCLUDE OVER 50 SIGNIFICANT PAPERS ON STATE RULES AND REGULATIONS IMPACTING ON LAND APPLICATION, PRIVATE ENTREPRENEURIAL OPERATION OF PREVIOUS POTWS, SLUDGE DEWATERING TECHNOLOGY AND EFFECTS ON ECONOMICS OF LAND DISPOSAL, COMPOSTING OF SLUDGE (BOTH IN-VESSEL PLANTS AND ON-LAND OPERATIONS), LAND APPLICATION OF SLUDGES, ENERGY AND PRODUCT RECOVERY, HEALTH EFFECTS, AND HOW POTWS INTEGRATE AND MANIPULATE THEIR INDIVIDUAL SLUDGE MANAGEMENT TECHNIQUES TO MINIMIZE COSTS.

AVAILABILITY: HMCRI, PUBLICATIONS DEPT., 9300 COLUMBIA BLVD., SILVER SPRING, MD 20910-1702

PUBLICATION DATE: 87

TITLE: SUPERFUND '87. PROCEEDINGS OF THE 8TH NATIONAL CONFERENCE.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *HEALTH ASSESSMENT; *MONITORING; *POLICIES; *SITE REMEDIATION; *SUPERFUND; *WASTE STORAGE; *WASTE DISPOSAL; *WASTE SITES; *POLLITION CONTROL; *HAZARDOUS WASTES; *TOXIC SUBSTANCES; *COSTS; *ECONOMICS

DESCRIPTIVE NOTE: 562P. SOFTBOUND: \$44.00 ISBN: 0-944989-51-9 ORDER NO.: 010087

ABSTRACT: THIS PUBLICATION CONTAINS MORE THAN 115 PAPERS AND SEMINAR OUTLINES EMPHASIZING THE LATEST DEVELOPMENTS AND CUMULATIVE KNOWLEDGE GAINED FROM THE SPECTRUM OF SUPERFUND ACTIVITIES. TOPICS COVERED INCLUDE: EPA POLICY PAPERS AND GUIDELINES; LIABIL'TY; POLICY ASSESSMENT; SAMPLING AND MONITORING; FIELD SCREENING; HEALTH ASSESSMENT; TRANSPORTATION MODELLING; CONTAMINATED AQUIFER CONTROL; SITE REMEDIATION; RAD AND MIXED WASTES; INCINERATION; COSTS AND ECONOMICS; AND DISPOSAL/STORAGE. INCLUDES CUMULATIVE AUTHOR AND SUBJECT INDICES.

AVAILABILITY: HMCRI, PUBLICATIONS DEPT., 9300 COLUMBIA BLVD., SILVER SPRING, MD 20910-1702

IRIS ACCESSION NUMBER: EW015264

FUBLICATION DATE: 88

TITLE: SITE CLEAN - UP BY INCINERATION.

PERSONAL AUTHOR: BRUNNER, CALVIN R.

DESCRIPTOR: AIR POLLUTION CONTROL; *HAZARDOUS WASTES; EQUIPMENT; *INCINERATION: *REGULATIONS; *TECHNOLOGY; *TOXIC WASTES; *WASTE DISPOSAL; *POLLUTION CONTROL

DESCRIPTIVE NOTE: 330P. CASEBOUND: \$55.00 ISBN: 0-94489-80-2 ORDER NO.: 128801

ABSTRACT: THIS TEXT PROVIDES A PICTURE OF THE STATE-OFINC-ART FOR ON-SITE THERMAL TREATMENT OF HAZARDOUS AND TOXIC
WISTE SITES. IT ADDRESSES BOTH REGULATORY ISSUES AND THE
VARIED TYPES OF TECHNOLOGY IN USE TODAY. ON THE PRACTICAL
SIDE, IT PRESENTS TECHNIQUES TO SIZE EQUIPMENT AND DEVELOP
OPERATING PARAMETERS. AN APPENDIX AND A GLOSSARY SUPPLEMENT
THE TEXT. CHAPTER CONTENTS INCLUDE: HAZARDOUS AND TOXIC
WASTES DISPOSAL PERMITTING REQUIREMENTS; CERLA; THE FEED
STREAM; EXISTING TECHNOLOGIES; AIR EMISSIONS GENERATION AND
CONTROL; CASE STUDIES; ROTARY KILN INCINERATOR CALCULATIONS;
AND INCINERATOR SYSTEM CALCULATIONS.

AVAILABILITY: HAZARDOUS MATERIALS CONTROL RESEARCH INSTITUTE, PUBLICATIONS DEPT., 9300 COLUMBIA BL:D., SILVER S: RING, MD 20910-1702

IRIS ACCESSION NUMBER: EW015265

PUBLICATION DATE: 88

TITLE: THE SOIL CHEMISTRY OF HAZARDOUS MATERIALS

PERSONAL AUTHOR: DRAGUN, JAMES

DESCRIPTOR: *CHEMISTRY; *GROUNDWATER; *HAZARDOUS MATERIALS; *ORGANIC CHEMICALS; *MODELS; *SOILS; *SOIL CHEMISTRY; *POLLUTION; *POLLUTION CONTROL

DESCRIPTIME NOTE: 350P. CASEBOUND: \$65.00 ISBN: 0-944989-79-9 ORDER NO.: 128701

ABSTRACT: THIS BOOK CONTAINS INFORMATION ON: (1) BASIC SOIL CHEMISTRY PRINCIPLES AND THE BEHAVIOR OF A WIDE VARIETY OF HAZARDOUS MATERIALS IN SOIL AND GROUNDWATER, INCLUDING TOXIC, CORROSIVE, IGNITABLE, FLAMMABLE, RADIDACTIVE WATER AND ETIOLOGICAL AGENTS:; (2) ORGANIC AND INORGANIC HAZARDOUS MATERIALS. BULK HAZARDOUS MATERIALS AND MATERIALS PRESENT IN DILUTE CONCENTRATIONS IN AQUEOUS AND ORGANIC SOLVENTS; (3) THE IMPORTANCE OF CHEMICAL STRUCTURE AND ITS EFFECTS ON THE BEHAVIOR OF CHEMICALS IN SOIL AND GROUNDWATER; (4) MANY PUBLISHED, SIMPLE AND RELATIVELY UNCOMPLICATED MATH MODELS THAT PROVIDE GENERAL ESTIMATIONS OF CHEMICAL MIGRATION AND DEGRADATION IN SOIL AND GROUNDWATER; AND (5) COMMONLY HELD MISCONCEPTIONS AND MISAPPLICATIONS OF VARIOUS SOIL CHEMISTRY PRINCIPLES (OVER 125 COMMON MISCONCEPTIONS OF BASIC PRINCIPLES ARE DISCUSSED).

AVAILABILITY: HMCRI, PUBLICATIONS DEPT., 9300 COLUMBIA BLVD., SILVER SPRING, MD 20910-1702

IRIS ACCESSION NUMBER: EW015266

PUBLICATION DATE: MAR 88

TITLE: IDENTIFYING AND REGULATING CARCINOGENS.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CARCINOGENS; *CHEMICALS; *FEDERAL PROGRAMS; *POLICIES; *REGULATIONS; *PUBLIC HEALTH; *TOXICOLOGY; *RISK ASSESSMENT

DESCRIPTIVE NOTE: 249P. PRICE: \$49.95 ISBN: 0-87371-152-1

ABSTRACT: THIS BOOK DESCRIBES POLICIES ISSUED BY FEDERAL AGENCIES COVERING IDENTIFICATION, ASSESSMENT, AND REGULATION OF CARCENOGENIC CHEMICALS. MAJOR SECTIONS INCLUDE: (1) INTRODUCTION AND SUMMARY; (2) POLICIES FOR TESTING, ASSESSMENT, AND REGULATING CARCENOGENS; (3) FEDERAL AGENCY ASSESSMENT AND REGULATION OF CARCENOGENS; (4) THE NATIONAL TOXICOLOGY PROGRAM- THE NEED FOR TESTING; ANJ (5) AGENCY RESPONSES TO THE ANNUAL REPORT ON CARCINOGENS AND NCI/NTP TEST RESULTS.

AVAILABILITY: LEWIS PUBLISHERS, INC., 121 SOUTH MAIN STREET, P.O. DRAWER 519, CHELSEA, MI 48118

PUBLICATION DATE: 88

TITLE: TOXICOLOGY: A PRIMER ON TOXICOLOGY PRINCIPLES AND APPLICATIONS.

PERSONAL AUTHOR: KAMRIN, MICHAEL A.

DESCRIPTOR: ASBESTOS; *CHEMICALS; BENZENE; *INSTRUCTIONAL MATERIALS; *PUBLIC HEALTH; *RISK ASSESSMENT; *TOXIC SUBSTANCES; *TOXICOLOGY; ARTIFICIAL SWEETENERS; FORMALDEHYDE; *AIR POLLUTION; *WATER POLLUTION; *FOOD

DESCRIPTIVE NOTE: 152P. PRICE: \$27.50 ISBN: 0-87371-133-5

ABSTRACT: THIS PUBLICATION PRESENTS BASIC TOXICOLOGY PRINCIPLES AND APPLICATIONS IN A NON-TECHNICAL STYLE. SECTIONS ARE INCLUDED ON: (1) CHEMICAL INDIVIDUALITY AND TOXICITY; (2) HUMAN VARIABILITY AND TOXICITY; (3) THE HUMAN BODY AND TOXIC CHEMICALS; (4) TYPES OF TOXIC EFFECTS; (5) TOXICITY ASSESSMENT; (6) RISK ASSESSMENT AND RISK MANAGEMENT; (7) THE CASE OF ARTIFICIAL SWEETENERS; (8) THE CASE OF ASBESTOS; (9) THE CASE OF FORMALDEHYDE; AND (10) THE CASE OF BENZENE.

AVAILABILITY: LEWIS PUBLISHERS, INC. 121 SOUTH MAIN STREET, P.O. DRAWER 519, CHELSEA, MI 48118

IRIS ACCESSION NUMBER: EW015268

PUBLICATION DATE: 86

TITLE: TOXIC SUBSTANCES IN AGRICULTURAL WATER SUPPLY AND DRAINAGE. DEFINING THE PROBLEMS.

PERSONAL AUTHOR: SUMMERS, JOSEPH B.; ANDERSON, SUSAN S.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *AGRICULTURE; *AGRICULTURAL DRAINAGE; ENVIRONMENTAL IMPACT; *MANAGEMENT; PUBLIC HEALTH; PLANNING; *RECOMMENDATIONS; *TOXIC SUBSTANCES; *WATER SUPPLY; *GROUNDWATER; *IRRIGATION; *WATER QUALITY; WATER TREATMENT; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 368P.

ABSTRACT: THIS PUBLICATION IS THE PROCEEDINGS FROM THE 1986 REGIONAL MEETINGS SPONSORED BY THE U.S. COMMITTEE ON IRRIGATION AND DRAINAGE. PAPERS WERE PRESENTED AT FOUR REGIONAL MEETINGS ADDRESSING PROBLEMS FACED BY THE AGRICULTURAL COMMUNITY, AS WELL AS THE GENERAL PUBLIC. CAUSED BY THE AGRICULTURAL COMMUNITY, AS WELL AS THE GENERAL PUBLIC, AND CAUSED BY THE FFFECTS OF TOXICITY IN AGRICULTURAL WATER. OVER 4D PAPERS ARE INCLUDED. AS WELL AS PANEL DISCUSSIONS REGARDING FUTURE NEEDS AND ACTIONS.

AVAILABILITY: U.S. COMMITTEE ON IRRIGATION AND DRAINAGE, P.O. BOX 15326, DENVER, CO 80215

IRIS ACCESSION NUMBER: EW015269

PUBLICATION DATE: 85

TITLE: OHIO WATER FIRSTS. VOLUME I.

PERSONAL AUTHOR: FROST, SHERMAN L.; NICHOLS, WAYNE S.

DESCRIPTOR: CONSERVATION; *HISTORY; *OHIO; LAKES; RESERVOIRS; *WATER RESOURCES; *WATER SUPPLY; *WATER USE; WATER TREATMENT

DESCRIPTIVE NOTE: 102P. HARDBACK: \$10.00 SOFTBACK: \$6.50 SHIPPING AND HANDLING: \$1.65

ABSTRACT: THIS PUBLICATION PROVIDES SOME VIGNETTES OF OHIO'S WATER HISTORY AND OF THE EFFORTS TO MAKE THE BEST USE OF OHIO'S WATER RESOURCES. ALL ARE "FIRSTS" IN WATER HISTORY IN OHIO. SOME REPRESENT WATER "FIRSTS" ANYWHERE IN THE UNITED STATES.

AVAILABILITY: WATER MANAGEMENT ASSOCIATION OF OHIO, 445 KING AVE., COLUMBUS, OH 43201

IRIS ACCESSION NUMBER: EW015270

PUBLICATION DATE 87

TITLE: THE HYDRANT MAINTENANCE SOFTWARE PROGRAM.

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE *FIRE HYDRANTS; *HYDRANTS; *FIELD TESTING; *MAINTENANCE; *OPERATION (WATER); *WATER DISTRIBUTION

DESCRIPTIVE NOTE: DISKETTEP. PRICE: \$395.00 ORDER NO.: 53004CZ

ABSTRACT: THE PROGRAM INCLUDES: (1) A COPY PROTECTED DISKETTE; (2) AN INSTRUCTION MANUAL; (3) AWWA'S MANUAL 17-INSTALLATION, FIELD TESTING, AND MAINTENANCE OF FIRE HYDRANTS; AND (4) A MASTER-FIELD INSPECTION REPORT FORM.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, CUSTOMER SERVICES DEPT., 6666 WEST QUINCY AVE., DENVER, CO 80235

IRIS ACCESSION NUMBER: EW015271

PUBLICATION DATE: 87

TITLE: BACTERIAL REGROWTH IN DISTRIBUTION SYSTEMS.

DESCRIPTOR: *DRINKING WATER; *BACTERIA; *DISINFECTION; *DISFECTANT RESIDUALS; *OPERATIONS (WATER); *WATER DISTRIBUTION: *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: MEMBERS: \$19.00 NONMEMBERS: \$24.00 ORDER NO.: 905321J

ABSTRACT: THIS PUBLICATION IS DESIGNED TO HELP UTILITY PERSONNEL UNDERSTAND WHY BACTERIA ARE PRESENT IN WATER

DISTRIBUTION SYSTEMS FOLLOWING TREATMENT AND TO ASSIST UTILITIES IN PREDICTING AND PREVENTING BACTERIAL REGROWTH.
THE PUBLICATION EXAMINES THE RELATIONSHIP BETWEEN NUTRIENTS PRESENT IN TLEATED WATER AND THE EFFECTIVENESS OF DISINFECTANT PESIDUALS LIMITING BACTERIAL REGROWTH.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, CUSTOMER SERVICES DEPT., 6666 WEST QUINCY AVE., DENVER, CO 80235

IRIS ACCESSION NUMBER: EW. 15272

PUBLICATION DATE: 87

TITLE: WATER TREATMENT PLANT WASTE MANAGEMENT.

DESCRIPTOR: *DRINKING WATER; *MANAGEMENT; *OPERATIONS (WATER); *SLUDGE; *WASTE HANDLING; *WASTE DISPOSAL; *WATER TREATMENT; *COSTS

DESCRIPTIVE NOTE: MEMBERS: \$19.00 NONHEMBERS: \$24.00 ORDER NO.: 905271K

ABSTRACT: THIS IS A PRACTICAL HANDBOOK WITH SUGGESTIONS FOR PROPER AND COST-EFFECTIVE HANDLING AND DISPOSAL OF WATER TREATMENT WASTE. TOPICS INCLUDE: (1) WATER TREATMENT WASTE CHARACTERISTICS; (2) METHODS OF WASTE DISPOSAL; (3) SLUDGE TREATMENT AND HANDLING; AND (4) IMPLEMENTING A WASTE TREATMENT PLAN.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, CUSTOMER SERVICES DEPT., 6666 WEST QUINCY AVE., DENVER, CO 80235

IRIS ACCESSION NUMBER: EW015273

PUBLICATION DATE: 87

TITLE: RISIDUAL ALUMINUM IN FILTERED WATER.

DESCRIPTOR: *ALUM; *ALUMINUM; *COAGULATION; *DRINKING WATER; *FILTRATION; *OPERATIONS (WATER); *WATER TREATMENT; *RESEARCH REPORTS

DESCRIPTIVE NOTE: MEMBERS: \$10.50 NONMEMBERS: \$13.00 ORDER NO.: 9053011

ABSTRACT: THIS PUBLICATION REPORTS ON A STUDY DESIGNED TO BETTER UNDERSTAND THE PROCESSES WHICH AFFECT THE CONCENTRATION AND CHEMISTRY OF ALUMINUM FOLLOWING WATER TREATMENT. GUIDELINES AND SUGGESTIONS TO MINIMIZE THE PRESENCE OF RESIDUAL ALUMINUM IN FINISHED WATER ARE PRESENTED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, CUSTOMER SERVICES DEPT., 6666 WEST QUINCY AVE., DENVER, CO 80235

IRIS ACCESSION NUMBER: EW015274

PUBLICATION DATE: 87

TITLE: WATER AND REVENUE LOSSES: UNACCOUNTED - FOR WATER.

DESCRIPTOR: *COSTS; *DRINKING WATER; *MONITORING; *MANAGEMENT; *OPERATIONS (WATER); *REVENUE; *WATER DISTRIBUTION; *WATER LOSS

DESCRIPTIVE NOTE: MFMBERS: \$14.50 NONMEMBERS: \$18.00 ORDER NO.: 90531IG

ABSTRACT: THIS REPORT IS DESIGNED TO HELP UTILITY MANAGERS EVALUATE POTENTIAL AND EXISTING WATER LOSS PROBLEMS. THE REPORT ASSESSES THE VALUE OF THE VARIOUS METHODS USED TO MEASURE LOST WATER AND APPRAISES TECHNIQUES USED TO MONITOR LOSSES. THE DIFFERENT CAUSES OF WATER LOSS ARE DISCUSSED WITH SOLUTIONS THAT UTILITIES MAY IMPLEMENT TO CONTROL THE PROBLEMS. PROPER WATER MANAGEMENT CAN RESULT IN INCREASED REVENUES AND SUBSTANTIAL COST SAVINGS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, CUSTOMER SERVICES DEPT., 6666 WEST QUINCY AVE., DENVER, CO 80235

IRIS ACCESSION NUMBER: EW015275

PUBLICATION DATE: 87

TITLE: M30 PRECOAT FILTRATION.

DESCRIPTOR: *DESIGN; *COSTS; *FILTER MEDIA; *FILTRATION; *PERFORMANCE EVALUATION; *OPERATIONS (WATER); *PRECOAT FILTRATION; *WATER TREATMENT

DESCRIPTIVE NOTE: MEMBERS: \$11.50 NONMEMBERS: \$14.50 ORDER NO.: 30030GX

ABSTRACT: THIS PUBLICATION IS CONCERNED WITH THE APPLICATION, DESIGN, AND OPERATION OF PRECOAT FILTERS. THE PUBLICATION EVALUATES THE POTENTIAL SHORTCOMINGS AND BENEFITS THAT MAY RESULT FROM USING A PRECOAT FILTRATION SYSTEM. PROCEDURES ARE GIVEN TO HELP PLANNERS WEIGH COST FACTORS AND OPERATING REQUIREMENTS IN ORDER TO DECIDE ON THE BEST SYSTEM FOR SPECIFIC NEEDS. INFORMATION IS ALSO PROVIDED ON DESIGN, OPERATION, AND MAINTENANCE OF A PRECOAT FILTER PLANT.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, CUSTOMER SERVICES DEPT., 6666 WEST QUINCY AVE., DENVER, CO 80235

IRIS ACCESSION NUMBER: EW015276

PUBLICATION DATE: 87

TITLE: M29 WATER UTILITY CAPITAL FINANCING.

DESCRIPTOR: *FINANCING; *CAPITAL FINANCING; *MANAGEMENT; *OPERATIONS (WATER); *PLANNING; *UTILITIES; *WATER TREATMENT

DESCRIPTIVE NOTE: MEMBERS: \$14.00 NONMEMBERS: \$17.50 ORDER NO.: 30029GZ

ABSTRACT: THIS PUBLICATION PROVIDES WATER UTILITY MANAGEMENT A BROAD OVERVIEW OF TRADITIONAL AND INNOVATIVE FINANCING ALTERNATIVES AND STRATEGIES TO MEET BOTH LONG-AND SHORT-TERM CAPITAL REQUIREMENTS. INCLUDED IS A GLOSSARY OF FINANCIAL TERMS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION. CUSTOMER SERVICES DEPT., 6666 WEST QUINCY AVE., DENVER, CO 80235

IRIS ACCESSION NUMBER: EW015277

PUBLICATION DATE: APR 88

TITLE: NEW STRATEGIES FOR HAZ WASTE TREATMENT AND DISPOSAL.

PERSONAL AUTHOR: CHEREMISINOFF. PAUL N.

DESCRIPTOR: *HAZARDOUS MATERIALS; *TECHNOLOGY; *TOXIC Substances; *Waste Disposal; *Waste Treatment; *Waste Reduction

DESCRIPTIVE NOTE: 64-71P.

ABSTRACT: DESCRIBED ARE SEVERAL NEW STRATEGIES FOR THE TREATMENT AND DISPOSAL OF HAZARDOUS WASTES.

AVAILABILITY: POLLUTION ENGINEERING: V20 N4

IRIS ACCESSION NUMBER: EW015278

PUBLICATION DATE: APR 88

TITLE: MOBILE HAZ WASTE TREATMENT TECHNOLOGIES.

PERSONAL AUTHOR: REES, JOHN; LYANDRES, SOL

DESCRIPTOR: *HAZARDOUS MATERIALS; *TECHNOLOGY; *TOXIC

SUBSTANCES; *WASTE TREATMENT; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 72-76P.

ABSTRACT: DESCRIBED ARE A VARIETY OF MOBILE HAZARDOUS WASTE

TREATMENT TECHNOLOGIES.

AVAILABILITY: POLLUTION ENGINEERING; V20 N4

IRIS ACCESSION NUMBER: EW015294

PUBLICATION DATE: APR B8

TITLE: RECOMMENDATIONS FOR USE OF SLUDGE COMPOSTS.

PERSONAL AUTHOR: GOLDSTEIN, NORA

ERIC TOR: *COMPOST; *COMPOST USE; *ENVIRONMENTAL IMPACT;

*PUBLIC HEALTH; *REGULATIONS; *RECOMMENDATIONS; *LAND APPLICATION

DESCRIPTIVE NOTE: 28-30P.

ABSTRACT: DISCUSSED ARE RECOMMENDATIONS FOR THE USE OF SLUDGE COMPOSTS. RECOMMENDATIONS ARE MADE FOR REGULATIONS AND SOUND LAND MANAGEMENT THAT WILL PROTECT PUBLIC HEALTH AND THE ENVIRONMENT.

AVAILABILITY: BIOCYCLE: V29 N4

IRIS ACCESSION NUMBER: EW015295

PUBLICATION DATE: APR BB

TITL THOUCED AERATION WINDROW COMPOSTING OF RAW SLUDGES.

PERSO: _ AUTHOR: WREN-JARVIS. JAMES

DESCRIPTOR: *COMPOSTING; *FACILITIES; *NEVADA; *OPERATIONS (WASTEWATER); *PILOT STUDIES; *PERFORMANCE EVALUATION; *SLUDGE

DESCRIPTIVE NOTE: 48-52P.

485 (RACT: DESCRIBED IS A PILOT PROJECT TO COMPOST CHEMICALLY CONDITIONED AND DEWATERED RAW SLUDGE AT A FACILITY IN NEVADA. CONCLUSIONS FROM THE STUDY ARE REPORTED.

AVAILABILITY: BIOCYCLE: V29 N4

IRIS ACCESSION NUMBER: EW015296

PUBLICATION DATE: APR. 3B

TITLE: WATER SUPPLY AND SLUDGE METALS.

PERSONAL AUTHOR: BROWN, WILLIAM E.

DESCRIPTOR: COMPOSTING: *LAND APPLICATION: *METALS: *METAL REDUCTION: *REGULATIONS: *SLUDGE: *OPERATIONS (WASTEWATER); WASTEWATER TREATMENT: *WATER SUPPLY: *WATER TREATMENT

DESCRIPTIVE NOTE: 59-62P.

ABSTRACT: REPORTED ARE WAYS TO LOWER THE AMOUNT OF METAL IN WASTEWATER SLUDGE BY REDUCING THE AMOUNT OF METAL IN WATER SUPPLIFE. FURTHER RESEARCH IS NEEDED TO DOCUMENT THE EXTENT OF THE PROBLEM.

AVAILABILITY: BIOCYCLE; V29 N4

IRIS ACCESSION NUMBER: EW015297

PUBLIC :: UN DATE: APR. 88

THE: FRESH WATER UTILITY PECYCLES ITS SLUDGE.

PERSONAL AUTHOR: HIGHEAULT, WILLIAM H.

DESCRIPTOR: *ECONOMICS; *OPERATIONS (WATER); *SLUDGE; *WATER TREATMENT: *RESOURCE RECOVERY

DESCRIPTIVE NOTE: 63-64P.

ABSTRACT: DESCRIBED IS A FRESH WATER UTILITY THAT RECYCLES ITS SLUDGE. THE FACILITY HAS BEEN ABLE TO REDUCE THE AMOUNT OF SLUDGE WASTE AND IS ABLE TO RECYCLE SOME OF THE MATERIAL INTO COMMON BRICK.

AVAILABILITY: BIOCYCLE; V29 N4

IRIS ACCESSION NUMBER: EW015300

PUBLICATION DATE: 87

TITLE: AGRICULTURAL CHEMICALS AND GROUNDWATER PROTECTION: EMERGING MANAGEMENT AND POLICY.

DESCRIPTOR: *AGRICULTURE; *CHEMICALS: *ENVIRONMENTAL IMPACT; *GROUNDWATER; *FEDERAL ROLE; *STATE ROLE; *MANAGEMENT; *POLICIES; *PUBLIC HEALTH; *WATER RESOURCES; *WATER QUALITY: *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: \$35.00

ABSTRACT: THIS PUBLICATION IS THE PROCEEDINGS OF A CONFERENCE HELD IN THE FALL OF 1987 ON THE COMPLEX ISSUES OF AGRICHEMICAL USE AND GROUNDWATER PROTECTION. THE PUBLICATION FOCUSES ON EFFECTIVE MANAGEMENT STRATEGIES AND CEALISTIC REGULATORY POLICIES TO BALANCE AGRICHEMICAL USE AND ITS POTENTIAL EFFECT ON GROUNDWATER.

AVAILABILITY: FRESHWATER FOUNDATION, 2500 SHADYWOOD RD., BOX 90, NAVARRE, MN 55392

IRIS ACCESSION NUMBER: EW015301

PUBLICATION DATE: 86

TITLE: GROUND-WATER MINING IN THE UNITED STATES.

PERSONAL AUTHOR: SLOGGETT, GORDON; DICKASON, CLIFFORD

DESCRIPTOR: *AGRICULTURE; *GROUNDWATER: *IRRIGATION; *CONSERVATION; *PLANNING; *MANAGEMENT; *WATER SUPPLY; *WATER RESOURCES; *UNITED STATES; *WATER USE; *WATER CONSERVATION

DESCRIPTIVE NOTE: \$1.25

ABSTRACT: THIS USDA REPORT DESCRIBES SOME MEASURES THAT CAN BE TAKEN TO REDUCE WATER PROBLEMS WHERE IRRIGATION DEPENDS EXTENSIVELY OF GROUNDWATER SUPPLIES. THE REPORT CONCLUDES, HOWEVER, THAT NOTHING WILL PREVENT MANY WELLS FROM EVENTUALLY GOING DRY. WITHIN THE 40 YEARS, FARMERS ON OVER 35 PERCENT OF GAQUNDWATER - IRRIGATED LAND IN TIE U.S. WILL HAVE TO DRASTICALLY REDUCE GROUNDWATER EXTRACTION, FIND A SURFACE WATER SUPPLY, OR ABANDON IRRIGATED FARMING.

AVAILABILITY: U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402

IRIS ACCESSION NUMBER: EW015302

PUBLICATION DATE: 87

TITLE: OUR COMMON FUTURE.

DESCRIPTOR: *DEVELOPMENT; *ECONOMICS; *ENVIRONMENT; *ENVIRONMENTAL IMPACT; *PLANNING; *PUBLIC HEALTH; *GOVERNMENT ROLE; *RECOMMENDATIONS; *UNITED NATIONS; *WORLD PROBLEMS; *POLLUTION CONTROL

DESCRIPTIVE NOTE: \$9.95

ABSTRACT: THIS IS A REPORT OF THE WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT WHICH WAS CREATED BY THE UNITED NATIONS IN 1983. THE PURPOSE OF THE DOCUMENT WAS TO INDICATE WHAT THE WORLD COMMUNITY AND NATIONAL GOVERNMENTS SHOULD DO ABOUT ENVIRONMENTAL DEGRADATION AND STALLED DEVELOPMENT. THE REPORT HAS RECEIVED CONSIDERABLE DEBATE AND STRONG SUPPORT FROM MANY ORGANIZATIONS AND GOVERNMENTS.

AVAILABILITY: OXFORD UNIVERSITY PRESS, 200 MADISON AVE., NEW YORK, NY 10016

IRIS ACCESSION NUMBER: EW015303

PUBLICATION DATE: SEP. 87

TITLE: INJECTION WELL MECHANICAL INTEGRITY.

PERSONAL AUTHOR: THORNHILL, JERRY T.: BENEFIELD. BOBBY G.

DESCRIPTOR: *FIELD TESTING: *INJECTION WELLS; *MECHANICAL INTEGRITY; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *WASTE DISPOSAL; WELLS; *WASTE MANAGEMEN1; *TECHNOLOGY

DESCRIPTIVE NOTE: 77P. FREE

ABSTRACT: THIS RESEARCH PROJECT EXAMINED THE QUESTION OF MECHANICAL INJECTION WELL INTEGRITY. THE THREE-PHASED PROJECT DETERMINED THE STATE-OF-THE-ART METHODS AVAILABLE FOR MECHANICAL INTEGRITY TESTING OF INJECTION WELLS AND FIELD TESTED SPECIFIC ANALYSIS METHODS TO DETERMINE THEIR ADEQUACY AS MECHANICAL INTEGRITY TESTS.

AVAILABILITY: CERI, TECHNOLOGY TRANSFER, U.S. ENVIRONMENTAL PROTECTION AGENCY, P.O. BOX 12505, CINCINNATI, OH 45212

IRIS ACCESSION NUMBER: EW015304

PUBLICATION DATE: SEP B7

TITLE: HANDBOOK: RETROFITTING POTWS FOR PHOSPHORUS REMOVAL IN THE CHESAPEAKE BAY DRAINAGE BASIN.

DESCRIPTOR: ^FACILITIES; *CHESAPEAKE BAY; *COSTS; *COMPLIANCE; *OPERATIONS (WASTEWATER); *PHOSPHORUS; *PHOSPHORUS; *PHOSPHORUS; *CHEMICAL TREATMENT; *CHEMICAL TREATMENT; *TECHNCLOGY; *WATER QUALITY

DESCRIPTIVE NOTE: 149P. FREE

ABSTRACT: THIS DOCUMENT ASSESSES THE TECHNOLOGY, ECONOMICS, AMD EFFICIENCY OF PHOSPHORUS REMOVAL PROCESSES AVAILABLE FOR USE IN THE CHESAPEAKE BAY DRAINAGE BASIN TO ACHIEVE REQUIRED LEVELS OF PROTECTION. ALSO ADDRESSED IS THE IMPACT THAT A REQUIREMENT FOR EITHER NITRIFICATION OR NITROGEN REMOVAL HAS ON PHOSPHORUS REMOVAL PROCESSES. THE DOCUMMENT IS DESIGNED TO BE A REFERENCE MANUAL FOR GOVERNMENT OFFICIALS, DESIGN ENGINEERS. AND PLANT OPERATORS TO ASSIST THEM IN RETROFITTING EXISTING TREATMENT PLANTS TO REMOVE PHOSPHORUS.

AVAILABILITY: CERI, TECHNOLOGY TRANSFER. U.S. ENVIRONMENTAL PROTECTION AGENCY, P.O. BOX 12505, CINCINNATI, OH 45212

IRIS ACCESSION NUMBER: EW015305

PUBLICATION DATE: SEP. 87

TITLE: MEETING HAZARDOUS WASTE REQUIREMENTS FOR METAL FINISHERS. SEMINAR PUBLICATION.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *HAZARDOUS WASTES; *INDUSTRIAL WASTES; *METALS; *METAL FINISHING; *REGULATIONS; *RESOURCE RECOVERY; *WASTE REDUCTION; *WASTE DISPOSAL; *WASTE TREATMENT; *WASTE STORAGE

DESCRIPTIVE NOTE: 58P. FREE

AGSTRACT: THIS PUBLICATION CONTAINS EDITED VERSIONS OF PRESENTATIONS AT THREE SEMINARS HELD IN 1986 RELATED TO THE METAL FINISHING INDUSTRY. CHAPTERS WERE EDITED TO REFLECT CHANGES IN REGULATIONS PROPOSED IN THE SPRING OF 1987. CHAPTERS ARE INCLUDED: (1) RCRA REGULATIONS; (2) DELISTING PROCEDURES; (3) LAND DISPOSAL BANS AND PROCEDURES FOR EXTENSIONS; (4) USED OIL AND HAZARDOUS WASTES AS FUELS; (5) UNDERGROUND STORAGE TANK AND HAZARDOUS WASTE; (6) CLEAN WATER UPDATE; (7) SELECTING A RESPONSIBLE TRANSPORTER AND WASTE MANAGEMENT FACILITY; (8) COSTS AND BENEFITS OF SOURCE REDUCTION IN METAL FINISHING; (9) MATERIALS REUSE AND RECOVERY; (10) ORGANIC LIQUIDS; AND (11) CHARACTERIZATION AND TREATMENT OF AQUEOUS WASTES.

AVAILABILITY: CERI, TECHNOLOGY TRANSFER, U.S. ENVIRONMENTAL PROTECTION AGENCY, P.O. BOX 12505, CINCINNATI, OH 45212

IRIS ACCESSION NUMBER: EW015306

PUBLICATION DATE: SEP. 87

TITLE: BIOMONITORING TO ACHIEVE CONTROL OF TOXIC EFFLUENTS.

ERICE STUDIES; *CHEMICAL WASTES; *CHEMICAL WASTES; *OHIO; *MONITORING;

*REGULATIONS; *STREAM SURVEYS; *WATER QUALITY; *WATER POLLUTION CONTROL; *TOXIC SUBSTANCES; *TOXICITY TESTING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 53P. FREE

ABSTRACT: THIS PUBLICATION PROVIDES A CASE STUDY OF HOW WATER QUALITY-BASED TOXICITY CONTROL PROCEDURES CAN BE COMBINED WITH CHEMICAL ANALYSES AND BIOLOGICAL STREAM SURVEYS TO ACHIEVE MORE EFFECTIVE WATER POLLUTION CONTROL. THE CASE STUDY RELATED TO A SERIOUS WATER QUALITY PROBLEM ON THE CUYAHOGA RIVER IN NE OHIO.

AVAILABILITY: CERI, TECHNOLOGY TRANSFER, U.S. ENVIRONMENTAL PROTECTION AGENCY, P.O. BOX 12505, CINCINNATI, OH 45212

IRIS ACCESSION NUMBER: EW015307

PUBLICATION DATE: SEP. 87

TITLE: DESIGN MANUAL: PHOSPHORUS REMOVAL.

DESCRIPTOR: COSTS; BIOLOGICAL TREATMENT; CHEMICAL TREATMENT; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *PROCESS DESIGN; *PHOSPHORUS; PHOSPHORUS REMOVAL; *SLUDGE HANDLING; *WASTEWATER TREATMENT; WATER QUALITY

DESCRIPTIVE NOTE: 126P. FREE

ABSTRACT: THIS MANUAL IS INTENDED TO SUMMARIZE PROCESS DESIGN INFORMATION FOR THE BEST DEVELOPED PHOSPHORUS-REMOVAL METHODS THAT HAVE RESULTED FROM GOVERNMENTAL AND PRIVATE EFFORT. INCLUDED IS INFORMATION ON SELECTING A PHOSPHORUS REMOVAL STRATEGY, REMOVAL BY BIOLOGICAL PROCESSES, REMOVAL BY CHEMICAL ADDITION, AND SLUDGE HANDLING.

AVAILABILITY: CERI, TECHNOLOGY TRANSFER, U.S. ENVIRONMENTAL PROTECTION AGENCY, P.O. BOX 12505, CINCINNATI, OH 45212

IRIS ACCESSION NUMBER: EW015308

PUBLICATION DATE: SEP. 87

TITLE: DESIGN MANUAL: DEWATERING MUNICIPAL WASTEWATER SLUDGES.

DESCRIPTOR: COSTS; *DEWATERING; REGULATIONS; MAINTENANCE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; SLUDGE; *SLUDGE DEWATERING; *WASTEWATER TREATMENT; *TECHNOLOGY; DESIGN; CASE STUDIES

DESCRIPTIVE NOTE: 207P. FREE

ABSTRACT: THIS MANUAL PRESENTS UP-TO-DATE INFORMATION ON DEWATERING PROCESSES FOR MUNICIPAL WASTEWATER SLUDGES. THE MANUAL REVISES AND UPDATES THE INFORMATION ON SLUDGE CONDITIONING AND DEWATERING FOUND IN PREVIOUS EPA DESIGN MANUALS OF 1979 AND 1982. SIGNIFICANT ADVANCES HAVE BEEN MADE IN DEWATERING TECHNOLOGY SINCE PREPARATION OF THE

PREVIOUS DOCUMENTS. ALSO, REGULATORY CRITERIA FOR DISPOSAL OF SLUDGE BY LANDFILLING, COMBUSTION, LAND APPLICATION, AND OCEAN DISPOSAL HAVE BEEN TIGHTENED.

AVAILABILITY: CERI, TECHNOLOGY TRANSFER, U.S. ENVIRONMENTAL PROTECTION AGENCY, P.O. BOX 12505, CINCINNATI, OH 45212

IRIS ACCESSION NUMBER: EW015309

PUBLICATION DATE: 5/6 88

TITLE: OVERVIEW OF TECHNOLOGY FOR CONTROLLING OFF-FLAVORS IN DRINKING WATER.

PERSONAL AUTHOR: MCGUIRE, MICHAEL J.; GASTON, JOHN M.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DRINKING WATER; *FLAVOR CONTROL; *OFF-FLAVOR; *OPERATIONS (WATER); *WATER TREATMENT; *WATER RESOURCES; *WATER QUALITY

DESCRIPTIVE NOTE: 18-21P.

ABSTRACT: THIS ARTICLE REVIEWS THE EXISTING TECHNOLOGY AVAILABLE FOR CONTROLLING OFF-FLAVORS IN DRINKING WATER, ORGANIZING CURRENT INFORMATION ON OFF-FLAVOR CONTROL STRATEGIES, AND PROVIDING THE TOOLS FOR WATER UTILITY MANAGERS TO DEVELOP COMPREHENSIVE STRATEGIES FOR OFF-FLAVOR CONTROL.

AVAILABILITY: WATERWORLD NEWS; V4 N3

IRIS ACCESSION NUMBER: EW015310

PUBLICATION DATE: 5/6 88

TITLE: PLANT MODERNIZATION PROJECT FEATURES AUTOMATIC FILTER CONTROLS.

PERSONAL AUTHOR: SARRA, W.F.

DESCRIPTOR: *AUTOMATIC CONTROLS; *DRINKING WATER: *FILTRATION; *BACKWASHING; *OHIO; *OPERATIONS (WATER); *FACILITIES; *FACILITY REHABILITATION; *WATER TREATMENT; *WATER OUALITY

DESCRIPTIVE NOTE: 24-25P.

ABSTRACT: DESCRIBED IS A MODERNIZATION PROGRAM FOR AN EAST LIVERPOOL, OHIO WATER TREATMENT PLANT. SEVERAL IMPROVEMENTS ARE DESCRIBED.

AVAILABILITY: WATERWORLD NEWS: V4 N3

IRIS ACCESSION NUMBER: EW015311

PUBLICATION DATE: 5/6 80

PROTECTING PIPE WITH POLYETHYLENE ENCASEMENT, 1951-

1988.

PERSONAL AUTHOR: HORTON, A. MICHAEL

DESCRIPTOR: *CORROSION; *CORROSION CONTROL; *COSTS; *PERFORMANCE EVALUATION; *PIPES; *POLYTHYLENE ENCASEMENT; *SOILS; *WATER DISTRIBUTION; *WATER PIPES

DESCRIPTIVE NOTE: 26-28P.

ABSTRACT: DESCRIBED IS A HISTORY OF POLYTHYLENE ENCASEMENT FOR PROTECTING PIPE FROM 1951-1988. THE PROCEDURE IS USED FOR CORROSION PROTECTION FOR GRAY AND DUCTILE IRON PIPE AND FITTINGS INSTALLED IN AGGRESSIVE SOILS. THE CONDITIONS OF PIPE EXCAVATED AT OVER 20 SITES ARE REPORTED.

AVAILABILITY: WATERWORLD NEWS: V4 N3

IRIS AC. ESSION NUMBER: EW015312

PUBLICATION DATE: JAN 86

TITLE: STATE ALTERNATIVE FINANCING PROGRAMS FOR WASTEWATER TREATMENT. TRANSITION TOWARDS GREATER SELF-SUFFICIENCY IN THE 1980'S. 2ND ED.

DESCRIPTOR: *FACILITIES; *FINANCING; *ECONOMICS; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PROGRAM DESCRIPTIONS; *PLANNING; *STATE PROGRAMS; *STATE ROLE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 106P. PRICE: \$7.36

ABSTRACT: THIS REPORT DESCRIBES ALTERNATIVE FINANCING PROGRAMS IN 18 STATES. THESE PROGRAMS FINANCE THE CONSTRUCTION OF WASTEWATER TREATMENT FACILITIES, AS WELL AS MANY OTHER INFRASTRUCTURE NEEDS. THERE ARE A VARIETY OF INNOVATIVE APPROACHES BEING TAKEN TO ESTABLISH THESE STATESPONSORED FINANCIAL INTERMEDIARIES. STATES HAVE CREATED PROGRAMS TO IMPROVE LOCAL GOVERNMENT ACCESS TO CREDIT. EACH APPROACH IS CREATIVELY TAILORED TO THE PARTICULAR NEEDS AND STATUTES OF THE STATE. A MAP AND A STATUS SHEET HIGHLIGHT THE INTENSITY OF RECENT ACTIVITY IN THE STATES TO EVALUATE AND ESTABLISH ALTERNATIVE FINANCING PROGRAMS. BY THE END OF 1985, 12 STATES HAD OPERATIONAL REVOLVING LOAN PROGRAMS. TEN STATES HAVE THE REVOLVING LOAN CONCEPT UNDER STUDY, AND IN 1986, AS MANY AS 12 MORE STATES MAY PROPOSE LEGISLATION TO CREATE BOND BANKS AND REVOLVING LOAN PROGRAMS. A MATRIX SUMMARIZES AND COMPARES THE PRINCIPAL CHARACTERISTICS OF 15 STATE PROGRAMS.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS RD., ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015313

PUBLICATION DATE: 87

TITLE: STATE OF THE ENVIRONMENT: A VIEW TOWARD THE

MINETIES. A REPORT FROM THE CONSERVATION FOUNDATION.

DESCRIPTOR: AGRICULTURE; *CONSERVATION; *ECOLOGY; *ENVIRONMENT; HAZARDOUS MATERIALS; ECONOMICS; *MANGEMENT; *NATURAL RESOURCES; *PLALIC HEALT; *POLLUTION; *POLLUTION CONTROL: TOXIC SUBSTANCES: *TRENDS: PISK ASSESSMENT: .'ASTE MANAGEMENT; *ENVIRONMENTAL QUALITY

DESCRIPTIVE NOTE: 614P. PRICE: \$19.95 ISBN: 0-89164-098-3

ABSTRACT: THIS DOCUMENT PROVIDES A REVIEW OF THE PROGRESS OF THE U.S. IN IMPROVING THE CONDITION OF ITS ENVIRONMENT AND THE MANAGEMENT OF ITS NATURAL RESOURCES, AS WELL AS A GLOBAL PERSPECTIVE WITH REGARD TO THIS COUNTRY'S POLICIES. THE REPORT IS DIVIDED INTO TWO PARTS. THE FIRST FIVE CHAPTERS DESCRIBE AND ANALYZE A WIDE RANGE OF ENVIRONMENTAL CONDITIONS AND TRENDS. (1) CHAPTER 1 DEALS WITH SUCH UNDERLYING TRENDS AS POPULATION, ECONOMIC GROWTH, PUBLIC OPINION, AND ENVIRONMENTAL EXPENDITURES: (2) CHAPTER 2 COVERS TRENDS IN CONVENTIONAL ENVIRONMENTAL POLLUTANTS IN THE AIR AND WATER AND ON THE LAND; (3) CHAPTER 3 ASSESSES THE AIR AND WATER AND ON THE LAND; (3) CHAPTER 3 ASSESSES THE SITUATION WITH TOXIC SUBSTANCES AND HAZARDOUS AND MUCLEAR WASTES; (4) CHAPTER 4 SUMMARIZES WHAT IS HAPPENING TO THE USE AND CONDITION OF THE NATION'S LAND, WATER, AND ENERGY RESOURCES; AND (5) CHAPTER 5 DEALS WITH WILDLIFE AND SUCH PROTECTED LANDS AND CRITICAL AREAS AS PARKS, WILDERNESS, AND WETLANDS. THE SECOND PART OF THE REPORT EXAMINES FOUR ENVIRONMENTAL ISSUES THAT ARE NOT BEING FULLY AND THE SECOND PART OF THE PROTECTION. ADDRESSED BY EXISTING ENVIRONMENTAL MANAGEMENT PROGRAMS. (1) CHAPTER 6 ASSESSES THE PROBLEMS FACING THE NATION'S AGRICULTURAL SECTOR AND THE INTERACTIONS RETWEEN AGRICULTURAL PRODUCTION AND ENVIRONMENTAL QUALITY, BOTH AT HOME AND ABROAD: (2, CHAPTER 7 PROVIDES A BROAD OVERVIEW OF WASTE PRODUCTION AND MAKAGEMENT IN THE U.S. IT SUGGESTS THAT THERE MAY BE MORE RATIONAL APPROACHES TO DEALING WITH THESE PROBLEMS THAN ARE PROVIDED BY EXISTING PROGRAMS: (3) CHAPTER 8 EVALUATES THE RISKS ASSOCIATED WITH THREE TYPES OF AIR POLLUTION MOT BEING DEALT WITH RIGOROUSLY UNDER CURRENT AIR POLLUTION CONTROL LAWS: AIR TOXICS, INDOOR AIR, AND ACCIDENTAL RELEASES; AND (4) CHAPTER 9 ASSESSES THE IMPORTANCE AND IMPLICATIONS OF SWITCHING FROM PAST WILDLIFE TOWN THE RESERVENCE AND THE PROGRAMMENT OF THE PROGR AIMED PREDOMINANTLY AT PROTECTING INDIVIDUAL SPECIES TO EXPANDED APPROACHES ADDRESSING BIOLOGICAL DIVERSITY.

AVAILABILITY: THE CONSERVATION FOUNDATION, 1250 24TH STREET. NW. WASHINGTON, D.C. 20037

IRIS ACCESSION NUMBER: EWC15315

PUBLICATION DATE: APR. 88

TITLE: A STUDY OF POSSIBLE ECONOMICAL WAYS OF REMOVING RADIUM FROM DRINKING WATER.

PERSONAL AUTHOR: VALENTINE, RICHARD L.; AND OTHERS.

DESCRIPTOR: *COS.S; *DRINKING WATER; *OPERATIONS (WATER); *PILOT STUDIES; *PJBLIC HEALTH; *RAGIUM; *RESEARCH REPORTS; *WATER TREATMENT

LIPTIVE NOTE: PRICE: \$19.35 ORDER NO.: PB 88-158464/AS

ABSTRACT: THE PRIMARY OBJECTIVE OF THIS STUDY WAS TO DETERMINE WHAT VARIABLES CONTROL THE INCIDENTAL REMOVAL OF RADIUM OCCURRING IN IRON REMOVAL PLANTS USING AERATION AND SAND FILTRATION. REPORTED ARE MATERIALS AND METHODS USED, ANALYSES, AND RESULTS AND DISCUSSION.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015316

PUBLICATION DATE: APR. 88

TITLE: DECISION SUPPORT SYSTEM FOR DRINKING WATER RESEARCH USING MICROCOMPUTERS AND MAINFRAMES.

PERSONAL AUTHOR: DEININGER, ROLF A.,; AND OTHERS

DESCRIPTOR: *DATABASES: *DRINKING WATER: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *DECISION MAKING; *DATA ANALYSIS; *MANAGEMENT; *RESEARCH; *IJSEPA; *WATER QUALITY

DESCRIPTIVE NOTE: PRICE: \$14.95 ORDER NO.: PB 88-114079/AS

ABSTRACT: DISCUSSED IS THE DEVELOPMENT AND THE BASIC ELEMEN'S OF A DECISION SUPPORT SYSTEM FOR THE DRINKING WATER RESEARCH DIVISION OF THE USEPA. THE SYSTEM USES A MAINFRAME AND MICROCOMPUTER FOR MANAGING AND ANALYZING DATA.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015317

PUBLICATION DATE: 87

TITLE: SUPERFUND STATE - LEAD REMEDIAL PROJECT MANAGEMENT HANDBOOK.

DESCRIPTO: *CLEANUP; *MAHAGEMENT; *LEAD; *STATE ROLE; *HANDBOOKS; *TOXIC SUBSTANCES; *HAZARDOUS *SUPERFUYP. WASTES: *HAZARDOUS WASTE SITES

υESCRIPTIVE NOTE: PRICE: \$19.95 ORDER NO: PB87-183141

ABSTRACT: THIS HANDBOOK DEFINES THE ROLES AND RESPONSIBLITIES OF THE REMEDIAL PROJECT MAKAGER (RPM) WITH REGARD TO STATE LEAL PROJECTS AT UNCONTROLLED HAZARDOUS WASTE SIYES. TROJECT MANAGEMENT TECHNIQUES AND THE RESOURCES AVAILABLE TO RPHS ARE ALSO DISCUSSED. THIS HANDBOOK SHOULD BE USEFUL TO BOTH NEW AND EXPERIENCED RPMS AS WELL AS SUPERVISORY PERSONNEL AND OTHERS INVOLVED WITH SUPERFUND JITES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

PUBLICATION DATE: 87

TITLE: SUPERFUND FEDERAL - LEAD REMEDIAL PROJECT MANAGEMENT HAMDBOOK.

DESCRIPTOR: *CLEANUP; *MANAGEMENT; *LEAD; *FEDERAL ROLE; SUPERFUND; *HANDBOOKS; *TOXIC SUBSTÂNCES; *HAZARDOUS WASTES; *HAZARDOUS WASTE SITES

DESCRIPTIVE NOTE: PRICE: \$25.95 ORDER NO.: P8-87-183133

ABSTRACT: THIS HANDBOOK DEFINES THE ROLES AND RESPONSIBILITIES OF THE REMEDIAL PROJECT MANAGER (RPM) WITH REGARD TO FEDERAL LEAD PROJECTS AT UNCONTROLLED HAZARDOUS WASTE SITES. PROJECT MANAGEMENT TECHNIQUES AND THE RESOURCES AVAILABLE TO RPMS ARE ALSO DISCUSSED. THIS HANDBOOK SHOULD BE USEFUL TO BOTH NEW AND EXPERIENCED RPMS AS WELL AS SUPERVISORY PERSONNEL AND OTHERS INVOLVED WITH SUPERFUND SITES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015319

PUBLICATION DATE: 88

TITLE: TECHNICAL RESOURCE DOCUMENT: TREASMENT TECHNOLOGIES FOR HALOGENATED ORGANIC CONTAINING WASTES VOLUME-1.

DESCRIPTOR: *CHEMICALS; *HALOGENS; *LAND DISPOSAL; *ORGANIC COMPOUNDS; *TECHNOLOGY; *WASTE DISPOSAL, *WASTE TREATMENT

DESCRIPTIVE NOTE: PRICE: \$38.35 ORDER NO: PB88-131271

ABSTRACT. THIS TECHNICAL RESOURCE DOCUMENT (TRD) IS ONE OF A SERIES OF FIVE TRP'S BEING PREFARED BY THE HAZARDOUS WASTE ENGINEERING RESEARCH LABORATORY. THESE DOCUMENTS PROVIDE TECHNICAL INFORMATION ON ALTERNATIVES TO LAND DISPOSAL WHICH INCLUDE WASTE MINIMIZATION /RECOVERY, TREATMENT, AND DISPOSAL. ALTHOUGH EMPHASIS IS PLACED ON THE PERFORMANCE DATA OF PROVEN TECHNOLOGIES, INFORMATION IS GIVEN ON EMERGING TECHNOLOGIES AS WELL. THE FIVE CATEGORIES ADDRESSED IN THESE TRDS ARE NONSOLVENT HALOGENATED ORGANICS, CORROSIVE WASTES. DIOXINS. SOLVENTS. AND METALS/CYANIDES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRIN, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015326

PUBLICATION DATE: 88

TITLE: TECHNICAL RESOURCE DOCUMENT: TREATMENT TECHNOLOGIES FOR CORROSIVE - CONTAINING WASTES - VOLUME 2.

DESCRIPTOR: *CHEMICALS; *CORROSIVE WASTES; *ACIDS; *BASES; *LANO DISPOSAL; *TECHNOLOGY; *WASTE DISPOSAL; *WASTE

TREATMENT

DESCRIPTIVE NOTE: PRICE: \$38.95 ORDER NO.: PB88-131289

ABSTRACT: UNDER THE LAND DISPOSAL RESTRICTIONS, ACIDIC CORROSIVE WASTES (PH LESS THAN OR EQUAL TO 2.0) ARE BANNED FROM LAND DISPOSAL UNITS (EXCLUDING UNDERGROUND INJECTION) AS OF 7/8/87. TREATMENT STANDARDS FOR CORROSIVES PRESENTLY MANAGED BY UNDERGROUND INJECTION WILL BE PROMULGATED 8/8/88. ALKALINE CORROSIVE WASTES (PH GREATER THAN 12.5) WILL BE BANNED FROM DISPOSAL EFFECTIVE 5/8/90. TECHNOLOGIES DISCUSSED IN THIS TRD FOR REUSE/RECYCLE INCLUDE ION EXCHANGE, ELECTRODIALYSIS, REVERSE OSMOSIS, DONNAN DIALYSIS, AND SOLVENT EXTRACTION. TREATMENT OPTIONS INCLUDE MEUTRALIZATION, DISTILLATION, INCINERATION, BIODEGRADADTION, AND SOLIDIFICATION.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION 'ERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015321

PUBLICATION DATE: 88

TITLE: HAZARDOUS WASTE COMBUSTION IN INDUSTRIAL PROCESSES: CALCINING AND LIME KILNS.

DESCRIPTOR: *AIR POLLUTION; *AIR POLLUTION CONTROL; *CHEMICALS; *ORGANIC COMPOUNDS; *HAZARDOUS WASTES; *INCINERATION; *INDUSTRIAL PROCESSES; *KILNS; *WASTE DISPOSAL: *WASTE REDUCTION

DESCRIPTIVE NOTE: PRICE: \$14.95 ORDER NO.: PB88-126412

ABSTRACT: THIS REPORT SUMMARIZES THE RESULTS OF SEVERAL STUDIES RELATING TO HAZAROOUS WASTE COMBUSTION IN CEMENT AND LIME KILNS. FOUR KILNS WERE TESTED BY THE US EPA, FOUR BY STATE AGENCIES OR THE KILN OPERATOR, TWO CANADIAN TESTS, AND ONE SWEDISH TEST. THE PREDOMINANT TYPES OF WASTES TESTED WERE CHLORINATED ORGANICS (INCLUDING PCBS), AROMATICS, AND METALCONTAMINATED WASTE OIL. FABRIC FILTERS AND ELECTROSTATIC PRECIPITATORS WERE USED AS THE POLLUTION CONTROL DEVICES. THE PRIMARY FUELS INCLUDED COAL, COKE, COAL/COKE, FUEL OIL, AND NATURAL GAS/COKE. THE OPERATIONS WERE EVALUATED BY DRES, POHCS, AND METALS, PARTICULATE, SOX, MOX, CO AND HCI EMISSIONS. OVERALL, DRES OF 99.99% OR GREATER CAN BE OBTAINED TO PROPERLY-OPERATING CALCINING KILNS. PARTICULATE MATTER INCREASE WHEN CHLORINATED WASTES ARE BURNED IN A KILE. JIPPED WITH AN ELECTROSTATIC PRECIPITATOR; KILNS EQUIPPED WITH FABRIC FILTERS SHOWED NO CHANGE IN EMISSIONS.

AVAILARILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015322

PUBLICATION DATE: 88

TITLE: COMPENDIUM OF COSTS OF REMEDIAL TECHNOLOGIES AT

HAZARDOUS WASTE SITES.

DESCRIPTOR: *CASE STUDIES; *CLEANUP; *ENGINEERING; *HAZARDOUS MATERIALS; *REMEDIAL ACTION; *TECHNOLOGY; *HAZARDOUS WASTES: *HAZARDOUS WASTE SITES: *COSTS

DESCRIPTIVE NOTE: PRICE: \$25.95 ORDER NO.: PB88-113477

ABSTRACT: THIS DOCUMENT ANALYZES THE ACTUAL EXPENSES INCURRED DURING THE REMEDIAL RESPONSES FOR SEVEN MAJOR TYPES OF ENGINEERING TECHNOLOGIES. THE DATA SUPPORTING THE COMPEDNIUM IS DERIVED FROM A SERIES OF 31 CASE STUDIES OF ACTUAL HAZARDOUS WASTE REMEDIAL RESPONSES. THE REPORT INVESTIGATES THE DIVERGENCE BETWEEN ACTUAL REMEDIAL COSTS AND ESTIMATES FROM EXISTING ENGINEERING COST METHODOLOGIES DEVELOPED BEFORE 1984.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EV015323

PUBLICATION DATE: 88

TITLE: GEOSYNTHETIC DESIGN GUIDANCE FOR HAZARDOUS WASTE LANDFILL CELLS AND SURFACE IMPOUNDMENTS.

DESCRIPTOR: *DESIGN; HAZARDOUS MATERIALS; *HAZARDOUS WASTES: *LANDFILL DISPOSAL CELLS; *LANDFILL LININGS; *HAZARDOUS WASTE SITES

DESCRIPTIVE NOTE: PRICE: \$25.95 ORDER NO.: PB88-131263

ABSTRACT: THIS REPORT PROVIDES GUIDANCE DESIGN PROCEDURES FOR THE USE OF GEOSYNTHETIC MATERIALS IN HAZARDOUS WASTE LAND DISPOSAL CELLS. THE USE OF GEOSYNTHETIC COMPONENTS BENEATH, WITHIN, AND ABOVE THE CELL, AND THE CONSTRUCTION AND FABRICATION OF CAPS, DRAINAGE, AND FILTRATION AND SUBGRADE ARE DISCUSSED. EACH DESIGN CONSIDERATION IS DERIVED FROM SPECIFIC EQUILIBRIUM EQUATIONS AND EXAMPLE APPLICATIONS ARE USED: BENEATH THE CELL (E.G. LEACHATE COLLECTION/REMOVAL SYSTEM TRANSMISSIVITY, FMLS, AND FILTERS), WITHIN THE CELL (E.G. SURFACE WATER COLLECTION/REMOVAL SYSTEMS). MINIMUM DESIGN RATIOS ARE RECOMME DESIGN FOR EACH DESIGN PROCEDURE AND GUIDELINES ARE GIVEN FOR EVALUATING THE LONG-TERM STABILITY OF EACH COMPONENT. FACTORS INFLUENCING STABILITY ARE RHEOLOGICAL PROPERTIES, AGING CHARACTERISTICS, MICROSIAL GROWTH, AND DEFORMATIONS DUE TO SETTING. CHEMICAL COMPATIBILITY IS NOT CONSIDERED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015324

PUBLICATION DATE: 88

TLE: MANUAL OF PROCEDURES AND CRITERIA FOR INSPECTING THE ERIC STALLATION OF FLEXIBLE MEMBRANE LINERS IN HAZARDOUS WASTE

DESCRIPTOR: *MANUALS; *HAZARDOUS MATERIALS; *HAZARDOUS WASTES; *INSPECTION; *LINERS; *MEMBRANE LINERS; *PERFORMANCE EVALUATION; *WASTE FACILITIES; *WASTE SITES; *WASTE DISPOSAL; *POLLUTION CONTROL

DESCRIPTIVE NOTE: PRICE: \$19.95 ORDER NO.: PB88-131313

ABSTRACT: THIS MANUAL IS INTENDED TO ASSIST INSPECTORS IN PERFORMING FLEXIBLE MEMBRANE LINER (FML) INSTALLATION INSPECTIONS. THE MANUAL DISCUSSES FOUR FML'S MOST COMMONLY USED FOR WASTE CONTAINMENT: POLYVINYL CHLORIDE, HIGH-DENSITY POLYTHYLENE, CHLOROSULFONATED POLYETHYLENE, AND CHLORINATED POLYETHYLENE. SEVEN INSTALLATION OPERATIONS ARE DISCUSSED: UNLOADING AND STORAGE OF FMLS, PREPARATION AND MAINTENANCE OF SUPPORTING SURFACE, PLACEMENT OF FML ON THE SUPPORTING SURFACE, SEAMING OPERATIONS, ANCHORING AND SEALING (ANCHORING IN EARTH AND TO CONCRETE, PIPING, ETC.), TESTING, AND COVERING THE FML (EARTH, CONCRETE, GEOTEXTILES, OR DRAINAGE NETS). THE MANUAL DESCRIBES EACH OPERATION AND PROVIDES RECOMMENDED INSPECTION PROCEDURES AND FREQUENCIES, INTERPRETATIONS, AND REQUIRED DOCUMENTATION.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD. VA 22161

IRIS ACCESSION NUMBER: EW015325

PUBLICATION DATE: 88

TITLE: CASE STUDIES OF HAZARDOUS WASTE TREATMENT TO REMOVE VOLATILE ORGANICS.

DESCRIPTOR: *CHEMICALS; *HAZARDOUS WASTES; *ORGANIC CHEMICALS; *PERFORMANCE EVALUATION; *WASTE REDUCTION; *WASTE TREATMENT; *WASTE DISPOSAL; *VOLATILE ORGANIC CHEMICALS; *POLLUTION CONTROL

DESCRIPTIVE NOTE: PRICE: 094A- \$19.95 094B- \$19.95 ORDER NO.: 094A- PB88-125893 094B- PB88-125901

ABSTRACT: THREE TREATMENT PROCESSES WERE INVESTIGATED FOR THE REMOVAL OF VOLATILE ORGANIC COMPOUNDS FROM HAZARDOUS WASTE: THIN-FILM EVAPORATION, STEAM STRIPPING AND STEAM STRIPPING WITH CARBON ADSORPTION. THE PROCESSES WERE EVALUATED BY DETERMINING REMOVAL EFFECTIVENESS, AIR EMMISSIONS FROM THE PROCESS, COST, AND PROCESS LIMITATIONS. TREATMENT OF REFINERY SLUDGES WITH A PILOT SCALE THIN-FILM EVAPORATOR DEMONSTRATED >99% REMOVAL OF PURGEABLE ORGANICS AND 10 TO 75% OF EXTRACTABLE ORGANICS (DEPENDING ON OPERATING CONDITIONS). TWO FULL-SCALE STEAM STRIPPERS WERE USED TO TREAT INDUSTRIAL WASTEWATERS CONTAINING 6000 PPM PURGEABLE ORGANICS. TOTAL VOLATILE ORGANIC REMOVAL EFFICIENCIES OF 99.8 AND 99.999% WERE OBTAINED. A FULL-SCALE STEAM STRIPPER/CARBON ADSORPTION UNIT DEMONSTRATED REMOVAL EFFICIENCIES OF SEMIVOLATILES FROM THE STRIPPER ALONE AT 92%, AND OVERALL, 99.6%.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

PUBLICATION DATE: 88

TITLE: REPORT ON DECONTAMINATION OF PCB-BEARING WASTES.

DESCRIPTOR: *DECONTAMINATION: *ORGANIC CHEMICALS: *PCBS; *PERFORMANCE EVALUATION: *SOILS; *TECHNOLOGY; *POLLUTION CONTROL; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: PRICE: \$14.95 ORDER NO.: P888-113220

ABSTRACT: THIS REPORT SUMMARIZES RESEARCH PROGRESS ON CHEMICAL/BIOLOGICAL METHODS FOR DETOXIFICATION/DESTRUCTION OF PCBS IN SEDIMENTS. THE FOLLOWING EIGHT PROCESSES WERE EVALUATED IN DETAIL; 1) THE BASIC EXTRACTION SLUDGE TREATMENT (B.E.S.T.) PROCESS WHICH USES A SOLVENT TO REMOVE WATER AND OILY MATERIAL FROM SOLIDS. (IT HAS BEEN USED AT A CERCLA SITE); 2) THE ULTRASOMICS/HYDROGEN-OZOME/UV PROCESS SIMULTANEOUSLY EXTRACTS AND TREATS SEDIMENTS FED AS A SLURRY (20% SOLIDS); 3) THE BIO-CLEAN PROCESS USES ARTHROBACTER SP. AND/OR OTHER NATURALLY OCCURRING ORGANISMS TO AEROBICALLY DESTROY PCBS AND RELATED ORGANICS; 4) THE POTASSIUM POLYETHYLENE GLYCOL (KPEG) WITH DMSO TREATMENT IS A DEHALOGENATION PROCESS WITH RESIDUALS OF UNKNOWN TOXICITY; 5) IN THE CFS PROPAME EXTRACTION PROCESS, UPON EXTRACATION OF THE PCBS BY THE PROPAME, THE PROPAME IS RECYCLED AND THE CONTAMINANTS CONCENTRATED FOR FINAL TREATMENT; 6) THE MODAR SUPERCRITICAL WATER-OXIDATION PROCESS CAN TREAT ORGANICS THAT ARE OXIDIZED AT SUPERCRITICAL CONDITIONS (A TEST UNIT WAS OPERATED AT THE CECOS INTERNATIONAL NIAGARA FALLS SITE); 7) THE LOW EMERGY ACETOME-KEROSEME EXTRAXTION PROCESS IS APPLICABLE TO ORGANICS THAT ARE DISSOLVED IN A HYDROPHILIC SOLVENT, YIELDING A CONCENTRATED SOLUTION SUITABLE FOR INCINERATION OR CTHER TREATMENT; AND 8) THE IN SITU VITRIFICATION PROCESS CONVERTS CONTAMINATED SOILS INTO A DURABLE GLASS AND CRYSTALLINE FORM.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015329

PUBLICATION DATE: 88

TITLE: NONDESTRUCTIVE TESTING (NDT) TECHNIQUES TO DETECT CONTAINED SUBSURFACE HAZARDOUS WASTES.

DESCRIPTOR: *DETECTION TECHNIQUES; *CONTAINERS; *MONITORING TECHNIQUES; *PLASTIC CONTAINERS; FIELD TECHNIQUES; *HAZARDOUS WASTES; *SUBSURFACE HAZARDOUS WASTES; *STEEL CONTAINERS; *POLLUTION CONTROL

DESCRIPTIVE NOTE: PRICE: \$14.95 ORDER NO.: PB88-102405

ABSTRACT: FGUR NDT (REMOTE SENSING) TECHNIQUES WERE EVALUATED FOR DETECTION OF BURIED CONTAINERS. THE TECHNIQUES TESTED WERE ELECTROMAGNETIC INDUCTION (EMI), METAL DETECTION (MD), MAGNETOMETER (MAG), AND GROUND PENETRATING RADAR (GPR). THE CONTAINERS, STEEL AND PLASTIC, VARIED IN SIZE FROM 5 TO 55 GA. AND WERE BURIED IN KNOWN DISTRIBUTIONS IN A WIDE VARIETY OF SOILS. WITH SOME SUBMERGED IN WATER. FIVE

DIVERSE FIELD SITES WERE TESTED. THE RESULTS SHOWED THAT GPR IS THE ONLY RELIABLE METHOD TO DETECT PLASTIC CONTAINERS, BUT IT HAS LIMITATIONS. GPR, EMI, AND MD ALL SUFFER SEVERE LOSS OF DETECTION ABILITY WHEN THE BACKGROUND ELECTRICAL CONDUCTIVITY EXCEEDS 40 MILLIMHOS/M. IN A DRY SAMDY SOIL EMI, GPR, AND MAG ARE ALL CAPABLE OF PICKING UP A SINGLE 55 GAL STEEL DRUM TO A DEPTH OF AT LEAST 10 FT. THE MAG METHOD WORKS WELL FOR STEEL UNDER ALL SUBSURFACE COMDITIONS. GPR CAN USUALLY DETECT THE SIDE WALLS OF THE EXCAVATIONS WHERE WASTE IS DUMPED. SIGNAL ENHANCEMENT TECHNIQUES (BACKGROUND SUPPRESION) CAN ENHANCE NDT UTILITY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015330

PUBLICATION DATE: 87

TITLE: METHOD FOR ESTIMATING FUGITIVE PARTICULATE EMISSIONS FROM HAZARDOUS WASTE SITES.

DESCRIPTOR: *AIR POLLUTION CONTROL; *CONTROL TECHNIQUES; *PARTICULATE EMISSIONS; *COSTS; *PERFORMANCE EVALUATION; *HAZARDOUS WASTES; *HAZARDOUS WASTE SITES; *POLLUTION CONTROL; *WASTE SITES; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 182P. PRICE: \$19.95 ORDER NO.: PB87-232203

ABSTRACT: CONTROL TECHNIQUES ARE REVIEWED FOR APPLICABILITY TO FUGITIVE PARTICULATE EMISSIONS FROM HAZARDOUS WASTE SITES. TECHNIQUES JUDGED APPLICABLE INCLUDE CHEMICAL STABILIZATION (40 TO 100 PERCENT EFFICIENCY, \$520-2720/ACRE-YR), WET SUPPRESSION (25 TO 90 PERCENT EFFICIENCY, \$365-\$1270/ACRE-YR), PHYSICAL COVERING (30 TO 100 PERCENT EFFICIENCY, \$0.01-\$65/M2), VEGETATIVE COVERING (50 TO 80 PERCENT EFFICIENCY, \$0.11-\$3.96/M2), AND WINDSCREENS (30 TO 80 PERCENT EFFICIENCY, \$18.01-\$26.90'M2).

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015331

PUBLICATION DATE: 87

TITLE: SUPERFUND PUBLIC HEALTH EVALUATION MANUAL.

DESCRIPTOR: *HAZARDOUS MATERIALS; *EVALUATION; *MANUALS; *PUBLIC HEALTH; *SUPERFUND; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: PRICE: \$19.95 ORDER NO.: P887-183125

ABSTRACT: THIS MANUAL HAS BEEN DEVELOPED FOR A DIVERSE AUDIENCE, INCLUDING EPA REGIONAL STAFF, STAYE SUPERFUND STAFFS, FEDERAL AND STATE REMEDIAL CONTRACTORS, AND POTENTIALLY RESPONSIBLE PARTIES. BECAUSE ASSUMPTIONS AND JUDGEMENTS ARE REQUIRED IN MANY PARTS OF THE ANALYSIS, THE INDIVIDUALS CONDUCTING THE EVALUATION ARE KEY ELEMENTS IN



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THE PROCESS. IT IS THE RESPONSIBILITY OF THE RPM, USING THE ANNUAL AS A GUIDE, TO MATCH THE SCIENTIFIC SUPPORT THEY DEEM MECESSARY WITH THE APPROPRIATE RESOURCES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015332

PUBLICATION DATE: 87

TITLE: SUCERFUND RISK ASSESSMENT INFORMATION DIRECTORY.

DESCRIPTOR: DATABASES; *DIRECTORIES; MODELS; *SUPERFUND; PUBLICATIONS; *RISK ASSESSMENT; *INFORMATION RESOURCES; HUMAN RESGURCES: CORPORATE RESOURCES

DESCRIPTIVE HOTE: PRICE: \$19.95 ORDER NO.: PB87-188918

ABSTRACT: THIS DIRECTORY INDENTIFIES AND DESCRIBES SOURCES OF INFORMATION USEFUL IN CONDUCTIONS SUPERFUND-RELATED RIS. A. ESSMENTS. INFORMATION IS PRESENTED ON SOURCES OF DATABASES, DATA FILES AND TAPES, MODELS, AUTUMATED DIRECTORIES, PERIODICALS, PUBLICATIONS, AND ON HUMAN AND CORPORATE RÉSOURCES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015333

PUBLICATION DATE: 87

TITLE: DEVELOPMENT OF CHEMICAL COMPATIBILITY CRITERIA FOR ASSESSING FLEXIBLE MEMBRANE LINERS.

DESCRIPTOR: *CHEMICALS: *LABORATORY TESTS: *LINERS: *MEMBRANE LINERS; *PERFORMANCE EVALUATION

DESCRIPTIVE NOTE: 492P. PRICE: \$44.95 ORDER NO.: PB87-227310

ABSTRACT: LABORATORY TESTING WAS CONDUCTED TO DEVELOP CHEMICAL RESISTANCE DATA USING IMMERSION TESTS. SIX FLEXIBLE MEMBRANE LINERS WERE TESTED: POLYVINYLCHLORIDE, CHLORINATED POLYETHYLENE, CHOLROSULFONATED POLYETHYLENE, HIGH DENSITY POLYETHYLENE, EPICHLOROHYDRIN, AND ETHYLENE PROPYLENE DIENETERPOLYMER. TWENTY CHEMICAL SOLUTIONS PROVIDING A RANGE OF CHEMICAL CHALLENGERS WERE TESTED WITH IMMERSION DURATION RANGING FROM 1, 7, 14, 28, AND 56 DAYS, AND FOUR MONTH INCREMENTS FOR UP TO TWO YEARS AT 23 AND 50C. LINERS WERE EVALUATED FOR CHANGES IN APPEARANCE, WEIGHT, DIMENSIONS, AND TENSILE PROPERTIES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT TOYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015334

TITLE: REFERENCE MANUAL OF COUNTERMEASURES FOR HAZARDOUS SUBSTANCE RELEASES.

DESCRIPTOR: *CLEANUP: *HAZARDOUS SUBSTANCES: *MANUALS: *EMERGENCY RESPONSE: *WASTE TREATMENT; *PUBLIC HEALTH

ABSTRACT: WHEN A RELEASE OF HAZARDOUS SUBSTANCES HAS OCCURRED OR THREATERS TO OCCUR, FEDERAL, STATE, LOCAL GOVERNMENT OR INDUSTRIAL PERSONNEL MAY HAVE TO ASSUME RESPONSIBILITY FOR IMMEDIATE AND PLANNED REMOVAL WHICH IS THE PRINCIPAL CLEANUP AND TREATMENT PHASE. THE MANUAL CONTAINS THE METHODOLOGY TO ASSIST RESPONSE PERSONNEL IN SELECTING DISPOSAL TREATMENT AND PROCESSES COUNTERMEASURES. THE METHODOLOGY USES COMPREHENSIVE TABLES. OR MATRICES, WHICH PROVIDE TECHNICAL GUIDANCE FOR ALMOST 700 HAZARDOUS SUBSTANCES DESIGNATED BY CERCLA.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015335

PUBLICATION DATE: 88

TITLE: DATA QUALITY OBJECTIVES FOR REMEDIAL RESPONSE ACTIVITIES: DEVELOPMENT PROCESS AND EXAMPLE SCENARIO.

DESCRIPTOR: *FIELD **PROCEDURES:** *HAZARDOUS WASTES: *HAZARDOUS WASTE SITES: *REMEDIAL RESPONSE: *UNCONTROLLED WASTE SITES; "WASTE DISPOSAL; "POLLUTION CONTROL

DESCRIPTIVE NOTE: PRICE: \$19.95 ORDER NO.: DEVELOPMENT PROCESS: P888-131370 EXAMPLE SCENARIO: P888-131388

ABSTRACT: THESE COMPENDIUMS PROVIDE SUPERFUND REMEDIAL PROJECT MANAGERS, QUALITY ASSURANCE OFFICERS, AND STATE OFFICIALS WITH A CONSILIDATED REFERENCE FOR ALL FIELD PROCEDURES AT UNCONTROLLED HAZARDOUS WASTE SITES. IT IS ALSO INTENDED TO CONTRIBUTE TO IMPROVED CONSISTENCY IN FIELD PROCEDURES AMONG THE 10 EPA REGIONS. THE DEVELOPMENT PROCESS REPORT FOCUSES SPECIFICALLY ON THE DOO PROCESS IN THE EXAMPLE SCENARIO REPORT. RI/FS ACTIVITIES ARE PRESENTED AS A FRAMEWORK FOR DOOS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015336

PUBLICATION DATE: 88

TITLE: HAZARDOUS WASTE BIBLIOGRAPHY.

DESCRIPTOR: *BIBLIOGRAPHIES; *CLEANUP; *HAZARDOUS WASTES: *HAZARDOUS WASTE SITES; *WASTE DISPOSAL; *WASTE DISPOSAL SITES

DESCRIPTIVE NOTE: PRICE: \$12.95 ORDER NO: PB88-142476



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ABSTRACT: THIS TECHNICAL BIBLIOGRAPHY WAS DEVELOPED TO BE USED BY THE REGIONAL SUPERFUND STAFF, THE CORRECTIVE ACTION PROGRAM, AND STATES. IT DOES NOT INCLUDE ALL EPA HAZARDOUS WASTE DOCUMENTS; IT DOES IDENTIFY THOSE TECHNICAL AND PROCEDURAL DOCUMENTS MOST USEFUL AND RELEVANT FOR HAZARDOUS WASTE SITE CLEANUPS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RO.. SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: FW015337

PUBLICATION DATE: 88

TITLE: ROLE OF ACUTE TOXICITY BIOASSAYS IN THE REMEDIAL ACTION PROCESS AT HAZARDOUS WASTE SITES.

DESCRIPTOR: *BIGASSAYS; *HAZARDOUS WASTES; *HAZARDOUS WASTE SITES; *REMEDIAL ACTION; *MONITORING; *TOXICOLOGY; *WASTE SITES: *POLLUTION CONTROL

DESCRIPTIVE NOTE: 162P. ORDER NO.: PB88-125430

ABSTRACT: THIS DOCUMENT WAS WRITTEN AS AN AID IN MAKING DECISIONS REGARDING THE USE OF STANDARDIZED AQUATIC AND TERRESTIAL ACUTE TOXICITY BIOASSAYS AT HAZARDOUS WASTE SITES. OTHER TYPES OF BIOASSAYS, INCLUDING THOSE FOR USE WITH RECEIVING WATERS AND INSITU TESTING, ARE NOT DISCUSSED. STEP-BY-STEP GUIDELINES ARE PRESENTED WHEREBY DECISIONS CAN BE MADE CONCERNING THE DESIGN OF SITE-SPECIFIC BIOASSAYS STUDIES.

AVAILABILITY: MATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT NOVAL RD.. SPRINGFIELD, VA 22167

IRIS ACCESSION NUMBER: EW015338

PUBLICATION DATE: 87

TITLE: SENSITIVITY ANALYSIS FOR APPLICATION OF THE INHALATION EXPOSURE METHODLOGY TO STUDIES OF HAZARDOUS WASTE MANAGEMENT FACILITIES.

DESCRIPTOR: *INHALATION EXPOSURE METHODOLOGY; *MONITORING; *HAZARDOUS WASTES; FACILITIES; MANAGEMENT; *OCCUPATIONAL HEALTH: *SAFETY; AIR POLLUTION: *AIR POLLUTION CONTROL

DESCRIPTIVE NOTE: 184P. PRICE: \$19.95 ORDER NO.: P887-232641

ABSTRACT: THIS STUDY INVESTIGATED THE UNCERTAINITIES ASSOCIATED WITH USING THE IEM TO DETERMINE HUMAN EXPOSURES TO HAZARDOUS WASTE MANAGEMENT FACILITY AIR EMISSIONS. EMISSION SOURCES INCLUDED INCINERATORS AND ASSOCIATED STRUCTURES, STORAGE AND TREATMENT TANKS, DRUM STACKS, PROCESS BUILDINGS, SURFACE IMPOUNDMENTS, LANDFILLS, WASTE PILES, AND TREATMENT AREAS.

AVAI' ABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015339

PUBLICATION DATE: FEB. 88

TITLE: ON STATE FINANCIAL ASSISTANCE PROGRAMS. REFERENCE GUIDE.

DESCRIPTOR: *FINANCIAL ASSISTANCE PROGRAMS; *FINANCIAL PLANNNING; *FUNDING SOURCES; *GUIDES; *PROGRAM DEVELOPMENT; *STATE PROGRAMS; *STATE ROLE: *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 50P. \$4.00

ABSTRACT: THIS GUIDE IS INTENDED TO PROVIDE INFORMATION TO HELP STATES IN THE INITIAL STAGES OF DEVELOPING A FINANCIAL ASSISTANCE PROGRAM. THE FIRST PART IS AIMED AT STATES THAT ARE JUST BEGINNING TO CONSIDER DEVELOPING A FINANCIAL ASSISTANCE PROGRAM; IT SUMMARIZES THE STEPS THAT MEED TO BE TAKEN. THE SECOND PART IS INTENDED FOR ALL STATES REGARDLESS OF THE STATUS OF THEIR CURRENT PROGRAMS. IT PRESENTS MORE DETAILED INFORMATION ON THE FUNDING SOURCES AND FINANCIAL MECHANISMS THAT CAN BE USED IN A STATE ASSISTANCE PROGRAM AND PROVIDES ADDITIONAL INFORMATION ON THE EFFECTS OF TAX REFORM. THE APPENDIX LISTS DOCUMENTS AVAILABLE TO HELP STATES ESTABLISH AND OPERATE FINANCIAL ASSISTANCE PROGRAMS.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS RD., RM. 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015341

PUBLICATION DATE: 87

TITLE: RURAL GROUNDWATER CONTAMINATION.

PERSONAL AUTHOR: D'ITRI, F.M.; WOLFSON, L.G.

DESCRIPTOR: *CONTAMINATION; *DRINKING WATER; *GROUNDWATER; *MONITORING; *RURAL AREAS; *STANDARDS; *REGULATIONS; *WATER WELLS: *MANAGEMENT: *WATER SUPPLY

DESCRIPTIVE NOTE: 416P. \$45.95 CLOTH

ABSTRACT: TOPICS COVERED IN THIS PUBLICATION ARE: (1) LOSSES, TRANSPORT, AND ABATEMENT OF NITROGEN FROM SOILS, NITRATES IN GROUNDWATER, AND THE IMPACT OF CHEMIGATION SYSTEMS (APPLICATYONS OF CHEMICALS -FERTILIZERS, PESTICIDES-BY WAY OF IRRIGATION WATER), LARGE SCALE ANIMAL (HOG) PRODUCTION, LANGILLS, UNDERGROUND STORAGE TANKS AND SEPTIC SYSTEMS AS SOURCES OF GROUNDWATER CONTAMINATION; (2) METHODS TO ACCESS, MONITOR, AND MODEL THE MOVEMENT OF CONTAMINANTS IN SOIL; (3) SUMMARIES OF DRINKING WAYER STANDARDS, PESTICIDE CONTAMINATION OF WELL WATERS, WELL CONSTRUCTION, TREATMENT OF CONTAMINATED GROUNDWATER AND PESTICIDE RISK CONSIDERATIONS AND HEALTH IMPLICATIONS OF GROUNDWATER CONTAMINANTS; AND 4), REGULATION AND REMEDIAL ACTION INCLUDING GROUNDWATER LAW, LIABILITY, ECONOMICS, LAND USE PLANNING, ZONING, SOCIOLOGICAL CONSIDERATIONS, AND PUBLIC POLICY. IN GENERAL, THE EMPHASIS IS ON A SYSTEMS APPROACH FOR TOTAL RESOURCE MANAGEMENT.

AVAILABILITY: LEWIS PUBLISHERS, INC., P.O. DRAWER 519.

CHELSEA, MI 48118

IRIS ACCESSION NUMBER: EW015342

PUBLICATION DATE: 87

TITLE: UNDERGROUND STORAGE TANKS GUIDEBOOK.

PERSONAL AUTHOR: CHEREMISINOFF, PAUL N.; AND OTHERS.

DESCRIPTOR: *CORROSION; *CONSTRUCTION; *LEAK DETECTION; *POLLUTION CONTROL; *REGULATIONS; *STORAGE TANKS; *MONITORING

DESCRIPTIVE NOTE: 163P. \$19.95

ABSTRACT: THIS BOOK IS PREPARED TO HELP OWNERS AND OFERATORS OF UNDERGROUND STORAGE TANKS ASSESS THEIR PROBLEMS AND EVALUATE TECHNICAL ISSUES. THE MONOGRAPH BEGINS WITH AN OVERVIEW OF THE MAGNITUDE OF THE PROBLEM. A SUMMARY AND REVIEW OF RECENT FEDERAL REGULATIONS AND RELEASE INCIDENTS FOLLOWS. THE TECHNICAL ISSUES OF TANK CORROSION, CONSTRUCTION MATERIAL, STRUCTURAL CONSIDERATION, AND LEAK DETECTION AND MONITORING ARE DISCUSSED. THE APPENDICES CONTAIN INFORMATION ON STATE UNDERGROUND STORAGE CONTACTS AND A REFERENCE OF PUBLICATIONS ON THE SAME SUBJECT.

AVAILABILITY: PUDVAN PUBLISHING CO., 1935 SHERMER RD., MORTHBROOK, IL 60062

IRIS ACCESSION NUMBER: EW015343

PUBLICATION DATE: (8 8)

Full Text Provided by ERIC

TILE: CATALOGUE OF WATER - EFFICIENT TECHNOLOGIES FOR THE URBAN/RESIDENTIAL SECTOR.

DESCRIPTOR: *CATALOGS; *COSTS; *EQUIPMENT; *PLUMBING; *TECHNOLOGY; *RESIDENTIAL EQUIPMENT; *WATER CONSERVATION; *WATER USE; *MANUFACTURERS; PERFORMANCE EVALUATION; *PURCHASING INFORMATION

DESCRIPTIVE NOTE: 168P. \$95.00 POSTPAID

ABSTRACT: THIS CATALOG PROFILES IN DETAIL MORE THAN 125 COMMERCIALLY AVAILABLE TECHNOLOGIES FOR URBAN AND RESIDENTIAL USES. INCLUDED ARE TECHNOLOGIES APPROPRIATE FOR COMMERCIAL AND PUBLIC INSTALLATIONS. THE TECHNOLOGIES LISTED REPRESENT THE BEST OF A NEW GENERATION OF WATER-SAVING FIXTURES AND TECHNOLOGIES. THEY USE 30-90% LESS WATER THAN CONVENTIONAL TECHNOLOGIES, YET PROVIDE EQUIVALENT OR SUPERIOR SERVICE. A VARIETY OF PRODUCTS FROM A VARIETY OF MANUFACTURERS ARE INCLUDED. THE PRODUCTS ARE GROUPED IN THE FOLLOWING SECTIONS: (1) FAUCETS; (2) SHOWERHEADS; (3) TOILETS; (4) PRESSURE-REDUCING VALVES; (5) COMPLETE WATER AND WASTEWATER PLUMBING SYSTEMS; AND (6) INNOVATIVE RESIDENTIAL IRRIGATION TECHNOLOGIES. INFORMATION FOR EACH PRODUCT USUALLY INCLUDES (1) PRODUCT DESCRIPTION, (2) TOTAL TOTA

SELECTED INSTALLATIONS. (8) PRODUCT REVIEW REFERENCES, AND (9) PURCHASING INFORMATION.

AVAILABILITY: ROCKY MOUNTAIN INSTITUTE, 1739 SNOWMASS CREEK RD., SNOWMASS, CO 81654-9199

IRIS ACCESSION NUMBER: EW015344

PUBLICATION DATE: 88

TITLE: POLLUTION ENGINEERING FLOW SHEETS: HAZARDOUS WASTE TREATMENT AND UNIT OPERATIONS.

DESCRIPTOR: *ENGINEERING; *FLOW SHEETS; *HAZARDOUS SUBSTANCES; *HAZARDOUS WASTES; *REFERENCE MATERIALS; *TECHNOLOGY; *WASTE TREATMENT; POLLUTION CONTROL; *UNIT PROCESSES

DESCRIPTIVE NOTE: 225P. \$29.95

ABSTRACT: THIS PUBLICATION PROVIDES FLOW SHEETS SHOWING PROCESSES, SYSTEMS, AND TECHNOLOGIES BEING USED FOR HAZARDOUS WASTE TREATMENT. THERE IS NO NARRATIVE COPY IN THE BOOK.

AVAILABILITY: PUDVAN PUBLISHING CO., 1935 SHERMER RD., NORTHBROOK, IL 60062

IRIS ACCESSION NUMBER: EW015345

PUBLICATION DATE: 88

TITLE: A RCRA GENERATOR'S COMPLIANCE PROGRAM.

DESCRIPTOR: *COMPLIANCE; *HAZARDOUS MATERIALS; *POLLUTION CONTROL; *REGULATIONS; *RCRA; *WASTE DISPOSAL; *HAZARDOUS WASTES

DESCRIPT VE NOTE: 160P. \$24.95

ABSTRACT: THIS HANDBOOK CONTAINS FORMS, CHECKLISTS, AND COPIES OF PERTINENT FEDERAL LAW RELATED TO THE RESOURCE AND RECOVERY ACT (RCRA). IT IS DESIGNED TO ASSIST THOSE WITH DRUMS, UNDERGKOUND TANKS, OR PROCESSES THAT HOLD HAZARDOUS MATERIALS.

AVAILABILITY: PUDVAN PUBLISHING CO., 1935 SHERMER RD., GORTHBROOK, IL 60062

IRIS ACCESSION NUMBER: EW015347

PUBLICATION DATE: 88

TITLE: EPA'S HANDBOOK: RESPONDING TO SINKING HAZARDOUS SUBSTANCES.

DESCRIPTOR: *CLEANUP; *CHEMICALS; *EMERGENCY RESPONSE; *HAZARDOUS SUBSTANCES; *HANDBOOKS; *TECHNOLOGY: *WATER

POLLUTION CONTROL; *SPILLS; *WATER QUALITY

DESCRIPTIVE NDTE: 312P. \$29.95

ABSTRACT: THIS HANDBOOK PRDVIDES DETAILED GUIDANCE ON HOW TO RESPOND TO SPILLS OF CHEMICALS THAT SINK IN WATER AND CONTAMINATE BOTTOM MATERIALS. IT WAS ORIGINALLY PREPARED IN VERY LIMITED QUANTITIES FOR EPA PERSONNEL. THE HANDBOOK TAKES THE READER STEP-BY-STEP THROUGH THE DECISION-MAKING PROCESS TO DETERMINE THE CLEANUP AND MITIGATIVE TECHNOLOGIES THAT MAY BE USED.

AVAILABILITY: PUDVAN PUBLISHING CD., 1935 SHERMER RD., NORTHBROOK, IL 60052

IRIS ACCESSION NUMBER: EW015367

PUBLICATION DATE: MAR. 88

TITLE: VALUE ENGINEERING FOR SMALL COMMUNITIES.

DESCRIPTOR: *COSTS; *CDNTRACTS; *DESIGN: *CONSTRUCTION; *ENGINEERING; *FACILITIES; *MAMAGEMENT; *VALUE ENGINEERING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 38P. \$3.28

ABSTRACT: THIS DOCUMENT PROVIDES GUIDANCE TO COMMUNITIES THAT ARE CONSIDERING THE USE OF VALUE ENGINEERING (VE) FOR THEIR WASTEWATER TREATMENT PROJECTS. THIS DOCUMENT (1) EXPLAINS WHAT VE IS AND PROVIDES EXAMPLES, (2) ILLUSTRATES THE COST DF VE AS WELL AS ITS BENEFITS, AND (3) PROVIDES A SIMPLIFIED CONTRACT CLAUSE TO BE USED IN OBTAINING VE SERVICES. DETAILED INFORMATION DN VE MAY BE OBTAINED FROM REFERENCES IN 1HE APPENDICES. THE USE OF VE FOR WASTEWATER TREATMENT FACILITIES DURING THEIR DESIGN AND DEVELOPMENT IS A PROVEN MANAGEMENT TOOL THAT SAVES MONEY.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESDURCES CENTER, 1200 CHAMBERS RD., RM. 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015375

PUBLICATION DATE: MAY 88

TITLE: NPDES COMPLIANCE INSPECTION MANUAL.

DESCRIPTOR: *COMPLIANCE; *COMPLIANCE INSPECTION: *NPDES; *FLOW *MANUALS: *NPDES *RECURDKEEPING; **MEASUREMENT:** *INSPECTION; *LABORATORY OUALITÝ *BIOMUNITORING: *OPERATIONS (WASTEWATER): *PRETREATMENT; ASSURANCE: *WASTEWATER TREATMENT: *SAMPLING: *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 249P. PRICE: \$3.00 AS LONG AS SUPPLY LASTS.

ABSTRACT: THIS MANUAL IS THE FIRST UPDATE OF THE JUNE 1984 NPDES COMPLIANCE INSPECTION MANUAL (EW 11636). THE MDDIFICATIONS INCLUDE CHANGES TO THE REGULATIONS AND TATIONS. A NEW EMPHASIS ON BIOMONITORING, AND

CLARIFICATION ON PRETREATMENT INSPECTIONS. THE MANUAL PROVIDES DISCUSSION DN ALL MAJOR COMPLIANCE INSPECTION FUNCTIONS AND DOES NOT FOCUS ON ANY ONE INSPECTION TYPE. THE MANUAL IS DRGANIZED INTO NINE CHAPTERS: (1) INTRODUCTION; (2) INSPECTION PROCEDURES; (3) RECORDKEEPING AND REPORTING; (4) FACILITY SITE REVIEW; (5) SAMPLING; (6) FLOW MEASUREMENT; (7) BIOMCNITDRING; (8) LABORATORY QUALITY ASSURANCE; AND (9) PRETREATMENT.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS RD., RM. 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015376

PUBLICATION DATE: SUM 88

TITLE: COMPUTER PROGRAM: INTERNAL PRESSURE DESIGN FOR PVC PRESSURE PIPE.

PERSONAL AUTHOR: KELLY, JEFFREY T.

DESCRIPTOR: BASIC LANGUAGE; *CDMPUTER PROGRAMS; COMPUTER APPLICATIONS; *DESIGN; PRESSURE; *PVC PIPES; PIPE SIZE; WATER DISTRIBUTION; *WATER PIPES

DESCRIPTIVE NOTE: 11-12P.

ABSTRACT: PRESENTED IS A COMPUTER PROGRAM TO CALCULATE PRESSURE REQUIREMENTS ALONG A PIPELINE AND APPROPRIATE DIMENSION RATIOS OF PVC PRESSURE PIPE.

AVAILABILITY: UNI-BELL PVC PIPE NEWS; V11 N1

IRIS ACCESSION NUMBER: EW015377

PUBLICATION DATE: JUN 88

TITLE: MANAGING PCB SPILLS.

PERSONAL AUTHOR: MCLEARN, MARY

DESCRIPTOR: *CONTAMINATION; *CLEANUP; *HAZAROOUS MATERIALS; *PCBS; *TECHNOLOGY; *TOXIC SUBSTANCES; *POLLUTION CONTROL

DESCRIPTIVE NOTE: 50.52P.

ABSTRACT: DISCUSSED ARE REMEDIATION OPTIONS FOR MANAGING AND CLEANING UP PCB SPILLS. DISCUSSED ARE THE IN SITU VITRIFICATION PROCESS, SOIL WASHING, AND MECHANICAL REMOVAL OF PCB'S FROM POROUS SURFACES.

AVAILABILITY: POLLUTION ENGINEERING: V20 H6

IRIS ACCESSION NUMBER: EW015378

PUBLICATION DATE: JUN 88

TITLE: MEASUREMENT AND CONTROL OF TOXIC AIR POLLUTANTS.

PERSONAL AUTHOR: CHEREMISINOFF. PAUL N.

DESCRIPTOR: *AIR POLLUTION CONTROL; *AIR POLLUTION; *MEASUREMENT; *MONITORING; *POLLUTANTS; *TECHNOLOGY; *SEWAGE SLUDGE; *PULLUTION CONTROL; *TDXIC SUBSTANCES; *PHOTOCHEMICALS: *STACK EMISSIONS

DESCRIPTIVE NOTE: 60-63P.

ABSTRACT: DISCUSSED IS THE MEASUREMENT AND CONTROL OF TOXIC AIR POLLUTANTS. ELIMINATING POLLUTANTS AT THE SOURCE IS STRESSED. IN ORDER TO ELIMINATE DR TO REDUCE THE POLLUTION, POLLUTION MUST BE MONITORED AND MEASURED. SOME OF THE POLLUTANTS ARE DIFFICULT TO MEASURE. SOME OF THE MEASUREMENT TECHNIQUES AVAILABLE ARE CONSIDERED.

AVAILABILITY: POLLUTION ENGINEERING; V20 %6

IRIS ACCESSION NUMBER: EW015379

PUBLICATION DATE: 88

TITLE: WATER TREATMENT OPERATION. VOLUME 2. A FIELD STUDY TRAINING PROGRAM. (REVISION).

DESCRIPTOR: *CORRESPONDENCE COURSES; *INDEPENDENT STUDY; *INSTRUCTIONAL MATERIALS; *DPERATOR TRAINING; *POSTSECONDARY EDUCATION; *OPERATIONS (WATER) *WATER TREATMENT; *DRINKING WATER; *WATER QUALITY

DESCRIPTIVE NDTE: 665P. \$30.00

ABSTRACT: THE PURPOSE OF THIS WATER TREATMENT FIELD STUDY TRAINING PROGRAM IS TO: (1) DEVELOP KEW QUALIFIED WATER TREATMENT PLANT OPERATORS; (2) EXPAND THE ABILITIES OF EXISTING OPERATORS; AND (3) PREPARE OPERATORS FOR CIVIL SERVICE AND CERTIFICATION EXAMINATIONS (EXAMINATIONS ADMINISTERED BY STATE/PROFESSIONAL ASSOCIATIONS WHICH OPERATORS TAKE TO INDICATE A LEVEL OF PROFESSIONAL COMPETENCE). VOLUME II IS A CONTINUATION OF VOLUME I, IN WHICH THE EMPHASIS WAS ON THE KNOWLEDGE AND SKILLS NEEDED BY OPERATORS OF CONVENTIONAL SURFACE WATER TREATMENT PLANTS. THIS VOLUME CONTAINS INFORMATION ON: (1) IRON AND MANGANESE CONTROL; (2) FLUORIDATION; (3) SOFTENING; (4) TRIHALOMETHANES; (5) DEMINERALIZATION; (6) HANDLING AND DISPOSAL OF PROCESSED WASTES; (7) MAINTENANCE; (8) INSTRUMENTATION; (9) SAFETY; (10) ADVANCED LABORATORY PROCEDURES; (11) DRINKING WATER REGULATIONS; AND (12) ADMINISTRATION: OBJECTIVES, GLOSSARY, LESSONS, QUESTIONS (WITH SUGGESTED ANSWERS), AND A TEST ARE PROVIDED FOR EACH CHAPTER. FINAL EXAMINATION (WITH ANSWERS), SOLVING WATER TREATMENT PLANT ARITHMETIC PROBLEMS, WATER ABBREVIATIONS, COMPLETE GLOSSARY, AND SUBJECT INDEX ARE PROVIDED IN AN APPENDIX. INFORMATION ON OBJECTIVES, SCOPE, AND USES OF THIS MANUAL AND INSTRUCTIONS TO PARTICIPANTS IN HOME-STUDY COURSES ARE FOUND IN VOLUME I.

AVAILABILITY: MR. KEN KERRI, CALIFORNIA STATE UNIVERSITY, SACRAMANTO, 6000 J ST., SACRAMENTO, CA 95819-2654

IRIS ACCESSION NUMBER: EW015380

PUBLICATION DATE: 88

TITLE: DPERATION OF WASTEWATER TREATMENT PLANTS. A FIELD STUDY TRAINING PROGRAM. VDLUME I.

DESCRIPTOR: CORRESPONDENCE CDURSES; *INDEPENDENT STUDY; *INSTRUCTIONAL MATERIALS; *OPERATOR TRAINING; *POSTSFCONDARY EDUCATION; *DPERATIONS (WASTEWATER) *WASTEWATER TREATMENT; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 490P. \$20.00

ABSTRACT: THE PURPOSE OF THIS WASTEWATER TEATMENT FIELD STUDY TRAINING PROGRAM IS TO: (1) DEVELOP NEW QUALIFIED WASTEWATER TREATMENT PLANT OPERATORS; (2) EXPAND THE ABILITIES OF EXISTING OPERATORS, PERMITTING BETTER SERVICE BOTH TO EMPLOYERS AND PUBLIC; AND (3) PREPARE OPERATORS FOR CIVIL SERVICE AND CERTIFICATION EXAMINATIONS (EXAMINATIONS ADMINISTERED BY STATE/PROFESSIONAL ASSOCIATIONS WHICH OPERATORS TAKE TO INDICATE A LEVEL OF PROFESSIONAL COMPETENCE). THIS VOLUME, VOLUME I, CONTAINS INFORMATION SECTIONS ON: (1) THE TREATMENT PLANT OPERATORS; (2) WHY WE SHOULD TREAT WASTES; (3) WASTEWATER TREATMENT FACILITIES; (4) RACKS, SCREENS, COMMINUTORS, AND GRIT REMOVAL; (5) SEDIMENTATION AND FILTRATION; (6) TRICKLING FILTERS; (7) ROTATING BIOLOGICAL CONTACTORS; (8) ACTIVATED SLUDGE; AND (9) DISINFECTION AND CHLORINATION. OBJECTIVES, GLOSSARY, LESSONS, QUESTIONS (WITH SUGGESTED ANSWERS), AND A TEST ARE PROVIDED FOR EACH CHAPTER. FINAL EXAMINATION (WITH ANSWERS), SDLVING WATER TREATMENT PLANT ARITHMETIC PROBLEMS, WATER ABBREVIATIONS, COMPLETE GLOSSARY, AND SUBJECT INDEX ARE PROVIDED IN AN APPENDIX. PROGRAM SCOPE/SEQUENCE AND INSTRUCTIONS TO PARTICIPATE IN HOME-STUDY COURSES ARE PROVIDED IN THE INTRODUCTION.

AVAILABILITY: MR. KEN KERRI, CALIFORNIA STATE UNIVERSITY, SACRAMENTO, 6000 J ST., SACRAMENTO, CA 95819-2654

IRIS ACCESSION NUMBER: EW015383

PUBLICATION DATE: 86

TITLE: LAWS OF CHEMICAL REGULATION AND HAZAROOUS WASTE.

PERSONAL AUTHOR: STEVER, OONALD W.

DESCRIPTOR: *CHEMICALS; *FEOERAL REGULATIONS; *HAZARDOUS WASTES; *LEGISLATION; *REGULATIONS; *FEDERAL REGULATIONS; *TOXIC SUBSTANCES; *INFORMATION SDURCES

DESCRIPTIVE NOTE: 896P. \$95.0D HARD COVER

ABSTRACT: THIS BDDK WAS DESIGNED TO PRESENT SUCCINCTLY USEFUL INFORMATION ON FEDERAL REGULATIONS RELATED TO TDXIC CHEMICALS AND HAZARDOUS WASTES AS DF 1986. SOME MORE RECENT ITEMS ARE NOT INCLUDED.

AVAILABILITY: CLARK BOARDMAN COMPANY, LTO., 435 HUDSON ST., NEW YORK, NY 10014

PUBLICATION DATE: 85

TITLE: WESTERN WATER FLOWS TO THE CITIES, WATER IN THE WEST. VOLUME 3.

PERSONAL AUTHOR: FOLK-WILLIAMS, JOHN A.; AND OTHERS

DESCRIPTOR: *CONTROVERSIES; *DRINKING WATER; *CASE STUDIES; *ISSUES; ECONOMICS; *SOUTHWEST USA; *URBAN AREAS; *WATER RESOURCES; *WATER SUPPLY; *WATER QUALITY; ETHICS; LEGISLATION: REGULATIONS

DESCRIPTIVE NOTE: 217P. \$25.00 SOFT COVER

ABSTRACT: THIS IS A SOURCEBOOK OF CASE STUDIES SURVEYING THE BROAD RANGE OF ICSUES AND CONTROVERSIES SURROUNDING THE PROVISION OF POTABLE WATER TO URBAN AREAS IN THE SOUTHWESTERN PART OF THE UNITED STATES. THE CASE STUDIES ARE BASED ON A SAMPLE OF 20 CITIES IN SEVEN STATES AND 56 SELECTED DISPUTES.

AVAILABILITY: WESTERN NETWORK, 1215 LE PASEO DE VERLTA, SANTA FE, NM 87501

IRIS ACCESSION NUMBER: EW015385

PUBLICATION DATE: 88

TITLE: ASBESTOS INFORMATION ACT. HEARING BEFORE THE SUBCOMMITTEE ON TRANSPORTATION, TOURISM, AND HAZARDOUS MATERIALS.

DESCRIPTOR: *ASBESTOS INFORMATION ACT: *ASBESTOS; *HOUSE OF REPRESENTATIVES; *ENVIRONMENT; *CONGRESSIONAL HEARINGS; *LEGISLATION: *HAZARDUUS MATERIALS; *POLLUTION CONTROL; *REGULATIONS; *PUBLIC HEALTH

DESCRIPTIVE NOTE: 67P.

ABSTRACT: THIS IS H.R. 2693, A BILL IN THE 100TH CONGRESS, TO REQUIRE ASBESTOS MANUFACTURERS TO SUBMIT INFORMATION ON THEIR ASBSTOS PRODUCTS TO THE ENVIRONMENTAL PROTECTION AGENCY AND TO REQUIRE OWNERS OF BUILDINGS CONTAINING ASBESTOS TO INSPECT THE BUILDINGS AND TAKE SAMPLES OF ASBESTOS OR ASBESTOS-CONTAINING MATERIAL BEFORE COMMENCING CIVIL ACTIONS RELATING TO ASBESTOS AND FOR OTHER PURPOSES. ALSO INCLUDED ARE TESTIMONY, DISCUSSION OF THE LEGISLATION AND TWO PREPARED STATEMENTS.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, CONGRESSIONAL SALES OFFICE, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON D.C., 20402

IRIS ACCESSION NUMBER: EW015386

PUBLICATION DATE: 86

TITLE: ASBESTOS INFORMATION CLEARINGHOUSE.

DESCRIPTOR: *ASBESTOS; *ASBESTOS INFORMATION CLEARINGHOUSE; *CONGRESSIONAL HEARIF?S; *HAZARDOUS MATERIALS; *LEGISLATION; *INFORMATION DISSEMINATION; *MONITORING; *PUBLIC HEALTH; *POLLUTION CONTROL; *USEPA; *REGULATIONS

DESCRIPTIVE NOTE: 103P.

ABSTRACT: THIS PUBLICATION CONTAINS H.R. 5078, A BILL TO ESTABLISH AN ASBESTOS INFORMATION CLEARINGHOUSE IN THE ENVIRONMENTAL PROTECTION AGENCY. ALSO INCLUDED ARE TESTIMONY, DISCUSSION AND PREPARED STATEMENTS AND MATERIALS RELATED TO THE PROPOSED LEGISLATION.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, CONGRESSIONAL SALES OFFICE, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON D.C., 20402

IRIS ACCESSION NUMBER: EW015387

PUBLICATION DATE: 88

TITLE: ARE WE CLEANING UP? 10 SUPERFUND CASE STUDIES. A SPECIAL REPORT TO OTA'S ASSESSMENT ON SUPERFUND IMPLEMENTATION.

DESCRIPTOR: *CASE STUDIES; *CLEANUP; *ENVIRONMENTAL IMPACT; *WASTE DISPOSAL; *PERFORMANCE EVALUATION; *SUPERFUND; *TECHNOLOGY; *POLLUTION CONTROL; *USEPA; *TOXIC WASTES; *COSTS; *COMPLIANCE; *PUBLIC HEALTH; *WASTE TREATMENT; *RISK MANAGEMENT

DESCRIPTIVE NOTE: 89P.

ABSTRACT: THIS REPORT EXAMINED TWO FUNDAMENTAL QUESTIONS ABOUT USING TECHNOLOGY TO CLEANUP TOXIC WASTE SITES. FIRST, WAS THE SUPERFUND PROGRAM CONSISTENTLY SELECTING PERMANENTLY EFFECTIVE TREATMENT TECHNOLOGIES, WHICH ACCORDING TO SARA, ARE PREFERABLE. THE ANSWER ACCORDING TO THIS REPORT WAS THAT THEY WERE NOT. SECONDLY, WERE LAND DISPOSAL AND CONTAINMENT, BOTH IMPERMANENT TECHNOLOGIES, STILL BEING F.EQUENTLY USED. THE ANSWER WAS THAT THEY WERE! THE REPORT CONTAINS A SUMMARY AND ANALYSIS, FOLLOWED BY 10 CASE STUDIES.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402-9325

IRIS ACCESSION NUMBER: EW015387

PUBLICATION DATE: 88

TITLE: AGRICULTURAL BENEFITS DERIVED FROM PESTICIDE USE: A STUDY OF THE ASSESSMENT PROCESS.

DESCRIPTOR: *AGRICULTURE; *CHEMICALS; *BENEFITS ASSESSMENT; *PESTICIDES; *ISUZS; *USEPA; *RECOMMENDATIONS; PUBLIC HEALTH; *PERFORMANCE EVALUATION; *USDA

DESCRIPTIVE NOTE: 161P.

ABSTRACT: THIS REPORT IS BASED ON A NATIONAL SURVEY OF



INFORMATION GATHERED FROM A VARIETY OF SOURCES. THE SURVEY WAS NOT INTENDED TO COVER EVERY CONCEIVABLE PROBLEM AREA OR SITUATION; IT REPRESENTS A CONDENSED OVERVIEW OF THE MOST IMPORTANT KEY ISSUES IN THE CURRENT PESTICIDE BENEFITS ASSESSMENT PROCESS. INCLUDEO ARE: (1) AN EXECUTIVE SUMMARY; (2) INTODUCTION; (3) BACKGROUND; (4) FINDINGS; (5) SUMMARY AND RECOMMENDATIONS; (6) REFERENCES; AND (7) APPENDICES.

AVAILABILITY: THE OHIO STATE UNIVERSITY, DEPT. OF PLANT PATHOLOGY, PROJECT DIRECTOR, COLUMBUS, OH 43210

IRIS ACCESSION NUMBER: EW015389

PUBLICATION DATE: MAY 88

TITLE: CHEMICAL AND BIOLOGICAL CHARACTERIZATION OF MUNICIPAL SLUDGES, SEDIMENTS, DREDGE SPOILS, AND DRILLING MUDS.

PERSONAL AUTHOR: LICHTENBERG, JAMES J.: AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANALYTICAL CHEMISTRY; *BIOLOGICAL CHARACTERISTICS; *OKLUĞE SPOILS; *LABORATORY PROCEDURES; *URILLING MUDS; *MONITORING; *MUNICIPAL SLUDGE; *SAMPLING; *SEDIMENTS; *REGULATIONS; QUALITY ASSURANCE; *RISK ASSESSMENT; WASTEWATER TREATMENT; WASTE DISPOSAL

DESCRIPTIVE NOTE: 510P. LIST PRICE: \$69.00 MEMBER PRICE: \$55.20 ISBN: 0-6031-09873

ABSTRACT: THIS BOOK PRESENTS STATE-OF-THE-ART DEVELOPMENTS IN SAMPLING AND ANALYTICAL METHODOLOGY AND QUALITY ASSURANCE PRACTICES FOR MONITORING TOXIC CHEMICALS IN MUNICIPAL SLUDGFS, SEDIMENTS, DREDGE SPOILS, AND DRILLING MUDS AND THEIR BIOLOGICAL CHARACTERIZATION. STP 976 ADD.ESSES SAMPLING, ORGANIC AND INORGANIC CHEMICAL METHODS, AQUATIC BIOLOGICAL, MICROBIOLOGICAL, AND VIROLOGIVAL METHODS AND RISK ASSESSMENT. USEPA REPRESENTATIVES DESCRIBE THE STATUS OF REGULATIONS AND ANALYTICAL NEEDS RELATED TO CHARACTERIZATION AND REGULATION OF SLUDGE, SEDIMENT, AND WASTE STREAMS. A TOTAL OF 42 PEER REVIEWED PAPERS COVER THE FOLLOWING 'AREAS OF INTEREST: (1) EPA REVIEW OF REGULATIONS RELATED TO SEWAGE; (2) SLUDGE DISPOSAL, SEDIMENT QUALITY, AND ANALYTICAL METHODOLOGY; (3) CHEMICAL CHARACTERIZATION; AND (5) RISK ASSESSMENT.

AVAILABILITY: ASTM. 1916 RACE ST., PHILAOELPHIA, PA 19103 ATTM: CUSTOMER SERVICE DEPARTMENT

IRIS ACCESSION NUMBER: EW015390

PUBLICATION DATE: 88

TITLE: PRETREATMENT FACILITY INSPECTION. A FIELD STUDY TRAINING PROGRAM.

DESCRIPTOR: ADMINISTRATION; HOMESTUDY; *INDEPENDENT STUDY; *INSTRUCTIONAL MATERIALS; *INSPECTION; *POSTSECONOARY (WASTEWATER); CHICAGO (WASTEWATER); CHICA

HONITORING; PRETREATMENT TECHNOLOGY: INDUSTRIAL WASTES

DESCRIPTIVE NOTE: 721P.

ABSTRACT: THIS MANUAL WAS PREPARED TO HELP PRETREATMENT INSPECTORS PERFORM THEIR JOBS SAFELY AND FAIRLY. PRETREATMENT INSPECTIONS HAVE THE RESPONSIBILITY OF PROTECTING MUNICIPAL WASTEWATER TREATMENT SYSTEMS, TREATMENT PLANTS, AND THE ENVIRONMENT FROM DAMAGE THAT MAY OCCUR WHEN INDUSTRIES THAT USE HAZARDOUS GR TOXIC MATERIALS DISCHARGE THEM INTO A WASTEWATER COLLECTION SYSTEM. THE PUBLICATION CONTAINS 11 CHAPTERS THAT CONSIDER ALL ASPECTS OF THE JOB. THE FORMAT OF THE BOOK PERMITS HOME STUDY FOR PEOPLE UNABLE TO ATTEND REGULAR COURSES. EACH CHAPTER CONTAINS OBJECTIVES, MARRATIVE, AND QUESTIONS AT THE END OF THE CHAPTER. THE APPENDICES CONTAIN A VARIETY OF FORMS, MATHEMATICAL FORMULAS TO USE FOR CALCULATIONS, AND A LIST OF KEY WORDS USED IN PRETREATMENT.

AVAILABILITY: MR. KENNETH D. KERRI, CALIFORNIA STATE UNIVERSITY, SACRAMENTO, 6000 J ST., SACRAMENTO, CA 95819-2694

IRIS ACCESSION NUMBER: EW015391

PUBLICATION DATE: MAR 88

TITLE: POTENTIAL VARIATION OF GREAT LAKES WATER LEVELS.

PERSONAL AUTHOR: HARTMANN, HOLLY C.

DESCRIPTOR: *FORECASTING; *GREAT LAKES; *MODELS; *PLANNING; *WATER LEVELS; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 35P.

ABSTRACT: THE POTENTIAL FOR WATER LEVEL CHANGES ON LAKES MICHIGAN, HURON, ST. CLAIR, AND ERIE IS EXAMINED USING THE GREAT LAKES ENVIRONMENTAL RESEARCH LABORATORY'S HYDROLOGIC RESPONSE MODEL (HRM) IN CONJUNCTION WITH SEVERAL HYDROMETEOROLOGIC AND WATER MANAGEMENT SCENARIOS. THE SCENARIOS SUGGEST THAT LAKE LEVELS ARE NOT LIKELY TO RETURN TO LONG-TERM (1900-1969) NORMAL LEVELS WITHIN THE NEXT SEVERAL YEARS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL RD., SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW015392

PUBLICATION DATE: 88

TITLE: INDOOR RADCY. LIMITED FEOERAL RESPONSE TO REDUCE CONTAMINATION IN HOUSING.

DESCRIPTOR: *AIR POLLUTION CONTROL; *CARCINOGENS; *FEDERAL ROLE; HUD; *HAZAROOUS MATERIALS; HOUSES; *INDOOR AIR; *POLLUTION CONTROL; *PUBLIC HEALTH; *RADON; FARMERS HOME AOMINISTRATION; *FEDERAL AGENCIES; *USEPA; VETERANS ADMINISTRATION; NATIONAL PARK SERVICE

DESCRIPTIVE NOTE: 66P. FIRST 5 COPIES FREE. ADDITIONAL COPIES - \$2.00

ABSTRACT: THIS REPORT DESCRIBES THE EFFORTS TO REDUCE RADON CONTAMINATION IN HOUSING BY THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; THE FARMERS HOME ADMINISTRATION; U.S. DEPARTMENT OF AGRICULTURE; THE NATIONAL PARK SERVICE; U.S. DEPARTMENT OF THE INTERIOR; AND THE VETERANS ADMINISTRATION. THE REPORT ALSO DISCUSSES THE ENVIRONMENTAL PROTECTION AGENCY'S WORK IN IDENTIFYING AND RESOLVING ELEVATED RADON LEVELS AND COMMENTS ON THE POTENTIAL FOR FEDERAL GOVERNMENT LIABILITY REGARDING INDOOR RADON HAZARDS IN FEDERALLY OWNED OR ASSISTED HOUSING. THE REPORT CONTAINS RECOMMENDATIONS FOR THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT. THE ENVIRONMENTAL PROTECTION AGENCY, AND THE DEPARTMENT OF THE INTERIOR.

AVAILABILITY: UNITED STATES, GENERAL ACCOUNTING OFFICE, WASHINGTON, D.C. 20548

IRIS ACCESSION NUMBER: EW015393

PUBLICATION DATE: 88

TITLE: LUTROPHICATION IN THE MEDITERRANEAN SEA: RECEIVING CAPACITY AND MONITORING OF LONG-TERM EFFECTS.

DESCRIPTOR: *ECOLOGY; *EUTROPHICATION; *GUIDELINES; *MONITORING; *CONFERENCE PROCEEDINGS; *MEDITERRAMEAN SEA; *RECOMMENDATIONS; *RESEARCH NEEDS; *WATER QUALITY

DESCRIPTIVE NOTE: 208P.

ABSTRACT: THIS PUBLICATION RESULTED FROM A WORKSHOP HELD IN MARCH, 1987. A SUMMARY REPORT OF THE MEETING INCLUDING THE GUIDELINES AND RECOMMENDATIONS APPEAR IN PART I. SEVERAL PAPERS WERE PRESENTED AS BACKGROUND INFORMATION. INCLUDING A PAPER ON THE STATE OF KNOWLEDGE OF THE EUTROPHICATION PROCESS IN THE MEDITERRANEAN SEA; THESE PAPERS ARE INCLUDED IN PART II. TOPICS ON WHICH THERE IS NEED FOR ADDITIONAL RESEARCH ARE ALSO IDENTIFIED.

AVAILABILITY: UNESCO, 7, PLACE DE FONTENOY, 75700 PARIS

IRIS ACCESSION NUMBER: EW015394

PUBLICATION DATE: 87

TITLE: HEALTH HAZARD CONTROL IN THE CHEMICAL PROCESS INDUSTRY.

PERSONAL AUTHOR: LIPTON, SYDNEY; LYNCH, JEREMIAH

DESCRIPTOR: *CHEMICALS; COMPLIANCE; *EMISSIONS; *HAZARDOUS MATERIALS; *PUBLIC HEALTH; *OCCUPATIONAL HEALTH; *ALTERNATIVE TECHNOLOGY; *TOXIC SUBSTANCES; *POLLUTION CONTROL; *INDUSTRY; *CHEMICAL INDUSTRY; *AIR POLLUTION CONTROL

DESCRIPTIVE NOTE: 358P. \$65.00

ABSTRACT: PRESENTED ARE REASONS FOR CONTROLLING CHEMICAL EMISSIONS AND THE WAYS THE PROBLEMS OF EMISSIONS ARE ASSESSED. INCLUDED ARE DETAILS ON ALTERNATIVE ENGINEERING METHODS FOR REDUCING THE RELEASE OF CHEMICALS FROM CHEMICAL PLANTS.

AVAILABILITY: JOHN WILEY & SONS, 605 THIRD AVE., NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW015396

PUBLICATION DATE: 87

TITLE: CHEMICAL QUALITY OF WATER AND THE HYDROLOGIC LYCLE.

PERSONAL AUTHOR: AVERETTE, R.C.: MCKNIGHT, D.M.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *CHEMISTRY; *HYDROLOGY; *CHEMICALS; *PRECIPITATION; *WATER; *WATER QUALITY; *GROUNDWATER: *SURFACE WATER: *RESEARCH REPORTS

DESCRIPTIVE NOTE: 382P. \$44.95 CLOTH

ABSTRACT: THE BOOK IS THE PROCEEDINGS OF A SYMPOSIUM HELD IN DENVER (COLORADG) ON JUNE 8-12, 1986. RESEARCH IS PRESENTED THAT EMPHASIZES THE CHANGES WHICH TAKE PLACE IN WATER AS IT CIRCULATES THROUGHOUT THE ATMOSPHERE, THE EARTH'S SURFACE. THE VOLUME IS DIVIDED INTO FOUR PRINCIPAL PARTS. THE FOUR CHAPTERS (PAPERS) IN PART I DEAL WITH VARIOUS ASPECTS OF PRECIPITATION CHEMISTRY. PART II HAS FOUR CHAPTERS, ALL CONCERNED WITH THE CHEMISTRY OF GROUNDWATER. PART III CÔVERS THE CHEMISTRY OF SURFACE WATER. PART IV IS A COLLECTION OF MINE 'EXTENDED ABSTRACTS.'

AVAILABILITY: LEWIS PUBLISHERS, INC., 121 SOUTH MAIN ST., P.O. DRAWER 519, CHELSEA, MI 48118

IRIS ACCESSION NUMBER: EW015397

PUBLICATION DATE: B2

TITLE: CONTRACTING FOR PROFESSIONAL SERVICES.

DESCRIPTOR: *MANAGEMENT; *CONTRACTING; *CONTRACT MEGOTIATIONS; *CONSULTANTS; *GUIDELINES; *PROFESSIONAL SERVICES; *PROJECT MANAGEMENT; *PROPOSALS; *WASTEWATER UTILITIES

DESCRIPTIVE NOTE: 20P.

ABSTRACT: THIS MANUAL PRESENTS A SYSTEMATIC SET OF PROVEN CONTRACT PROCEDURES TO ASSIST WASTEWATER UTILITIES WHEN THEY MEED THE USE OF CONSULTANTS. THE MANUAL ADDRESSES THE MOST COMMON ISSUES AND PROBLEMS THAT CAN ARISE AND PROVIDES GUIDANCE ON HOW TO MINIMIZE OR AVOID THEM. SECTIONS ARE INCLUDED ON (1) REQUEST FOR QUALIFICATIONS, (2) REQUEST FOR PROPOSALS, (3) CONTRACT NEGOTIATIONS, AND (4) PROJECT MANAGEMENT.

AVAILABILITY: U.S EPA, PUBLICATIONS DISTRIBUTION CENTER, 531 N. WAYNE AVE., CINCINNATI, OH 45215

IRIS ACCESSIGN NUMBER: EW015398

PUBLICATION DATE: 88

TITLE: THE DETROIT RIVER. MICHIGAN: AN ECOLOGICAL PROFILE.

PERSONAL AUTHOR: MANNY, BRUCE A.: AND OTHERS.

DESCRIPTOR: BIOLOGICAL RESOURCES; *ENVIRONMENT; *ECOLOGY; *DETROIT RIVER; *MANAGEMENT; *MICHIGAN; *WATER QUALITY; RECREATION; *PLANNING; GREAT LAKES; INDUSTRY; RECREATION: GREAT *RECOMMENDATIONS

DESCRIPTIVE NOTE: 101P.

ABSTRACT: THIS MONOGRAPH IS PART OF A SERIES OF PUBLICATIONS ABOUT CURRENT ISSUES FACING THE NATION'S COASTAL ENVIRONMENTS. IT SYNTHESIZES EXISTING INFORMATION DESCRIBING THE ECOLOGICAL STRUCTURE AND FUNCTION OF THE DETROIT RIVER, WHICH FLOWS BETWEEN LAKE ERIE AND LAKE HURON. SECTIONS ARE INCLUDED ON (2) THE SETTING, (2) THE ENVIRONMENT, (3) BIOLOGICAL CHARACTERISTICS, (4) ECOLÓGICAL CHARACTERISTICS, (5) COMMERCIAL AND RECREATIONAL ACTIVITIES, AND (6) MANAGEMENT ISSUES AND RECOMMENDATIONS. AN EXTENSIVE BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: NATIONAL WETLAKOS RESEARCH CENTER. U.S. FISH AND WILDLIFE SERVICE. 1010 GAUSE BOULEVARD. SLIDELL. LA 70458

IRIS ACCESSION NUMBER: EW015399

PUBLICATION DATE: 88

TITLE: THE ST. CLAIR RIVER AND LAKE ST. CLAIR, MICHIGAN: AN ECOLOGICAL PROFILE.

PERSONAL AUTHOR: EDSALL, THOMAS A.; AND OTHERS.

DESCRIPTOR: BIOLOGICAL RESOURCES; *ENVIRONMENT; *LAKE ST. CLAIR; *MICHIGAN; *ONTARIO; *PLANNING; *ECOLOGY; *MANAGEMENT; *ST. CLAIR RIVER; *WATER QUALITY; GREAT LAKES; INDUSTRY; *RECOMMENDATIONS

DESCRIPTIVE NOTE: 148P.

ABSTRACT: THIS MONOGRAPH IS ONE OF AN ONGOING SERIES OF PUBLICATIONS CONCERNING CURRENT ISSUES FACING THE NATION'S INLAND AND ESTUARINE WATERS. IT'S PURPOSE IS TO SYNTHESIZE EXISTING INFORMATION DESCRIBING THE ECOLOGICAL STRUCTURE AND FUNCTION OF THE ST. CLAIR RIVER AND LAKE ST. CLAIR ECOSYSTEMS. SECTIONS ARE INCLUDED ON (1) THE SETTING, (2) THE ENVIRONMENT. (3) BIOLOGICAL CHARACTERISTICS, (4) ECOLOGICAL RELATIONSHIPS, (5) COMMERCE AND RECREATION, AND (6) MANAGEMENT ISSUES AND RECOMMENDATIONS. AN EXTENSIVE STATEMENT OF THE PROPERTY OF THE PROPERTY

AVAILABILITY: NATIONAL WETLANDS RESEARCH CENTER, U.S. FISH & WILDLIFE SERVICE, MASA-SLIDELL COMPUTER COMPLEX, 1010 GAUSE BLVD., SLIDELL, LA 70458

IRIS ACCESSION NUMBER: EW015400

PUBLICATION DATE: 86

TITLE: TECHNOLOGY TRANSFER SEMINAR: FIELD EVALUATIONS OF I/A TECHNOLOGIES. HANDOUT MATERIALS.

DESCRIPTOR: *ALTERNATIVE -TECHNOLOGY; *CONFERENCE PROCEEDINGS: *EQUIPMENT; *FACILITIÉS; *INNOVATIVE TECHNOLOGY; *OPERATIONS (WASTEWATER) *PERFORMANCE EVALUATION; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 183P. PRICE: \$11.98 BEST AVAILABLE COPY, PRINT ON SEVERAL PAGES IS NOT CLEAR

ABSTRACT: THIS PACKET CONTAINS HANDOUT MATERIALS FROM A TECHNOLOGY TRANSFER SEMINAR HELD IN AUGUST, 1986. THE SEMINAR RELATED TO FIELD EVALUATIONS OF I/A TECHNOLOGIES. INCLUDED IN THE PACKET ARE 11 SETS OF MATERIALS CONCERNING;
(1) LARGE CLUSTER HOUND SYSTEMS, (2) BIOLOGICAL PHOSPHORUS
REMOYAL, (3) MUNICIPAL SLUDGE COMPOSTING TECHNOLOGY, (4)
ULTRAVIOLET DISINFECTION EQUIPMENT, (5) SLUDGE DEWATERING,
(6) AEROBIC DIGESTION, (7) PHASED ISOLATION DITCH
TECHNOLOGIES, (8) INTRACHANNEL CLARIFICATION, AND (9) HYDROGRAPH CONTROLLED RELEASE LAGOONS.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS RD., RM. 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015401

PUBLICATION DATE: 88

TITLE: EFFECTS OF COMPOSTED MUNICIPAL SLUDGE ON SOILBORNE PLANT PATHOGENS.

PERSONAL AUTHOR: HOITINK, H. A. J.: SCHMITTHENNER, A.F.

DESCRIPTOR: *AGRICULTURE; *COMPOSTING; *PLANT DISEASES; *SLUDGE; *LAND APPLICATION; *RECYCLING; *WASTE DISPOSAL; *SOYBEANS; *SLUDGE DISPOSAL

DESCRIPTIVE NOTE: 69P. \$5.14

ABSTRACT: COMPOSTED MUNICIPAL SLUDGE (CMS) INCREASED SOYBEAN YIELDS BY IMPROVING SOIL FERTILITY AND/OR BY PARTIAL CONTROL OF PHYTOPHTORA ROOT ROT. THIS BICLOGICAL CONTROL WAS REALIZED ONLY IF CMS WAS APPLIED AT RATES OF 40 TONNES DRY WT./HA WELL AHEAD OF PLANTING WITH TOLERANT CULTIVARS SO THAT SOLUBLE SALTS INTRODUCED WITH CMS LEACHED OUT. THE DISEASE WAS ENHANCED BY APPLICATIONS OF CMS JUST BEFORE PLANTING. RIDOMIL 5E, A SELECTIVE PHYTOPHTHORA FUNGICIDE, CONTROLLED THIS DISEASE ENHANCING EFFECT OF CMS ON SOYBEAN. CONTAINER MEDIA FORMULATED WITH CMS CURED 4 MONTHS CONSISTENTLY SUPPRESSED PYTHIUM ROOT ROT AND DAMPING-OFF DISEASES. DISEASES OF ORNAMENTALS OVER A 2-YR PRODUCTION PERIOD.

ERIC

RHIZOCTONIA DISEASES WERE SUPRESSED CONSISTENTLY ONLY IF MEDIA PREPARED WITH CMS WERE STORED 4 WKS PRIOR TO THEIR UTILIZATION. THESE MEDIA REMAINED SUPPRESSED FOR A 2 YR PERIOD. SEVERAL MICROBIAL ANTAGONISTS WERE ISOLATED FROM CMS MEDIA THAT PROVIDED BIOLOGICAL CONTROL OF THE TWO DISEASES OF ORNAMENTAL PLANTS.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS RD., RM. 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015402

PUBLICATION DATE: 88

TI:: .: AERATION EQUIPMENT EVALUATION: PHASE I- CLEAN WATER TEST RESULTS.

PERSONAL AUTHOR: YUNT, FRED W.; HANCUFF, TIM O.

DESCRIPTOR: *ACTIVATED SLUDGE PROCESS: *AERATION SYSTEMS: *EQUIPMENT: *OPERATIONS (WASTEWATER) *PERFORMANCE EVALUATION: *SUBMERGED AERATORS: *WASTEWATE% TREATMENT

DESCRIPTIVE NOTE: 204P. \$13.24

ABSTRACT: THIS RESEARCH PROJECT WAS INITIATED WITH THE PRINCIPLE OBJECTIVE OF EVALUATING THE DXYGEN TRANSFER PERFORMANCE OF VARIOUS GENERIC AERATION SYSTEMS USED IN ACTIVATED SLUDGE WASTEWATER TREATMENT. A SECONDARY OBJECTIVE OF THE PROJECT WAS TO EVALUATE VARIOUS DXYGEN TRANSFER DATA ANALYSIS METHODS IN CURRENT USE. CLEAN WATER TESTS WERE COMDUCTED ON EIGHT TYPES OF SUBMERGED AERATORS. ALL AERATOR TESTING WAS COMDUCTED IN THE SAME TANK AND USED THE SAME PROCEDURES IN ORDER TO PROVIDE STANDARD TEST CONDITIONS. RESULTS OF THIS WORK INDICATED THAT, OF THE SYSTEMS TESTED, FINE BUBBLE DIFFUSION EQUIPMENT TRANSFERRED DXYGEN MOST EFFICIENTLY IN CLEAN WATER. RESULTS ALSO INDICATED THAT, IN CLEAN WATER, JET AERATION EQUIPMENT TRANSFERS DXYGEN MORE EFFICIENTLY THAN DO COARSE BUBBLE AERATION SYSTEMS. HOWEVER, BECAUSE THE VALUE OF WASTEWATER CORRECTION FACTORS (*CPHA AND BETA) ARE DEPENDENT ON THE TYPE OF AERATOR TESTED, THE RELATIVE PERFORMANCE OF THE AERATORS TO ONE ANOTHER IN WASTEWA'ER MAY BE DIFFERENT.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS RD., RM. 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015403

PUBLICATION DATE: 88

TITLE: PILOT SCALE EVALUATION OF SLUDGE LANDFILLING. FOUR YEARS OF OPERATION.

PERSONAL AUTHOR: STAMM, J.W.; WALSH, J.J.

DESCRIPTOR: *ENVIRONMENTAL IMPACT; *LANDFILLS; *PERFORMANCE EVALUATION; *PILOT STUDIES; *OPERATIONS (WASTEWATER); *SLUDGE; *SLUDGE DISPOSAL; *WASTE DISPOSAL

JESCRIPTIVE NOTE: 255P. \$16.30

ABSTRACT: A SLUDGE LANDFILL SIMULATOR PROGRAM CONSISTING OF 28 LYSIMETERS WAS USED TO EVALUATE SLUDGE LANDFILLING AS A DISPOSAL OPTION BY ASSESSING THE ENVIRONMENTAL IMPACTS ON LEACHATE COMPOSITION AND GAS PRODUCTION. THE DISPOSAL SCENARIOS INVESTIGATED WERE CODISPOSAL, REFUSE-ONLY, AND SLUDGE-ONLY. LYSIMETERS WERE HOUSED AT U.S. EPA'S TEST EVALUATION FACILITY IN CINCINNATI, DHIO. THIRTY-FOUR PARAMETERS WERE MEASURED TO DOCUMENT LEACHATE AND GAS UNALTED TO STORY THE PARAMETERS. QUALITY AND QUANTITY. IN ADDITION, CERTAIN LYSIMETERS WERE SPIKED WITH A PRIORITY POLLUTANT SOLUTION TO INVESTIGATE THE GENERATION OF POTENTIALLY HAZARDOUS LEACHATE. THIS STUDY PRESENTS THE RESULTS OF FOUR YEARS OF RESEARCH, FROM JULY 1982 TO JUNE 1986. A COMPLETE TABULATION OF DATA COLLECTED OVER THE FOUR YEARS IS INCLUDED IN THE REPORT. RESULTS INDICATE THAT CODISPOSAL OF SLUDGE ARE EFUSE ACCELERATED THE ANAEROBIC DECOMPOSITION PROCESSES RELATIVE TO THE OTHER DISPOSAL SCENARIOS. INFILTRATION RATE, SLUDGE LOADING RATE, AND SLUDGE TYPE PRODUCED DEFINITIVE EFFECTS ON THE LEACHATE AND GAS QUALITY AND QUANTITY. A REVIEW OF LEACHATE AND GAS QUALITY DATA SUGGESTS THAT THE CODISPOSAL OF SLUDGE AND REFUSE IS A SUPERIOR MEANS OF DISPOSAL. CODISPOSAL HAD THE DETRIMENTAL EFFECT ON LEACHATE QUALITY WHILE ELY AFFECTING THE DECOMPOSITION PROCESSES (AS LEAST POSITIVELY AFFECTING MEASURED BY METHANE GENERATION). GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS) ANALYSIS OF LEACHATE SAMPLES SHOWED SEVERAL LEACHING TRENDS EXHIBITED BY THE FRIORITY POLLUTANTS FROM BOTH THE SLUDGE-ONLY AND CODISPOSAL TEST CELLS.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS RD., RM. 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW015404

PUBLICATION DATE: 88

TITLE: OESIGN AND CONSTRUCTION OF WATER WELLS. A GUIDE FOR ENGINEERS.

DESCRIPTOR: *CONSTRUCTION; *DESIGN; *DRILLING; *WATER WELLS; *WATER SUPPLY; *WATER RESOURCES; *WATER QUALITY; *GROUNDWATER

DESCRIPTIVE NOTE: 256P. \$34.95

ABSTRACT: THIS PUBLICATION EXPLAINS DETAILS OF WATER-WELL DESIGN, CONSTRUCTION, AND OPERATION. EXAMINED ARE METHODS OF WELL DRILLING AND DEMONSTRATED ARE WAYS TO DETERMINE PROPER INTAKE DESIGN, TEST FOR YIELD AND QUANTITY, AND MAINTAIN WELLS. INFORMATION IS ALSO INCLUDED ON GROUNDWATER GEOLOGY, GROUNDWATER FLOW, AND GROUNDWATER SUPPLIES.

AVAILABILITY: VAN MOSTRAND REINHOLD, MAIL ORDER DEPT., P.O. BOX 668, FLORENCE, KY 41022-9979

PUBLICATION DATE: 87

TITLE: WHAT IS THE LIMIT?

DESCRIPTOR: *AUDIOVISUAL AIDS; *ENVIRONMENT; *ENVIRONMENTAL DEGRADATION: *HABITAT DESTRUCTION: *POPULATION GROWTH; *POSTSECONDARY EDUCATION; *SECONDARY EDUCATION; *VIDEOTAPES; *MATURAL RESOURCES; *RESOURCE DEPLETION; *ETHICS; *WORLD PROBLEMS; *TRENDS

DESCRIPTIVE NOTE: 23 MIN. VIDEOTAPE AND DISCUSSION GUIDE. VMS FORMAT TAPE: \$25.00

ABSTRACT: THIS VIDEOTAPE AND AN ACCOMPANYING DISCUSSION GUIDE PRESENT A PROBING DISCUSSION OF THE INTERRELATIONSHIPS BETWEEN POPULATION GROWTH, ENVIRONMENTAL DEGRADATION, RESOURCE DEPLETION, HABITAT DESTRUCTION, AND THE ETHICAL CONSIDERATIONS FOR THE FUTURE.

AVAILABILITY: THE NATIONAL AUDUBON SOCIETY, POPULATION PROGRAM, 801 PENNSYLVANIA AVE. SE, WASHINGTON DC, 20003

IRIS ACCESSION NUMBER: EW015406

PUBLICATION DATE: J/AG 88

TITLE: THE COMING REVOLUTION IN DISTRIBUTED CONTROL.

PERSONAL AUTHOR: UNDERWOOD, FRANK H.

GESCRIPTOR: *DISTRIBUTED CONTROL; *COMPUTER APPLICATIONS; *MANAGEMENT; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *SYSTEMS DESIGN; *TECHNOLOGY; *SCADA

DESCRIPTIVE NOTE: 22-23P.

ABSTRACT: AFTER 20 YEARS OF EVOLUTION SUPERVISORY CONTROL AND DATA ACQUISITION SYSTEMS (SCADA) IS POISED FOR SOME RADICAL CHANGES. BOTH INDUSTRY AND UTILITIES ARE PREPARING FOR A NEW GENERATION OF HARDWARE AND SOFTWARE SOLUTIONS. HISTORICAL DEVELOPMENTS ARE SUMMARIZED AND SOME EXAMPLES OF MEW SYSTEMS ARE BRIEFLY DISCUSSED.

AVAILABILITY: WATERWORLD NEWS; V4 N4

IRIS ACCESSION NUMBER: EW015407

PUBLICATION DATE: 87

TITLE: SOLID WASTE DISPOSAL AND REUSE IN THE UNITED STATES. VOLUME I. & VOLUME II.

PERSONAL AUTHOR: MURARKA, ISHWAR P.

DESCRIPTOR: *INDUSTRIAL WASTES; *RECYCLING; *RESOURCE ECOVERY; *SOLID WASTES; *SOLID WASTE REUSE; *SOLID WASTE REUSE; *SOLID WASTE REUSE; *SOLID WASTE

DESCRIPTIVE NOTE: I-200P: II-168P. 2-VOLUME SET: U.S.= \$245.00 OUTSIDE U.S.= \$289.00

ABSTRACT: THE PUBLICATION PRESENTS INFORMATION ON THE SOURCES, AMOUNTS, AND COMPOSITION OF VARIOUS SOLID WASTES. INCLUDED IS INFORMATION ON SOLID WASTE DISPOSAL AND REUSE AND SOURCES, AMOUNTS, AND TRENDS IN THE PRODUCTION OF SOLID WASTES IN VARIOUS INDUSTRIES.

AVAILABILITY: CRC PRESS, INC., 2000 CORPORATE BLVD., N.W., BOCA RATON, FL 33431

IRIS ACCESSION NUMBER: EW015408

PUBLICATION DATE: 87

TITLE: ON-SITE WASTEWATER TREATMENT, VOLUME 5.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *DESIGN; *GROUNDWATER; *SOIL ADSORPTION; *PERFORMANCE EVALUATION; *RUGAL AREAS; *SYSTEM DESIGN; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT; *ON-SITE WASTEWATER TREATMENT; *MUMICIPALITIES; *MANAGEMENT: *STATE ROLE

DESCRIPTIVE NOTE: 405P. \$39.00 + \$2.00 POSTAGE & HANDLING

ABSTRACT: THIS PUBLICATION CONTAINS THE 43 PAPERS PRESENTED AT THE FIFTH NATIONAL SYMPOSIUM ON INDIVIDUAL AND SMALL COMMUNITY SEWAGE SYSTEMS. INCLUDED ARE ON-SITE DISPOSAL, ALTERNATIVE SYSTEM DESIGN, PERFORMANCE EVALUATION, GROUNDWATER IMPACT, SOIL ADSORPTION REQUIREMENTS, GN-SITE MANAGEMENT, AND STATE PROGRAMS.

AVAILABILITY: ASAE, 2950 NILES RD., ST. JOSEPH, MI 49085

IRIS ACCESSION NUMBER: EW015410

PUBLICATION DATE: JUL 88

TITLE: GENERAL ELECTRIC'S "FINANCIAL ANALYSIS OF WASTE MANAGEMENT ALTERNATIVES".

PERSONAL AUTHOR: RICH, GERALD

DESCRIPTOR: *COMPUTER APPLICATIONS: *COMPUTER SOFTWARE: *FINANCIAL ALTERNATIVES; *MANAGEMENT; *WASTE MANAGEMENT ALTERNATIVES

DESCRIPTIVE NOTE: 38, 40-42P.

ABSTRACT: REVIEWED IS A PROGRAM THAT CALCULATES LONG-TERM COSTS. INCLUDING LONG-TERM LIABILITY COSTS, ASSOCIATED WITH ENVIRONMENTAL CONTROL TECHNOLOGIES. THE PROGRAM IS A SPREADSHEET MACRO THAT NEEDS 512K AND EITHER 2 FLOPPYS OR A HARD DISK. THE WORKBOOK PROVIDES BACKGROUND INFORMATION FOR DESIGNING SPREADSHEETS AND OTHER USEFUL INFORMATION.

AVAILABILITY: POLLUTION ENGINEERING; V20 N7

PUBLICATION DATE: JUL 88

TITLE: SPECIAL REPORT: UNDERGROUND STORAGE TANKS.

PERSONAL AUTHOR: MAKWINSKI, JOSEPH; CHEREMISINOFF, PAUL N.

DESCRIPTOR: *LEAK DETECTION; *LEAKS; *POLLUTION CONTROL; *STORAGE TANKS; *TANKS; *WATER POLLUTION CONTROL; *UNDERGROUND STORAGE TANKS

DESCRIPTIVE NOTE: 60-67P.

ABSTRACT: THIS IS A REPORT ON A VARIETY OF ITEMS RELATED TO UNDERGROUND STORAGE TANKS. INCLUDED ARE GATA FROM A STUDY BY EPA OF UNDERGROUND HOTOR FUEL STORAGE TANK SYSTEMS AND A DISCUSSION OF LEAK DETECTION.

AVAILABILITY: POLLUTION ENGINEERING; V20 N7

IRIS ACCESSION NUMBER: EW015412

PUBLICATION DATE: JUL 88

TITLE: LINER MATERIALS FOR WASTE CONTAINMENT.

PERSONAL AUTHOR: CADWALLADER, MARK; DIXON, ERIN

DESCRIPTOR: *CONTAINMENT; *LINERS; *POLLUTION CONTROL;

*WASTE CONTAINMENT

DESCRIPTIVE NOTE: 70-73P.

ABSTRACT: CONSIDERED ARE A VARIETY OF LINER MATERIALS FOR WASTE CONTAINMENT. LINERS INCLUDED ARE CLAY, HDPE, PVC, HYPALON, CPE, AND LDPE.

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AVAILABILITY: POLLUTION ENGINEERING; V20 N7

IRIS ACCESSION NUMBER: EW015413

PUBLICATION DATE: JUL 88

TITLE: CASE STUDY OF SOIL VENTING.

PERSONAL AUTHOR: CONNOR, J. ROBERT

DESCRIPTOR: *HAZARDOUS MATERIALS; *CASE STUDIES; *LEAKS; *POLLUTION CONTROL; *GASOLINE; *STORAGE TANKS; *SOIL VENTING; *UNDERGROUND STORAGE TANKS; *REMEDIATION

TECHNIQUES; *MASSACHUSETTS

DESCRIPTIVE NOTE: 74-78P.

Full Text Provided by ERIC

ABSTRACT: DESCRIBED IS A CASE STUDY OF SOIL VENTING TO REMOVE GASOLINE FROM A FORMER GASOLINE SERVICE STATION SITE IN MASSACHUSETTS.

Orallability: Pollution Engineering; V20 N7

IRIS ACCESSION NUMBER: EW015414

PUBLICATION DATE: JUL 88

TITLE: CLOSURE OF SURFACE IMPOUNDMENTS.

PERSONAL AUTHOR: NEWTON, JIM

DESCRIPTOR: *CONTAINMENT; *HAZARDOUS MATERIALS; *POLLUTION CONTROL; *IMPOUNDMENTS; *TOXIC SUBSTANCES; *WASTEWATER TREATMENT; *WASTE CONTAINMENT; *SURFACE IMPOUNDMENTS; *IMPOUNDMENT CLOSURE

DESCRIPTIVE NOTE: 80-83P.

ABSTRACT: PRESENTED IS A BRIEF DISCUSSION OF PROCEDURES FOR CLOSING SURFACE IMPOUNDMENTS. PRINCIPLES PRESENTED APPLY TO HAZARDOUS WASTES AND WASTEWATER.

AVAILABILITY: POLLUTION ENGINEERING; V20 N7

IRIS ACCESSION NUMBER: EW015415

PUBLICATION DATE: JUL 88

TITLE: CRITICAL EVALUATION OF EPA'S UST TESTING APPARATUS.

PERSONAL AUTHOR: BAIRD, WILLIAM E.

DESCRIPTOR: *CONTAINMENT; *LEAK DETECTION; *REGULATIONS; *PROCEDURES; STORAGE TANKS; *HONITORING; *USEPA; *STANDARDS; *UNDERGROUND STORAGE TANKS

DESCRIPTIVE NOTE: 86-89P.

ABSTRACT: THE OBJECTIVE OF THIS ARTICLE IS TO CRITIQUE THE USEPA EDISON, NJ TEST APPARATUS AND PROCEDURES FOR LEAK DETECTION SO THAT REGULATORS, TANK OWNERS, AND THE ENGINEERING COMMUNITY CAN BE INFORMED WHEN EPA REPORTS ARE ISSUED. SEVERAL CONCERNS REGARDING EQUIPMENT AND PROCEDURES ARE PRESENTED.

AVAILABILITY: POLLUTION ENGINEERING; V20 N7

IRIS ACCESSION NUMBER: EW015416

PUBLICATION DATE: JUL 88

TITLE: GROUNDWATER CONTAMINANT PLUME CAPTURE THRU BLASTING.

PERSONAL AUTHOR: BEGOR, K; AND OTHERS

DESCRIPTOR: *CONTAINMENT; *COSTS; *GROUNDWATER; *WATER POLLUTION; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 90-95P.

ABSTRACT: DESCRIBED IS A CORRECTION ACTION PROGRAM. THE ENHANCED RECOVERY OF CONTAMINATED GROUNDWATER THROUGH THE CREATION OF AN ARTIFICAL FRACTION OF PREVENTED FURTHER 114

CONTAMINANT MIGRATION. IT PROVED TO BE AN EFFICIENT AND COST EFFECTIVE PROCEDURE.

AVAILABILITY: POLLUTION ENGINEERING; V20 N7

IRIS ACCESSION NUMBER: EW015417

PUBLICATION DATE: JUL 88

TITLE: BIOREMEDIATION FEASIBILITY STUDIES FOR HAZ WASTE.

PERSONAL AUTHOR: WOODWARD, RICHARD E.

DESCRIPTOR: *BIOREMEDIATION; *HAZARDOUS WASTES; *BIODEGRADATION; *FEASIBILITY STUDIES; *TOXIC SUBSTANCES; *POLLUTION CONTROL

DESCRIPTIVE NOTE: 102-103P.

ABSTRACT: TO ACCURATELY ASSESS THE FEASIBILITY OF BIODEGRADATION FOR REMEDIATION OF HAZARDOUS WASTE MIXTURES, A SERIES OF EXPERIMENTS AND ANALYSES ARE CONDUCTED. THIS SERIES INVOLVES FOUR TASKS WHICH ARE BRIEFLY DESCRIBED: (1) CHARACTERIZATION, (2) PRIMARY DEGRADATION SCREEN, (3) SCALED-UP TREATMENT PROGRAM, AND (4) DATA INTERPRETATION.

AVAILABILITY: POLLUTION ENGINEERING: V20 N7



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*DRINKING WATER	(20) EW015225 EW015315	EW015096 EW015260 EW015316	EW015097 EW018271 EW015341	EW015159 EW015272 EW015379	EW015175 EW015273 EW015384	EW015190 EW015274	EW015199 EW015309	EW015220 EW015310
DRINKING WATER	(1)	EW015176						
*DRUMS	(1)	EW015165						
*EARTHQUAKES	(1)	EW015191						
*ECOLOGY	(7)	EW015187	EW015204	EW015260	EW015313	EW015393	EW015398	EW015399
ECOLOGY	(1)	EW015197		•				
*ECONOMIC DEVELOPMENT	(1)	EW015197						
*ECONOMICS	(16) EW015176 EW015312	EW015110 EW015231	EW015111 EW015233	EW015112 EW015251	EW015113 EW015255	EW015114 EW015263	EW015160 EW015297	EW015170 EW015302
ECONOMICS	(3)	EW015109	EW015313	EW015384				
EFFLUENT	(1)	EW015306						
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*EFFLUENT LIHITS	(1)	EW015224						
ELECTROMAGNETIC TECHNIQUES	(1)	EW015240						
*ELEMENTARY EDUCATION	(1)	EW015170						
<b>≠EMERGENCIES</b>	(1)	EW015172						
*EMERGENCY RESPONSE	(8) EW015347	EW015101	EW015171	EW015181	EW015185	EW015210	EW015244	EW015334
*EMISSIONS	(1)	EW015394						
*EMPLOYMENT	(1)	EW015231						
*EMPLOYMENT TRENDS	(1)	EW015231						
EMERGY	(1)	EW015236						
*ENERGY CONSERVATION	(2)	EW015161	EW015212					
ENERGY CONSERVATION	(1)	EW015213						
ENFORCEMENT	(1)	EW015254						
*ENGINEERING	(3)	EW015322	EW015344	EW015367				
*ENVIRONMENT	(20) EW01519 <b>8</b> EW015313	EW015159 EW015204 EW015385	EW015162 EW015205 EW015398	EW015171 EW015214 EW015399	EW015191 EW015219 EW015405	EW015192 _EW015221	EW015196 EW015260	EW015197 EW015302
ENVIRONMENT	(1)	EW015103						
*ENVIRONMENTAL ASSESSMENT	(1)	EW015204						
*ENVIRONMENTAL DEGRADATION	(1)	EW015405						
*ENVIRONHENTAL HAZARDS	(1)	EW015191						
*ENVIRONMENTAL IMPACT	(12) EW015294	EW015103 EW015300	EW015162 EW015302	EW015206 EW015387	EW015207 EW015403	EW015208	EW015237	EW015238
ENVIRONHENTAL IMPACT	(1)	EW015268						
*ENVIRONMENTAL IMPACTS	(1)	EW015205						
*ENVIRONMENTAL LAWS	(1)	EW015209						
*ENVIRONMENTAL MEDICINE	(1)	EW015259						
*ENVIRONMENTAL QUALITY	(2)	EW015197	EW015313					
*ENVIRONMENTAL STUDIES	(1)	EW015252						
*EQUIPMENT	(13) EW015226	EW015120 EW015252	EW015158 EW015262	EW015175 EW015343	EW015177 EW015400	EW015212 EW015402	EW015223	EW015225
EQUIPMENT	(1)	EW015264						
*ETHICS	(1)	EW015405						
ETHICS	(1)	EW015384						
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*EVALUATION	(2)	EW015183	EW015331					
*EXAMINATIONS	(1)	EW015183						
*EXPERT SYSTEMS	(2)	EW015101	EW015241					
*FACILITIES	(25) EW015158 EW015232 EW015394	EW015091 EW015177 EW015251 EW015400	EW015096 EW015186 EW015254	EW015108 EW015192 EW015295	EW015133 EW015211 EW015304	EW015134 EW015223 EW015310	EW015135 EW015226 EW015312	EW015156 EW015230 EW015367
FACILITIES	(2)	EW015109	EW015338		•			
*FACILITY REHABILITATION	(1)	EW015310						
FARMERS HOME ADMINISTRATION	(1)	EW015392						
*FARM GLURRIES	(1)	EW015237						
*FEASIBILITY STUDIES	(1)	EW015417						
*FEDERAL AGENCIES	(1)	EW015392						
*FEDERAL LAWS	(1)	EW015209						
*FEDERAL PROGRAMS	(1)	EW015266						
*FEDERAL REGULATIONS	(2)	EW015383	EW015383					
*FEDERAL ROLE	(6)	EW015156	EW015163	EW015254	EW015300	EW015318	EW015392	
FEDERAL ROLE	(2)	EW015106	EW015109					
*FIELD PROCEDURES	(1)	EW015335						
FIELD TECHNIQUES	(1)	EW015329						
*FIELD TESTING	(2)	EW015270	EW015303					
*FILMS	(2)	EW015170	EW015172					
*FILTER MEDIA	(1)	EW015275						
*FILTRATION	(4)	EW015202	EW015273	EW015275	EW015319			
*FINANCES	(2)	EW015106	EW015107					
*FINANCIAL ALTERNATIVES	(1)	EW015410						
*FINANCIAL ASSISTANCE PROGRAMS	(1)	EW015339						
*FINANCIAL PLANNING	(1)	EW015109						
*FINANCIAL PLANNNING	(1)	EW015339						
*F!.NANCING	(6)	EW015156	EW015158	EW015160	EW015176	EW915276	EW015312	
*FIRE HAZARDS	(1)	EW015244						
*FIRST AID	(1)	EW015218						
*FLAMMABLE MATERIALS	(1)	EW015214						
*FLAVOR CONTROL	(1)	EW015309						
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FLOW MEASUREMENT		(1)	EW015375						
*FLOW SHEETS		(1)	EW015344						
*F00D		(1)	EW015267						
*FORECASTING		(1)	EW015391						
FORMALDEHYDE		(1)	EW015267						
*FUNDING		(1)	EW015254						
*FUNDING SOURCES		(1)	C:015339						
FUNGI		(1)	EW015188						
*FURNACES		(1)	EW015167						
*GAO REPORT		(1)	EW015193						
*GASOLINE		(1)	EW015413						,
*GENERAL ACCOUNTING OF	FFICE	(1)	EW015194						
*GEOCHEMICAL PROCESSES	5	(1)	EW015206						
*GEOPHYSICAL TECHNIQUE	ES	(1)	EW015240						
GLASS		(1)	EW015229						
*GLOBAL APPROACH		(2)	EW015197	EW015260					
*GOVERNMENT ROLE		(2)	EW015163	EW015302					
*GRANTS		(1)	EW015156						
*GREAT LAKES		(6)	EW015110	EW015111	EW015112	EW015113	EW015114	EW015391	
GREAT LAKES		(2)	EW015398	EW015399					
*GRIT REMOVAL		(1)	EW015177						
*GROUNDWATER		(19) EW015206 EW015396	EW015115 EW015238 EW015404	EW015116 EW015246 EW015408	EW015117 EW015265 EW015416	EW015158 EW015268	EW015169 EW015300	EW015190 EW015301	EW015195 EW015341
*GUIDEBOOKS		(1)	EW015252						
*GUIDELINES		(3)	EW015159	EW015393	EW015397				
*GUIDES		(3)	EW015209	EW015251	EW015339				
*GULF OF MEXICO		(1)	EW015184						
*HABITAT DESTRUCTION		(1)	EW015405						
*HALOGENS		(1)	EW015319						
*HANDBOOKS		(4)	EW015166	EW015317	EW015318	EW015347			
*HANDLING PROCEDURES		(1)	EW015165					1	37
HAZARD ABATEMENT	<b>1</b> 36	(1)	EW015235						•

*HAZARD COMMUNICATION	(1)	EW015191						
*HAZARD CONTROL	(1)	EW015394						
*HAZARDOUS AND SOLID WASTE AMENDMENTS	(1)	EW015207						
*HAZARDOUS MATERIALS	(42) EW015166 EW015205 EW015244 EW015322 EW015394	EW015080 EW015171 EW015208 EW015245 EW015324 EW015413	EW015095 EW015172 EW015210 EW015257 EW015331 EW015414	EW015102 EW015180 EW015214 EW015258 FY015345	EW015115 EW015181 EW015216 EW015259 EW015377	EW015159 EW015183 EW015218 EW015265 EW015385	EW015162 EW015192 EW015235 EW015277 EW015386	EW015165 EW015194 EW015236 EW015278 EW015392
HAZARDOUS MATERIALS	(3)	EW015178	EW015313	EW015323				
*HAZARDOUS MATERIALS HANDLING	(1)	EW015245						
*HAZARDOUS SUBSTANCES	(3)	EW015334	EW015344	EW015347		•		
*HAZARDOUS WASTES	(39) EW015165 EW015222 EW015318 EW015335	EW015095 EW015167 EW015223 EW015321 EW015336	EW015101 EW015173 EW015240 EW015322 EW015337	EW015115 EW015179 EW015241 EW015323 EW015338	EW015116 EW015192 EW015263 EW015324 EW015344		EW015120 EW015206 EW015305 EW015329 EW015383	EW015164 EW015207 EW015317 EW015330 EW015417
*HAZARDOUS WASTE SITE INVENTORIES	(1)	EW015193						
*HAZARDOUS WASTE SITES	(9) EW015336	EW015193 EW015337	EW015317	EW015318	EW015322	EW015323	EW015330	EW015335
*HEALTH	(1)	EW015196						
*HEALTH ASSESSMENT	(1)	EW015263						
*HEALTH HAZARDS	(1)	EW015244						
HEAVY METALS	(1)	EW015178						
HELMINTHS	(1)	EW015188						
*HERBICIDES	(2)	EW015159	EW015162					
*HISTORY	(1)	EW015269						
HOMESTUDY	(1)	EW015390						
*HOUSE OF REPRESENTATIVES	(2)	EW015198	EW015385					
HOUSES	(1)	EW015392						
HUD	(1)	EW015392						
*HUMAN HILK	(1)	EW015258						
HUMAN RESOURCES	(1)	EW015332						
*HYDRANTS	(1)	EW015270						
*HYDROLIC PROCESSES	(1)	EW015206						
*HYDROLOGY	(3)	EW015158	EW015169	EW015396				
*ILLINOIS	(2)	EW015255	EW015261					





*IMPACT ASSESSMENT	(1)	EW015184						
*IMPOUNDMENT CLOSURE	(1)	EW015414						
*IMPOUNDMENTS	(1)	EW015414						
*INCINERATION	(4)	EW015120	EW015167	EW015264	EW015321	٠		
*INDEPENDENT STUDY	(3)	EW015379	EW015380	EW015390				
*INDOOR AIR	(1)	EW015392						
*INDUSTRIAL PROCESSES	(1)	EW015321						
*INDUSTRIAL WASTES	(9) EW015306	EW015116 EW015407	EW015120	EW015161	EW015173	EW015178	EW015182	EW015305
INDUSTRIAL WASTES	(1)	EW015390						
*INDUSTRIAL WASTEWATER	(1)	EW015182						
*INDUSTRY	(3)	EW015167	EW015260	EW015394				
INDUSTRY	(2)	EW015398	EW015399					
*INFORMATION DISSEMINATION	(1)	EW015386						
*INFORMATION RESOURCES	(1)	EW015332						
*INFORMATION RETRIEVAL	(1)	EW015108						
*INFORMATION SOURCES	(10) EW015160	EW015106 EW015208	EW015108 EW015383	EW015110	EW015111	EW015112	EW015113	EW015114
*INHALATION EXPOSURE METHODOLOGY	(1)	EW015338						
*INJECTION WELLS	(1)	EW015303						
*INNOVATIVE TECHNOLOGY	(1)	EW015400						
*INORGANIC SOIL COMPONENTS	(1)	EW015242						
*INSPECTION	(5)	EW015164	EW015165	EW015324	EW015375	EW015390		
*INSTRUCTIONAL MATERIALS	(17) EW015214 EW015380	EW015170 EW015215 EW015390	EW015200 EW015216	EW015201 EW015217	EW015202 EW015218	EW015203 EW015235	EW015212 EW015267	EW015213 EW015379
*INSURANCE	(1)	EW015194						
*INTTRCHANNEL CLARIFIERS	(1)	EW015226						
*INTERNATIONAL ORGANIZATIONS	(1)	EW015197						
*INTERNATIONAL PROGRAMS	(1)	EW015197						
*I#-VESSEL COMPOSTING	(1)	EW015251						
*ION EXCHANGE	(1)	EW0151.5					1 4 1	
*IRRIGATION	(2)	EW015268	EW015301				141	
RIC ^{SUES} 140	(2)	EW015384	EW015388					

*KILNS		(1)	EW015321						
*LABORATORIES		(2)	EW015080	EW015252					
*LABORATORY PROCEDURES		(2)	EW015252	EW015389					
*LABORATORY QUALITY ASSURANCE	CE	(1)	EW015375						
*LABORATORY SAFETY		(1)	EW015080						
*LABORATORY TESTS		(1)	EW015333						
*LAGOONS		(2)	EW015091	EW015092					
*LAKE ERIE		(1)	EW015110						
*LAKE HURON		(1)	EW015111						
*LAKE MICHIGAN		(1)	EW015112						
*LAKE ONTARIO		(1)	EW015113						
LAKES		(1)	EW015269						
*LAKE ST. CLAIR		(1)	EW015399						
*LAKE SUPERIOR		(1)	EW015114						
*LAND		(1)	EW015206						
*LAND APPLICATION		(7)	EW015117	EW015237	EW015261	EW015262	EW015294	EW015296	EW015401
*LAND DISPOSAL		(2)	EW015319	EW015320					
*LANDFILL DISPOSAL CELLS		(1)	EW015323						
*LANDFILL LININGS		(1)	EW015323						
*LANDFILLS		(2)	EW015323	EW015403					
*LAND POLLUTION		(2)	EW015208	EW015209					
*LAND USE		(6)	EW015110	EW015111	EW015112	EW015113	EW015114	EW015116	
*LEAD		(3)	EW015235	EW015317	EW015318				
*LEAK DETECTION		(4)	EW015215	EW015342	EW015411	EW015415			
*LEAK DETECTION TECHNIQUES		(1)	EW015168						
*LEAKS		(3)	EW015168	EW015471	EW015413				
*LEGISLATION		(8) EW015386	EW015080	EW015172	EW015198	EW015207	EW015209	EW015383	EW015385
LEGISLATION		(1)	EW015384						
*LEGISLATIVE AMENDMENTS		(1)	EW015192						
*LIABILITY		(2)	EW015102	EW015194					
*LICENSES		(1)	EW015254						
*LINERS		(3)	EW015324	EW015333	EW015412				
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	*LITERATURE REVIEWS	(1)	EW015091						
	LITERATURE REVIEWS	(1)	EW015261						
	*LOANS	(1)	EW015156						
	*LOCAL GOVERNMENTS	(1)	EW015156						
	*LOVE CANAL	(1)	EW015171			•			
	*MAINTENANCE	(7)	EW015096	EW015158	EW015213	EW015215	EW015226	EW015234	EW015270
	MAINTENANCE	(1)	EW015308						
	*MANAGEMENT	(37) EW015169 EW015241 EW015301 EW015397	EW015101 EW015183 EW015260 EW015312 EW015398	EW015107 EW015184 EW015262 EW015313 EW015399	EW015120 EW015204 EW015268 EW015316 EW015406	EW015135 EW015207 EW015272 EW015317 EW015408	EW015158 EW015210 EW015274 EW015318 EW015410	EW015160 EW015234 EW015276 EW015341	EW01523 <b>8</b> EW015300
	MANAGEMENT	(3)	EW015109	EW015213	EW015338				
	*MANUALS	(4)	EW015324	EW015331	EW015334	EW015375			
	*MANUFACTURERS	(1)	EW015343						
	*MAPS	(5)	EW015110	EW015111	EW015112	EW015113	EW015114		
	*MARINE ENVIRONMENT	(1)	EW015198						
	*MARKETING	(2)	EW015251	EW015255					
	*MASSACHUSETTS	(1)	EW015413						
	*MATERIALS HANDLING	(4)	EW015215	EW015216	EW015217	EW015218			
	*MEASUREMENT	(1)	EW015378						
	*MECHANICAL INTEGRITY	(1)	EW015303						
	*MEDICINE	(1)	EW015259						
	*MEDITERRANEAN SEA	(1)	EW015393						
	*MEMBRANE LINERS	(2)	EW015324	EW015333					
	*MERCURY	(1)	EW015218						
	METAL DETECTION	(1)	EW015240						
	*METAL FINISHING	(1)	EW015305						
	*METAL REDUCTION	(1)	EW015296						
	*METALS	(6)	EW015116	EW015173	EW015178	EW015189	EW015296	EW015305	
	METALS	(1)	EW015229						
	*METHYL ETHYL KETONE	(1)	EW015244						
	*MICHIGAN 144	(2)	EW015398	EW015399					1 4 5
Full Tex	DELS L T T	(5)	EW015191	EW015195	EW015234	EW015265	EW015391		145

MODELS	(1)	EW015332						
*MONITORING	(19) EW015263	EW015097 EW015274	EW015164 EW015306	EW015165 EW015337	EW015168 EW015338	EW015204 EW015341	EW015205 EW015342	EW015240
	EW015386	EW015389	EW015393	EW015415	F#013330	F#013341	EM013245	EWG15378
MONITORING	(1)	EW015390						
*MONITORING TECHNIQUES	(1)	EW015329						
*MUNICIPALITIES	(1)	EW015408						
*MUNICIPAL SLUDGE	(1)	EW015389						
*MUNICIPAL WASTES	(2)	EW015161	EW015219					
NATIONAL PARK SERVICE	(1)	EW015392						
*NATURAL RESOURCES	(5)	EW015204	EW015221	EW015260	EW015313	EW015405		
*NATURAL SYSTEMS	(1)	EW015161						
*NEVADA	(1)	EW015295						
*NEW JERSEY	(1)	EW015230						
*NEW SOURCE PERFORMANCE STANDARDS	(1)	EW015224						
*NEW YORK	(1)	EW015134						
*NP DES	(1)	EW015375						
*NUCLEAR POWER	(1)	EW015236						
*NUTRIENT MANAGEMENT	(1)	EW015195						
*NUTRITION	(1)	EW015196						
*OCCUPATIONAL HEALTH	(4)	EW015166	EW015257	EW015338	EW015394			
*OCCUPATIONAL SAFETY	(7)	EW015080	EW015166	EW015214	EW015215	EW015216	EW^15217	EW015218
*OFF-FLAVOR	(1)	EW015309						
*OHIO	(4)	EW015234	EW015269	EW015306	EW015310			
OIL	(1)	EW015255						
*OIL SPILLS	(1)	EW015184						
*ON-SITE WASTEWATER TREATMENT	(1)	EW015408						
*ONSITE WASTEWATER TREATMENT	(1)	EW015160						
*ONTARIO	(1)	EW015399						
*OPERATIONS (COMPOSTING)	(2)	EW015186	EW015188					
*OPERATIONS (SOLID WASTES)	(1)	EW015230						
*OPERATIONS (WASTEWATER)	(35) EW015156 EW015200 EW015262	EW015091 EW015158 EW015201 EW015295	EW015092 EW015160 EW015202 EW015296	EW015106 EW015161 EW015203 EW015304	EW015107 EW015177 EW015212 EW015307	EW015108 EW015178 EW015213 EW015308	EW015134 EW015182 EW015226 EW015312	EW015187 EW015232
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		EW015390	EW015403	EW015406	EW015408					
OPERATIONS (WAST	EWATER)	(2)	EW015109	EW015186						
*OPERATIONS (WAST EVALUATION	EWATER) *PERFORMANCE	(2)	EW01540C	EW015402						
*OPERATIONS (WAST TREATMENT	EWATER) *WASTEWATER	(1)	EW015380							
*OPERATIONS (WATE	R)	(18) EW015271 EW015310	EW015096 EW015272 EW015315	EW015108 EW015273 EW015406	EW015175 EW015274	EW015190 EW015275	EW015199 EW015276	EW015225 EW015297	EW015234 EW015309	
OPERATIONS (WATE	R)	(1)	EW015176							
*OPERATIONS (WATE	R) *WATER TREATHENT	(1)	EW015379							
*OPERATION (WATER	)	(1)	EW015270							
*OPERATOR TRAININ	G	(9) EW01537 <b>9</b>	EW015200 EW015380	EW015201	EW015202	EW015203	EW015212	EW015213	EW015215	
*ORGANIC CHEMICAL	S	(3)	EW015265	EW015325	EW015326					
*ORGANIC COMPOUND	S	(3)	EW015182	EW015319	EW015321					
*ORGANIC SOIL COM	PONENTS	(1)	EW015242							
ORGANIC VAPOR AN	ALYSIS	(1)	EW015240							
*OSHA		(1)	EW015245							
*OUTREACH PROGRAM	S	(1)	EW015106							
*PACKAGE TREATMEN	T SYSTEMS	(1)	EW015223							
PAPER		(1)	EW015229							
*PARTICULATE EMIS	SIONS	(1)	EW015330							
*PATHOGEN REDUCTI	ON	(1)	EW015188							
*PATHOGENS		(2)	EW015188	EW015228						
*PCBS		(3)	EW015258	EW015326	EW015377					
*PCDDS		(1)	EW015258							
*PCDFS		(1)	EW015258							
*PENNSYLVANIA		(1)	EW015135							
*PERFORMANCE EVAL	UATION	(31) EW0151 <b>8</b> 0 EW015233 EW015325	EW015091 EW015185 EW015275 EW015326	EW015186 EW015295	EW015188	EW015307	EW015199 EW015308	EW015175 EW015222 EW015311 EW015403	EW015232	
PERFORMANCE EVAL	UATION	(1)	EW015343							
*PERMITS		(1)	EW015254							
RIC	148	(2)	EW015162	EW015388				14	9	

*PETROLEUM	(1)	EW015194						
*PETRELEUM DISTRIBUTION	(1)	EW015194						
*PH	(1)	EW015097						
*PHOSPHATES	(1)	EW015174						
*PHOSPRORUS	(2)	EW015304	EW015307					
*PHOSPHORUS REMOVAL	(1)	EW015304						
PHOSPHORUS REMOVAL	(1)	EW015307						
*PHOTOCHEMI CALS	(1)	EW015378						
*PHYSICAL TREATMENT	(3)	EW015115	EW015116	EW015117				
*FILOT STUDIES	(3)	EW015295	EW015315	EW015403				
*PIPE REPAIR	(1)	EW015234						
*PIPES	(2)	EW015234	EW015311				:	
PIPE SIZE	(1)	EW015376						
*PLANNING	(19) EW015184 EW015391	EW015102 EW015204 EW015394	EW015106 EW015211 EW015398	EWP15160 EW015234 EW015399	EW015163 EW015276	EW015172 EW015301	EW015176 EW01. 72	EW015181 EW015312
PLANNING	(2)	EW015109	EW015268					
*PLAnT DISEASES	(1)	EW015401						
*PLANT GROWTH	(1)	EW015233						
*PLAST1. LONTAINERS	(1)	EW015329						
*PLASTICS	(1)	EW015198						
*PLUMBING	(1)	EW015343						
*POISON PREVENTION PROGRAMS	(1)	EW015257						
*POISONS	(1)	EW015257						
*POLICIES	(10) EW015263	EW015095 EW015266	EW015103 EW015300	EW015163	EW015176	EW015210	EW015236	EW015255
*POLLITION CONTROL	(1)	EW015263						
*POLLUTANTS	(1)	EW015378		• •				
*FOLLUTION	(3)	EW015198	EW015265	EW015313				
POLLUTION	(1)	EW015103						
*POLLUTION CONTROL	(46) EW015173 EW015209 EW015302 EW015337 EW015392	EW015102 EW015181 EW015223 EW015313 EW015342 EW015394	EW015193 FW015236	EW015115 EW015194 EW015240 EW015325 EW015377 EW015412	EW015164 EW015198 EW015241 EW015326 EW015378 EW015413	EW015166 EW015205 EW015258 EW015329 EW015385 EW015414	EW015168 EW015206 EW015264 EW015330 EW015386 EW015417	EW015170 EW015207 EW015265 EW015335 EW015387





POLLUTION CONTROL		(1)	EW015344	-					
*POLYTHYLENE ENCASEMENT		(1)	EW015311						
POPULATION		(1)	EW015197						
*POPULATION GROWTH		(1)	EW015405						
*POSTSECONDARY EDUCATION		(15) EW015215	EW015170 EW015216	EW015200 EW015217		EW015202 EW015379	EW015203 EW015380	EW015212 EW015390	EW015214 EW015405
POSTSECONDARY EDUCATION		(1)	EW015213						
*PRECIPITATION		(1)	EW015396						
*PRECOAT FILTRATION		(1)	EW015275						
*PRELIMINARY TREATMENT		(1)	EW015177						
PRESSURE		(1)	EW015376						
*PRETREATMENT		(4)	EW015182	EW015224	EW015375	EW015390			
PRETREATMENT TECHNOLOGY		(1)	EW015390						
*PREVENTION		(1)	EW015196						
*PROCEJURES		(1)	EW015415						
*PROCESS CONTROL		(3)	EW015091	EW015212	EW015213				
*PROCESS DESIGN		(1)	EW015307						
*PROFESSIONAL SERVICES		(1)	EW015397						
*PROGRAM DESCRIPTIONS		(1)	EW015312						
*PROGRAM DEVELOPMENT		(1)	EW015339						
*PROJECT MANAGEMENT		(1)	EW015397						
*PROPOSALS		(1)	EW015397						
*PROTECTIVE CLOTHING		(1)	EW015185						
PUBLICATIONS		(1)	EW015332						
*PUBLIC HEALTH		(42) EW015172 EW015214 EW015256 EW015300 EW015387	EW015091 EW015174 EW015220 EW015257 EW015302 EW015392	EW015^95 EW015188 EW015225 EW015258 EW015313 EW015394	EW015103 EW015191 EW015228 EW015259 EW015315	EW015198 EW015235 EW015262	EW015162 EW015199 EW015236 EW015266 EW015334	EW015164 EW015205 EW015238 EW015267 EW015385	EW015171 EW015208 EW015244 EW015294 EW015386
PUBLIC HEALTH		(3)	EW015261	EW015268	EW015388				
*PUBLIC LAW 100-4		(1)	EW015254						
*PUBLIC OPINION		(1)	EW015103						
*PUBLIC PARTICIPATION		(3)	EW015219	EW015220	EW015229			•	153
4 DUBLIC SAFETY		(1)	EW015214					-	100
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*PURCHASING INFORMATION		(1)	EW015345						
*PVC PIPES		(1)	EW015376						
QUALITY ASSURANCE		(1)	EW015389						
*RADIATION		(1)	EW015256						
*RADIOACTIVE MATERIALS		(3)	EW015214	EW015236	EW015256				
*RADIOACTIVE WASTES		(1)	EW015236						
*RADIUM		(1)	EW015315						
*RADON		(3)	EW015225	EW015256	EW015392				
*RCRA		(2)	EW015192	EW015345					
*RECOMMENDATIONS		(10) EW015393	EW015159 EW015398	EW015257 EW015399	EW015258	EW015268	EW015294	EW015302	EW015388
*RECORDKEEPING		(1)	EW015375						
RECREATION		(1)	EW015398						
*RECYCLING		(6)	EW015170	EW015221	EW015231	EW015255	EW015401	EW015407	
*REFERENCE MATERIALS		(1)	EW015344						
*REGULATIONS		(31) EW015207 EW015254 EW015341	EW015102 EW015208 EW015262 EW015342	EW015115 EW015209 EW015264 EW015345	EW015156 EW015210 EW015266 EW015383	EW015173 EW015224 EW015294 EW015385	EW015179 EW015228 EW015296 EW015386	EW015184 EW015245 EW015305 EW015389	EW015198 EW015252 EW015306 EW015415
REGULATIONS		(3)	EW015308	EW015384	EW015390				
*REMEDIAL ACTION		(2)	EW015322	EW015337					
*REMEDIAL RESPONSE		(1)	EW015335						
*REMEDIATION TECHNIQUES		(1)	EW015413						
*RESEARCH		(6)	EW015120	EW015206	EW015254	EW015256	EW015259	EW015316	
*RESEARCH NEEDS		(3)	EW015204	EW015205	EW015393				
*RESEARCH REPORTS		(10) EW015303	EW015091 EW015315	EW015092 EW015396	EW015173	EW015233	EW015246	EW015251	EW015273
RESERVOIRS		(1)	EW015269						
*RESIDENTIAL EQUIPMENT		(1)	EW015343						
RESISTIVITY TECHNIQUES		(1)	EW015240						
*RESOURCE CONSERVATION AND	RECOVERY ACT	(1)	EW015192						
*RESOURCE DEPLETION		(1)	EW015405						
*RESOURCE RECOVERY		(21) EW015187 EW015237	EW015117 EW015189 EW015251	EW015133 EW015219 EW015255	EW015134 EW015221 EW0152 <b>97</b>	EW015135 EW015228 EW015305	EW015158 EW015229 EW015407	EW015170 EW015230	EW015179 EW015231
ESOURCE RECOVERY	154	(3)	EW015178	EW015186	EW015261	,		155	

*RESOURCES		(5)	EW015110	EW015111	EW015112	EW015113	EW015114		
*REVENUE		(1)	EW015274						
*RISK ANALYSIS		(1)	EW015191						
*RISK ASSESSHENT		(14) EW015241	EW015102 EW015256	EW015103 EW015257	EW015162 EW015261	EW015194 EW015266	EW015204 EW015267	EW015205 EW015389	EW015236
RISK ASSESSMENT		(2)	E1:015240	EW015313					
*RISK ASSESSHSNT		(1)	EW015332						
*RISK ESTIMATION	•	(1)	EW015101						
*RISK MANAGEMENT		(1)	EW015387						
*ROTATING BIOLOGICAL CON	TACTORS	(1)	EW015202						
*RURAL AREAS		(5)	EW015106	EW015160	EW015195	EW015341	EW015408		
*SAFE DRINKING WATER ACT		(1)	EW015096						
*SAFETY		(5)	EW015080	EW015116	EW015172	EW015185	EW015338		
SAFETY		(1)	EW015390						
*SAMPLING		(4)	EW015190	EW015252	EW015375	EW015389			
SAMPLING		(1)	EW015390						
*SCADA		(1)	EW015406						
*SECONDARY EDUCATION		(2)	EW015170	EW015405					
*SEDIMENTS		(1)	EW015389						
SEISMIC TECHNIQUES		(1)	EW015240						
*SEWAGE SLUDGE		(6)	EW015134	EW015135	EW015228	EW015237	EW015251	EW015378	
*SHAN-NO-CORR		(1)	EW015174						
SITE CLEANUP		(1)	EW015101						
*SITE IDENTIFICATION		(1)	EW015193						
*SITE INVESTIGATIONS		(1)	EW015240						
*SITE PREPARATION		(1)	EW015165						
*SITE REMEDIATION		(1)	EW015263						
*SLUDGE		(12) EW015295	EW015134 EW015296	EW015135 EW015297	EW015161 EW015401	EW015188 EW015403	EW015189	EW015233	EW015272
SLUDGE		(2)	EW015261	EW015308					
*SLUDGE APPLICATION		(1)	EW015233						
*SLUOGE COMPOST		(1)	EW015228						
CLUDGE DEWATERING	156	(1)	EW015308					157	

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*SLUDGE DIGESTION	(1)	EW015213						
+SLUDGE DISPOSAL	(5)	EW015186	EW015203	EW015262	EW015401	EW015403		
SLUDGE DISPOSAL	(1)	EW015213						
+SLUDGE HANDLING	(2)	EW015203	EW015307					
*SLUDGE MANAGEMENT	(2)	EW015117	EW015262					
*SMALL COMMUNITIES	(2)	EW015108	EW015160					
*SMALL FLOWS	(3)	EW015106	EW015160	EW015226				
+SUDIUM	(1)	EW015246						
*SOIL	(1)	EW015206						
*SOIL ADSORPTION	(1)	EW015408						
*SOIL CHEMISTRY	(1)	EW015265						
*SOIL CLASSIFICATION SYSTEMS	(1)	EW015242						
*SOIL CONSERVATION	(2)	EW015163	EW015195					
*SOILS	(4)	EW015242	EW015265	EW015311	EW015326			
*SOIL VENTING	(1)	EW015413						
SOLAR ENERGY	(1)	EW015187						·
*SOLID WASTE REUSE	(1)	EW015407						
*SOLID WASTES	(11) EW015231	EW015133 EW015251	EW015170 EW015255	EW015198 EW015407	EW015207	EW015219	EW015229	EW015230
*SOLID WASTE SOURCES	(1)	EWU15407						
*SOUTHWEST USA	(1)	EW015384						
*SOYBEANS	(1)	EW015401						
*SPILL EMERGENCIES	(1)	EW015185						
*SPILLS	(1)	EW015347						
*STACK EMISSIONS	(1)	EW015378						
*STANDARDS	(6)	EW015156	EW015159	EW015224	EW015254	EW015341	EW015415	
*STATE PROGRAMS	(2)	EW015312	EW015339					
*STATE REGULATIONS	(1)	EW015228						
*STATE ROLE	(9) EW015339	EW015106 EW015408	EW015156	EW015163	EW015254	EW015300	EW015312	EW015317
STATE ROLE	(1)	EW015109						
*ST. CLAIR RIVER	(1)	EW015399						
*STEEL CONTAINERS	158 (1)	EW015329					4	<b>~</b> ^
O.C.	190						1	55

*STORAGE TANKS		(5)	EW015164	EW015194	EW015342	EW015411	EW015413		
STORAGE TANKS		(1)	EW015415						
*STREAM SURVEYS		(1)	EW015306						
*SUBMERGED AERATORS		(1)	EW015402						
*SUBSURFACE HAZARDOUS WA	STES	(1)	EW015329						
*SUPERFUND		(10) EW015331	EW015102 EW015332	EW015192 EW015387	EW015193	EW015194	EW015245	EW015263	EW015317
SUPERFUND		(1)	EW015318						
*SURFACE IMPOUNDMENTS	• •	(1)	EW015414						
*SURFACE WATER		(1)	EW015396						
*SURVEYS		(4)	EW015091	EW015092	EW015107	EW015388			
SURVEYS		(1)	EW015261						
*SURVEY TECHNIQUES		(1)	EW015107						
*SYSTEM DESIGN		(1)	EW015408						
SYSTEMS APPROACH		(1)	EW015240						
*SYSTEMS DESIGN		(1)	EW015406						
*TANKS		(1)	EW015411						
*TANK SYSTEMS		(1)	EW015164						
*TAX INCENTIVES		(1)	EW015255						
*TECHNOLOGY		(31) EW015187 EW015278 EW015343	EW015120 EW015205 EW015303 EW015344	EW015158 EW015210 EW015304 EW015347	EW015177 EW015221 EW015308 EW015377	EW015178 EW015222 EW015319 EW015378	EW015179 EW015223 EW015320 EW015387	EW015180 EW015264 EW015322 EW015400	EW015182 EW015277 EW015326 EW015406
*THERAPY		(1)	EW015196						
*THERMAL DESTRUCTION		(1)	EW015167						
*THERMAL PROCESSES		(1)	EW015120						
*TOXIC EFFECTS		(1)	EW015259						
*TOXICITY TESTING		(1)	EW015306						
*TOXICOLOGY		(3)	EW015266	EW015267	EW015337				
*TOXIC SUBSTANCES		(32) EW015182 EW015259 EW015318 EW015417	EW015080 EW115183 EWU15263 EWJ15326	EW015095 EW015205 EW015267 EW015331	EW015206	EW015208	EW015171 EW015214 EW015278 EW015383	EW015172 EW015235 EW015306 EW015394	EW015181 EW015257 EW015317 EW015414
TOXIC SUBSTANCES	•	(1)	EW015313						
*TOXIC WASTES	100	(7)	EW015115	EW015116	EW015117	EW015171	EW015209	EW015264	EW015387
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*TRACE ELEMENTS	(1)	EW015196	
*TRAINING	(1)	EW015245	92
*TREATMENT	(2)	EW015116 EW015117	
*TREES	(1)	EW015233	
*TRENDS	(5)	EW015091 EW015108 EW015313 EW015405 EW015407	
*TRICKLING FILTERS	(1)	EW015202	
*TROUBLE SHOOTING	(1)	EW015212 ·	
*TURBIDITY	(1)	FWn15ng7	

*TRAINING	(1)	EW015245						
*TREATMENT	(2)	EW015116	EW015117					
*TREES	(1)	EW015233						
*TRENDS	(5)	EW015091	EW015108	EW015313	EW015405	EW015407		
*TRICKLING FILTERS	(1)	EW015202						
*TROUBLE SHOOTING	(1)	EW015212						
*TURBIDITY	(1)	EW015097						
*UNCONTROLLED WASTE SITES	(1)	EW015335						
*UNDERGROUND STORAGE TANKS	(4)	EW015342	EW015411	EW015413	EW015415			
*UNDERGROUND TANKS	(1)	EW015168						
*UNITED NATIONS	(2)	EW015095	EW015302					
*UNITED NATIONS ENVIRONMENT PROGRAM	(2)	EW015197	EW015260					
*UNITED STATES	(1)	EW015301						
*UNIT PROCESSES	(1)	EW015344						
*URANIUM	(1)	EW015175						
*URBAN AREAS	(2)	EW015176	EW015384					
The state of the s	<b>\-</b> /							
*USDA	(1)	EW015388						
		EW015388	EW015156 EW015392	EW015193 EW015415	EW015207	EW015224	EW015316	EW015386
*USDA	(1)	EW015388	EW015156	EW015193 EW015415	EW015207	EW015224	EW015316	EW015386
*USDA *USEPA	(1) (11) EW015387	EW015388 EW015108 EW015388	EW015156	EW015193 EW015415	EW015207	EW015224	EW015316	EW015386
*USDA *USEPA USEPA	(1) (11) EW015387 (1)	EW015388 EW015108 EW015388 EW015103	EW015156	EW015193 EW015415	EW015207	EW015224	EW015316	EW015386
*USDA *USEPA USEPA *USER CHARGES	(1) (11) EW015387 (1) (1)	EW015388 EW015108 EW015388 EW015103 EW015107	EW015156	EW015193 EW015415	EW015207	EW015224	EW015316	EW015386
*USDA *USEPA  USEPA *USER CHARGES USER CHARGES	(1) (11) EW015387 (1) (1) (1)	EW015388 EW015108 EW015388 EW015103 EW015107 EW015109	EW015156	EW015193 EW015415	EW015207	EW015224	EW015316	EW015386
*USDA *USEPA  USEPA *USER CHARGES USER CHARGES *UTILITIES	(1) (11) EW015387 (1) (1) (1)	EW015388 EW015388 EW015388 EW015103 EW015107 EW015109 EW015276	EW015156	EW015193 EW015415	EW015207	EW015224	EW015316	EW015386
*USDA *USEPA  USEPA *USER CHARGES USER CHARGES *UTILITIES *VALUE ENGINEERING	(1) (11) EW015387 (1) (1) (1) (1) (1)	EW015388 EW015388 EW015103 EW015107 EW015109 EW015276 EW015367	EW015156	EW015193 EW015415	EW015207	EW015224	EW015316	EW015386
*USDA *USEPA  USEPA *USER CHARGES  USER CHARGES *UTILITIES *VALUE ENGINEERING VETERANS ADMINISTRATION	(1) (11) EW015387 (1) (1) (1) (1) (1) (1)	EW015388 EW015388 EW015103 EW015107 EW015109 EW015276 EW015367 EW015392 EW015171	EW015156 EW015392	EW015415			EW015316	
*USDA *USEPA  USEPA *USER CHARGES  USER CHARGES *UTILITIES *VALUE ENGINEERING VETERANS ADMINISTRATION *VIDEO TAPE	(1) (11) EW015387 (1) (1) (1) (1) (1) (1) (1)	EW015388 EW015388 EW015103 EW015107 EW015109 EW015276 EW015367 EW015392 EW015171	EW015156 EW015392	EW015415				
*USDA *USEPA  USEPA *USER CHARGES  USER CHARGES *UTILITIES *VALUE ENGINEERING VETERANS ADMINISTRATION *VIDEO TAPE *VIDEOTAPES	(1) (11) EW015387 (1) (1) (1) (1) (1) (1) (1) (1)	EW015388 EW015108 EW015388 EW015103 EW015107 EW015109 EW015276 EW015367 EW015367 EW015392 EW015171 EW015200 EW015405	EW015156 EW015392	EW015415				
*USDA *USEPA  USEPA *USER CHARGES  USER CHARGES *UTILITIES *VALUE ENGINEERING VETERANS ADMINISTRATION *VIDEO TAPE *VIDEOTAPES *VIRCHEM 932	(1) (11) EW015387 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	EW015388 EW015108 EW015388 EW015103 EW015107 EW015109 EW015276 EW015367 EW015392 EW015171 EW015200 EW015405 EW015174	EW015156 EW015392	EW015415				
*USDA *USEPA  USEPA *USER CHARGES USER CHARGES *UTILITIES *VALUE ENGINEERING VETERANS ADMINISTRATION *VIDEO TAPE *VIDEOTAPES  *VIRCHEM 932 VIRUSES	(1) (11) EW015387 (1) (1) (1) (1) (1) (1) (1) (1)	EW015388 EW015388 EW015388 EW015103 EW015107 EW015109 EW015276 EW015367 EW015367 EW015392 EW015171 EW015200 EW015405 EW015174 EW015188	EW015156 EW015392	EW015415				





*WASTE CLEANUP		(1)	EW015192						
*WASTE COLLECTION		(1)	EW015229						
*WASTE CONTAINMENT		(2)	EW015412	EW015414					
*WASTE DISPOSAL		(41) EW015171 EW015222 EW015272 EW015324 EW015403	EW015115 EW015172 EW015236 EW015277 EW015325 EW015407	EW015133 EW015192 EW015237 EW015278 EW015330	EW015134 EW015193 EW015251 EW015303 EW015335	EW015135 EW015198 EW015255 EW015305 EW015336	EW015164 EW015217 EW015261 EW015319 EW015345	EW015165 EW015219 EW015263 EW015320 EW015387	EW015167 EW015221 EW015264 EW015321 EW015401
WASTE DISPOSAL		(2)	EW015186	EW015389					
*WASTE OISPOSAL SITES		(1)	EW015336						
*WASTE FACILITIES		(1)	EW015324						
*WASTE HANDLING		(3)	EW015217	EW015221	EW015272				
*WASTE MANAGEMENT		(2)	EW015255	EW015303					
WASTE MANAGEMENT		(1)	EW015313						
*WASTE MANAGEMENT ALTE	RNATIVES	(1)	EW015410						
*WASTE RECOVERY		(2)	EW015229	EW015230					
*WASTE REDUCTION		(17) EW015217 EW015321	EW015133 EW015219 EW015325	EW015134 EW015221	EW015135 EW015222	EW015170 EW015229	EW015179 EW015231	EW015180 EW015277	EW015189 EW015305
*WASTES		(5)	EW015161	EW015164	EW015165	EW015171	EW015172		
*WASTE SEPARATIONS		(1)	EW015230						
*WASTE SITES		(5)	EW015165	EW015263	EW015324	EW015330	EW015337		
*WASTE STORAGE		(6)	EW015115	EW015116	EW015164	<b>EW015165</b>	EW015263	EW015305	
*WASTE TREATMENT		(15) EW015278	EW015115 EW015305	EW015120 EW015319	EW015164 EW015320	EW015179 EW015325	EW015180 EW015334	EW015222 EW015344	EW015277 EW015387
*WASTEWATER		(1)	EW015223						
*WASTEWATER COLLECTION		(2)	EW015158	EW015160					
*WASTEWATER TREATMENT		(41) EW015135 EW015187 EW015223 EW015308 EW015408	EW015091 EW015156 EW015188 EW015224 EW015312 EW015414	EW015158 EW015200 EW015226	EW015160		EW015108 EW015177 EW015203 EW^15304 EW015390	EW015109 EW015178 EW015212 EW015306 EW015400	EW015134 EW015182 EW015213 EW015307 EW015402
WASTEWATER TREATMENT		(3)	EW015186	EW015296	EW015389				
*WASTEWATER UTILITIES		(1)	EW015397		•				
*WATER		(1)	EW015396						
TER CONSERVATION		(3)	EW015163	EW015301	EW015343				
RICTER CONTAMINATION	164	(1)	EW015191					165	

*WATER	DISTRIBUTION	(7)	EW015097	FW015174	EW015234	EU018220	FURATOR		
WATER	DISTRIBUTION	(2)	EW015176		F#019534	EM0135/0	EWU15271	EW015274	EW015311
*WATER	LEVELS	(1)	EW015391	24025070					
*WATER	LOSS	(1)	EW015274						
*WATER	MAINS	(1)	EW015234						
*WATER	NEEOS	(1)	EW015211						
*WATER	PIPES	(3)	EW015234	EW015311	EW015376				
*WATER	POLLUTION	(5)	EW015173	EW015208	EW015209	EW015267	EUOSEASC		
*WATER	POLLUTION CONTROL	(22) EW015184 EW015300	EW015091 EW015195 EW015306	EW015092 EW015198 EW015347	EW015106 EW015206 EW015375	EW015158 EW015220 EW015380	EW015416 EW015169 EW015238 EW015411	EW015174 EW015246 EW015416	EW015181 EW015268
*WATER	QUALITY	(35) EW015158 EW015238 EW015309 EW015396	EW015091 EW015159 EW015246 EW015310 EW015398	EW015092 EW015160 EW015260 EW015316 EW015399	EW015096 EW015190 EW015268 EW015347 EW015404	EW015097 EW015191 EW015271 EW015379	EW015106 EW015195 EW015300 EW015380	EW015108 EW015197 EW015304 EW015384	EW015116 EW015220 EW015306 EW015393
WATER	QUALITY	(1)	EW015307						
*WATER	RATES	(1)	EW015211						
*WATER	RESOURCES	(15) EW015260	EW015110 EW015269	EW015111 EW015200	EW015112 EW015301	EW015113 EW015309	EW015114 EW015384	EW015163 EW015391	EW015169 EW015404
*WATER	REUSE	(1)	EW015158						F#013404
*WATER	SOFTENERS	(1)	EW015246						
*WATER	SUPPLY	(20) EW015176 EW015301	EW015110 EW015195 EW015341	EW015111 EW015211 EW015384	EW015112 EW015238 EW015391	EW015113 EW015260 EW015404	EW015114 EW015268	EW015163 EW015269	EW015169 EW015296
W'TER	SUPPLY	(1)	EW015246						
*WATER	TREATMENT	(22) EW015211 EW015275	EW015096 EW015220 EW015276	EW015097 EW015223 EW015296	EW015108 EW015225 EW015297	EW015159 EW015261 EW015309	EW015169 EW015271 EW015310	EW015175 EW015272 EW015315	EW015199 EW015273
WATER	TREATHENT	(3)	EW015176	EW015268	EW015269				
*WATER	USE	(3)	EW015269	EW015301	EW015343				
*WATER	UTILITIES	(1)	EW015234						
*WATER	WELLS	(3)	EW015246	EW015341	EW015404				
WELLS		(1)	EW015303						
*WI SCONS		(1)	EW015233						
*WORLD I	HEALTH ORGANIZATION	(1)	EW015258						
*WORLD F	PROBLEMS	(6)	EW015095	EW015236	EW015257	EW015258	EW015302	EW015405	



