

TD365
W375

EPA Information Dissemination Project
1200 Chambers Road - Third Floor
Columbus, Ohio 43212

000R84005

Water

Water Quality Instructional Resources Information System



Prepared by

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

as part of
Grant No. T-901366010

WATER QUALITY INSTRUCTIONAL
RESOURCES INFORMATION SYSTEM (IRIS)

A Compilation of Abstracts
to Water Quality and Water
Resources Materials

Supplement XX (1984)
December, 1984

U.S. Environmental Protection Agency
Region V, Library
230 South Dearborn Street
Chicago, Illinois 60604

This project has been financed (in part) with Federal funds from the U.S. Environmental Protection Agency, Office of Water Program Operations, under grant identification number T-901366010. The contents do not necessarily reflect the views and policies of the U.S. Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

U.S. Environmental Protection Agency

TABLE OF CONTENTS

<u>Topic</u>	<u>Page</u>
Preface	
I. General Information about Materials in IRIS	1
A. What Types of Materials Are Included in IRIS	1
B. How Are Materials Entered in IRIS	1
C. How Can a User Locate Materials in IRIS	1
1. All Materials Placed in IRIS (Water) Collection	1
2. Materials Placed in the Educational Resources Information System (ERIC)	2
II. How to Use the Compilation	4
A. Description of Information in Resumes	4
B. How to Locate Desired Materials	6
1. Subject Index	6
2. Author Index	7
III. Correcting an Existing IRIS Record	7
IV. Requests to Receive Information about IRIS and the <u>IRC Bulletin</u>	8
V. Requests for Assistance in Using IRIS	8
VI. How to Locate Other Relevant Educational Materials	9
VII. How to Structure a Computer Search of IRIS	15
VIII. How to Order Materials	17
IX. Resume Section	19
X. Author Index	95
XI. Subject Index	101

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 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:

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

(614) 422-6717

I. General Information about Materials in IRIS.

A. What types of materials are included in IRIS?

The EPA 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.

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 a few cases the EPA 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:

EPA 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 (water) computer tape. This tape is maintained by the EPA 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 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. Copies are available for purchase from the EPA Instructional Resources Center for \$5.00

Quarterly updates of the compilation are available by subscription on a yearly basis beginning November, 1979. Information regarding an annual subscription to IRIS (water) Quarterly Compilations can be obtained by writing to the EPA Instructional Resources Center. A subscription to the quarterly supplements for 1984 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 \$4.00 each.

The compilation 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 both batch and on-line computer searches. The IRIS tapes are available for searching through CompuServe. Individuals or agencies with computer terminals and telephone connection equipment can subscribe to CompuServe and do their own searches if they desire.

Information regarding Dialog may be obtained by writing or phoning Dialog Information Retrieval Service, 3460 Hillview Avenue, Palo Alto, CA 94304, (415) 858-3775.

Information regarding CompuServe can be obtained from the EPA/IRC.

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

A number of the 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
(202) 783-3238

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 EPA 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. ERIC computer tapes may be purchased outright, but users can

access them through Dialog, BRS, CompuServe and Systems Development Corporation (Orbit). For the addresses of search services in your state that can search these databases, contact the:

EPA Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212
(614) 422-6717

Most of the materials announced in RIE are available on microfiche (microfilm) 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 EPA Instructional Resources Center for \$0.06 per page plus \$1.00 per document.

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

A number of journal articles processed for the IRIS (water) system are entered into the ERIC system and announced in Current Index to Journals in Education (CIJE).

Current Index to Journals in Education is published monthly and is available from:

ORYX Press
2214 North Central at Encanto
Phoenix, Arizona 85004
(602) 254-6156

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

Materials announced in CIJE can be located in journals at many university libraries.

Many of the articles can be obtained from University Microfilms. Current prices are \$12.00 per article. Additional copies of the same article are \$2.25 each. For further information write to:

UMI Article Reprint Department
300 North Zeeb Road
Ann Arbor, Michigan 48106
(800) 521-0600

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. Two samples of resumes are provided to explain the data fields in the resumes. Sample resume #1 is a sample resume of an item not entered into ERIC. Sample resume #2 is a sample resume of an item entered into ERIC; a few additional data elements are in these resumes and are explained.

1. Sample resume of materials not entered in ERIC

- 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.
- g. 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 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.
2. Sample resume of material entered into ERIC (Resources in Education)

Items entered into ERIC (Resources in Education) will have a few additional data fields.

IRIS ACCESSION NUMBER: EW006664

PUBLICATION DATE: 80

TITLE: RESOURCE DEVELOPMENT OF WATERSHED LANDS: A SIX WEEK SHORT COURSE.

DESCRIPTOR: ADMINISTRATION; ECOLOGICAL FACTORS; ECONOMIC FACTORS; INSTRUCTIONAL MATERIALS; *LAND USE; NATURAL RESOURCES; *POST SECONDARY EDUCATION; *TECHNICAL EDUCATION; *WATER RESOURCES; HYDROLOGY; NATURAL RESOURCES MANAGEMENT; WATER QUALITY; *WATERSHEDS

- b. DESCRIPTIVE NOTE: EDRS PRICE: MF01 PLUS POSTAGE-NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT.

ABSTRACT: THIS COURSE WAS DESIGNED TO PROVIDE THE WATER RESOURCE TECHNICIAN OR MANAGER WITH INFORMATION WHICH WILL AID IN THE IMPLEMENTATION OF IMPROVEMENTS OF PRESENT LAND USE PRACTICES AND TO ILLUSTRATE ALTERNATIVE CONCEPTS AND TECHNIQUES IN LAND AND WATER USE FOR INCREASING AND IMPROVING THE MULTIPLE PRODUCTS OF

- a. WATERSHED LANDS. (ED 197 941)

AVAILABILITY: ERIC DOCUMENT REPRODUCTION SERVICE, P. O. BOX 190, ARLINGTON, VA 22210

- a. ERIC NUMBER -- the ED number indicates the document has been processed and entered into Resources in Education. This identification number is the number to use when ordering a document or when requesting information about a document.

- b. EDRS PRICE -- if material is available through the ERIC Document Reproduction Service, the price of the material when it was entered into the ERIC system and the form of the material is indicated. "MF" means microfiche; "HC" means Xerox copy. Prices are subject to change. Current prices of microfiche and paper copies are listed in the back of each issue of Resources in Education; consult the latest monthly issue for current prices. Information about ordering items can be obtained by contacting:

ERIC Document Reproduction Service (EDRS)
P. O. Box 190
Arlington, Virginia 22210
(703) 841-1212

Items that are available on microfiche (MF) are contained in microfiche collections at over 700 sites where they can be read. For information on the microfiche locations in your state contact the EPA Instructional Resources Center.

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 on a quarterly basis. Corrections will be made to the data base at those times. 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:

EPA Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212
(614) 422-6717

Corrections of errors will occur in the IRIS tapes at the next update after comments are received.

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 annual availability checks.

If you are the supplier 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 IRC Bulletin. The Bulletin is issued about six times a year as information is available.

If you are not on the mailing list write to the EPA Instructional Resources Center. Limited numbers of some back issues are still available.

If you need information about IRIS you can also phone (614) 422-6717 with your questions.

V. Requests for Assistance in Using IRIS

A. Assistance in use of IRIS manuals

If you need help in using the IRIS manuals, phone (614) 422-6717 or write to the EPA Instructional Resources Center. Staff are normally available from about 8:30 a.m. to 4:30 p.m. Eastern time to answer your questions.

B. Assistance in accessing IRIS by computer

1. Conducting searches.

See section VII.

2. Subscribing to CompuServe for computer searching of IRIS.

Contact: CompuServe
5000 Arlington Centre Boulevard
P.O. Box 20212
Columbus, OH 43220
(614) 457-8600

3. Contacting a computer search service (an agency that will conduct a search for you, usually for a fee.)

The EPA Instructional Resources Center maintains a list of agencies that can conduct searches. Most charge a fee, though some are free to qualified users in a limited geographical area.

Phone or write to obtain information for your area.

VI. How to Locate Other Relevant Educational Materials

A number of people have requested information related to such areas as management, basic skills (reading, mathematics, writing) human relations, contract negotiations, and other topics. The EPA Instructional Resources Center is developing some user service products in selected areas.

Another excellent source of information for many educational concerns is the ERIC System.

ERIC is a national information system designed and developed by the U.S. Office of Education, and now supported and operated by the National Institute of Education (NIE), for providing ready access to descriptions of exemplary programs, research and development efforts, and related information that can be used in developing more effective educational programs.

There are 16 Clearinghouses in the nationwide ERIC network. Each specializes in a different, multi-discipline, educational area. Each searches out pertinent documents.

The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular areas, selecting the highest quality and most relevant material, processing (i.e., cataloging, indexing, abstracting) the selected items for input to the data base, and also for providing information analysis products and various user services based on the data base.

The 16 ERIC Clearinghouses are listed on the next few pages, together with addresses, telephone numbers, and brief scope notes describing the areas they cover. You can contact them for assistance in locating information relevant to their scope notes.

- A. ERIC Clearinghouse on Adult, Career, and Vocational Education
The Ohio State University
National Center for Research in Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
Telephone: (614) 486-3655

Career education, formal and informal at all levels, encompassing attitudes, self-knowledge, decision-making skills, general and occupational knowledge, and specific vocational and occupational skills; adult and continuing education, formal and informal, relating to occupational, family, leisure, citizen, organizational, and retirement roles; vocational and technical education, including new sub-professional fields, industrial arts, and vocational rehabilitation for the handicapped.

B. ERIC Clearinghouse on Counseling and Personnel Services

University of Michigan
School of Education, Room 2108
Ann Arbor, Michigan 48109
Telephone: (313) 764-9492

Preparation, practice, and supervision of counselors at all educational levels and in all settings, theoretical development of counseling and guidance, use and results of personnel procedures such as testing, interviewing, disseminating, and analyzing such information, group work and case work; nature of pupil, student, and adult characteristics; personnel workers and their relation to career planning, family consultations, and student orientation activities.

C. ERIC Clearinghouse on Elementary and Early Childhood Education

University of Illinois
College of Education
805 West Pennsylvania Avenue
Urbana, Illinois 61801
Telephone: (217) 333-1386

Prenatal factors, parental behavior; the physical, psychological, social, educational, and cultural development of children from birth through the primary grades; educational theory, research and practice related to the development of young children.

D. ERIC Clearinghouse on Educational Management

University of Oregon
Library, Room 108
Eugene, Oregon 97403
Telephone: (503) 686-5043

Leadership, management, and structure of public and private educational organizations; practice and theory of administration; preservice and inservice preparation of administrators, tasks and processes of administration, methods and varieties of organization, organizational change, and social context of the organization.

Sites, buildings, and equipment for education; planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

- E. ERIC Clearinghouse on Handicapped and Gifted Children
Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091
Telephone: (703) 620-3660

Aurally handicapped, visually handicapped, mentally handicapped, physically handicapped, emotionally disturbed, speech handicapped, learning disabilities, and the gifted; behavioral, psychomotor, and communication disorders, administration of special education services; preparation and continuing education of professional and paraprofessional personnel; preschool learning and development of the exceptional; general studies on creativity.

- F. ERIC Clearinghouse on Higher Education
George Washington University
One Dupont Circle, NW, Suite 630
Washington, DC 20036
Telephone: (202) 296-2597

Various subjects relating to college and university students, college and university conditions and problems, college and university programs; curricular and instructional problems and programs, faculty, institutional research; federal programs, professional education (medical, law, etc.), graduate education, university extension programs, teaching-learning, planning, governance, finance, evaluation, interinstitutional arrangements, and management of higher educational institutions.

- G. ERIC Clearinghouse on Information Resources
Syracuse University
School of Education
Huntington Hall
150 Marshall Street
Syracuse, New York 13210
Telephone: (315) 423-3640

Management, operation, and use of libraries; the technology to improve their operation and the education, training, and professional activities of librarians and information specialists. Educational techniques involved in microteaching, systems analysis, and programmed instruction employing audiovisual teaching aids and technology, such as television, radio, computers, and cable television, communication satellites, microforms, and public television.

- H. ERIC Clearinghouse for Junior Colleges
University of California at Los Angeles (UCLA)
Mathematical Sciences Building, Room 8118
405 Hilgard Avenue
Los Angeles, California 90024
Telephone: (213) 825-3931
- Development, administration, and evaluation of public and private community junior colleges. Junior college students, staff, curricula, programs, libraries, and community services.

- I. ERIC Clearinghouse on Languages and Linguistics
Center for Applied Linguistics
3520 Prospect Street, NW
Washington, DC 20007
Telephone: (202) 298-9292

Languages and linguistics. Instructional methodology, psychology of language learning, cultural and intercultural content, application of linguistics, curricular problems and developments, teacher training and qualifications, language sciences, psycholinguistics, theoretical and applied linguistics, language pedagogy, bilingualism, and commonly taught languages including English and speakers of other languages.

- J. ERIC Clearinghouse on Reading and Communication Skills
National Council of Teacher of English
1111 Kenyon Road
Urbana, Illinois 61801
Telephone: (217) 328-3870

Reading, English, and communication skills, preschool through college. Educational research and development in reading, writing, speaking, and listening. Identification, diagnosis, and remediation of reading problems. Speech communication--forensics, mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, instruction development, speech sciences, and theater. Preparation of instructional staff and related personnel in these areas.

All aspects of reading behavior with emphasis on physiology, psychology, sociology, and teaching. Instructional materials, curricula, tests and measurement, preparation of reading teachers and specialists, and methodology at all levels. Role of libraries and other agencies in fostering and guiding reading. Diagnostic and remedial services in school and clinical settings.

- K. ERIC Clearinghouse on Rural Education and Small Schools
New Mexico State University
Box 3AP
Las Cruces, New Mexico 88003
Telephone: (505) 646-2623

Education of Indian Americans, Mexican Americans, Spanish Americans, and migratory farm workers and their children; outdoor education; economic, cultural, social, or other factors related to educational programs in rural areas and small schools; disadvantaged of rural and small school populations.

- L. ERIC Clearinghouse for Science, Mathematics and Environmental Education
The Ohio State University
1200 Chambers Road - Room 310
Columbus, Ohio 43212
Telephone: (614) 422-6717

All levels of science, mathematics, and environmental education; development of curriculum and instructional materials; media applications; impact of interest, intelligence, values, and concept development upon learning; preservice and inservice teacher education and supervision.

- M. ERIC Clearinghouse for Social Studies/Social Science Education
Social Science Education Consortium, Inc.
855 Broadway
Boulder, Colorado 80302
Telephone: (303) 492-8434

All levels of social studies and social science; all activities relating to teachers; content of disciplines; applications of learning theory, curriculum theory, child development theory, and instructional theory; research and development programs; special needs of student groups; education as a social science; social studies/social science and the community.

- N. ERIC Clearinghouse on Teacher Education
American Association of Colleges for Teacher Education (AACTE)
One Dupont Circle, NW, Suite 610
Washington, DC 20036
Telephone: (202) 293-2450

School personnel at all levels, all issues from selection through preservice and inservice preparation and training to retirement; curricula, educational theory and philosophy; general education not specifically covered by Educational Management Clearinghouse; Title XI NDEA Institutes not covered by subject speciality in other ERIC Clearinghouses; all aspects of physical education.

- O. ERIC Clearinghouse on Tests, Measurement, and Evaluation
Educational Testing Service (ETS)
Rosedale Road
Princeton, New Jersey 08541
Telephone: (609) 734-5176

Tests and other measurement devices; evaluation procedures and techniques; application of tests, measurement, or evaluation in educational projects of programs.

- P. ERIC Clearinghouse on Urban Education
Teachers College, Columbia University
Institute for Urban and Minority Education
Box 40
525 West 120th Street
New York, New York 10027
Telephone: (212) 678-3433

The relationship between urban life and schooling; the effect of urban experiences and environments from birth onward; the academic, intellectual, and social performance of urban children and youth from grade three through college entrance (including the effect of self concept, motivation, and other affective influences), education of urban, Puerto Rican and Asian American populations, and rural and urban black populations; programs and practices which provide learning experiences designed to meet the special needs of diverse populations served by urban schools and which build upon their unique as well as their common characteristics, structural changes in the classroom, school, school system, and community and innovative instructional practices which directly affect urban children and youth; programs, practices, and materials related to economic and ethnic discrimination, segregation, desegregation, and integration in education; issues, programs, practices, and materials related to redressing the curriculum imbalance in the treatment of ethnic minority groups.

- Q. Educational Resources Information Center
Central ERIC
National Institute of Education (NIE)
Information Resources Division
1200 - 19th Street, NW
Washington, DC 20208
Telephone: (202) 254-5500

There are other sources of educational information in many states. Included are information dissemination units in the state departments of education, intermediate education units, and local education units. In many cases, a local school administrator or school librarian can help you locate assistance.

VII. How to Structure a Computer Search of IRIS

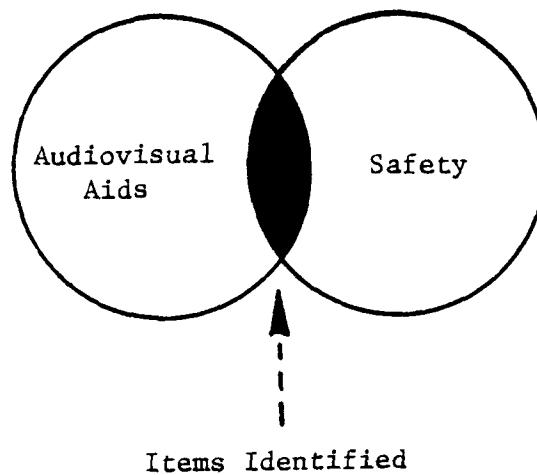
This explanation relates to the IRIS data base that can be searched through CompuServe.

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

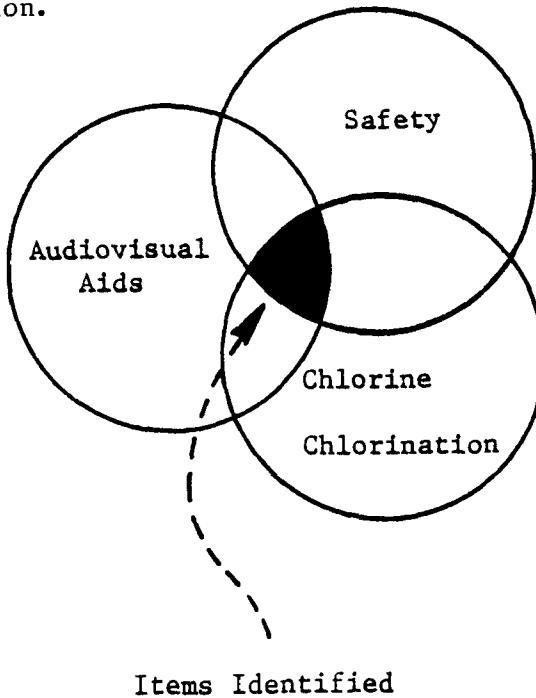
If you submit a search of IRIS through CompuServe, the program can search for the words you select in three fields. These fields are: (1) title field, (2) subject index field, and (3) author field. Several sample searches are listed below and on the following pages.

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.

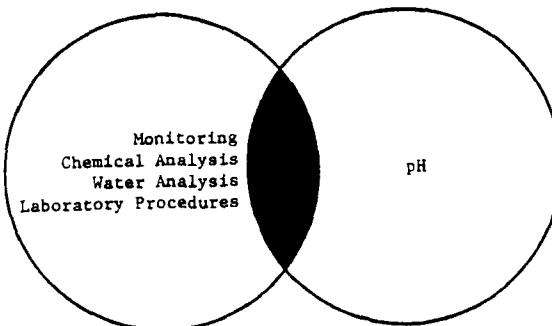


The computer program can tell you the number of items and the title of the items. If you were primarily interested in audiovisual aids, safety, and chlorine you would submit a search of these three terms. You might want to include chlorides and chlorination as well as chlorine in the search. This search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



B. Sample 2

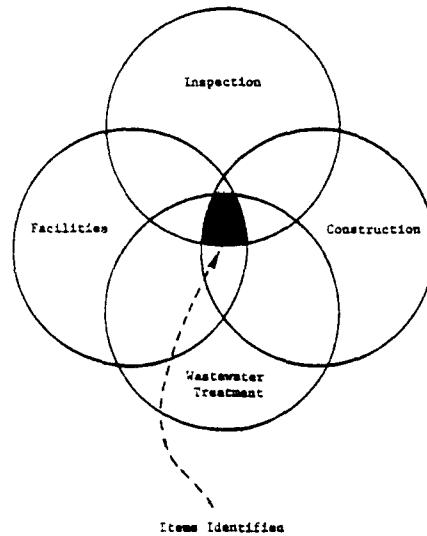
If you want to identify materials related to monitoring, you should include several related terms and the chemical, material, or situation that is being monitored. See the example below.



This search would identify all the items that included any of the terms on the left and pH.

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 could construct a search as diagrammed.



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

The subject index in the IRIS compilations can also be used to help you select words to include in a search. Words listed in the subject index are certain to be in the subject field. Therefore, selecting these terms to use in structuring a search will increase the probability of locating materials.

VIII. How to Order Materials

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 rental basis or purchased from the EPA Instructional Resources Center. Most items previously available from the NTOTC office are available from the EPA Instructional Resources Center at The Ohio State University. For further information write or call.

- B. Some of the materials are available through the ERIC Document Reproduction Service. MF (microfiche) are 4" x 6" sheets of microfilm; up to 96 pages of text can be reproduced on one sheet. HC (paper copy) is a reproduction of the document in paper form at the original size.

Order forms for these materials can be obtained from:

ERIC Document Reproduction Service
P. O. Box 190
Arlington, Virginia 22210
(703) 841-1212

- C. The EPA 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 EPA Instructional Resources Center. We can provide assistance in obtaining materials from some sources. If materials become unavailable, we will remove them from the IRIS data base.

RESUME SECTION

- RIS ACCESSION NUMBER: EW009163
 PUBLICATION DATE: DEC 82
 TITLE: POTENTIAL IMPACTS OF REDUCING THE ENVIRONMENTAL PROTECTION AGENCY'S BUDGET.
 DESCRIPTOR: *CONTRACTING; *ECONOMICS; *BUDGETTING; *FEDERAL PROGRAMS; *ENVIRONMENTAL PROTECTION; *FEDERAL ROLE; *PROGRAM EVALUATION; *MANAGEMENT; *POLLUTION CONTROL; *POLICY; *RECOMMENDATIONS; *STATE ROLE; *REVIEW OF USEPA
 DESCRIPTIVE NOTE: 60P.
- ABSTRACT: THE GOVERNMENT AUDITING AGENCY WAS ASKED TO DETERMINE THE IMPACT OF FISCAL YEARS 1982 AND 1983 BUDGET REDUCED IMPACT OF BUDGET CUTS ARE PRESENTED. IN ADDITION ISSUES RELATED TO: (1) REDUCTIONS OF STATE GRANT ASSISTANCE; (2) THE EVOLVING FEDERAL/STATE PARTNERSHIP; AND (3) THE USE OF PERMIT FEES/USER CHARGES TO REPLACE FEDERAL FUNDS ARE CONSIDERED. MANAGEMENT AND CONTRACTING PRACTICES OF USEPA ARE ALSO CONSIDERED.
- AVAILABILITY: U.S. GENERAL ACCOUNTING OFFICE, DOCUMENT HANDLING AND INFORMATION SERVICES FACILITY, P. O. BOX 6015, ALTHERSBURG, MD 20760
- RIS ACCESSION NUMBER: EW010863
 PUBLICATION DATE: SEP 83
 TITLE: ASSESSMENT OF POTENTIAL ENVIRONMENTAL PROBLEMS CONCERNING WATER AVAILABILITY. PROJECT SUMMARY.
 PERSONAL AUTHOR: WESNER, G. M.; BURRIS, B. E.
- DESCRIPTOR: *WATER AUGMENTATION; *CONSERVATION; ENVIRONMENTAL PROBLEMS; *TECHNOLOGY; *TRENDS; *WATER USE DEMAND; *WATER RESOURCES; *WATER SUPPLY; *WATER USE
 DESCRIPTIVE NOTE: 2P. FOR COMPLETE REPORT PB83-226035. PRICE: \$11.50
- ABSTRACT: THIS STUDY ANALYZES NATIONAL SUPPLY AND DEMAND DATA ON ALL WATER RESOURCES REGIONS. IN ADDITION, IT REVIEWS THE TECHNOLOGY FOR WATER SUPPLY AUGMENTATION. PRESENTS EVALUATIONS OF WATER RESOURCES IN THREE DIFFERENT AREAS OF THE U.S., AND ANALYZES ISSUES, PROBLEMS, AND RESEARCH NEEDS IN WATER AVAILABILITY.
- AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285. RT ROYAL ROAD, SPRINGFIELD, VA 22161
- RIS ACCESSION NUMBER: EW011136
 PUBLICATION DATE: JUN 84
 TITLE: STATE OF THE ENVIRONMENT. AN ASSESSMENT AT MID-
- DECADE.
- DESCRIPTOR: *AIR; *RISK; *AGRICULTURE; *ENVIRONMENT; *FEDERAL ROLE; *HAZARDOUS WASTES; *LAND USE; *NATURAL RESOURCES; *POLICIES; *REGULATIONS; *TRENDS; *WATER QUALITY; *WATER RESOURCES
 DESCRIPTIVE NOTE: 400P. PRICE: \$16.00
- ABSTRACT: THIS REPORT DOCUMENTS CONTINUING PROGRESS IN DEALING WITH ENVIRONMENTAL PROBLEMS IN AIR AND WATER QUALITY, HAZARDOUS WASTE, LAND USE, AGRICULTURE, AND OTHER ISSUES. IT DISCUSSES RECENT BUDGETARY, POLICY, AND OTHER INITIATIVES OF THE REAGAN ADMINISTRATION. IT ATTEMPTS TO IDENTIFY AND DEFINE LONG-TERM ENVIRONMENTAL THREATS. RISK ASSESSMENT, CROSS-MEDIA POLLUTION, WATER RESOURCES, AND INTERGOVERNMENTAL RELATIONS ARE TOPICS THAT RECEIVE DETAILED DISCUSSION.
- AVAILABILITY: THE CONSERVATION FOUNDATION, 1717 MASSACHUSETTS AVE., N.W., WASHINGTON, DC 20036
- IRIS ACCESSION NUMBER: EW011112
 PUBLICATION DATE: 82
 TITLE: ADVANCES IN IRRIGATION. VOLUME 1.
 PERSONAL AUTHOR: HILLEL, DANIEL, ED.
- DESCRIPTOR: *AGRICULTURE; *CASE STUDIES; *IRRIGATION; *ECONOMICS; *MANAGEMENT; *RESEARCH; *WATER RESOURCES
 DESCRIPTIVE NOTE: 320P. PRICE: \$50.00; ISBN: 012-024301-6
- ABSTRACT: THIS PUBLICATION IS DESIGNED TO MEET THE NEED FOR PERIODIC DESCRIPTIONS, REVIEWS, AND ANALYSES OF IMPORTANT TOPICS OF CONTEMPORARY INTEREST TO THE RAPIDLY GROWING SCIENCE AND ENGINEERING PRACTICE OF IRRIGATION. IT PROVIDES A FORUM FOR THE PRESENTATION OF VIEWS ON CURRENT IRRIGATION RESEARCH, THEORY, AND FIELD APPLICATIONS. CONTRIBUTIONS INCLUDE, BUT ARE NOT LIMITED TO, STATE-OF-THE-ART REVIEWS, CRITIQUES OF CURRENT PRACTICES, ECONOMIC ANALYSES, CASE STUDIES OF IRRIGATION IN DIFFERENT LOCATIONS, CHANGING CONCEPTS OF IRRIGATION, AND WATER-USE EFFICIENCY.
- AVAILABILITY: ACADEMIC PRESS, INC., 6277 SEA HARBOR DRIVE, ORLANDO, FL 32821
- IRIS ACCESSION NUMBER: EW011136
 PUBLICATION DATE: JUN 84
 TITLE: AIR AND WATER POLLUTION CONTROL, A BENEFIT-COST ASSESSMENT.
 PERSONAL AUTHOR: FREEMAN, A. MYRICK, III
- DESCRIPTOR: *AIR POLLUTION; *BENEFIT-COST ASSESSMENT; *AESTHETICS; *ECONOMICS; *ENVIRONMENT; *PLANNING; *POLICIES; *PUBLIC HEALTH; *WATER POLLUTION
 DESCRIPTIVE NOTE: 2P. FOR COMPLETE REPORT PB83-226035. PRICE: \$11.50
- ABSTRACT: THIS STUDY ANALYZES NATIONAL SUPPLY AND DEMAND DATA ON ALL WATER RESOURCES REGIONS. IN ADDITION, IT REVIEWS THE TECHNOLOGY FOR WATER SUPPLY AUGMENTATION. PRESENTS EVALUATIONS OF WATER RESOURCES IN THREE DIFFERENT AREAS OF THE U.S., AND ANALYZES ISSUES, PROBLEMS, AND RESEARCH NEEDS IN WATER AVAILABILITY.
- AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285. RT ROYAL ROAD, SPRINGFIELD, VA 22161
- RIS ACCESSION NUMBER: EW011107
 PUBLICATION DATE: JUN 84
 TITLE: STATE OF THE ENVIRONMENT. AN ASSESSMENT AT MID-

SCRIPTIVE NOTE: 186P.

IRIS ACCESSION NUMBER: EW011198

STRACT: THIS PUBLICATION IS BASED ON A REPORT FOR THE S. COUNCIL OF ENVIRONMENTAL QUALITY RELEASED BY CEQ IN 80. THE MAJOR PORTION OF THE BOOK (ABOUT 75%) RELATES TO R. POLLUTION, WHILE THE REMAINING PART RELATES TO WATER POLLUTION CONTROL AND BENEFITS.

AILABILITY: WILEY-INTERSCIENCE SERIES OF TEXTS AND NOGRAPHHS, JOHN WILEY AND SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

.IS ACCESSION NUMBER: EW011141

BLICATION DATE: 83

ITLE: TRAINING THE TRAINER: RESEARCH AND PREPARATION. DEOTAPE 3401.

RIPTOR: *AUDIOVISUAL AIDS; *COURSE OUTLINES; ANALYSIS; INSTRUCTION; *INSTRUCTIONAL MATERIALS; *JOB ANALYSIS; POSTSECONDARY EDUCATION; *TASK EDUCATION; *VIDEOTAPES

RIPTIVE NOTE: VIDEOCASSETTE. ALSO INCLUDES STUDENT WORKBOOK AND LESSON PLANS. PRICE: \$650.00

STRACT: THIS PROGRAM IS ONE OF A FOUR PART SERIES. THE PROGRAM CONTAINS FOUR LESSONS: (1) THE TRAINERS ROLE; (2) R ANALYSIS; (3) TASK ANALYSIS; AND (4) THE COURSE OUTLINE. E PROGRAM INCLUDES VIDEOTAPES, STUDENT WORKBOOKS, AND AN STRUCTOR GUIDE.

AILABILITY: LEIGHTON AND KIDD, CONSULTING ENGINEERS, 121 MNEY AVE, TORONTO, ONTARIO, CANADA M6S 2X8

.IS ACCESSION NUMBER: EW011156

BLICATION DATE: MAY 84

TLE: REPORT ON ANALYTICAL METHODOLOGY FOR PURGEABLE AND VOLATILE COMPONENTS IN LEACHATES AND SOLID WASTES. OBJECT SUMMARY.

RSONAL AUTHOR: WARNER, J. S.; AND OTHERS

RIPTOR: *ANALYTICAL PROCEDURES; *LEACHATES; *ORGANIC COMPOUNDS; ERFORMANCE EVALUATION; *RECOMMENDATIONS; *SOLID WASTES; ASTE DISPOSAL

RIPTIVE NOTE: 3P. PRICE: \$11.50. ORDER NO.: PB84-180157

STRACT: THIS STUDY WAS DESIGNED TO EVALUATE METHODS FOR TERMINATING PURGEABLE AND SEMIVOLATILE ORGANIC COMPOUNDS IN LIQUID WASTES. RESULTS OF THE STUDIES ARE REPORTED.

AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 RT ROYAL ROAD, SPRINGFIELD, VA 22161

.IS ACCESSION NUMBER: EW011141

UBLICATION DATE: 84

ITLE: CALIFORNIA WATER TREATMENT FACILITIES.

SCRIPTOR: *CALIFORNIA; *DRINKING WATER; *COAGULATION; *FILTRATION; *FILTERS; *OPERATIONS (WATER); *PROGRAM DESCRIPTIONS; *SEDIMENTATION; *WATER TREATMENT

ESCRITIVE NOTE: 207P. PRICE: \$13.48

STRACT: LISTED ARE WATER TREATMENT PLANTS IN CALIFORNIA AS OF 7/5/84. INFORMATION IS INCLUDED ON REASONS FOR TREATMENT, TREATMENT AGENTS USED, FEED EQUIPMENT, USE OF COAGULATION, TYPE OF SEDIMENTATION, TYPE OF FILTRATION, TYPE OF FILTER MEDIA, AND FILTER RATE.

AVAILABILITY: EPA/IRC, 1200 CHAMBERS ROAD, 3RD FLOOR, COLUMBUS, OH 43212

.IS ACCESSION NUMBER: EW011201

UBLICATION DATE: 83

TITLE: PRUDENT PRACTICES FOR DISPOSAL OF CHEMICALS FROM LABORATORIES.

SCRIPTOR: *CHEMICALS; *CHEMICAL STORAGE; *HAZARDOUS WASTES; *LABORATORIES; *MANAGEMENT; *REGULATIONS; *SAFETY; *WASTE DISPOSAL

ESCRITIVE NOTE: 282P. PRICE: \$16.50

STRACT: THIS IS A COMPREHENSIVE GUIDE TO RECOMMENDED PRACTICES AND CURRENT GOVERNMENT REGULATIONS FOR MANAGING CHEMICALS FOR DISPOSAL FROM LABORATORIES.

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

.IS ACCESSION NUMBER: EW011347

UBLICATION DATE: DEC 78

TITLE: REPORT TO CONGRESS ON INDUSTRIAL COST RECOVERY. VOLUME I - EXECUTIVE SUMMARY.

SCRIPTOR: *CONGRESSIONAL REPORTS; *USEPA; *FEDERAL PROGRAMS; *FACILITIES; *LEGISLATION; *INDUSTRIAL COST RECOVERY; *INDUSTRY; *WASTES; *OPERATIONS (WASTEWATER); *POLLUTION CONTROL; *PROGRAM EVALUATION; *USER CHARGES; *WATER CONSERVATION; *WATER POLLUTION CONTROL; *WASTEWATER TREATMENT

ESCRITIVE NOTE: 29P. ORDER NO.: FB 292171

STRACT: THE INDUSTRIAL COST RECOVERY (ICR) OF THE FEDERAL WATER POLLUTION CONTROL ACT WAS EXAMINED TO DETERMINE THE EFFICIENCY OF, AND NEED FOR THE ICR PROVISION. THE FINAL

EPORT CONSISTS OF SEVEN VOLUMES; THIS IS VOLUME I. THE EXECUTIVE SUMMARY, BASED ON THE DATA AVAILABLE AT THE TIME HE STUDY DETERMINED THAT THE ICR PROVISIONS WERE NOT EFFECTIVE IN ACCOMPLISHING THEIR LEGISLATIVE PURPOSES. INDINGS, TRENDS, AND CONCLUSIONS ARE REPORTED.

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

RIS ACCESSION NUMBER: EW011351

PUBLICATION DATE: 33

TITLE: ACTIVATED SLUDGE PROCESS: FUNDAMENTALS OF OPERATION.

PERSONAL AUTHOR: JUNKINS, RANDY; AND OTHERS

ESCRIPTOR: *ACTIVATED SLUDGE; *INSTRUCTIONAL MATERIALS; *MONITORING; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *PROCESS DESCRIPTIONS; *PROCESS CONTROL; *PLANT STARTUP; *PROCESSES; *PROTOTYPES; *SWASTEWATER TREATMENT

ESCRITIVE NOTE: 136P. ORDER NO.: 250-40506-7. PRICE: 14.95

ABSTRACT: THIS PUBLICATION PRESENTS FUNDAMENTALS OF THE ACTIVATED SLUDGE PROCESS. TOPICS PRESENTED INCLUDE: (1) PROCESS MECHANICS; (2) FACTORS AFFECTING OPERATION; (3) PROCESS MODIFICATIONS; (4) PROCESS MONITORING; (5) CAPILLARY COLUMNS, TEMPERATURE PROGRAMMING AND SELECTIVE DETECTORS. AS A LEARNING AID, SAMPLE SEPARATIONS ARE INCLUDED. THROUGHOUT THE COURSE, THE EXTENSIVE BIBLIOGRAPHY AND GLOSSARY IN THE COURSE MANUAL MAKE IT A VALUABLE REFERENCE FOR FREQUENT, CONVENIENT USE AFTER THE COURSE IS COMPLETED.

AILABILITY: BUTTERWORTH PUBLISHERS, 39 MONTVALE AVENUE, READING, MA 02130

RIS ACCESSION NUMBER: EW011363

PUBLICATION DATE: JUN 84

TITLE: EPA METHOD STUDY 22 METHOD 612-CHLORINATED HYDROCARBONS.

PERSONAL AUTHOR: HALL, JACK R.; AND OTHERS

ESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHLORINATED HYDROCARBONS; *EPA METHOD STUDY; *HYDROCARBONS; *LABORATORY PROCEDURES; *METHOD STUDY; *ORGANIC COMPOUNDS; *USEPA; WASTEWATER

ESCRITIVE NOTE: 4P. ORDER NO.: PB84-187772. COST FOR COMPLETE REPORT: \$13.00

ABSTRACT: AN INTERLABORATORY STUDY IN WHICH 20 LABORATORIES PARTICIPATED WAS CONDUCTED TO PROVIDE A PRECISION AND ACCURACY STATEMENT FOR THE PROPOSED EPA METHOD 612-CHLORINATED HYDROCARBONS FOR MEASURING THE CATEGORY 3 CHEMICALS. RESULTS ARE REPORTED.

AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE 5000

PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011412

PUBLICATION DATE: 84

TITLE: BASIC GAS CHROMATOGRAPHY. SECOND EDITION.

PERSONAL AUTHOR: MCNAIR, HAROLD M.

DESCRIPTIVE NOTE: 218P. PRICE: \$325.00. INCLUDES SIX AUDIOTAPE CASSETTES AND A 218-PAGE MANUAL.

ABSTRACT: THIS COURSE PROVIDES A BASIC UNDERSTANDING OF ONE OF THE MOST WIDELY USED TECHNIQUES IN THE ANALYTICAL LABORATORY. IT ALSO OFFERS IMPORTANT INSIGHTS INTO THE LATEST DEVELOPMENTS IN SUCH AREAS AS CAPILLARY COLUMNS, QUANTITATIVE ANALYSIS, AND SELECTIVE DETECTORS. THE COURSE STARTS BY DETAILING THE PRINCIPLES REQUIRED TO UNDERSTAND AND IMPROVE GC SEPARATIONS AND EMPHASIZES METHODS OF SELECTING EQUIPMENT AND OPERATING PARAMETERS TO OBTAIN GOOD SEPARATIONS. IT THEN PROGRESSES TO MANUAL AND AUTOMATED QUALITATIVE AND QUANTITATIVE ANALYSIS PROCEDURES TO FACILITATE CORRECT INTERPRETATION OF CHROMATOGRAPHIC DATA. ADVANCED SECTIONS INCLUDE MATERIAL ON SPECIAL LIQUID PHASES, CAPILLARY COLUMNS, TEMPERATURE PROGRAMMING AND SELECTIVE DETECTORS. AS A LEARNING AID, SAMPLE SEPARATIONS ARE INCLUDED. THROUGHOUT THE COURSE, THE EXTENSIVE BIBLIOGRAPHY AND GLOSSARY IN THE COURSE MANUAL MAKE IT A VALUABLE REFERENCE FOR FREQUENT, CONVENIENT USE AFTER THE COURSE IS COMPLETED.

AILABILITY: ACS AUDIO COURSES, DISTRIBUTION OFFICE, DEPT. 51001, 1155 SIXTEENTH STREET, NW, WASHINGTON, DC 20036

IRIS ACCESSION NUMBER: EW011413

PUBLICATION DATE: 84

TITLE: COLUMN SELECTION IN GAS CHROMATOGRAPHY.

PERSONAL AUTHOR: MCNAIR, HAROLD M.

DESCRIPTORS: *ANALYTICAL TECHNIQUES; *COLUMN SELECTION; *GAS CHROMATOGRAPHY; *CHEMISTRY; *CHROMATOGRAPHY; *LABORATORY PROCEDURES; *LABORATORY EQUIPMENT; *INSTRUCTIONAL MATERIALS; *POST SECONDARY EDUCATION; *TRAINING

DESCRIPTIVE NOTE: 140P. PRICE: \$265.00. INCLUDES FOUR AUDIOTAPE CASSETTES AND A 140-PAGE MANUAL.

ABSTRACT: THIS COURSE EMPHASIZES THE SELECTION PROCESS FROM BOTH A THEORETICAL AND PRACTICAL POINT OF VIEW. TOPICS DISCUSSED INCLUDE CRITERIA FOR EVALUATING AND CHOOSING FAVORITE PHASES THE MOST COMMONLY USED IN THE IRON

BITERIA FOR CHOOSING SOLID SUPPORTS AND THE RESULTS YOU OBTAIN. COLUMN OPERATING PARAMETERS SUCH AS FLOW RATE, LENGTH, DIAMETER, AND LIQUIDLOADING ARE ALSO DISCUSSED. A SHORT SET OF PROBLEMS FOLLOWS. MOST SECTIONS OF THE COURSE; NO BACKGROUND IN HIGHER MATHEMATICS IS REQUIRED. PREVIOUS EXPERIENCE IN GAS CHROMATOGRAPHY IS NOT ESSENTIAL OR THIS COURSE.

AVAILABILITY: ACS AUDIO COURSES, DISTRIBUTION OFFICE, DEPT. 5001, 1155 SIXTEENTH STREET, NW, WASHINGTON, DC 20036

IRIS ACCESSION NUMBER: EW011414

PUBLICATION DATE: 84

TITLE: MODERN LIQUID CHROMATOGRAPHY, SECOND EDITION.
PERSONAL AUTHOR: SNYDER, LLOYD R.

ESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHROMATOGRAPHY;
CHEMISTRY; *LABORATORY PROCEDURES; *LABORATORY EQUIPMENT;
LIQUID CHROMATOGRAPHY; *INSTRUCTIONAL MATERIALS;
POSTSECONDARY EDUCATION; *TRAINING

ESCRIPTIVE NOTE: 416P. INCLUDES TWELVE AUDIOTAPE
CASSETTES AND A 416-PAGE MANUAL. PRICE: \$445.00

ABSTRACT: THIS IN-DEPTH COURSE OFFERS A THOROUGH EXPOSURE TO LC THEORY, METHODS, AND INTERPRETATION. PARTICIPANTS WILL LEARN HOW TO ASSEMBLE EQUIPMENT, PACK COLUMNS, CHOOSE SOLVENTS, RUN A SAMPLE PROPERLY, AND INTERPRET THE DATA ACCURATELY. FUNDAMENTALS OF RESOLUTION, SEPARATION CONTROL, AND QUANTITATION ARE ALSO COVERED. A MAJOR PART OF THE COURSE IS DEVOTED TO THE SIX MOST WIDELY USED TYPES OF LIQUID CHROMATOGRAPHY: BONDED PHASE, LIQUID-LIQUID, LIQUID-LIQUID SIZE EXCLUSION, ION-EXCHANGE, AND ION-PAIR. A SYSTEMATIC APPROACH TO SELECTING THE PROPER LC METHOD FOR ANY GIVEN ANALYSIS MEANS GREATER ACCURACY AND ECONOMY IN DAY-TO-DAY OPERATIONS.

AVAILABILITY: ACS AUDIO COURSES, DISTRIBUTION OFFICE, DEPT. 5001, 1155 SIXTEENTH STREET, NW, WASHINGTON, DC 20036

IRIS ACCESSION NUMBER: EW011415

PUBLICATION DATE: 84

TITLE: MODERN LIQUID CHROMATOGRAPHY, SPECIAL TOPICS.
PERSONAL AUTHOR: KIRKLAND, J. J.

ESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHROMATOGRAPHY;
CHEMISTRY; *INSTRUCTIONAL MATERIALS; *LABORATORY EQUIPMENT;
LIQUID CHROMATOGRAPHY; *LABORATORY EQUIPMENT; *POSTSECONDARY EDUCATION;
TRAINING

ESCRIPTIVE NOTE: 320P. PRICE: \$385.00. INCLUDES SEVEN
AUDIOTAPE CASSETTES AND A 320-PAGE MANUAL.

ABSTRACT: THIS COURSE SUPPLEMENTS MODERN BENEFIT FROM THIS CHROMATOGRAPHY, 2ND ED. TO DERIVE MAXIMUM THIS ADVANCED COURSE, USERS SHOULD EITHER LISTEN TO THE BASIC LC COURSE FIRST OR HAVE PRACTICAL, WORKING EXPERIENCE WITH LC. SPECIAL TOPICS BEGINS WITH AN INTRODUCTION TO TROUBLESHOOTING EQUIPMENT PROBLEMS AND DIAGNOSIS THE CAUSES OF PECULIAR BAND SHAPES. THE AUTHORS THEN DISCUSS ADVANCED TECHNIQUES THAT CAN BE APPLIED TO DIFFICULT SEPARATIONS. FOR EACH TECHNIQUE, STUDENTS WILL LEARN HOW TO CHOOSE AND APPLY THE TECHNIQUE TO COMMON SEPARATIONS. NUMEROUS EXAMPLES ARE PROVIDED TO REINFORCE EACH TECHNIQUE PRESENTED. THE COURSE CONCLUDES WITH A DISCUSSION OF SPECIAL PROBLEMS FACED IN DIFFICULT SEPARATIONS AND NEW APPROACHES TO SYSTEMATIC OPTIMIZATION OF RESOLUTION. TOGETHER BOTH THE BASIC AND ADVANCED LC COURSES PROVIDE A UNIQUE OPPORTUNITY TO STUDY EVERY IMPORTANT ASPECT INVOLVED IN DEVELOPING METHODS FOR AND RUNNING AN LC LABORATORY.

AVAILABILITY: ACS AUDIO COURSES, DISTRIBUTION OFFICE, DEPT. 5001, 1155 SIXTEENTH STREET, NW, WASHINGTON, DC 20036

IRIS ACCESSION NUMBER: EW011417

PUBLICATION DATE: 84

TITLE: DESIGN AND CONSTRUCTION OF SMALL WATER SYSTEMS - A GUIDE FOR MANAGERS.

DESCRIPTOR: *DESIGN; *HANDBOOKS; *MANAGEMENT; *OPERATIONS (WATER); *PLANNING; *REGULATIONS; *RURAL AREAS; *WATER RESOURCES; *WATER TREATMENT

DESCRIPTIVE NOTE: 120P. PRICE: MEMBERS, \$13.65; NONMEMBERS, \$18.85.

ABSTRACT: THIS HANDBOOK PROVIDES STEP-BY-STEP DETAILS FOR DESIGNING A SMALL WATER SYSTEM. SECTIONS INCLUDE: (1) SELECTING A WATER SOURCE; (2) DRINKING WATER REGULATIONS; (3) GROUNDWATER AS A WATER-SUPPLY SOURCE; (4) SURFACE WATER AS A WATER-SUPPLY SOURCE; (5) WATER TREATMENT; AND (6) PUMPING, DISTRIBUTION, AND STORAGE.

AVAILABILITY: AWWA DATA PROCESSING DEPARTMENT, 6666 WEST QUINCY AVENUE, DENVER, CO 80235

IRIS ACCESSION NUMBER: EW011418

PUBLICATION DATE: 84

TITLE: FLUORIDATION LIBRARY SET.

DESCRIPTOR: *BIBLIOGRAPHIES; *DRINKING WATER; *PUBLIC HEALTH; *STANDARDS; *WATER TREATMENT

DESCRIPTIVE NOTE: PRICE: \$24.95. EACH SET INCLUDES:
WATER FLUORIDATION PRINCIPLES AND PRACTICES; AWWA FLUORIDE CHEMICAL STANDARDS; FLUORIDATION BIBLIOGRAPHY; AND ARTICLE REPRINTS.

ABSTRACT: THIS SET IS AWWA'S FLUORIDATION SET OF MATERIALS. INCLUDED ARE THE FOLLOWING ITEMS: (1) WATER FLUORIDATION PRINCIPLES AND PRACTICES CM4; (2) B701-R84, AWWA STANDARD FOR SODIUM FLUORIDE; (3) B702-R84, AWWA STANDARD FOR SODIUM LICOFLUORIDE; (4) B703-R84, AWWA STANDARD FOR FLUOSILICIC (5) FLUORIDATION BIBLIOGRAPHY; AND (6) AWWA ARTICLE PRINTS INCLUDING: A FLUORIDE OVERFEED INCIDENT AT HARBOR RINGS, MICH.; FLUORIDATION INSTALLATION AND OPERATION; FLUORIDE COMPOUNDS USED TO PREVENT TOOTH DECAY, AND FLUORIDATION FLUORIDE CONCENTRATIONS IN COMMUNITY WATER APPLIES.

AVAILABILITY: AWWA COMPUTER SERVICES, 6666 WEST QUINCY AVENUE, DENVER, CO 80235

IRIS ACCESSION NUMBER: EW011442

ABSTRACT: DESIGN CONSIDERATIONS IN WATERWORKS PUMP SELECTION.

PERSONAL AUTHOR: KRUTZSCH, WILLIAM C.

SCRIPTIVE NOTE: *DESIGN; *EQUIPMENT SELECTION; *PERFORMANCE EVALUATION; *PUMPS; *WATERWORKS; *WATER SUPPLY; *WATER DISTRIBUTION

ABSTRACT: DESCRIBED ARE A NUMBER OF VARIABLES TO CONSIDER IN SELECTION OF PUMPS FOR WATERWORKS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N8

PERSONAL AUTHOR: FRENCH, WILLIAM W.

SCRIPTOR: *EQUIPMENT; *MAINTENANCE; *PRIMING; *PUMPS

SCRIPTIVE NOTE: R-14-R-15, R-18P. REFERENCE HANDBOOK 84

ABSTRACT: DESCRIBED ARE METHODS OF PRIMING PUMPS. DIAGRAMS ARE INCLUDED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N8

IRIS ACCESSION NUMBER: EW011444

ABSTRACT: INFORMATION AND TABLES RELATED TO WATER AND WASTEWATER TREATMENT OPERATIONS.

SCRIPTOR: *EQUIPMENT; *FLOW METERS; *OPERATIONS (WATER); *PIPS; *PUMPS; *WEIRS

SCRIPTIVE NOTE: R-19-R-32P. REFERENCE HANDBOOK 84

ABSTRACT: THIS SECTION CONTAINS SEVERAL TABLES AND CHARTS

ABSTRACT: RELATED TO WATER AND WASTEWATER OPERATIONS. INCLUDED IS INFORMATION ON PUMPS, FLOW METERS, PIPE FRICTION LOSS, CAPACITY TABLES FOR WEIRS AND FLUMES, AND DATA ON DUCTILE IRON PIPE.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N8

IRIS ACCESSION NUMBER: EW011445

ABSTRACT: DESIGN CONSIDERATIONS IN HYDRAULIC INSTALLATIONS.

SCRIPTIVE NOTE: *DESIGN; *EQUIPMENT; *GAS FEEDERS; *HYDRAULICS; *WASTEWATER TREATMENT; *WATER TREATMENT

ABSTRACT: DESCRIBED ARE HYDRAULIC VARIABLES TO CONSIDER IN GAS FEEDER INSTALLATIONS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N8

IRIS ACCESSION NUMBER: EW011446

ABSTRACT: A PRESSURE FILTER REVIEW.

SCRIPTIVE NOTE: *DESIGN; *EQUIPMENT; *FILTERS; *PRESSURE FILTERS; *WATER TREATMENT

ABSTRACT: R-40-R41P. REFERENCE HANDBOOK 84

ABSTRACT: PRESSURE FILTERS FOR WATER TREATMENT ARE DISCUSSED. ADVANTAGES AND CHARACTERISTICS OF EACH PRESENTED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N8

IRIS ACCESSION NUMBER: EW011447

ABSTRACT: INFORMATION AND TABLES RELATED TO WATER AND WASTEWATER TREATMENT OPERATIONS.

SCRIPTOR: *CHEMICALS; *CONVERSION TABLES; *EQUIPMENT; *FILTRATION; *GLOSSARIES; *MEASUREMENT; *MICROCOMPUTERS; *VOCABULARY; *WATER TREATMENT

SCRIPTIVE NOTE: R-42-R-52P. REFERENCE HANDBOOK 84

ABSTRACT: THIS SECTION OF THE JOURNAL CONTAINS INFORMATION AND TABLES RELATED TO WATER AND WASTEWATER TREATMENT. INCLUDED ARE A FILTRATION GLOSSARY, INFORMATION ON WATER METERS, WATER TREATMENT INFORMATION, UNIT CONVERSION TABLES, AND A MICROCOMPUTER GLOSSARY.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N8

ABSTRACT: THIS SECTION CONTAINS SEVERAL TABLES AND CHARTS

IRIS ACCESSION NUMBER:	EW011448	WERE THREEFOLD: (1) TO IMPROVE THE USEPA'S UNDERSTANDING OF PROBLEMS FACED BY THE STATES AND MUNICIPALITIES IN ENSURING THAT GROUNDWATER IS SAFE FOR DRINKING; (2) TO PROVIDE GUIDANCE TO EPA IN SETTING PRIORITY AREAS; AND (3) PRIORITIES IN GROUND WATER AND DRINKING WATER AREAS; AND (3) TO PRESENT DATA ON THE ORIGINAL AND FINAL SETS OF GROUND-WATER CONTAMINATION CASES EXAMINED, WITH SOURCE LISTS FOR CONTACTS AT EACH ORGANIZATION DEALING WITH THE PROBLEM.
IRIS ACCESSION NUMBER:	R-53-R-54, R-94P.	ESCRITPTIVE NOTE: THIS ARTICLE PRESENTS SOME BASIC SAFETY RULES AND LIFE PRACTICES SELECTED FROM THE DALLAS WATER UTILITIES SAFE PRACTICES HANDBOOK.
AVAILABILITY:	WATER ENGINEERING AND MANAGEMENT; V131 N8	AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5235 PORT ROYAL ROAD, SPRINGFIELD, VA 22161
IRIS ACCESSION NUMBER:	EW011511	IRIS ACCESSION NUMBER: EW011526
PUBLICATION DATE:	82	PUBLICATION DATE: JUN 84
ITLE:	LOVE YOUR BACK.	TITLE: EPA METHOD STUDY 14 METHOD 604-PHENOLS. PROJECT SUMMARY.
ESCRITPTOR:	*ACCIDENT PREVENTION; *AUDIOVISUAL AIDS; *HEALTH EDUCATION; *INSTRUCTIONAL MATERIALS; *POSTSECONDARY EDUCATION; *SAFETY; *SLIDES; *VIDEOTAPES	PERSONAL AUTHOR: HALL, JACK R.; AND OTHERS
ESCRITPTIVE NOTE:	AVAILABLE IN SLIDES AND VIDEOTAPE SLIDES: \$100; TAPE: \$120). WORKSHOP LEADER'S GUIDE AND HANDOUTS ARE INCLUDED.	DESCRIPTOR: *ANALYTICAL TECHNIQUES; *EPA; *LABORATORY PROCEDURES; *METHOD-604; *PERFORMANCE EVALUATION; *PHENOLS; *USEPA; *WASTEWATER TREATMENT; *WATER TREATMENT; *METHOD STUDY
ABSTRACT:	THIS EMPLOYEE EDUCATION AND TRAINING PROGRAM IS DESIGNED TO REDUCE THE INCIDENCE OF BACK INJURY AT WORK AND AT HOME. HOLISTIC IN APPROACH, IT DEALS WITH THE RELATIONSHIP BETWEEN THE ANATOMY OF THE BACK, LIFTING METHODS, PROPER MATERIALS HANDLING TECHNIQUES, AND THE ROLE OF GOOD NUTRITION AND ADEQUATE EXERCISE. THE AUDIOVISUAL PROGRAM ALSO COMES WITH A LEADER'S GUIDE AND HANDOUTS. THE MATERIALS ARE AVAILABLE IN ENGLISH OR SPANISH.	DESCRIPTIVE NOTE: 7P. PRICE: \$22.00 CODE: FOR COMPLETE REPORT PB84-196211. PRICE: \$22.00
AVAILABILITY:	FIREMAN'S FUND RISK MANAGEMENT SERVICES, BOX 390, SAN RAFAEL, CA 94911	IRIS ACCESSION NUMBER: EW011535
IRIS ACCESSION NUMBER:	EW011525	PUBLICATION DATE: 83
PUBLICATION DATE:	MAR 84	TITLE: ANNUAL REPORT, 1983. TO THE PRESIDENT AND CONGRESS.
ITLE:	INSTITUTIONAL RESPONSES TO CONTAMINATION OF GROUND WATER USED FOR PUBLIC WATER SUPPLIES: IMPLICATIONS FOR EPA 3D PROGRAMS. PROJE	DESCRIPTOR: *ACID RAIN; *ANNUAL REPORTS; *ENVIRONMENTAL IMPACTS; *MONITORING; *NAPAP; *POLLUTION CONTROL; *RESEARCH; *SOURCES; *RESEARCH REVIEWS
PERSONAL AUTHOR:	BRETTON, THEODORE R.; PAYNE, STEVEN N.	DESCRIPTIVE NOTE: 75P.
ESCRITPTOR:	*DRINKING WATER; *CASE STUDIES; *CONTAMINATION; *GROUNDWATER; *MONITORING; *ORGANIC COMPOUNDS; *RESEARCH; *RESEARCH NEEDS; *TRENDS; *WATER POLLUTION CONTROL; *WATER SOURCES	ABSTRACT: THE GOAL OF THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM IS TO DEVELOP AND PROGRESSIVELY IMPROVE ON AN OBJECTIVE AND COMPREHENSIVE INFORMATION BASE FOR USE BY DECISIONMAKERS. THIS REPORT OUTLINES ACCOMPLISHMENTS OF THE PROGRAM DURING 1983, SUMMARIZES THE CURRENT STATE OF SCIENTIFIC KNOWLEDGE FOR DECISIONMAKERS, AND DESCRIBES THE OUTLOOK FOR CONTINUED PROGRESS BY THE FEDERALLY SPONSORED RESEARCH EFFORT ON ACID DEPOSITION.
ESCRITPTIVE NOTE:	2P. FOR COMPLETE REPORT: ORDER NO. 384-140326. PRICE: \$19.00.	AVAILABILITY: EXECUTIVE DIRECTOR - NATIONAL ACID
ABSTRACT:	THE OBJECTIVES OF THIS GROUND-WATER ASSESSMENT	

RECIPITATION ASSESSMENT PROGRAM, C/O EOP PUBLICATIONS (ROOM 200), 726 JACKSON PLACE, NW, WASHINGTON, DC 20503

IRIS ACCESSION NUMBER: EW011540
PUBLICATION DATE: AUG 83

TITLE: RISK & DECISION ANALYSIS FOR HAZARDOUS WASTE DISPOSAL - 1981.
DESCRIPTOR: *DECISION MAKING; *HAZARDOUS MATERIALS; *LAND APPLICATION; *MANAGEMENT; *MONITORING; *RISK ASSESSMENT; *WASTE DISPOSAL

SCRIPTIVE NOTE: 216P. PRICE: \$23.00 SOFTCOVER. ORDER NO.: RDA 1
ABSTRACT: THIS PUBLICATION INCLUDES THE INFORMATION ON ANALYSIS FOR MANAGEMENT OF HAZARDOUS MATERIALS. ALSO INCLUDED IS INFORMATION ON FATE; MONITORING; AND APPLICATION; DISPOSAL AND MOVEMENT OF HAZARDOUS MATERIALS.

AVAILABILITY: HAZARDOUS MATERIALS CONTROL RESEARCH INSTITUTE, 9300 COLUMBIA BLVD., SILVER SPRING, MD 20910

IRIS ACCESSION NUMBER: EW011554

PUBLICATION DATE: AUG 83
TITLE: POLICIES AND PROCEDURES FOR LAND TREATMENT OF WASTEWATER.

PERSONAL AUTHOR: FLEMING, W. L.; AND OTHERS
DESCRIPTOR: *DESIGN; *LAND APPLICATION; *LAND TREATMENT; *MANAGEMENT; *OPERATIONS (WASTEWATER); *POLICIES; *WASTEWATER TREATMENT; *WASTEWATER

SCRIPTIVE NOTE: 20P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB84-190230

ABSTRACT: THE FIRST OF A SERIES OF FIVE REPORTS DEALING WITH THE LAND (AND WETLAND) TREATMENT OF WASTEWATER AND JUDGE PREPARED UNDER THE GENERAL GUIDANCE OF A TASK FORCE PRESENTING THE NORTH CAROLINA AGRICULTURAL RESEARCH AND EXTENSION SERVICES, WATER RESOURCES RESEARCH INSTITUTE, DIVISION OF ENVIRONMENTAL MANAGEMENT, AND DIVISION OF HEALTH SERVICES. DRAFT REPORTS WERE PRESENTED AT A WORKSHOP FOR CRITIQUE AND INPUT FROM OTHER SOURCES. POLICIES AND PROCEDURES FOR LAND TREATMENT OF WASTEWATER INTRODUCED IN THE SERIES AND DISCUSSES PUBLIC ACCEPTANCE, NORTH CAROLINA STATUTES AND REGULATIONS, ADMINISTRATIVE PERMITTING PROCEDURES AND REQUIREMENTS, AND THE AVAILABILITY OF ADVISORY AND TECHNICAL ASSISTANCE. THE SERIES AS A WHOLE PROVIDES GENERAL GUIDELINES FOR THE DESIGN AND MANAGEMENT OF LAND TREATMENT SYSTEMS.

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

IRIS ACCESSION NUMBER: EW011555
PUBLICATION DATE: AUG 83
TITLE: DISPOSAL OF SECONDARILY TREATED MUNICIPAL SEWAGE BY SUBSURFACE IRRIGATION.

PERSONAL AUTHOR: STEWART, L. E.; AND OTHERS
DESCRIPTOR: *IRRIGATION; *LAND TREATMENT; *OPERATIONS (WASTEWATER); *SUBSURFACE IRRIGATION; *TERtiARY TREATMENT; *WASTEWATER DISPOSAL; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 24P. PRICE CODE: PC A02/MF A01
ABSTRACT: TRICKLE IRRIGATION TUBING WAS USED FOR LOW PRESSURE, UNIFORM SUBSURFACE DISTRIBUTION OF CHLORINATED SEWAGE EFFLUENT FOR LAND TREATMENT AND DISPOSAL. THE EFFLUENT WAS DOMESTIC, SECONDARILY TREATED WATER FROM A SEPTIC TANK AND SAND FILTER SYSTEM. THE LAND PROVIDED TERTIARY TREATMENT OF THE WATER THROUGH GROWING PLANTS, EVAPORATION, AND GROUNDWATER RECHARGE. THIS METHOD ELIMINATED A POINT SOURCE DISCHARGE INTO A STREAM AND APPEARS TO HAVE FUTURE APPLICATION. THIS EXPERIMENTAL SYSTEM PERFORMED WELL IN THE FALL OF 1982 AND, WITH MODIFICATION, IN 1983. ALTHOUGH THE ROWCROP TRICKLE IRRIGATION TUBING (TAPE) APPEARED TO FUNCTION SATISFACTORILY IN A HEAVY SOIL CONTAINING STONES, RIGID WALL TRICKLE TUBING MAY BE ADVANTAGEOUS IN PROBLEM SOILS OR AT DEEPER DEPTHS.

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

IRIS ACCESSION NUMBER: EW011556
PUBLICATION DATE: DEC 83
TITLE: RESULTS OF THE NATIONWIDE URBAN RUNOFF PROGRAM. VOLUME 3. DATA APPENDIX.
PERSONAL AUTHOR: ATHAYDE, D. N.; AND OTHERS

DESCRIPTOR: *MONITORING DATA; *NATIONWIDE URBAN RUNOFF PROGRAM; *POLLUTION CONTROL; *STORMWATER; *SURFACE RUNOFF; *URBAN AREAS; *WATER QUALITY; *WASTEWATER COLLECTION
SCRIPTIVE NOTE: 209P. PRICE CODE: PC A10/MF A01. ORDER NO.: PB84-185578
ABSTRACT: THIS VOLUME CONTAINS MONITORING DATA ACCUMULATED DURING THE PROJECT PERIOD, USED IN DEVELOPING THE REPORT.
AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011557
PUBLICATION DATE: SEP 82
TITLE: RESULTS OF THE NATIONWIDE URBAN RUNOFF PROGRAM.

VOLUME 2. APPENDICES.**\$21 .20 . PCN: 04-742000-16****PERSONAL AUTHOR:** ATHAYDE, D. N.; AND OTHERS**SCRIPTOR:** *DATA ANALYSIS; *NATIONWIDE URBAN RUNOFF; *SURFACE RUNOFF; *URBAN AREAS; *WATER QUALITY; *WASTEWATER COLLECTION**SCRIPTIVE NOTE:** 863P. PRICE CODE: PC A99/MF E04. ORDER #: PB84-185560**ABSTRACT:** THIS VOLUME OF APPENDICES INCLUDES AN INDIVIDUAL PENDIX ON EACH OF THE FOLLOWING: SELECTED SITE CHARACTERISTICS; SELECTED EVENT DATA; DATA ANALYSIS METHODOLOGIES; WET WEATHER WATER QUALITY CRITERIA; PROJECT SUMMARIES; PRIORITY POLLUTANT REPORT; PROJECT DESCRIPTIONS; ID REPORT.**AVAILABILITY:** NATIONAL TECHNICAL INFORMATION SERVICE, 5235 MRT ROYAL ROAD, SPRINGFIELD, VA 22161**IRIS ACCESSION NUMBER:** EW011558**PUBLICATION DATE:** DEC 83**TITLE:** RESULTS OF THE NATIONWIDE URBAN RUNOFF PROGRAM. VOLUME 1. FINAL REPORT.**PERSONAL AUTHOR:** ATHAYDE, D. N.; AND OTHERS**SCRIPTOR:** NATIONWIDE URBAN RUNOFF PROGRAM; *POLLUTION CONTROL; *STORMWATER; *SURFACE RUNOFF; *URBAN AREAS; *WATER QUALITY; *WASTEWATER COLLECTION**SCRIPTIVE NOTE:** 200P. PRICE CODE: PC A09/MF A01. ORDER #: PB84-185552**ABSTRACT:** THIS VOLUME OF THE REPORT INCLUDES INFORMATION ON THE BACKGROUND AND URBAN RUNOFF PERSPECTIVES; STORMWATER MANAGEMENT METHODS; CHARACTERISTICS OF URBAN RUNOFF; JNOFF, RECEIVING WATER QUALITY EFFECTS OF URBAN RUNOFF, JNOFF CONTROLS, AND CONCLUSIONS.**AVAILABILITY:** NATIONAL TECHNICAL INFORMATION SERVICE, 5235 MRT ROYAL ROAD, SPRINGFIELD, VA 22161**IRIS ACCESSION NUMBER:** EW011559**PUBLICATION DATE:** 81**TITLE:** POWER PLANT INSTRUMENTATION FOR MEASUREMENT OF HIGH-QUALITY WATER QUALITY. STP 742.**PERSONAL AUTHOR:** LANE/OFTEN, ED.**SCRIPTOR:** *INSTRUMENTATION; *LABORATORY PROCEDURES; *POSTSECONDARY EDUCATION; *INSTRUCTIONAL MATERIALS; *WATER QUALITY MEASUREMENT; *SAMPLING; *WATER QUALITY ASSESSMENT; *MONITORING; *TOXICOLOGY**SCRIPTIVE NOTE:** 235P. PRICE: \$26 .50 ; MEMBER PRICE**ABSTRACT:** THIS PUBLICATION PRESENTS TECHNIQUES EMPLOYING VARIOUS METHODS OF MEASUREMENT, SUCH AS ION CHROMATOGRAPHY, ATOMIC ABSORPTION, SPECIFIC ION ELECTRODE, ION EXCHANGE, COLUMNS, ELECTRICAL CONDUCTIVITY, A GRAVIMETRIC METHOD, DIFFERENTIAL PULSE POLAROGRAPHY AND OTHERS. DISCUSSIONS ON METHODS OF SAMPLING, DESIRED POINTS OF SAMPLING, AND OTHER DETAILS ARE INCLUDED.**AVAILABILITY:** ASTM, 1916 RACE STREET, PHILADELPHIA, PA 19103**IRIS ACCESSION NUMBER:** EW011560**PUBLICATION DATE:** 81**TITLE:** ANALYSIS OF WATERS ASSOCIATED WITH ALTERNATIVE FUEL PRODUCTION. STP 720.**DESCRIPTOR:** *ALTERNATIVE FUEL PRODUCTION; *FUELS; *INORGANIC COMPOUNDS; *ORGANIC COMPOUNDS; *STANDARDS; *WATER; *WATER ANALYSIS; *WATER CHARACTERISTICS**DESCRIPTIVE NOTE:** 205P. PRICE: \$23 .00 ; MEMBER PRICE \$18 .40 . PCN: 04-720000-16**ABSTRACT:** THIS VOLUME PROVIDES DETAILED INFORMATION IN SUCH AREAS AS: CHARACTERISTICS OF WATERS FROM EMERGING ENERGY TECHNOLOGIES; PARAMETRIC ANALYSIS OF INORGANIC SPECIES; ORGANIC SPECIES; AND BIOLOGIC ACTIVITY, CHARACTERISTICS OF WATER WHICH CONTACTS SOLID FOSSIL ENERGY WASTES.**AVAILABILITY:** ASTM, 1916 RACE STREET, PHILADELPHIA, PA 19103**IRIS ACCESSION NUMBER:** EW011561**PUBLICATION DATE:** 82**TITLE:** AQUATIC TOXICOLOGY AND HAZARD ASSESSMENT (FIFTH CONFERENCE). STP 766.**PERSONAL AUTHOR:** PEARSON/FOSTER/BISHOP, EDS.**DESCRIPTOR:** *ANALYTICAL TECHNIQUES; *AQUATIC TOXICOLOGY; *AQUATIC SAFETY; *ASSESSMENT; *SCREENING; *TOXICOLOGY**DESCRIPTIVE NOTE:** 414P. PRICE: \$44 .50 . PCN: 04-766000-16**ABSTRACT:** STP 766 PRESENTS A DISCUSSION OF THE SCIENCE'S LACK OF QUANTITATIVE GROWTH AND INNOVATION BASED ON THE EXPERIENCE OF THOSE DEALING IN THE PRACTICAL APPLICATION OF AQUATIC TOXICOLOGY AS DECISION TOOLS IN AQUATIC SAFETY ASSESSMENT. THE PAPERS EXPRESS NEW AND INNOVATIVE TECHNIQUES FOR SCREENING CHEMICALS FOR MEASURING POPULATION AND COMMUNITY EFFECTS OF STRESS, AND FIELD VALIDATION OF LABORATORY-DERIVED DATA.

AVAILABILITY: ASTM, 1916 RACE STREET, PHILADELPHIA, PA
9103

IRIS ACCESSION NUMBER: EW011564

PUBLICATION DATE: MAY 84

IRIS ACCESSION NUMBER: EW011562

84

TITLE: ECOLOGICAL ASSESSMENT OF MACROPHYTON: COLLECTION, USE, AND MEANING OF DATA. STP 843.

PERSONAL AUTHOR: DENNIS ISOM, EDS.

DESCRIPTOR: *AQUATIC BIOLOGY; *BOTANY; *INSTRUCTIONAL MATERIALS; *MACROPHYTES; *MANAGEMENT; *POSTSECONDARY EDUCATION; *PLANTS; *PLANT COLLECTION

SCRIPTIVE NOTE: 115P. PRICE: \$29.00; MEMBER PRICE: \$16.00. PCN: 94-243000-16

ABSTRACT: THIS PUBLICATION PRESENTS A WIDE ARRAY OF STATE-OF-THE-ART TECHNIQUES FOR AQUATIC PLANT COLLECTION, USE, AND LEARNING OF DATA. PROBLEMS UNIQUE TO SAMPLING AQUATIC MACROPHYTES AND POSSIBLE SOLUTIONS ARE HIGHLIGHTED IN THE BOOK'S 12 PAPERS. STP 843 IS FOR AQUATIC BOTANISTS, LIMNOLOGISTS, AND AQUATIC PLANT MANAGEMENT SPECIALISTS AND SCIENTIST WORKING WITH THE DESCRIPTION, QUANTIFICATION, AND MANAGEMENT OF AQUATIC MACROPHYTES.

AVAILABILITY: ASTM, 1916 RACE STREET, PHILADELPHIA, PA
19103

IRIS ACCESSION NUMBER: EW011563

84

TITLE: ASTM POWER PLANT WATER ANALYSIS MANUAL (FIRST EDITION).

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *LABORATORY PROCEDURES; *MANUALS; *POSTSECONDARY EDUCATION; *POWER PLANTS; *WATER ANALYSIS; *WATER TREATMENT; *WATER QUALITY

SCRIPTIVE NOTE: 232P. PRICE: SOFT COVER, \$39.00; MEMBER PRICE: \$31.20; LOOSELEAF \$44.00; MEMBER PRICE: \$35.20. PCN: DFT COVER 03-419084-16; LOOSELEAF 03-419184-16

ABSTRACT: THIS BOOK PROVIDES 46 SIMPLIFIED TEST METHODS AND PRACTICES FOR RAPID ANALYSIS OF POWER PLANT WATER. THE INFORMATION HAS BEEN STRUCTURED FOR PLANT CHEMISTS AS WELL AS FOR ROUTINE USE AT THE LABORATORY BENCH. THIS MANUAL IS SO INTENDED FOR USE BY ANY PLANT THAT PERFORMS WATER CHEMICAL ANALYSIS SUCH AS PLANTS DEALING IN PAPER AND PULP, WATER TREATMENT AND EFFLUENCE.

AVAILABILITY: ASTM, 1916 RACE STREET, PHILADELPHIA, PA
19103

IRIS ACCESSION NUMBER: EW011564

PUBLICATION DATE: MAY 84

DESCRIPTOR: *ENVIRONMENT; *FLOW MEASUREMENT; *REAGENTS; *SAMPLING; *STANDARDS; *STEAM; *TECHNOLOGY; *WATER

SCRIPTIVE NOTE: 788P. PRICE: \$40.50. PCN: 01-110184-16

ABSTRACT: THIS PUBLICATION CONTAINS THE FOLLOWING TOPICS: DEFINITIONS, SPECIFICATIONS, REAGENTS, AND REPORTING RESULTS; SAMPLING AND FLOW MEASUREMENT OF WATER AND STREAM; GENERAL PROPERTIES; INORGANIC CONSTITUENTS.

AVAILABILITY: ASTM, 1916 RACE STREET, PHILADELPHIA, PA
19103

IRIS ACCESSION NUMBER: EW011565

PUBLICATION DATE: MAY 84

DESCRIPTOR: *MICROBIOLOGY; *ORGANIC COMPOUNDS; *SALINITY; *STANDARDS; *SEA WATER; *WATER; *WATER TREATMENT

SCRIPTIVE NOTE: 1220P. PRICE: \$67.00; MEMBER PRICE: \$60.30. PCN: 01-110284-16

ABSTRACT: TOPICS IN THIS PUBLICATION INCLUDE: ORGANIC CONSTITUENTS; RADIOACTIVITY; SALINE AND BRACKISH WATER; SEAWATERS AND BRINES; MICROBIOLOGICAL EXAMINATIONS; WATER-FORMED DEPOSITS; WATER TREATMENT MATERIALS.

AVAILABILITY: ASTM, 1916 RACE STREET, PHILADELPHIA, PA
19103

IRIS ACCESSION NUMBER: EW011566

PUBLICATION DATE: AUG 84

DESCRIPTOR: *BIOMEDICAL EFFECTS; *HAZARDOUS SUBSTANCES AND OIL SPILL RESOURCE RECOVERY; HAZARDOUS SUBSTANCES AND OIL SPILL RESPONSE; WASTE DISPOSAL; BI

ABSTRACT: TOPICS CONSIDERED INCLUDE: PESTICIDES; RESOURCE RECOVERY; HAZARDOUS SUBSTANCES AND OIL SPILL RESPONSE; WASTE DISPOSAL; BIOLOGICAL EFFECTS AND ENVIRONMENTAL FATE.

SCRIPTIVE NOTE: 740P. PRICE: \$45.00. PCN: 01-110484-48

ABSTRACT: TOPICS CONSIDERED INCLUDE: PESTICIDES; RESOURCE RECOVERY; HAZARDOUS SUBSTANCES AND OIL SPILL RESPONSE; WASTE DISPOSAL; BIOLOGICAL EFFECTS AND ENVIRONMENTAL FATE.

AVAILABILITY: ASTM, 1916 RACE STREET, PHILADELPHIA, PA
1103

Descriptor: *AFRICA; *GUIDELINES; *DESIGN; *LATRINES;
*SANITATION; *VENT PIPES

Descriptive Note: 17P.

Abstract: THIS TECHNICAL NOTE SETS OUT PRELIMINARY GUIDELINES FOR THE DESIGN OF VENT PIPES FOR VENTILATED IMPROVED PIT (VIP) LATRINES. THESE GUIDELINES ARE BASED ON EXTENSIVE FIELDWORK DONE IN BOTSWANA AND ZIMBABWE IN 1981/2, WHICH SHOWED THAT THE LOCAL WIND SPEED AND DIRECTION WERE THE MAJOR FACTORS RESPONSIBLE FOR INDUCING UPDRAFT IN THE VENT PIPE; THERMALLY INDUCED UPDRAFT WAS FOUND TO BE OF ONLY MINOR IMPORTANCE.

Personal Author: BITTON, GABRIEL, ED.; GERBA, CHARLES P.
Descriptor: *CHEMICAL CONTAMINATES; *CONTAMINATION;
GROUNDWATER; *HEALTH; *HYDROLOGY; *MICROBIOLOGY
Descriptive Note: 377P. Price: \$49.95

Abstract: THIS IS A COMPILATION OF CURRENT KNOWLEDGE OF THE MICROBIAL ASPECTS OF GROUNDWATER POLLUTION. THE BOOK EXAMINES THE ROLE OF MICROBES IN DEGRADATION AND TRANSFORMATION OF CHEMICAL CONTAMINANTS, AND REVIEWS THE HEALTH EFFECTS OF CHEMICAL CONTAMINANTS AND MICROORGANISMS SIGNIFICANCE IN GROUNDWATER.

Availability: WILEY PROFESSIONAL BOOK ANNOUNCEMENTS, JOHN WILEY AND SONS, INC., DEPT. 0113, P.O. BOX 692, SOMERSET, NJ., 08873

Descriptor: *ECONOMICS; *ENGINEERING; *KENYA; *PLANNING;
*SANITATION; *SEWAGE; *TECHNOLOGY; *WATER SUPPLY

Abstract: THIS PAPER REVIEWS SOME OF THE CURRENT SANITARY ENGINEERING PROBLEMS THAT RESULT FROM THE USE OF CONVENTIONAL WATERBORNE SEWERAGE IN SITE AND SERVICE HOUSING SCHEMES IN KENYA. THE STUDY IS BASED ON A SYNTHETIC NEIGHBOURHOOD MODEL, AND USES AN IMPROVED HOUSEHOLD WATER SUPPLY SERVICE, EMPLOYING AUTOMATIC SELF-CLOSING TAPS.

Availability: T. S. CHANA, DIRECTOR, HOUSING RESEARCH AND DEVELOPMENT UNIT, P.O. BOX 30197, NAIROBI, KENYA

Descriptor: *AGRICULTURE; *AUSTRALIA; *CROPS; *BACTERIA;
*IRRIGATION; *RECLAIMED WATER; *RESEARCH; *VIRUSES;
*WATER REUSE; *WASTEWATER

Descriptive Note: 316P.

Abstract: THIS REPORT PRESENTS INFORMATION RESULTING FROM A RESEARCH PROJECT WHOSE OBJECTIVE WAS TO ASSESS THE EXTENT OF THE ACCUMULATION OF A SELECTED RANGE OF HEAVY METALS AND THE EXTENT OF THE RETENTION AND SURVIVAL OF BACTERIA AND VIRUSES IN EDIBLE CROPS WHICH HAVE BEEN IRRIGATED WITH SECONDARY EFFLUENT FROM A METROPOLITAN SEWAGE TREATMENT PLANT.

Descriptor: *AGRICULTURE; *AUSTRALIA; *CROPS; *BACTERIA;
*IRRIGATION; *RECLAIMED WATER; *RESEARCH; *VIRUSES;
*WATER REUSE; *WASTEWATER

Descriptive Note: 316P.

Availability: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161
Personal Author: RYAN, BEVERLY A.; MARA, D. DUNCAN
Descriptor: *AGRICULTURE; *AUSTRALIA; *CROPS; *BACTERIA;
*IRRIGATION; *RECLAIMED WATER; *RESEARCH; *VIRUSES;
*WATER REUSE; *WASTEWATER

Abstract: THIS REPORT PRESENTS INFORMATION RESULTING FROM A RESEARCH PROJECT WHOSE OBJECTIVE WAS TO ASSESS THE EXTENT OF THE ACCUMULATION OF A SELECTED RANGE OF HEAVY METALS AND THE EXTENT OF THE RETENTION AND SURVIVAL OF BACTERIA AND VIRUSES IN EDIBLE CROPS WHICH HAVE BEEN IRRIGATED WITH SECONDARY EFFLUENT FROM A METROPOLITAN SEWAGE TREATMENT PLANT.

Descriptor: *AGRICULTURE; *AUSTRALIA; *CROPS; *BACTERIA;
*IRRIGATION; *RECLAIMED WATER; *RESEARCH; *VIRUSES;
*WATER REUSE; *WASTEWATER

Abstract: THIS REPORT PRESENTS INFORMATION RESULTING FROM A RESEARCH PROJECT WHOSE OBJECTIVE WAS TO ASSESS THE EXTENT OF THE ACCUMULATION OF A SELECTED RANGE OF HEAVY METALS AND THE EXTENT OF THE RETENTION AND SURVIVAL OF BACTERIA AND VIRUSES IN EDIBLE CROPS WHICH HAVE BEEN IRRIGATED WITH SECONDARY EFFLUENT FROM A METROPOLITAN SEWAGE TREATMENT PLANT.

Descriptor: *AGRICULTURE; *AUSTRALIA; *CROPS; *BACTERIA;
*IRRIGATION; *RECLAIMED WATER; *RESEARCH; *VIRUSES;
*WATER REUSE; *WASTEWATER

IRIS Accession Number: EW011567

Publication Date: 84

Title: GROUNDWATER POLLUTION MICROBIOLOGY.

Personal Author: BITTON, GABRIEL, ED.; GERBA, CHARLES P.
Descriptor: *CHEMICAL CONTAMINATES; *CONTAMINATION;
GROUNDWATER; *HEALTH; *HYDROLOGY; *MICROBIOLOGY
Descriptive Note: 377P. Price: \$49.95

Abstract: THIS IS A COMPILATION OF CURRENT KNOWLEDGE OF THE MICROBIAL ASPECTS OF GROUNDWATER POLLUTION. THE BOOK EXAMINES THE ROLE OF MICROBES IN DEGRADATION AND TRANSFORMATION OF CHEMICAL CONTAMINANTS, AND REVIEWS THE HEALTH EFFECTS OF CHEMICAL CONTAMINANTS AND MICROORGANISMS SIGNIFICANCE IN GROUNDWATER.

Availability: WILEY PROFESSIONAL BOOK ANNOUNCEMENTS, JOHN WILEY AND SONS, INC., DEPT. 0113, P.O. BOX 692, SOMERSET, NJ., 08873

Descriptor: *ECONOMICS; *ENGINEERING; *KENYA; *PLANNING;
*SANITATION; *SEWAGE; *TECHNOLOGY; *WATER SUPPLY

Abstract: THIS PAPER REVIEWS SOME OF THE CURRENT SANITARY ENGINEERING PROBLEMS THAT RESULT FROM THE USE OF CONVENTIONAL WATERBORNE SEWERAGE IN SITE AND SERVICE HOUSING SCHEMES IN KENYA. THE STUDY IS BASED ON A SYNTHETIC NEIGHBOURHOOD MODEL, AND USES AN IMPROVED HOUSEHOLD WATER SUPPLY SERVICE, EMPLOYING AUTOMATIC SELF-CLOSING TAPS.

Availability: T. S. CHANA, DIRECTOR, HOUSING RESEARCH AND DEVELOPMENT UNIT, P.O. BOX 30197, NAIROBI, KENYA

Descriptor: *AGRICULTURE; *AUSTRALIA; *CROPS; *BACTERIA;
*IRRIGATION; *RECLAIMED WATER; *RESEARCH; *VIRUSES;
*WATER REUSE; *WASTEWATER

Descriptive Note: 316P.

Abstract: THIS REPORT PRESENTS INFORMATION RESULTING FROM A RESEARCH PROJECT WHOSE OBJECTIVE WAS TO ASSESS THE EXTENT OF THE ACCUMULATION OF A SELECTED RANGE OF HEAVY METALS AND THE EXTENT OF THE RETENTION AND SURVIVAL OF BACTERIA AND VIRUSES IN EDIBLE CROPS WHICH HAVE BEEN IRRIGATED WITH SECONDARY EFFLUENT FROM A METROPOLITAN SEWAGE TREATMENT PLANT.

Descriptor: *AGRICULTURE; *AUSTRALIA; *CROPS; *BACTERIA;
*IRRIGATION; *RECLAIMED WATER; *RESEARCH; *VIRUSES;
*WATER REUSE; *WASTEWATER

Descriptive Note: 316P.

Abstract: THIS REPORT PRESENTS INFORMATION RESULTING FROM A RESEARCH PROJECT WHOSE OBJECTIVE WAS TO ASSESS THE EXTENT OF THE ACCUMULATION OF A SELECTED RANGE OF HEAVY METALS AND THE EXTENT OF THE RETENTION AND SURVIVAL OF BACTERIA AND VIRUSES IN EDIBLE CROPS WHICH HAVE BEEN IRRIGATED WITH SECONDARY EFFLUENT FROM A METROPOLITAN SEWAGE TREATMENT PLANT.

Descriptor: *AGRICULTURE; *AUSTRALIA; *CROPS; *BACTERIA;
*IRRIGATION; *RECLAIMED WATER; *RESEARCH; *VIRUSES;
*WATER REUSE; *WASTEWATER

Descriptive Note: 316P.

Abstract: THIS REPORT PRESENTS INFORMATION RESULTING FROM A RESEARCH PROJECT WHOSE OBJECTIVE WAS TO ASSESS THE EXTENT OF THE ACCUMULATION OF A SELECTED RANGE OF HEAVY METALS AND THE EXTENT OF THE RETENTION AND SURVIVAL OF BACTERIA AND VIRUSES IN EDIBLE CROPS WHICH HAVE BEEN IRRIGATED WITH SECONDARY EFFLUENT FROM A METROPOLITAN SEWAGE TREATMENT PLANT.

Descriptor: *AGRICULTURE; *AUSTRALIA; *CROPS; *BACTERIA;
*IRRIGATION; *RECLAIMED WATER; *RESEARCH; *VIRUSES;
*WATER REUSE; *WASTEWATER

Descriptive Note: 316P.

Abstract: THIS REPORT PRESENTS INFORMATION RESULTING FROM A RESEARCH PROJECT WHOSE OBJECTIVE WAS TO ASSESS THE EXTENT OF THE ACCUMULATION OF A SELECTED RANGE OF HEAVY METALS AND THE EXTENT OF THE RETENTION AND SURVIVAL OF BACTERIA AND VIRUSES IN EDIBLE CROPS WHICH HAVE BEEN IRRIGATED WITH SECONDARY EFFLUENT FROM A METROPOLITAN SEWAGE TREATMENT PLANT.

Descriptor: *AGRICULTURE; *AUSTRALIA; *CROPS; *BACTERIA;
*IRRIGATION; *RECLAIMED WATER; *RESEARCH; *VIRUSES;
*WATER REUSE; *WASTEWATER

Descriptive Note: 316P.

Abstract: THIS REPORT PRESENTS INFORMATION RESULTING FROM A RESEARCH PROJECT WHOSE OBJECTIVE WAS TO ASSESS THE EXTENT OF THE ACCUMULATION OF A SELECTED RANGE OF HEAVY METALS AND THE EXTENT OF THE RETENTION AND SURVIVAL OF BACTERIA AND VIRUSES IN EDIBLE CROPS WHICH HAVE BEEN IRRIGATED WITH SECONDARY EFFLUENT FROM A METROPOLITAN SEWAGE TREATMENT PLANT.

Descriptor: *AGRICULTURE; *AUSTRALIA; *CROPS; *BACTERIA;
*IRRIGATION; *RECLAIMED WATER; *RESEARCH; *VIRUSES;
*WATER REUSE; *WASTEWATER

Descriptive Note: 316P.

Abstract: THIS REPORT PRESENTS INFORMATION RESULTING FROM A RESEARCH PROJECT WHOSE OBJECTIVE WAS TO ASSESS THE EXTENT OF THE ACCUMULATION OF A SELECTED RANGE OF HEAVY METALS AND THE EXTENT OF THE RETENTION AND SURVIVAL OF BACTERIA AND VIRUSES IN EDIBLE CROPS WHICH HAVE BEEN IRRIGATED WITH SECONDARY EFFLUENT FROM A METROPOLITAN SEWAGE TREATMENT PLANT.

Descriptor: *AGRICULTURE; *AUSTRALIA; *CROPS; *BACTERIA;
*IRRIGATION; *RECLAIMED WATER; *RESEARCH; *VIRUSES;
*WATER REUSE; *WASTEWATER

Descriptive Note: 316P.

VAILABILITY: AUSTRALIAN GOVERNMENT PUBLISHING SERVICE,
.O. BOX 84, CANBERRA ACT. 2600, AUSTRALIA

RIS ACCESSION NUMBER: EW011572
UBLICATION DATE: 82

'TITLE: GROUNDWATER RECHARGE WITH SECONDARY SEWAGE EFFLUENT.
'EHNICAL PAPER NO. 71.

'ERSONAL AUTHOR: MATHEW, K.; AND OTHERS

'SCRIPTOR: *AUSTRALIA; *GROUNDWATER;
ECHARGE; *EFFLUENT; *MODELS; *NITROGEN; *POLLUTION; *SOILS;
WATER REUSE; *WATER RESOURCES; WASTEWATER TREATMENT
ESCRITIVE NOTE: 172P.

'STRACT: THE PRESENT STUDY PRIMARILY EXAMINES HOW VARIOUS
OILS AFFECT POLLUTANT REMOVAL IN A RECHARGE PROJECT. THE
REMOVAL OF NITROGEN WAS STUDIED IN DETAIL AND A MATHEMATICAL
MODEL WAS DEVELOPED BASED ON THE PROCESSES CONTRIBUTING TO
NITROGEN REMOVAL, IN ORDER TO SIMULATE THE OVERALL PROCESS
AND OPTIMIZE NITROGEN REMOVAL.

'AILABILITY: AUSTRALIAN GOVERNMENT PUBLISHING SERVICE,
.O. BOX 84, CANBERRA ACT. 2600, AUSTRALIA

RIS ACCESSION NUMBER: EW011573

UBLICATION DATE: OCT 84

'ITLE: CHEMICAL GROUT REHABILITATION OF MANHOLES.

'ERSONAL AUTHOR: MAGILL, F. D., JR.

'SCRIPTOR: *CASE HISTORIES; *GROUT; *INFILTRATION;
INFLOW; *MAINTENANCE; *MANHOLES; *REHABILITATION;
WASTEWATER COLLECTION
ESCRITIVE NOTE: 50-52P.

'STRACT: THREE CASE HISTORIES FOCUS ON THE BENEFITS OF
HEMICAL GROUTING TO CONTROL INFILTRATION AND INFLOW IN
ANHOLES.

'AILABILITY: PUBLIC WORKS; V115 N10

MINTAINANCE; *PROGRAM DESCRIPTIONS; *SOUTH CAROLINA; *WATER
TREATMENT

ESCRITIVE NOTE: 53-56P.

ABSTRACT: A COMPREHENSIVE PREVENTIVE MAINTENANCE PROGRAM IS
SIMPLE TO USE AND EFFECTIVE. A PROGRAM AT A WATER TREATMENT
PLANT IN CHARLESTON, SOUTH CAROLINA IS DESCRIBED.

'AILABILITY: PUBLIC WORKS; V115 N10

RIS ACCESSION NUMBER: EW011575

UBLICATION DATE: OCT 84

'ITLE: WASTEWATER DISINFECTION WITH BROMINE CHLORIDE.

'ERSONAL AUTHOR: ZEH, THURBER G., JR.

'SCRIPTOR: *BROMINE CHLORIDE; *DISINFECTION;
*HANDLING;
*OPERATIONS (WASTEWATER); *SAFETY; *WASTEWATER TREATMENT

ESCRITIVE NOTE: 56-57P.

'STRACT: THE CHARACTERISTICS OF BROMINE CHLORIDE ARE
OUTLINED AND SAFE HANDLING PRACTICES ARE REVIEWED.

'AILABILITY: PUBLIC WORKS; V115 N10

RIS ACCESSION NUMBER: EW011576

UBLICATION DATE: OCT 84

'ITLE: WHAT IS PRIVATIZATION?

'ERSONAL AUTHOR: DOCTOR, RONALD D.

'SCRIPTOR: *COSTS; *CONTRACTING; *FINANCES; *FACILITIES;
*INVESTMENT; *MANAGEMENT; *OPERATIONS (WATER); *OPERATIONS
(WASTEWATER); *PRIVATIZATION; *SERVICE CONTRACTS;
*WASTEWATER TREATMENT; *WATER TREATMENT

ESCRITIVE NOTE: 60-62, 104P.

'STRACT: REVIEWED ARE THE ADVANTAGES FOR A COMMUNITY AND
POTENTIAL BENEFITS FOR THE INVESTOR.

'AILABILITY: PUBLIC WORKS; V115 N10

RIS ACCESSION NUMBER: EW011577

UBLICATION DATE: OCT 84

'ITLE: MAINTENANCE DOLLARS WORKING HARDER FOR WATER
TREATMENT PLANT.

'ERSONAL AUTHOR: LYLES, BARBARA D.; BOWERS, ROBERT G.

'SCRIPTOR: *FACILITIES; *MAINTENANCE; *PREVENTIVE

MINTAINANCE; *PROGRAM DESCRIPTIONS; *SOUTH CAROLINA; *WATER
TREATMENT

ESCRITIVE NOTE: 53-56P.

ABSTRACT: A COMPREHENSIVE PREVENTIVE MAINTENANCE PROGRAM IS
SIMPLE TO USE AND EFFECTIVE. A PROGRAM AT A WATER TREATMENT
PLANT IN CHARLESTON, SOUTH CAROLINA IS DESCRIBED.

'AILABILITY: PUBLIC WORKS; V115 N10

RIS ACCESSION NUMBER: EW011578

UBLICATION DATE: OCT 84

'ITLE: VIDEO TAPING - A NEW TOOL FOR WASTEWATER OPERATIONS.

'ERSONAL AUTHOR: NICOLAI, BRUNO

'SCRIPTOR: *AUDIOVISUAL AIDS; *INSTRUCTIONAL MATERIALS;

MINTAINANCE; *PROGRAM DESCRIPTIONS; *SOUTH CAROLINA; *WATER
TREATMENT

ESCRITIVE NOTE: 53-56P.

ABSTRACT: A COMPREHENSIVE PREVENTIVE MAINTENANCE PROGRAM IS
SIMPLE TO USE AND EFFECTIVE. A PROGRAM AT A WATER TREATMENT
PLANT IN CHARLESTON, SOUTH CAROLINA IS DESCRIBED.

'AILABILITY: PUBLIC WORKS; V115 N10

RIS ACCESSION NUMBER: EW011579

UBLICATION DATE: OCT 84

'ITLE: VIDEO TAPING - A NEW TOOL FOR WASTEWATER OPERATIONS.

'ERSONAL AUTHOR: NICOLAI, BRUNO

'SCRIPTOR: *AUDIOVISUAL AIDS; *INSTRUCTIONAL MATERIALS;

OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *TRAINING; *VIDEO TAPES; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 66, 103-04P.

ABSTRACT: AS SERVICEMEN EXPLAINED OPERATION AND MAINTENANCE REFERENCE. THE MATERIALS CAN PROVIDE INSTRUCTION FOR LATER TRAINING.

AVAILABILITY: PUBLIC WORKS; V115 N10

RIS ACCESSION NUMBER: EW011578
PUBLICATION DATE: OCT 84

TITLE: THE ANSWER IS A RESOUNDING 'YES, MAYBE!' PART II.
PERSONAL AUTHOR: HARDY, JUSTIN T.

DESCRIPTOR: *CONTRACTING; *MAINTENANCE; *OPERATIONS
*WASTEWATER; *SERVICE CONTRACTS; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 67-70, 197P.

ABSTRACT: DESCRIBED IS THE SELECTION OF AN OPERATION AND MAINTENANCE CONTRACT OPERATOR FOR BREMERTON, WASHINGTON'S WASTEWATER TREATMENT FACILITY.

AVAILABILITY: PUBLIC WORKS; V115 N10

RIS ACCESSION NUMBER: EW011579
PUBLICATION DATE: OCT 84
TITLE: LANDSCAPE DESIGN HELPS SELL INNOVATIVE WASTEWATER OFFLUENT DISPOSAL SYSTEM.

PERSONAL AUTHOR: OLCOFT, JOHN Z.; PEDERSEN, TOM A.

DESCRIPTOR: *EFFLUENT; *AESTHETICS; *INFILTRATION;
*LANDSCAPING; *MANAGEMENT; *WASTE DISPOSAL; *WASTEWATER
TREATMENT; *WATER RESOURCES
DESCRIPTIVE NOTE: 74-75P.

ABSTRACT: DESCRIBED IS THE DESIGN OF RAPID FILTRATION BASINS TO COMPLY WITH A ZERO DISCHARGE MANDATE. LANDSCAPING WAS INCLUDED TO ENHANCE AESTHETICS.

AVAILABILITY: PUBLIC WORKS; V115 N10

RIS ACCESSION NUMBER: EW011580
PUBLICATION DATE: OCT 84

TITLE: TRADEOFFS IN WATER QUALITY MANAGEMENT.
DESCRIPTIVE NOTE: 455-77P.

PERSONAL AUTHOR: MALE, JAMES W.; OGAWA, HISASHI

DESCRIPTOR: *COSTS; *ECONOMICS; *STREAMFLOW; *WATER QUALITY; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 434-44P.

ABSTRACT: THIS PAPER DESCRIBES A DIAGRAM WHICH CAN BE USED TO ASSESS SOME OF THE TRADEOFFS INVOLVED IN WATER QUALITY MANAGEMENT DECISIONS. THE DIAGRAM IS USED IN THE PAPER TO ADDRESS THE ECONOMIC EFFECT OF SPECIFYING A CRITICAL LOW FLOW, OTHER THAN THE SEVEN-DAY TEN-YEAR LOW FLOW. RESULTS SHOW THAT FOR THE CASE STUDY CHOSEN, SIGNIFICANT COST SAVINGS COULD RESULT WITHOUT SUBSTANTIALLY REDUCING THE WATER QUALITY OF THE RECEIVING STREAM.

AVAILABILITY: JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT; V110 N4

IRIS ACCESSION NUMBER: EW011581
PUBLICATION DATE: OCT 84

TITLE: WATER RESOURCE EDUCATION IN THE CORPS OF ENGINEERS.
PERSONAL AUTHOR: SHEPPARD, STEPHEN M.

DESCRIPTOR: *CORPS OF ENGINEERS; *ENGINEERING EDUCATION;
*HIGHER EDUCATION; *EDUCATION; *POSTSECONDARY EDUCATION;
*PROGRAM DESCRIPTIONS; *TRAINING; *WATER RESOURCES
DESCRIPTIVE NOTE: 445-53P.

ABSTRACT: DESCRIBED ARE TRAINING PROGRAMS PROVIDED BY THE CORPS OF ENGINEERS RELATED TO WATER RESOURCE EDUCATION. COURSES AND PROGRAMS ARE AVAILABLE FOR HIGH SCHOOL AND COLLEGE STUDENTS. IN ADDITION EXTENSIVE PROGRAMS ARE OFFERED TO EMPLOYEES BEGINNING WITH NEWLY HIRED STAFF AND CONTINUING THROUGHOUT THE EMPLOYEE'S CAREER.

AVAILABILITY: JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT; V110 N4
DESCRIPTIVE NOTE: 445-53P.

IRIS ACCESSION NUMBER: EW011582
PUBLICATION DATE: OCT 84

TITLE: WATER CONSERVATION, RECYCLING, AND REUSE: U.S.
NORTHEAST.
PERSONAL AUTHOR: KAPLAN, EDWARD

DESCRIPTOR: *WATER CONSERVATION; *MIDDLE ATLANTIC STATES; *NEW ENGLAND; *INDUSTRIES; *MANAGEMENT;
*POLICIES; *RECYCLING; *TRENDS; *WATER REUSE; *WATER RECYCLING; *WATER RESOURCES; *WATER SUPPLY
DESCRIPTIVE NOTE: 455-77P.

ABSTRACT: THIS PAPER FOCUSES UPON PRESENT AND FUTURE POSSIBILITIES FOR WATER CONSERVATION, RECYCLING, AND REUSE IN NEW ENGLAND AND MIDDLE ATLANTIC STATES. ASSUMING INDUCTIONS IN WATER USE BY INDUSTRIES, AGRICULTURE, AND BY PRIVATE RESIDENCES IN THE YEAR 2000, IT WAS FOUND THAT MANY USERS, PARTICULARLY THE ELECTRIC UTILITY SECTOR, WOULD STILL EXPERIENCE SERIOUS WATER SUPPLY SHORTFALLS IN SEVERAL INDUSTRIAL STATES.

AVAILABILITY: JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT; V110 N4. PUBLICATION DATE: OCT 84. IRIS ACCESSION NUMBER: EW011583. TITLE: PROVING OUR WORTH: THE TRAINING VALUE MODEL. PERSONAL AUTHOR: BENNETT, BARBARA; CRISWOLD, DAVID F. DESCRIPTOR: *COSTS; *EVALUATION; *HUMAN RESOURCES DEVELOPMENT; *NEEDS ASSESSMENT; *OBJECTIVES; *PLANNING; *PERFORMANCE EVALUATION; *TRAINING; *TRAINING PROGRAMS DESCRIPTIVE NOTE: 81-83P.

ABSTRACT: THIS MODEL ANSWERS THE FOUR TOUGHEST TRAINING QUESTIONS: (1) WHAT BEHAVIORAL CHANGES DO WE NEED? (2) WHAT SERVICES WILL ACCOMPLISH THESE CHANGES? (3) HOW WILL THESE SERVICES BACK-ON-THE-JOB BEHAVIOR?

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V33 N10. PUBLICATION DATE: OCT 84. IRIS ACCESSION NUMBER: EW011583. TITLE: COAGULANTS AND FLOCCULANTS IN WATER TREATMENT. PERSONAL AUTHOR: ZAPOL'SKII, A. K.; AND OTHERS DESCRIPTOR: *CHEMICALS; *COAGULANTS; *CONFERENCE PROCEEDINGS; *FLOCCULANTS; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *RESEARCH; *SYNTHESIS; *WASTEWATER TREATMENT; *WATER TREATMENT; *USSR DESCRIPTIVE NOTE: 128-36P.

ABSTRACT: THIS PAPER FOCUSES UPON PRESENT AND FUTURE POSSIBILITIES FOR WATER CONSERVATION, RECYCLING, AND REUSE IN NEW ENGLAND AND MIDDLE ATLANTIC STATES. ASSUMING INDUCTIONS IN WATER USE BY INDUSTRIES, AGRICULTURE, AND BY PRIVATE RESIDENCES IN THE YEAR 2000, IT WAS FOUND THAT MANY USERS, PARTICULARLY THE ELECTRIC UTILITY SECTOR, WOULD STILL EXPERIENCE SERIOUS WATER SUPPLY SHORTFALLS IN SEVERAL INDUSTRIAL STATES.

AVAILABILITY: JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT; V110 N4. PUBLICATION DATE: AUG 83. IRIS ACCESSION NUMBER: EW011585. TITLE: GENERAL GUIDELINES FOR SUBSURFACE TREATMENT OF WASTEWATER. PERSONAL AUTHOR: COGGER, C. G.; RUBIN, A. R. DESCRIPTIVE NOTE: 31P. PRICE CODE: PC A03/MF A01. ORDER NO.: PB84-190370

ABSTRACT: THE FOURTH OF A SERIES OF FIVE REPORTS DEALING WITH LAND (AND WETLAND) TREATMENT OF WASTEWATER AND SLUDGE UNDER THE GENERAL GUIDANCE OF A TASK FORCE REPRESENTING NORTH CAROLINA REGULATORY AGENCIES AND UNIVERSITIES. THE REPORT PROVIDES GENERAL GUIDELINES FOR THE DESIGN AND MANAGEMENT OF LARGE SUBSURFACE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS, WHILE DEVELOPED PRIMARILY FOR FLOWS GREATER THAN 3000 CAL. PER DAY, MANY OF THE CONCEPTS APPLY TO SMALLER SYSTEMS. EMPHASIS IS ON THE LAND TREATMENT PART OF THE SYSTEM, RATHER THAN INITIAL TREATMENT UNITS. MAJOR SECTIONS INCLUDE WASTE CHARACTERIZATION, SITE SELECTION, INITIAL TREATMENT, LAND AREA REQUIREMENTS, ABSORPTION AREA DESIGN, AND MAINTENANCE AND MONITORING.

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

IRIS ACCESSION NUMBER: EW011586
PUBLICATION DATE: JUN 84
TITLE: APPLICATION GUIDE FOR HYDROLOGICAL SIMULATION PROGRAM - FORTRAN (HSPE).
PERSONAL AUTHOR: DONIGIAN, A. S., JR.; AND OTHERS
DESCRIPTOR: *COMPUTER APPLICATIONS; *GUIDES; *HYDROLOGY; *SIMULATIONS; *WATER QUALITY
DESCRIPTIVE NOTE: 189P. PRICE CODE: PC A09/MF A01. ORDER NO.: PB84-215763

ABSTRACT: THE HYDROLOGICAL SIMULATION PROGRAM - FORTRAN (HSPE) IS A SET OF COMPUTER CODES THAT CAN SIMULATE THE HYDROLOGIC AND ASSOCIATED WATER QUALITY PROCESSES ON PERVERSUS AND IMPERVIOUS LAND SURFACES, IN THE SOIL PROFILE, AND IN STREAMS AND WELLMIXED IMPOUNDMENTS. THIS DOCUMENT DESCRIBES THE ENTIRE APPLICATION PROCESS OF HSPE TO DEMONSTRATE THE DECISIONS, PROCEDURES, AND RESULTS THAT ARE INVOLVED IN A TYPICAL APPLICATION. THE DOCUMENT IS INTENDED AS A SUPPLEMENT TO THE EXISTING HSPE USER'S MANUAL AND PROGRAMMER'S SUPPLEMENT. TOGETHER, THESE THREE DOCUMENTS PROVIDE SUFFICIENT GUIDANCE FOR THE FULL AND INTELLIGENT USE OF THE BROAD RANGE OF CAPABILITIES OF HSPE.

ABSTRACT: THIS PAPER SUMMARIZES REPORTS PRESENTED AT A SEMINAR ON THE SYNTHESIS AND USE OF COAGULANTS AND FLOCCULANTS IN WATER TREATMENT HELD IN KIEV, USSR.
AVAILABILITY: SOVIET JOURNAL OF WATER CHEMISTRY AND TECHNOLOGY; V5 N4. PUBLICATION DATE: 1983. IRIS ACCESSION NUMBER: EW011587. TITLE: COAGULANTS AND FLOCCULANTS IN WATER TREATMENT. PERSONAL AUTHOR: ZAPOL'SKII, A. K.; AND OTHERS DESCRIPTOR: *CHEMICALS; *COAGULANTS; *CONFERENCE PROCEEDINGS; *FLOCCULANTS; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *RESEARCH; *SYNTHESIS; *WASTEWATER TREATMENT; *WATER TREATMENT; *USSR DESCRIPTIVE NOTE: 128-36P.

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

IS ACCESSION NUMBER: EW011587

PUBLICATION DATE: APR 34

TITLE: WATER SCIENCE AND TECHNOLOGY BOARD ANNUAL REPORT,
'83.

SCRIPTIVE NOTE: 46P. PRICE CODE: PC A03/MF A01. ORDER
#: PB84-216571

ABSTRACT: THE WATER SCIENCE AND TECHNOLOGY BOARD WAS ESTABLISHED IN 1982 TO SERVE AS THE FOCAL POINT FOR NATIONAL RESEARCH COUNCIL ACTIVITIES RELATED TO WATER RESOURCES. THE BOARD'S OBJECTIVE IS TO IMPROVE THE SCIENTIFIC AND TECHNOLOGICAL BASES FOR REACHING IMPORTANT SCIENTIFIC TESTIMONIES AND ISSUES. ITS SCOPE COVERS ALL OF THE ADDITIONAL SCIENTIFIC AND ENGINEERING ASPECTS OF WATER SOURCES AND THE ECONOMIC, INSTITUTIONAL, LEGAL, EDUCATIONAL, AND SOCIAL ASPECTS, AS WELL. STANDING COMMITTEES OF THE BOARD CONDUCT PROGRAM-LEVEL ACTIVITIES IN FOUR AREAS: WATER RESOURCES FACILITIES AND STRUCTURES; WATER SCIENCE; WATER QUALITY AND TECHNOLOGY; AND MANAGEMENT ANALYSIS, AND PLANNING.

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

IRIS ACCESSION NUMBER: EW011588

PUBLICATION DATE: 34

TITLE: USE OF PROBABILISTIC INFORMATION IN THE WATER QUALITY BASED APPROACH.

PERSONAL AUTHOR: JAWORSKI, N. A.; MOUNT, D. I.

SCRIPTIVE NOTE: *DATA ANALYSIS; *STATISTICAL INFORMATION; *WASTEWATER; *WATER QUALITY

SCRIPTIVE NOTE: 21P. PRICE CODE: PC A02/MF A01. ORDER
#: PB84-220326

ABSTRACT: DURING THE PAST TWO DECADES, IMPLEMENTATION PROCEDURES IN WASTEWATER MANAGEMENT OFTEN RESULTED IN A LARGE MARGIN OF SAFETY BEING INCORPORATED INTO THE USE OF WATER QUALITY CRITERIA FOR THE PROTECTION OF AQUATIC LIFE AND ITS USES. SEVEN-DAY, TEN-YEAR LOW FLOW, GAVE ASSURANCES INSTREAM CONCENTRATIONS WELL BELOW THE WATER QUALITY CRITERIA FOR A LARGE PERCENTAGE OF TIME. PRESENT-DAY ECONOMIC CONDITIONS AND THE INCREASING COST OF ADVANCED WASTEWATER TREATMENT ARE NECESSITATING A RE-EXAMINATION OF

HOW WATER QUALITY CRITERIA ARE BEING USED IN THE WATER QUALITY BASED APPROACH FOR ESTABLISHING EFFLUENT LIMITATIONS. THE RELATIONSHIPS BETWEEN WATER QUALITY CRITERIA AND OTHER COMPONENTS OF THE WATER QUALITY BASED APPROACH ARE IDENTIFIED. THE NEED FOR A BETTER DEFINED AND MORE CONSISTENT USE OF STATISTICAL INFORMATION IS SUGGESTED NOT ONLY IN THE DEVELOPMENT OF WATER QUALITY BASED APPROACH; INTENSITY, DURATION, AND FREQUENCY OF OCCURRENCE (RETURN PERIOD) APPEAR TO BE THREE COMMON STATISTICAL PARAMETERS OF THE SIX-STEP WATER QUALITY BASED APPROACH.

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

IRIS ACCESSION NUMBER: EW011589

PUBLICATION DATE: 84

TITLE: ENVIRONMENTAL HEALTH-RELATED INFORMATION: A BIBLIOGRAPHIC GUIDE TO FEDERAL SOURCES FOR THE HEALTH PROFESSIONAL.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *AUDIOVISUAL AIDS; *EDUCATIONAL RESOURCES; *ENVIRONMENTAL HEALTH; *OCCUPATIONAL HEALTH; *PUBLICATIONS

SCRIPTIVE NOTE: 325P. PRICE CODE: PC A14/MF A01. ORDER NO.: PB84-229681

ABSTRACT: THE ANNOTATED BIBLIOGRAPHY CITES FEDERALLY-FUNDED MATERIAL ON OCCUPATIONAL AND ENVIRONMENTAL HEALTH ISSUES. PUBLICATIONS AND AUDIOVISUAL MATERIAL RELEVANT TO THE PREVENTION, DIAGNOSIS, TREATMENT, OR LIMITATION OF ENVIRONMENTALLY RELATED DISEASE ARE INCLUDED. SOME MATERIALS LISTED PROVIDE BASIC INFORMATION NECESSARY TO THE UNDERSTANDING OF ANY POTENTIAL RELATIONSHIP BETWEEN HEALTH AND OCCUPATIONAL AND ENVIRONMENTAL FACTORS. MATERIALS INCLUDED ARE PRIMARILY DIRECTED TOWARD ASSISTING HEALTH PROFESSIONALS TO IDENTIFY AND SELECT APPROPRIATE MATERIALS FOR UPDATING AND EXPANDING THEIR OWN KNOWLEDGE AND TO AIDING IN THE EDUCATION OF THEIR STUDENTS AND PATIENTS. IT WILL ALSO HELP FEDERAL PROGRAM PLANNERS WHO MAKE DECISIONS RELATIVE TO FUTURE EDUCATIONAL RESOURCE NEEDS. THE BIBLIOGRAPHY CONTAINS 37 SUBJECT CATEGORIES. INFORMATION IS INCLUDED ON HOW TO OBTAIN CITED DOCUMENTS AND AUDIOVISUAL MATERIALS.

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

IRIS ACCESSION NUMBER: EW011590

PUBLICATION DATE: APR 84

TITLE: HEALTH ASSESSMENT DOCUMENT FOR CHLORINATED BENZENES. PARTS 1 AND 2. EXTERNAL REVIEW DRAFT.

DESCRIPTOR: *ANIMALS; *CHEMICAL PROPERTIES; *CHLORINATED BENZENES; *ENVIRONMENT; *HEALTH; *HUMANS; *MONITORING; *PUBLIC HEALTH; *RESEARCH REVIEW; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 626P. PRICE CODE: PC A99/MF A01. ORDER NO.: PB84-220359

ABSTRACT: THIS DOCUMENT SUMMARIZES THE CURRENT KNOWLEDGE OF THE EFFECTS OF EXPOSURE TO THE CHLORINATED BENZENES ON HUMAN HEALTH. THE CHLORINATED BENZENES ARE RESISTANT TO CHEMICAL AND BIOLOGICAL DEGRADATION AND TEND TO ACCUMULATE IN LIPID-CONTAINING TISSUES OF ANIMALS AND HUMANS. THE UBIQUITOUS ENVIRONMENTAL DISTRIBUTION OF THE CHLORINATED BENZENES AND THEIR BIOCONCENTRATION IN HUMANS ARE A BASIS FOR CONCERN OVER THE CONSEQUENCES OF CHRONIC EXPOSURE TO HUMAN HEALTH. THE RATIONALE FOR STRUCTURING THIS DOCUMENT IS BASED PRIMARILY ON TWO MAJOR ISSUES, EXPOSURE AND RESPONSE. THE FIRST PORTION OF THE DOCUMENT IS DEVOTED TO THE CHLORINATED BENZENES IN THE ENVIRONMENT: PHYSICAL AND CHEMICAL PROPERTIES, THE MONITORING OF THE CHLORINATED BENZENES IN VARIOUS MEDIA, NATURAL AND HUMAN-MADE SOURCES, THE TRANSPORT AND DISTRIBUTION OF THE CHLORINATED BENZENES WITHIN ENVIRONMENTAL MEDIA, AND THE LEVELS OF EXPOSURE. THE SECOND PART IS DEVOTED TO BIOLOGICAL RESPONSES IN LABORATORY ANIMALS AND HUMANS INCLUDING METABOLISM, PHARMACOKINETICS, AS WELL AS THE TOXICOLOGICAL EFFECTS OF THE CHLORINATED BENZENES.

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

IRIS ACCESSION NUMBER: EW011591

PUBLICATION DATE: 84

TITLE: TRAINING FOR ENVIRONMENTAL GROUPS.

PERSONAL AUTHOR: DAVIES, J. CLARENCE; AND OTHERS

DESCRIPTOR: CONSERVATION EDUCATION; *ENVIRONMENT; ENVIRONMENTAL EDUCATION; HIGHER EDUCATION; *NEEDS ASSESSMENT; *ORGANIZATIONS (GROUPS); *PROGRAM DESCRIPTIONS; 'POLICY FORMATION; RESOURCE ALLOCATION; SKILL DEVELOPMENT; TRAINING NEEDS; TRAINING METHODS; TRAINING OBJECTIVES

DESCRIPTIVE NOTE: 141P.

ABSTRACT: THIS REPORT EXAMINES THE NEED FOR AND RESOURCES AVAILABLE TO ENVIRONMENTAL AND CONSERVATION GROUPS TO DEVELOP SKILLS IN RAISING MONEY AND RECRUITING NEW MEMBERS, MANAGING AN ORGANIZATION, COMMUNICATING WITH THE PRESS, AND ANALYZING POLICY ISSUES. DATA WERE OBTAINED FROM 255 QUESTIONNAIRES RETURNED BY REPRESENTATIVE GROUPS (411 WERE MAILED). AN EXTENSIVE LITERATURE SEARCH, INTERVIEWS WITH EXECUTIVES IN MAJOR ENVIRONMENTAL GROUPS, AND PROVIDERS OF TRAINING, AND A MEETING OF THE HEADS OF UNIVERSITIES ENVIRONMENTAL STUDIES PROGRAMS, FINDINGS INDICATE THAT THE NEEDS FOR MANAGEMENT, FUND RAISING, MEMBERSHIP RECRUITMENT, AND POLICY DEVELOPMENT SKILLS ARE CURRENTLY UNMET. FOR EXAMPLE, HALF THE GROUPS SURVEYED DID NOT KNOW HOW TO MEET THE TRAINING NEEDS THEY IDENTIFIED. BASED ON THESE AND OTHER FINDINGS, THE ESTABLISHMENT OF A NETWORK TO IDENTIFY AND LINK THE NEEDS OF DIVERSE ENVIRONMENTAL GROUPS AND THE INCREASING NUMBER OF TRAINING RESOURCES IS RECOMMENDED. IN ADDITION, A PILOT PROGRAM IN POLICY TRAINING (FUNDED BY

PRIVATE SOURCES); REGULAR MEETINGS OF DEANS OF ENVIRONMENTAL STUDIES PROGRAMS, AND INTERNSHIPS ARE ALSO RECOMMENDED.

AVAILABILITY: THE CONSERVATION FOUNDATION MASSACHUSETTS AVENUE, N.W., WASHINGTON, DC 20036

IRIS ACCESSION NUMBER: EW011592

PUBLICATION DATE: 83

TITLE: INTRODUCTION TO WASTEWATER TREATMENT PROCESSES. SECOND EDITION.

PERSONAL AUTHOR: RAMALHO, R. S.

DESCRIPTOR: *DESIGN; *FACILITIES; *INSTRUCTIONAL MATERIALS; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *PRIMARY TREATMENT; *SECONDARY TREATMENT; *TERTIAL TREATMENT; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 589P. PRICE: \$57.00

ABSTRACT: THIS BOOK IS AN INTRODUCTORY PRESENTATION TO WASTEWATER TREATMENT. IN MOST SECTIONS THE PROCESS IS DISCUSSED AFTER A DISCUSSION OF THE THEORIES INVOLVED IN THE PROCESS, DEFINITIONS OF DESIGN PARAMETERS INVOLVED, AND DEVELOPMENT OF A SYSTEMATIC DESIGN PROCEDURE FOR THE TREATMENT PLANT. SECTIONS ARE INCLUDED ON PRETREATMENT AND PRIMARY TREATMENT, THEORY AND PRACTICE OF AERATION, SECONDARY TREATMENT, SLUDGE TREATMENT AND DISPOSAL, AND TERTIARY TREATMENT.

AVAILABILITY: ACADEMIC PRESS, 111 FIFTH AVENUE, NEW YORK, NY 10003

IRIS ACCESSION NUMBER: EW011593

PUBLICATION DATE: AUG 84

TITLE: ENVIRONMENTAL IMPACTS: COMPUTER ANALYSIS. 1970-JULY, 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; COMPUTER ANALYSIS; COMPUTER APPLICATIONS; DESIGN; *ENVIRONMENTAL IMPACTS; *MODELS; *HUMAN ACTIVITIES; *SIMULATIONS

DESCRIPTIVE NOTE: 274P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB84-872548

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING COMPUTERIZED SIMULATION AND MATHEMATICAL MODELLING, COMPUTER PROGRAMS AND CALCULATIONS, AND COMPUTER-AIDED DESIGN FOR THE DETERMINATION, EVALUATION, AND SPECIFICATION OF ENVIRONMENTAL IMPACT RELATED TO VARIOUS HUMAN ACTIVITIES (COMMERCIAL, RECREATIONAL, AND GOVERNMENTAL) AND EQUIPMENT (AND SYSTEMS ASSOCIATED WITH THESE ACTIVITIES. (THIS UPDATED BIBLIOGRAPHY CONTAINS 274 CITATIONS, 46 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

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

IRIS ACCESSION NUMBER: EW011594

PUBLICATION DATE: AUG 84

TITLE: BIOLOGICAL OXYGEN DEMAND IN RIVERS AND WASTEWATER LAGOONS, 1977-JULY, 1984 (CITATIONS FROM THE SELECTED WATER SOURCES ABSTRACTS)

SCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; BIOLOGICAL OXYGEN DEMAND; *FACILITIES; *LAGOONS; *RIVERS; *WASTEWATER TREATMENT; *WATER QUALITY

SCRIPTIVE NOTE: 154P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB84-872316

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING BIOLOGICAL OXYGEN DEMAND (BOD) AS IT PERTAINS TO WATER QUALITY. THE FEATURES STUDIED INCLUDE POLLUTED WATERWAYS AND WASTEWATER TREATMENT FACILITIES. LOADING RATES AND EVALUATIONS OF BOD REMOVAL FOR SPECIFIC TREATMENT SYSTEMS ARE DISCUSSED. PROCESS MODELING AND SYSTEM DESIGN ARE ALSO PRESENTED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 143 CITATIONS, 47 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW011596

PUBLICATION DATE: 84

TITLE: SIGNIFICANCE OF COAGULATION-FLOCCULATION AND FILTRATION OPERATIONS IN WASTEWATER RECLAMATION AND REUSE.

PERSONAL AUTHOR: ASANO, TAKASHI; AND OTHERS

SCRIPTOR: *COAGULATION; *FILTRATION; *FLOCCULATION; *PERFORMANCE; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: PC N01/MF N01. ORDER NO.: PB84-872316

ABSTRACT: THE PURPOSE OF THIS PAPER WAS TO EVALUATE FACTORS AFFECTING THE OPTIMIZATION OF COAGULATION-FLOCCULATION AND FILTRATION PROCESSES IN MUNICIPAL WASTEWATER RECLAMATION AND REUSE. SPECIAL REFERENCE IS MADE TO RECENT STUDIES DESIGNED TO ASSESS THE ABOVE TREATMENT PROCESSES FOR PRODUCING RECLAIMED WATER THAT HAS AN EXTREMELY SMALL PROBABILITY OF VIRUS CONTAMINATION.

AVAILABILITY: DOCUMENT SECTION DEPARTMENT OF GENERAL SERVICES, STATE OF CALIFORNIA, P.O. BOX 1015, NORTH HIGHLANDS, CA 95560

IRIS ACCESSION NUMBER: EW011595

PUBLICATION DATE: JUL 84

TITLE: IRRIGATION WITH RECLAIMED MUNICIPAL WASTEWATER - A GUIDANCE MANUAL. REPORT NO. 84-1.

PERSONAL AUTHOR: PETTYGROVE, G. STUART, ED.; ASANO, TAKASHI, ED.

SCRIPTOR: *AGRICULTURE; *DESIGN; *IRRIGATION; *MANUALS; *OPERATIONS (WASTEWATER); *LAND APPLICATION; *PLANNING; *RECYLING; *RECLAIMED WASTEWATER; *WASTEWATER; *WATER SUPPLY TREATMENT; *WATER RESOURCES; *WATER SUPPLY

SCRIPTIVE NOTE: 518P. PRICE: \$13.16. ORDER NO.: 979-1019-0

ABSTRACT: THIS PUBLICATION IS FOR USE IN THE PLANNING, DESIGN, AND OPERATION OF AGRICULTURAL AND LANDSCAPE IRRIGATION SYSTEMS USING RECLAIMED MUNICIPAL WASTEWATER.

SEVERAL CHAPTERS WERE WRITTEN SPECIFICALLY FOR CALIFORNIA READERS, BUT MUCH OF THE GUIDANCE MANUAL IS APPLICABLE TO ARID AND SEMI-ARID ENVIRONMENTS OUTSIDE OF CALIFORNIA. THE EMPHASIS IN THIS MANUAL IS ON THE BENEFICIAL USE OF RECLAIMED WASTEWATER FOR AGRICULTURAL AND LANDSCAPE IRRIGATION. IN THIS RESPECT, IT DIFFERS FROM PUBLICATIONS SUCH AS THE U. S. ENVIRONMENTAL PROTECTION AGENCY'S PROCESS DESIGN MANUAL - LAND TREATMENT OF MUNICIPAL WASTEWATER. FOR EXAMPLE, THE GUIDANCE MANUAL EMPHASIZES IRRIGATION FOR THE NEW ENTRIES TO THE PREVIOUS EDITION.)

IRIS ACCESSION NUMBER: EW011597

PUBLICATION DATE: JUL 84

TITLE: IRRIGATION WITH RECLAIMED MUNICIPAL WASTEWATER - A GUIDANCE MANUAL. REPORT NO. 84-1.

PERSONAL AUTHOR: PETTYGROVE, G. STUART, ED.; ASANO, TAKASHI, ED.

SCRIPTOR: *AGRICULTURE; *DESIGN; *IRRIGATION; *MANUALS; *OPERATIONS (WASTEWATER); *LAND APPLICATION; *PLANNING; *RECYLING; *RECLAIMED WASTEWATER; *WASTEWATER; *WATER SUPPLY TREATMENT; *WATER RESOURCES; *WATER SUPPLY

SCRIPTIVE NOTE: 518P. PRICE: \$13.16. ORDER NO.: 7540-

POSE OF OPTIMIZING CROP PRODUCTION; THEREFORE, IT INCLUDES DETAILED INSTRUCTION IN THE CALCULATION OF CROP YIELD REQUIREMENTS. FURTHERMORE, THE BENEFITS AND MITIATIONS OF USING RECLAIMED MUNICIPAL WASTEWATER FOR AGRICULTURAL AND LANDSCAPE IRRIGATION ARE DISCUSSED, AS ARE OTHER TOPICS OF SPECIAL INTEREST, INCLUDING WATER MANAGEMENT, SALINITY AND SODIUM CONTROL, AND ECONOMIC AND LEGAL ASPECTS OF RECLAIMED WASTEWATER IRRIGATION. THIS 518-PAGE GUIDANCE MANUAL IS A RESULT OF THE COOPERATIVE EFFORT AMONG THE UNIVERSITY OF CALIFORNIA, THE CALIFORNIA STATE WATER SOURCES CONTROL BOARD, AND OTHER AGENCIES AND CONSULTANTS. IT REPRESENTS THE COLLECTIVE EFFORT OF 27 AUTHORS AND SEVERAL STAFF MEMBERS OVER A PERIOD OF TWO AND A HALF YEARS.

AVAILABILITY: DOCUMENT SECTION DEPARTMENT OF GENERAL SERVICES, STATE OF CALIFORNIA, P.O. BOX 1615, NORTH CHILDS, CA 95560

IRIS ACCESSION NUMBER: EW011598

PUBLICATION DATE: SEP 84

TITLE: OLD WATER-NEW WATER: SETTING EQUITABLE WATER RATES FOR SUBURBAN CUSTOMERS.

PERSONAL AUTHOR: MILLER, JAMES W.

SCRIPTOR: *COSTS; *MODELS; *RATES; *SERVICE; *WATER SUPPLY

SCRIPTIVE NOTE: 34-41P.

ABSTRACT: A CREATIVE RATE-MAKING METHODOLOGY ADDRESSES THE CONCERN OF CITY WATER USERS AND SUBURBAN WHOLESALERS. THE ABSTRACT APPLIED IN THE SEATTLE, WASH. METROPOLITAN AREA ADDRESS THE QUESTIONS OF HOW WATER SYSTEM COSTS SHOULD BE SPLIT BETWEEN CITY AND SUBURBAN CUSTOMERS, WHO SHOULD PAY FOR SUBURBAN GROWTH, AND WHAT METHODS SHOULD BE USED TO IMPUTE REVENUES REQUIRED FROM WHOLESALE PURVEYORS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N9

IRIS ACCESSION NUMBER: EW011599

PUBLICATION DATE: SEP 84

TITLE: COMPUTING WATER SYSTEM DEVELOPMENT CHARGES.

PERSONAL AUTHOR: BARDEN, DREW S.; STEPP, RUSSELL J.

SCRIPTOR: *CAPITAL COSTS; *DEVELOPMENT CHARGES; *COSTS; MODELS; *WATER RATES; *WATER SUPPLY; *WATER SYSTEMS

SCRIPTIVE NOTE: 42-46P.

ABSTRACT: THE BASE-EXTRA CAPACITY METHOD CAN BE ADAPTED TO CALCULATE AN EQUITABLE WATER SYSTEM DEVELOPMENT CHARGE.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76

N9

IRIS ACCESSION NUMBER: EW011600

PUBLICATION DATE: SEP 84

TITLE: WATER RATES AND THE RATE-SETTING PROCESS.

PERSONAL AUTHOR: WOODS, CHARLES E.

SCRIPTOR: *ECONOMICS; *LEGAL ASPECTS; *POLICIES; *WATER RATES; *RATE SETTING PROCESS; *WATER SUPPLY

SCRIPTIVE NOTE: 47-51P.

ABSTRACT: ECONOMIC PRINCIPLES AND LEGAL PRECEDENTS PLAY IMPORTANT ROLES IN DESIGNING AN EQUITABLE RATE STRUCTURE. SIX STAGES OF THE RATE-SETTING PROCESS ARE IDENTIFIED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N9

IRIS ACCESSION NUMBER: EW011601

PUBLICATION DATE: SEP 84

TITLE: SINGLE TARIFF PRICING.

PERSONAL AUTHOR: LIMBACH, EDWARD W.

SCRIPTOR: *ECONOMICS; *MODELS; *POLICIES; *RATE SETTING; *WATER RATES; *WATER SUPPLY; *WATER SYSTEMS

SCRIPTIVE NOTE: 52-55P.

ABSTRACT: ALL CUSTOMERS IN 12 SEPARATE WATER DISTRICTS, WHETHER LARGE OR SMALL, ARE NOW CHARGED THE SAME RATES. SINGLE TARIFF PRICING WAS USED TO SOLVE THE PROBLEM OF DISPARATE RATES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N9

IRIS ACCESSION NUMBER: EW011602

PUBLICATION DATE: SEP 84

TITLE: THE COMMON DENOMINATOR: EQUIVALENT RESIDENTIAL UNITS.

PERSONAL AUTHOR: WOODCOCK, JOHN J.

SCRIPTOR: *MODELS; *POLICIES; *RATE-SETTING; *SEWER RATES; *WATER RATES; *WATER SUPPLY; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 56-62P.

ABSTRACT: THE AVERAGE DAILY WATER USE AT A SINGLE-FAMILY

SIDENCE WAS EXTRAPOLATED AS A USE FACTOR FOR OTHER CLASSES OF CUSTOMERS. THE CONCEPT APPEARS TO RESULT IN MORE UNIATABLE CHARGES THAN THOSE BASED ON EQUIVALENT METERS.

AILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 ,

LIS ACCESSION NUMBER: EW011603
BLICATION DATE: SEP 84
ITLE: SEASONAL AND TIME-OF-DAY PRICING.

RSONAL AUTHOR: RUSSELL, JOHN D.

SCRIPTOR: *POLICIES; *RATE SETTING; *SEWER RATES; *WATER TES; *WATER SUPPLY
SCRIPTIVE NOTE: 63-65P.

STRACT: THE QUESTION OF WHETHER SEASONAL RATES AFFECT THE MAND FOR WATER IS STILL BEING DEBATED. THIS ARTICLE INSIDERS SOME OF THE VARIABLES INVOLVED IN A DIFFERENTIAL UNCING STRUCTURE.

AILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 ,

LIS ACCESSION NUMBER: EW011604
BLICATION DATE: SEP 84
ITLE: IS HAZARDOUS WASTE DISPOSAL IN CLAY VAULTS SAFE?

RSONAL AUTHOR: LEE, G. FRED; JONES, R. ANNE

SCRIPTOR: *CLEANUP; *DETOXIFICATION; *HAZARDOUS WASTES; MAINTENANCE; *MONITORING; *POLICIES; *PUBLIC HEALTH; RECOMMENDATIONS; *WASTE DISPOSAL
SCRIPTIVE NOTE: 66-73P.

STRACT: HAZARDOUS WASTES, NO MATTER HOW CAREFULLY PARATED FROM THE ENVIRONMENT, MAY PLAQUE FUTURE GENERATIONS. THE AUTHORS QUESTION THE SAFETY AND ADEQUACY OF AY-LINED DISPOSAL PITS FOR CONTAINING THE MIGRATION OF WASTES FROM HAZARDOUS WASTES INTO GROUNDWATER SYSTEMS. PROCESSES TO ENSURE LONG-TERM PROTECTION OF PUBLIC HEALTH E DISCUSSED.

AILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 ,

LIS ACCESSION NUMBER: EW011605
BLICATION DATE: SEP 84
ITLE: EFFECTIVE MANGANESE REMOVAL USING LIME AS AN

ADITIVE.

PERSONAL AUTHOR: JENKINS, STEPHEN R.; AND OTHERS

SCRIPTOR: *CALCIUM; *LIME; *MANGANESE; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *WATER SUPPLY; *WATER TREATMENT

SCRIPTIVE NOTE: 82-86P.

ABSTRACT: LIME ADDITION ENHANCED MANGANESE REMOVAL FROM A SURFACE WATER SUPPLY IN OKLAHOMA.

AILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N9

LIS ACCESSION NUMBER: EW011606
BLICATION DATE: OCT 84
ITLE: OVERLAND FLOW/AN UPDATE - NEW INFORMATION IMPROVES RELIABILITY.

SCRIPTOR: *CONSTRUCTION; *DESIGN; *LAND TREATMENT; *OVERLAND FLOW; *OPERATIONS (WATER); *OVERLAND FLOW; *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT
SCRIPTIVE NOTE: 8P.

ABSTRACT: THIS PUBLICATION PROVIDES RECENT INFORMATION ON OVERLAND FLOW FOR WASTEWATER TREATMENT.

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL, MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460
SCRIPTIVE NOTE: 8P.

LIS ACCESSION NUMBER: EW011607

TITLE: EMERGING TECHNOLOGIES: ALTERNATIVE WASTEWATER COLLECTION SYSTEMS - PRACTICAL APPROACHES.
SCRIPTOR: *ALTERNATIVE TECHNOLOGIES; *COSTS; *PERFORMANCE EVALUATION; *SEWER SYSTEMS; *RURAL AREAS; *SMALL FLOWS; *WASTEWATER COLLECTION; *WASTEWATER TREATMENT

ABSTRACT: THIS BROCHURE PRESENTS SEVERAL EMERGING TECHNOLOGIES FOR SMALL AND RURAL COMMUNITIES. TECHNOLOGIES DISCUSSED INCLUDE PRESSURE SEWER SYSTEMS, VACUUM SEWER SYSTEMS, AND SMALL DIAMETER GRAVITY SEWER SYSTEMS. ADVANTAGES, DISADVANTAGES, COSTS, AND LIMITATIONS ARE CONSIDERED.

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL, MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460
SCRIPTIVE NOTE: 8P.

IRIS ACCESSION NUMBER: EW011608
PUBLICATION DATE: SEP 83

TITLE: A PRACTICAL TECHNOLOGY: LAND APPLICATION OF SLUDGE
A VIABLE ALTERNATIVE.
SCRIPTOR: *APPROPRIATE TECHNOLOGY; *COSTS; *LAND
APPLICATION; *LAND TREATMENT; *OPERATIONS (WASTEWATER);
RESEARCH; *SLUDGE; *SEWAGE SLUDGE; *WASTE DISPOSAL
SCRIPTIVE NOTE: 8P.

ABSTRACT: THIS BROCHURE DESCRIBES THE LAND APPLICATION OF
SEWAGE SLUDGE.
AVAILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL,
MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
WASHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011609
PUBLICATION DATE: JUL 84
SCRIPTOR: *ALTERNATIVE TECHNOLOGY: HYDROGRAPH CONTROLLED
LEASE LAGOONS - A PROMISING MODIFICATION.

ABSTRACT: THIS BROCHURE DESCRIBES THE USE OF HYDROGRAPH
CONTROLLED RELEASE LAGOONS TO PROTECT WATER QUALITY OF
RECEIVING STREAMS. INCLUDED ARE DISCUSSIONS OF OPERATIONS,
VANTAGES, DESIGN, AND COSTS.

AVAILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL,
MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
WASHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011610
PUBLICATION DATE: SEP 83
TITLE: AN ALTERNATIVE TECHNOLOGY: METHANE RECOVERY - AN
ENERGY RESOURCE.
SCRIPTOR: *ALTERNATIVE TECHNOLOGY; *COSTS;
OPERATIONS (WASTEWATER); *METHANE; *RECYCLING;
ASTE DISPOSAL; *WASTEWATER TREATMENT

ABSTRACT: THIS BROCHURE DESCRIBES THE RECOVERY OF METHANE
S FROM WASTEWATER TREATMENT OPERATIONS. INCLUDED ARE
DISCUSSIONS OF RECOVERY, USE, LIMITATIONS, AND COSTS.
AVAILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL,

MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
WASHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011611
PUBLICATION DATE: JUL 83

TITLE: AN EMERGING TECHNOLOGY: AQUACULTURE - AN
ALTERNATIVE WASTEWATER TREATMENT APPROACH.

SCRIPTIVE NOTE: 8P.

ABSTRACT: THIS BROCHURE DESCRIBES THE USE OF AQUACULTURE IN
WASTEWATER TREATMENT. THE DISCUSSION INCLUDES A DESCRIPTION,
DESIGN FACTORS, COSTS, AND OPERATION AND MAINTENANCE.

AVAILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL,
MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
WASHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011612
PUBLICATION DATE: JUN 84

TITLE: A PRACTICAL TECHNOLOGY: COMPOSTING - A VIABLE
METHOD OF RESOURCE RECOVERY.

AVAILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL,
MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
WASHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011613
PUBLICATION DATE: JUL 83

TITLE: FINANCIAL BUILDING BLOCKS...FOR SELF-SUSTAINING
MUNICIPAL WASTEWATER FACILITIES.

ABSTRACT: THIS BROCHURE DISCUSSES COMPOSTING OF SEWAGE
SLUDGE AS A MEANS OF RESOURCE RECOVERY AND FOR REDUCING
WASTE DISPOSAL PROBLEMS. DISCUSSED ARE THE TECHNOLOGY,
COMPOSTING SYSTEMS, REACTOR SYSTEMS, NON-REACTOR SYSTEMS,
COSTS, AND COMPOST USE.

MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
WASHINGTON, DC 20460

TITLE: AN EMERGING TECHNOLOGY: AQUACULTURE - AN
ALTERNATIVE WASTEWATER TREATMENT APPROACH.

SCRIPTIVE NOTE: 8P.

ABSTRACT: THIS BROCHURE DESCRIBES THE USE OF AQUACULTURE IN
WASTEWATER TREATMENT. THE DISCUSSION INCLUDES A DESCRIPTION,
DESIGN FACTORS, COSTS, AND OPERATION AND MAINTENANCE.

AVAILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL,
MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
WASHINGTON, DC 20460

TITLE: A PRACTICAL TECHNOLOGY: COMPOSTING - A VIABLE
METHOD OF RESOURCE RECOVERY.

ABSTRACT: THIS BROCHURE DISCUSSES COMPOSTING OF SEWAGE
SLUDGE AS A MEANS OF RESOURCE RECOVERY AND FOR REDUCING
WASTE DISPOSAL PROBLEMS. DISCUSSED ARE THE TECHNOLOGY,
COMPOSTING SYSTEMS, REACTOR SYSTEMS, NON-REACTOR SYSTEMS,
COSTS, AND COMPOST USE.

AVAILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL,
MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
WASHINGTON, DC 20460

TITLE: FINANCIAL BUILDING BLOCKS...FOR SELF-SUSTAINING
MUNICIPAL WASTEWATER FACILITIES.

ABSTRACT: THIS BROCHURE DISCUSSES COMPOSTING OF SEWAGE
SLUDGE AS A MEANS OF RESOURCE RECOVERY AND FOR REDUCING
WASTE DISPOSAL PROBLEMS. DISCUSSED ARE THE TECHNOLOGY,
COMPOSTING SYSTEMS, REACTOR SYSTEMS, NON-REACTOR SYSTEMS,
COSTS, AND COMPOST USE.

ABSTRACT: THIS BROCHURE DISCUSSES COMPOSTING OF SEWAGE
SLUDGE AS A MEANS OF RESOURCE RECOVERY AND FOR REDUCING
WASTE DISPOSAL PROBLEMS. DISCUSSED ARE THE TECHNOLOGY,
COMPOSTING SYSTEMS, REACTOR SYSTEMS, NON-REACTOR SYSTEMS,
COSTS, AND COMPOST USE.

ABSTRACT: THIS BROCHURE DISCUSSES COMPOSTING OF SEWAGE
SLUDGE AS A MEANS OF RESOURCE RECOVERY AND FOR REDUCING
WASTE DISPOSAL PROBLEMS. DISCUSSED ARE THE TECHNOLOGY,
COMPOSTING SYSTEMS, REACTOR SYSTEMS, NON-REACTOR SYSTEMS,
COSTS, AND COMPOST USE.

SCRIPTIVE NOTE: 11P.

STRACT: THIS BULLETIN CONSIDERS ELEMENTS OF FINANCING, DESIGNING, CONSTRUCTING, AND OPERATING WASTEWATER PLANTS. SUGGESTIONS FOR EACH PHASE OF THE OPERATION ARE GIVEN AND REFERENCES DEVELOPED BY EPA ARE STED.

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460

.IS ACCESSION NUMBER: EW011614
BLICATION DATE: SEP 83

TLE: AN EMERGING TECHNOLOGY: WETLANDS TREATMENT - A ACTICAL APPROACH.

SCRIPTOR: *COSTS; *LAND APPLICATION; *LAND TREATMENT; MAINTENANCE; *OPERATIONS (WASTEWATER); *PERFORMANCE ALUATION; *PROCESS DESCRIPTION; *TECHNOLOGY; *WASTEWATER ATMENT; *WETLANDS

SCRIPTIVE NOTE: 8P.

STRACT: THIS BROCHURE CONSIDERS THE USE OF WETLANDS AS A ACTICAL APPROACH TO WASTEWATER TREATMENT. THE DISCUSSION CLIDES A DESCRIPTION OF THE TREATMENT PROCESS, MITIATIONS, CAPITAL COSTS, AND OPERATION AND MAINTENANCE STS.

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460

.IS ACCESSION NUMBER: EW011615
BLICATION DATE: SEP 83

TLE: AN EMERGING TECHNOLOGY: SEQUENCING BATCH REACTORS - PROJECT ASSESSMENT.

SCRIPTOR: ACTIVATED SLUDGE; *BATCH REACTORS; *COSTS; ACILITIES; *MAINTENANCE; *OPERATIONS (WASTEWATER); ROCESS DESCRIPTIONS; *TECHNOLOGY; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 8P.

STRACT: THIS BROCHURE DESCRIBES THE USE OF SEQUENCING TCH REACTORS FOR WASTEWATER TREATMENT. INFORMATION IS CLUSED ON THE PROCESS, A DEMONSTRATION PLANT, COSTS, ERATIONS, AND MAINTENANCE.

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460

.IS ACCESSION NUMBER: EW011617
PUBLICATION DATE: JUN 83

TITLE: AN EMERGING TECHNOLOGY: INTRACHANNEL CLARIFICATION - A PROJECT ASSESSMENT.

AILABILITY: OFFICE OF MUNICIPAL FACILITIES WASHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011616

PUBLICATION DATE: SEP 83

TITLE: A PRACTICAL TECHNOLOGY: RAPID INFILTRATION - A VIABLE LAND TREATMENT ALTERNATIVE.

SCRIPTOR: *COSTS; *DESIGN; *LAND APPLICATION; *PROCESS DESCRIPTIONS; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 8P.

ABSTRACT: THIS BROCHURE DISCUSSES RAPID INFILTRATION, A LAND TREATMENT ALTERNATIVE. INCLUDED IN THE DISCUSSION ARE THE FOLLOWING TOPICS: (1) OBJECTIVE; (2) PROCESS DESCRIPTION; (3) DESIGN; (4) PERFORMANCE; (5) USE; (6) COSTS; (7) ADVANTAGES; AND (8) LIMITATIONS.

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL, MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011618

PUBLICATION DATE: JUL 83

TITLE: AN EMERGING TECHNOLOGY: THE BIOLOGICAL AERATED FILTER - A PROMISING BIOLOGICAL PROCESS.

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL, MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011619

PUBLICATION DATE: JUL 83

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL, MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460

SCRIPTOR: *AERATED FILTERS; *BIOMASS AERATED FILTERS; *COSTS; *FILTERS; *OPERATIONS (WASTEWATER); *PROCESS DESCRIPTIONS; *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 8P.

ABSTRACT: THIS BROCHURE DESCRIBES THE BIOLOGICAL AERATED FILTER PROCESS FOR WASTEWATER TREATMENT. INCLUDED IS INFORMATION ON OPERATIONAL EXPERIENCES, LIMITATIONS, COSTS, AND ADVANTAGES.

AVAILABILITY: OFFICE OF MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460
IRIS ACCESSION NUMBER: EW011619
PUBLICATION DATE: JUL 83

TITLE: AN EMERGING TECHNOLOGY: COUNTER-CURRENT AERATION - PROMISING PROCESS MODIFICATION.
DESCRIPTOR: *AERATION; *COSTS; *COUNTERCURRENT AERATION; *OPERATIONS (WASTEWATER); *PROCESS DESCRIPTIONS; *TECHNOLOGY; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 3P.

ABSTRACT: THIS BROCHURE PRESENTS A DISCUSSION OF THE COUNTER-CURRENT AERATION PROCESS FOR WASTEWATER TREATMENT.
AVAILABILITY: OFFICE OF MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460
IRIS ACCESSION NUMBER: EW011620
PUBLICATION DATE: AUG 84

TITLE: LIME HANDLING SYSTEMS - PROBLEMS AND REMEDIES.
DESCRIPTOR: *HANDLING; *LIME; *OPERATIONS (WASTEWATER); *STORAGE; *TRANSPORT; *TROUBLESHOOTING; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 7P.

ABSTRACT: THIS BROCHURE IS CONCERNED WITH LIME HANDLING SYSTEMS IN WASTEWATER TREATMENT. THE DISCUSSION INCLUDES:
1) THE LIME HANDLING SYSTEM; (2) LIME LOADING (UNLOADING); 2) LIME STORAGE; (4) LIME SLAKING; (5) LIME SLURRY FEED; (6) LIME SLURRY TRANSPORT AND (7) LIME SLURRY FEED. IN ADDITION, PROBLEMS AND REMEDIES ARE PRESENTED.
AVAILABILITY: OFFICE OF MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460
IRIS ACCESSION NUMBER: EW011621
PUBLICATION DATE: AUG 84
TITLE: GRANULAR ACTIVATED CARBON SYSTEMS - PROBLEMS AND

DESCRIPTOR: *ACTIVATED CARBON; *GRANULAR ACTIVATED CARBON; *FACILITIES; *OPERATIONS (WASTEWATER); *ORGANIC COMPOUNDS; *PROCESS DESCRIPTIONS; *PERFORMANCE EVALUATION; *TROUBLESHOOTING; *WASTEWATER TREATMENT

ABSTRACT: THIS BROCHURE DESCRIBES GRANULAR ACTIVATED CARBON SYSTEMS FOR WASTEWATER TREATMENT. OPERATIONAL PROBLEMS AND SUGGESTED REMEDIES ARE PRESENTED.
AVAILABILITY: OFFICE OF MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460
DESCRIPTIVE NOTE: 7P.

IRIS ACCESSION NUMBER: EW011622
PUBLICATION DATE: AUG 84
TITLE: TERTIARY GRANULAR FILTRATION - PROBLEMS AND REMEDIES.

DESCRIPTOR: *FILTRATION; MAINTENANCE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *PROCESS DESCRIPTIONS; *TERTIARY GRANULAR FILTRATION; *WASTEWATER TREATMENT
AVAILABILITY: OFFICE OF MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460
DESCRIPTIVE NOTE: 3P.

ABSTRACT: THIS BROCHURE DESCRIBES THE USE OF TERTIARY GRANULAR FILTRATION FOR WASTEWATER TREATMENT. INCLUDED IN THE DISCUSSION ARE POTENTIAL PROBLEMS AND POSSIBLE SOLUTIONS.
AVAILABILITY: OFFICE OF MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460
DESCRIPTIVE NOTE: 8P.

IRIS ACCESSION NUMBER: EW011623
PUBLICATION DATE: JUN 84
TITLE: AN EMERGING TECHNOLOGY: FILTRATION - A PROCESS ASSESSMENT.

DESCRIPTOR: *COSTS; *DESIGN; *FILTERS; *FACILITIES; *INTERMITTENT SAND FILTERS; *MAINTENANCE; *OPERATIONS (WASTEWATER); *ONSITE TREATMENT; *PERFORMANCE EVALUATION; *SMALL FLOWS; *PROCESS EVALUATION; *WASTEWATER TREATMENT
AVAILABILITY: OFFICE OF MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460
DESCRIPTIVE NOTE: 8P.

ABSTRACT: THIS BROCHURE DESCRIBES THE USE OF INTERMITTENT SAND FILTERS FOR WASTEWATER TREATMENT OF SMALL WASTEWATER VOLUMES AND ONSITE TREATMENT.
AVAILABILITY: OFFICE OF MUNICIPAL FACILITIES DIVISION, 401 "M" STREET, S.W., WASHINGTON, DC 20460
DESCRIPTIVE NOTE: 8P.

IRIS ACCESSION NUMBER: EW011624
PUBLICATION DATE: JUN 84

TITLE: LAND TREATMENT: RAPID INFILTRATION - PLAN, DESIGN,
ID CONSTRUCT FOR SUCCESS.

SCRIPTOR: *CONSTRUCTION; *DESIGN; *FACILITIES; *LAND
TREATMENT; *OPERATIONS (WASTEWATER); *RAPID INFILTRATION;
*WASTEWATER TREATMENT

SCRIPTIVE NOTE: 8P.

STRACT: THIS BROCHURE DESCRIBES LAND TREATMENT FOR
STEWATER INCLUDED IN THE DISCUSSION ARE SOILS, DESIGN,
OUNDWATER, CONSTRUCTION, AND CAUTIONS.

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL,
NIPITAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
SHINGTON, DC 20460

SCRIPTIVE NOTE: 8P.

IRIS ACCESSION NUMBER: EW011625

PUBLICATION DATE: AUG 84

TLE: INNOVATIVE AND ALTERNATIVE (I/A) TECHNOLOGY:
STEWATER TREATMENT TO IMPROVE WATER QUALITY AND REDUCE
STS.

SCRIPTOR: *ALTERNATIVE TECHNOLOGY; *COSTS; *ENERGY;
INNOVATIVE TECHNOLOGY; *FUNDING; *EPA; *MAINTENANCE;
OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *PROJECT
SCRIPTIONS; *TECHNOLOGY; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 8P.

STRACT: THIS BROCHURE DESCRIBES INNOVATIVE AND
TERNATIVE TECHNOLOGY FOR IMPROVING WASTEWATER TREATMENT TO
PROVE WATER QUALITY AND TO REDUCE COSTS. ALTERNATIVE
STEMS ARE FULLY PROVEN SYSTEMS WHILE INNOVATIVE SYSTEMS
E TREATMENT TECHNOLOGIES THAT ARE DEVELOPED, BUT NOT FULLY
OEN. EXAMPLES OF BOTH ARE GIVEN.

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL,
NIPITAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
SHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011626

PUBLICATION DATE: MAY 84

TLE: ROTATING BIOLOGICAL CONTACTORS (RBCS): CHECKLIST
R A TROUBLE-FREE FACILITY.

SCRIPTOR: *CONSTRUCTION; *DESIGN; *FACILITIES;
OPERATIONS (WASTEWATER); *PLANNING; *ROTATING BIOLOGICAL
CONTACTORS; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 8P.

ABSTRACT: THIS BROCHURE PROVIDES A CHECKLIST FOR PLANNING,
DESIGN, AND CONSTRUCTION CONSIDERATIONS FOR ROTATING
BIOLOGICAL CONTACTORS.

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL,
NIPITAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
SHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011627

PUBLICATION DATE: SEP 83

TITLE: LESS COSTLY WASTEWATER TREATMENT FOR YOUR TOWN.
DISCUSSION.

SCRIPTOR: *APPROPRIATE TECHNOLOGY; *COSTS; *CONSTRUCTION;
*DESIGN; *FACILITIES; *MAINTENANCE; *OPERATIONS
(WASTEWATER); *PERFORMANCE EVALUATION; *RURAL AREAS; *SMALL
FLOWS; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 8P.

ABSTRACT: THIS BROCHURE DESCRIBES ALTERNATIVE SOLUTIONS FOR
WASTEWATER TREATMENT. THE DISCUSSION STRESSES APPROPRIATE
TECHNOLOGY FOR SMALL COMMUNITIES. ITEMS CONSIDERED INCLUDE
COSTS AND SPECIAL CONSIDERATIONS.

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL,
NIPITAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
SHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011628

PUBLICATION DATE: SEP 84

TITLE: LESS COSTLY WASTEWATER TREATMENT FOR YOUR TOWN.

SCRIPTOR: *COSTS; *DESIGN; *FACILITIES;
*PLANNING; *VALUE ENGINEERING;
*WASTEWATER TREATMENT

SCRIPTIVE NOTE: 8P.

ABSTRACT: THIS FACT SHEET DESCRIBES VALUE ENGINEERING FOR
WASTEWATER TREATMENT WORKS. VALUE ENGINEERING IS A
SPECIALIZED COST CONTROL TECHNIQUE APPLIED BY AN INDEPENDENT
TEAM OF EXPERIENCED MULTIDISCIPLINARY PROFESSIONALS DURING
THE DESIGN OF WASTEWATER TREATMENT FACILITIES.

AILABILITY: OFFICE OF MUNICIPAL POLLUTION CONTROL,
NIPITAL FACILITIES DIVISION, 401 "M" STREET, S.W.,
SHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011629

PUBLICATION DATE: SEP 84

TITLE: PUMPS AND PUMPING.

PERSONAL AUTHOR: ARASMITH, E. E.

IRIS ACCESSION NUMBER: EW011631

SCRIPTOR: *AUDIOVISUAL AIDS; *INSTRUCTIONAL MATERIALS; MANUALS; *MAINTENANCE; *OPERATIONS (WATER); *OPERATIONS (SEAWATER); *POSTSECONDARY EDUCATION; *PUMPS; *SLIDES

SCRIPTIVE NOTE: PRICE: \$16.00. TEN SLIDE TAPE SETS ARE SO AVAILABLE TO ACCOMPANY THE MANUAL. SLIDE SETS VARY IN SIZE FROM \$25.00 TO \$85.00 EACH. AN INSTRUCTOR'S GUIDE IS SO AVAILABLE FOR \$30.00.

STRACT: THIS MANUAL IS DESIGNED SPECIFICALLY FOR OPERATORS AND TECHNICIANS. IT COVERS THE THEORY OF OPERATION OF CENTRIFUGAL PUMPS. THE MANUAL IS DESIGNED BE USED WITH THE ACCOMPANYING SLIDES AND OVERHEADS. THE MATERIAL IS ADAPTABLE TO A THREE-DAY WORKSHOP OR TYPICAL ASSROOM SETTING. IT WAS NOT INTENDED TO BE A SELF-STUDY SOURCE, BUT COULD BE USED AS SUCH WITH SOME ASSISTANCE. EACH LESSON IS PRECEDED BY A SET OF PERFORMANCE OBJECTIVES. EACH INCLUDES WITH A WORKSHEET BASED ON THOSE OBJECTIVES. ALSO AVAILABLE WITH THE MANUAL IS AN INSTRUCTOR'S GUIDE THAT MAINTAINS LESSON PLANS, WRITTEN NARRATIVE FOR THE MATERIALS AND ANSWERS TO THE WORKSHEET QUESTIONS. THE MANUAL DIVIDED INTO 12 LESSONS AS FOLLOWS: (1) CENTRIFUGAL PUMP THEORY; (2) CENTRIFUGAL PUMP TYPES; (3) PUMP NOMENCLATURE; (4) REPLACEMENT OF COMPONENTS; (5) SELECTION AND REPLACEMENT PACKING; (6) SELECTION AND REPLACEMENT OF MECHANICAL ALRS; (7) PUMP PIPING SYSTEMS; (8) PUMP HYDRAULICS; (9) OPERATING CONDITIONS; END-SUCCTION AND SPLIT CASE; (10) OPERATING CONDITIONS; LINESHAFT TURBINES; (11) SPECIAL PIPING UNITS; AND (12) ABNORMAL OPERATING CONDITIONS.

AILABILITY: ENVIRONMENTAL TRAINING CONSULTANTS, INC., BOX 2097, CORVALLIS, OR 97339

IRIS ACCESSION NUMBER: EW011630
PUBLICATION DATE: 84

ITLE: ELECTRICAL TRAINING MODULE: PROGRAM I - IV.

SCRIPTOR: *AUDIOVISUAL AIDS; *INSTRUCTIONAL MATERIALS; ELECTRICITY; *ELECTRICAL CONTROL PANELS; *POSTSECONDARY EDUCATION; *TRAINING; *VIDEOTAPES

SCRIPTIVE NOTE: EACH VIDEOTAPE AND ONE COPY OF THE TEXT MATERIAL IS \$85.00. ADDITIONAL TEXTS ARE AVAILABLE FOR .00 EACH.

STRACT: THIS MODULE IS DIVIDED INTO FOUR PROGRAMS AND SEVEN PARTS (TAPES). EACH PROGRAM IS PRECEDED BY A SET OF PERFORMANCE OBJECTIVES AND CONCLUDES WITH A WORKSHEET BASED THOSE OBJECTIVES. THE PROGRAMS ARE ACCCOMPANIED BY TEXTS SIGNED TO BE USED WITH THE VIDEOTAPES DESCRIBED BELOW. THIS TEXT HAS OBJECTIVES, LISTS OF KEY WORDS, WRITTEN MATERIALS, SELF-TESTS AND A FINAL EXAM. THE PROGRAMS ARE: (1) BASICS OF ELECTRICITY; (2) ELECTRICAL CONTACTORS, TRANSFORMERS AND RELATED COMPONENTS; (3) MEASUREMENTS OF ELECTRICITY; AND (4) ELECTRICAL CONTROL PANELS.

AILABILITY: ENVIRONMENTAL TRAINING CONSULTANTS, INC., BOX 2097, CORVALLIS, OR 97339

PUBLICATION DATE: OCT 84
TITLE: BACKFLOW PREVENTION DEVICE TESTER CERTIFICATION.

PERSONAL AUTHOR: GENTY, YVES R.
SCRIPTOR: *BACKFLOW PREVENTION; *TRAINING; *WATER SUPPLY
*BACKFLOW; *COLORADO; *TRAINING; *WATER SUPPLY

SCRIPTIVE NOTE: 1, 3, 5P.

IRIS ACCESSION NUMBER: EW011632
PUBLICATION DATE: OCT 84
TITLE: SUPPLYING POTABLE WATER TO HOSPITALS.

PERSONAL AUTHOR: ANGELE, GUSTAVE J.
SCRIPTOR: *BACKFLOW; *BACKFLOW PREVENTION; *HOSPITALS;
*WATER SUPPLY
SCRIPTIVE NOTE: 4-5P.

IRIS ACCESSION NUMBER: EW011633
PUBLICATION DATE: DEC 75
TITLE: HANDBOOK FOR SEWER SYSTEM EVALUATION AND REHABILITATION. MCD-19.

SCRIPTIVE NOTE: THIS IS PART 2 OF A TWO-PART ARTICLE. PART 1 APPEARED IN THE SEPTEMBER, 1984 ISSUE OF BACKFLOW PREVENTION. THIS ARTICLE DISCUSSES SUPPLYING WATER TO HOSPITALS AND PREVENTION OF CONTAMINATION OF WATER SUPPLIES WITHIN THE HOSPITAL AND BETWEEN THE HOSPITAL AND THE COMMUNITY. VARIOUS BACKFLOW PROBLEMS ARE DISCUSSED.

AILABILITY: BACKFLOW PREVENTION; V1 N4

IRIS ACCESSION NUMBER: EW011649
PUBLICATION DATE: DEC 75
TITLE: HANDBOOK FOR SEWER SYSTEM EVALUATION AND REHABILITATION. MCD-19.

SCRIPTIVE NOTE: 243P. PRICE: \$15.58
IRIS ACCESSION NUMBER: EW011649
PUBLICATION DATE: DEC 75
TITLE: HANDBOOK FOR SEWER SYSTEM EVALUATION AND REHABILITATION. MCD-19.

SCRIPTIVE NOTE: THIS HANDBOOK IS NOT A DESIGN MANUAL. IT IS PRIMARILY A SUPPLEMENT FOR SEWER SYSTEM EVALUATION. IT CONTAINS TECHNICAL INFORMATION AND DESCRIBES THE METHODOLOGY NECESSARY FOR AN EFFECTIVE INVESTIGATION AND CORRECTION OF LIQUID CONDITIONS IN A SEWER SYSTEM. ALSO INCLUDED IS A SET OF COST CURVES SHOWING THE CORRELATION BETWEEN THE COST FOR EACH PHASE OF SEWER SYSTEM EVALUATION WORK AND VARIABLES

CH AS SEWER LENGTH, POPULATION, AND MAGNITUDE OF I/I.

IRIS ACCESSION NUMBER: EW011667

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

PUBLICATION DATE: FEB 79

TITLE: 1978 NEEDS SURVEY: COST METHODOLOGY FOR CONTROL OF COMBINED SEWER OVERFLOW AND STORMWATER DISCHARGE. FRD-3.

SCRIPTOR: *CONSTRUCTION; *COSTS; *EPA; *FACILITIES; *OBJECTIVES; *PLANNING; *POLLUTION CONTROL; *NEEDS; *SURVEYS; *SEWERS; *STORMWATER; *USEPA; *WASTEWATER TREATMENT; *WASTEWATER COLLECTION

TITLE: INDUSTRIAL COST RECOVERY SYSTEMS. MCD-44.

SCRIPTIVE NOTE: *COST RECOVERY SYSTEMS; *DESIGN; *GUIDELINES; *INDUSTRY; *INDUSTRIAL COST RECOVERY; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PLANNING; *RECORDS; *USEPA; *WASTEWATER TREATMENT

PRICE: \$4.73

ABSTRACT: THIS DOCUMENT OF SUPPLEMENTAL INFORMATION WAS TENDED TO DESCRIBE THE ESSENTIAL REQUIREMENTS OF THE FEDERAL GUIDELINES- INDUSTRIAL COST RECOVERY SYSTEMS" INDUSTRIAL COST RECOVERY (ICR) GUIDELINES AND OTHER RELATED REQUIREMENTS IN A FORMAT TO ASSIST IN THE DESIGN, INSTALLATION, AND IMPLEMENTATION OF SYSTEMS. CONTENTS INCLUDE: (1) ICR SYSTEM REQUIREMENTS; (2) DEVELOPING THE ICR STEM; (3) FUNDS MANAGEMENT; AND (4) ICR DESIGN CHECKLIST.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW011668

PUBLICATION DATE: NOV 76

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

SCRIPTIVE NOTE: 63P. PRICE: \$4.73

ABSTRACT: THIS REPORT PRESENTS THE 1978 ESTIMATE OF NEEDS FOR CONTROL OF POLLUTION FROM COMBINED SEWER OVERFLOW AND URBAN STORMWATER RUNOFF AS WELL AS A DESCRIPTION OF THE CRITERIA, METHODS, AND ASSUMPTIONS USED TO DEVELOP THE NEEDS ESTIMATES. THIS REPORT CONTINUES THE SURVEY SERIES THAT WAS ESTABLISHED IN 1973 AND CONTINUED IN 1974 AND 1976. COST ESTIMATES ARE PROVIDED FOR ACHIEVING VARIOUS OBJECTIVES.

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

IRIS ACCESSION NUMBER: EW011672

PUBLICATION DATE: AUG 84

ABSTRACT: EPA'S INNOVATIVE TECHNOLOGY PROGRAM FOR WASTE WATER TREATMENT NEEDS BETTER CONTROLS. REPORT BY THE U.S. GENERAL ACCOUNTING OFFICE.

SCRIPTOR: *EPA; *EVALUATION; *INNOVATIVE TECHNOLOGY; *FACILITIES; *INCENTIVES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *TECHNOLOGY; *USEPA; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 62P. FIRST FIVE COPIES FREE OF CHARGE; ADDITIONAL COPIES \$3.25 EACH.

AVAILABILITY: U.S. GENERAL ACCOUNTING OFFICE, DOCUMENT HANDLING AND INFORMATION SERVICES FACILITY, P.O. BOX 6015, GAITHERSBURG, MD 20760

IRIS ACCESSION NUMBER: EW011673

PUBLICATION DATE: OCT 84

TITLE: WATER ANALYSIS. VOLUME 3. ORGANIC SPECIES.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

PERSONAL AUTHOR: MINEAR, ROGER A., ED.; KEITH, LAWRENCE H.,

IRIS ACCESSION NUMBER: EW011676
 PUBLICATION DATE: 82
 TITLE: MUNICIPAL WASTEWATER IN AGRICULTURE.
 PERSONAL AUTHOR: D'ITRI, FRANK M., ED.
 DESCRIPTOR: *AGRICULTURE; *DESIGN; *COSTS; *CONFERENCE PROCEEDINGS; *LEGAL ASPECTS; *LAND TREATMENT; *LAND USE; *OPERATIONS (WASTEWATER); *RESEARCH NEEDS; *WATER REUSE; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 430P. PRICE: \$69.00

ABSTRACT: THE CHAPTERS IN THIS VOLUME REPRESENT A COLLECTION OF THE METHODOLOGY IN CURRENT USE, WHICH ACCOUNTS FOR THE MAJOR PORTION OF THE METHODS USED FOR ANALYSIS OF ORGANIC CONSTITUENTS IN WATER. TOGETHER WITH THE CHAPTERS ON ANALYSIS OF THE INORGANIC CONSTITUENTS IN WATER FROM THE FIRST TWO VOLUMES, THIS REPRESENTS A COMPREHENSIVE WORK ON WATER ANALYSIS. CONTENTS INCLUDE: (1) WASTE STRENGTH AND WATER POLLUTION PARAMETERS; (2) CHEMICAL NONSPECIFIC ORGANICS ANALYSIS; (3) CONCENTRATION, PARTITIONING, AND SOLVENTATION TECHNIQUES; (4) GAS CHROMATOGRAPHY; (5) ORGANIC MASS SPECTROMETRY AND ITS APPLICATION TO WATER ANALYSIS; (6) USE OF HPLC FOR WATER ANALYSIS; AND (7) INFRARED SPECTROPHOTOMETRY OF POLLUTANTS IN WATER SYSTEMS.

AVAILABILITY: ACADEMIC PRESS, INC., 6277 SEA HARBOR DRIVE, ORLANDO, FL 32821

IRIS ACCESSION NUMBER: EW011675
 PUBLICATION DATE: 84
 TITLE: APPLIED ENVIRONMENTAL GEOCHEMISTRY.
 PERSONAL AUTHOR: THORNTON, IAIN, ED.
 DESCRIPTOR: *DISEASES; *ENVIRONMENT; *GEOCHEMISTRY; *HEALTH; *INSTRUCTIONAL MATERIALS; *METALS; *PLANTS; *RADIODACTIVITY; *SOILS; *WATER QUALITY

SCRIPTIVE NOTE: 523P. PRICE: \$70.00. ORDER NO.: SBN:0-12-690640-3

ABSTRACT: THIS PUBLICATION CONTAINS THE FOLLOWING TOPICS: (1) PRINCIPLES OF ENVIRONMENTAL GEOCHEMISTRY; (2) ANALYTICAL METHODS IN APPLIED ENVIRONMENTAL GEOCHEMISTRY; (3) THE CHEMICAL FORMS OF TRACE METALS IN SOILS; (4) REGIONAL GEOCHEMICAL MAPPING AND ITS APPLICATION TO ENVIRONMENTAL MONITORING; (5) SOILS AND PLANTS AND THE GEOCHEMICAL ENVIRONMENT; (6) GEOCHEMISTRY AND WATER QUALITY; (7) MICROBIAL MEDIATION OF BIOGEOCHEMICAL CYCLES; (8) GEOCHEMISTRY APPLIED TO AGRICULTURE; (9) GEOCHEMISTRY AND DISEASE; (10) GEOMEDICINE IN SCANDINAVIA; (11) ASSESSMENT OF METAL POLLUTION IN SOILS; (12) ASSESSMENT OF METAL POLLUTION IN RIVERS AND ESTUARIES; (13) HEAVY METAL CONTAMINATION FROM MINING AND SMELTING: IMPLICATIONS FOR MAN AND HIS ENVIRONMENT; (14) HEALTH IMPLICATIONS OF COAL DEVELOPMENT; AND (15) PLANT NATURAL RADIOACTIVITY IN THE ENVIRONMENT.

AVAILABILITY: BUTTERWORTH PUBLISHERS, 10 TOWER OFFICE PARK, WOBURN, MA 01801

IRIS ACCESSION NUMBER: EW011681
 PUBLICATION DATE: 84
 TITLE: ENVIRONMENT AND SOLID WASTES: CHARACTERIZATION, TREATMENT, AND DISPOSAL.
 PERSONAL AUTHOR: FRANCIS, CHESTER W.; AUERBACK, STANLEY I.
 DESCRIPTOR: *CONFERENCE PROCEEDINGS; *ENVIRONMENT; *HAZARDOUS WASTES; *MANAGEMENT; *MONITORING; *POLLUTION CONTROL; *PUBLIC HEALTH; *SOLID WASTES; *WASTE DISPOSAL

SCRIPTIVE NOTE: 512P. PRICE: \$55.00. ORDER NO.: ISBN:0-12-214830-0

ABSTRACT: CONTENTS INCLUDE: (1) ADMINISTRATIVE AND LEGAL ASPECTS OF WASTEWATER RENOVATION AND REUSE; (2) REUSE ALTERNATIVE SYSTEMS FOR MUNICIPAL WASTEWATER; (3) OPERATION OF LAND TREATMENT SYSTEMS; (4) PATHOGENS AND HEAVY METALS IN MUNICIPAL WASTEWATER; (5) DESIGN AND COST CRITERIA FOR LAND TREATMENT SYSTEMS AND (6) RESEARCH NEEDS FOR RENOVATION AND REUSE.

AVAILABILITY: ACADEMIC PRESS, INC., 6277 SEA HARBOR DRIVE, ORLANDO, FL 32821

IRIS ACCESSION NUMBER: EW011682
 PUBLICATION DATE: OCT 84
 TITLE: CENTER FRAME: LARGE SCREEN PROJECTION.

- PERSONAL AUTHOR: BEHREND, JACK
 DESCRIPTOR: *AUDIOVISUAL AIDS; *INSTRUCTION; *PROJECTION
 SYSTEMS; *SCREENS
 DESCRIPTIVE NOTE: 14-15, 47P.
- ABSTRACT:** THIS ARTICLE PROVIDES A DISCUSSION ON IMPORTANT ELEMENTS INVOLVED IN SETTING UP A LARGE SCREEN PROJECTION SYSTEM.
AVAILABILITY: TECHNICAL PHOTOGRAPHY; V16 N10
- IRIS ACCESSION NUMBER: EW011685
 PUBLICATION DATE: OCT 84
 TITLE: MANAGEMENT IN ACTION;
 PERSONAL AUTHOR: HERSCHE, PAUL
 DESCRIPTOR: *EVALUATION; *EMPLOYEE EVALUATION; *MANAGEMENT;
 *PERSONNEL; *PERFORMANCE EVALUATION; *PRODUCTIVITY;
 *RECOMMENDATIONS
 DESCRIPTIVE NOTE: 22P.
- ABSTRACT:** THIS ARTICLE PRESENTS SUGGESTIONS FOR IMPROVING EMPLOYEE EVALUATIONS AND ALSO PROVIDES A LIST OF CRITERIA FOR PERFORMANCE EVALUATION RELATED TO JOB COMPATIBILITY AND PEOPLE COMPATIBILITY.
TITLE: GUIDELINES ON THE USE AND ACCEPTABILITY OF OIL SPILL DISPERSANTS. SECOND EDITION.
- IRIS ACCESSION NUMBER: EW011683
 PUBLICATION DATE: 1-2 84
TITLE: GUIDELINES ON THE USE AND ACCEPTABILITY OF OIL SPILL DISPERSANTS. SECOND EDITION.
- PERSONAL AUTHOR: ABBOTT, F. S.
 DESCRIPTOR: *DISPERSANTS; *GUIDELINES; *OIL SPILLS;
 POLLUTION CONTROL; *WATER POLLUTION CONTROL
 DESCRIPTIVE NOTE: 6-10P.
- ABSTRACT:** THESE GUIDELINES ARE A REVISION OF GUIDELINES INTRODUCED IN 1973. THE ARTICLE HIGHLIGHTS MAJOR CHANGES IN THE SECOND EDITION.
- AVAILABILITY:** SPILL TECHNOLOGY NEWSLETTER; V9 N1
- IRIS ACCESSION NUMBER: EW011684
 PUBLICATION DATE: SUM 84
TITLE: TOXIC CONTAMINANTS IN WATER SUPPLIES AND THE IMPLICATIONS FOR POLICY.
- PERSONAL AUTHOR: PAGE, G. WILLIAM
 DESCRIPTOR: *CONTAMINATION; *DRINKING WATER; *CHEMICALS;
 HEALTH; *HEAVY METALS; *ORGANIC CHEMICALS; *POLICIES;
 PUBLIC HEALTH; *TOXIC CHEMICALS; *TOXIC SUBSTANCES; *WATER QUALITY; *WATER RESOURCES; *WATER TREATMENT
 DESCRIPTIVE NOTE: 131-38P.
- ABSTRACT:** THIS PAPER DISCUSSES PROBLEMS ASSOCIATED WITH THE CONTAMINATION OF WATER SUPPLIES WITH TOXIC CHEMICALS. FIVE KEY QUESTIONS ARE ADDRESSED: (1) WHAT TOXIC CHEMICALS ARE FOUND IN OUR WATER RESOURCES? (2) WHAT ARE THE HEALTH IMPLICATIONS? (3) HOW DO WE IDENTIFY GROUNDWATER CONTAMINATED WITH TOXIC CHEMICALS? (4) HOW DO WE PROTECT THE PUBLIC FROM THE RISKS ASSOCIATED WITH CONSUMPTION OF WATER CONTAMINATED WITH TOXIC CHEMICALS? (5) WHAT ARE THE POLICY IMPLICATIONS?
AVAILABILITY: ENVIRONMENTALIST; V4 N2
- IRIS ACCESSION NUMBER: EW011685
 PUBLICATION DATE: OCT 84
 TITLE: MANAGEMENT IN ACTION;
 PERSONAL AUTHOR: HERSCHE, PAUL
 DESCRIPTOR: *EVALUATION; *EMPLOYEE EVALUATION; *MANAGEMENT;
 *PERSONNEL; *PERFORMANCE EVALUATION; *PRODUCTIVITY;
 *RECOMMENDATIONS
 DESCRIPTIVE NOTE: 22P.
- ABSTRACT:** THIS ARTICLE PRESENTS SUGGESTIONS FOR IMPROVING EMPLOYEE EVALUATIONS AND ALSO PROVIDES A LIST OF CRITERIA FOR PERFORMANCE EVALUATION RELATED TO JOB COMPATIBILITY AND PEOPLE COMPATIBILITY.
TITLE: MEASURING DIFFERENTIAL PRESSURE ACCURATELY IN WATER DISTRIBUTION SYSTEMS.
- PERSONAL AUTHOR: WALKSI, THOMAS
 DESCRIPTOR: *FLOW MEASUREMENT; *INSTRUMENTATION;
 *MEASUREMENT; *WATER MAINS; *WATER DISTRIBUTION; *WATER PRESSURE
 DESCRIPTIVE NOTE: 28-30P.
- ABSTRACT:** A PILOT TUBE CAN BE USED TO MEASURE VELOCITY IN A WATER MAIN, BUT IT REQUIRES AN AUXILIARY DEVICE TO SENSE DIFFERENTIAL PRESSURE, WHICH CAN THEN BE CONVERTED INTO A VELOCITY READING.
AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N11
- IRIS ACCESSION NUMBER: EW011687
 PUBLICATION DATE: OCT 84
TITLE: PRESSURE RECORDERS IN THE RIGHT PLACES MAKE A BETTER DISTRIBUTION SYSTEM.
- PERSONAL AUTHOR: GORISCH, JOHN
 DESCRIPTOR: *INSTRUMENTATION; *MEASUREMENT;
 *WATER MAINS; *WATER DISTRIBUTION; *WATER PRESSURE
 DESCRIPTIVE NOTE: 30-31P.
- ABSTRACT:** CIRCULAR-CHART PRESSURE RECORDS PLACED IN KEY POSITIONS HAVE GIVEN THIS WATER DEPARTMENT A PRACTICAL AND

EXPENSIVE MONITORING CAPABILITY, WHICH HAS HELPED SOLVE ME PROBLEMS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N11

IRIS ACCESSION NUMBER: EW011688

PUBLICATION DATE: OCT 84

TITLE: NEW TOOL REJUVENATES OLD COMPANY'S PIPES.

SCRIPTOR: *CLEANING; *MAINTENANCE; *PIPES; *WATER MAINS; WATER DISTRIBUTION

SCRIPTIVE NOTE: 32-33P.

ABSTRACT: A SPECIALLY DEVISED MULTI-BLADED CLEANING TOOL IS SENT THROUGH A SECTION OF HEAVILY ENCRUSTED MAIN OWNED BY A VERY OLD WATER COMPANY. VERY LITTLE SHUTDOWN TIME WAS REQUIRED TO RESTORE MUCH OF THE LINES ABILITY TO TRANSPORT WATER COST-EFFECTIVELY.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N11

IRIS ACCESSION NUMBER: EW011689

PUBLICATION DATE: OCT 84

TITLE: RETRENCHMENT MANAGEMENT: OR HOW TO COPE WITH FEWER X DOLLARS.

PERSONAL AUTHOR: KEMP, ROGER L.

SCRIPTOR: *COSTS; *EFFICIENCY; *LOCAL GOVERNMENT; MANAGEMENT; *PLANNING; *POLICIES; *RETRENCHMENT

SCRIPTIVE NOTE: 36-38P.

ABSTRACT: REDUCED TAX REVENUES ARE FORCING MUNICIPAL AGENTS TO SEARCH FOR COST-CUTTING IDEAS. THERE ARE A RIETY OF RETRENCHMENT MANAGEMENT TECHNIQUES TO WHICH THEY TURN. THESE METHODS CAN BE USED TO EXTEND THE REACH OF LIMITED FUNDS-AND STILL EXPAND PUBLIC SERVICES.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N11

IRIS ACCESSION NUMBER: EW011697

PUBLICATION DATE: OCT 84

TITLE: A SURVEY OF COMBINED TRICKLING FILTER AND ACTIVATED SLUDGE PROCESSES.

PERSONAL AUTHOR: HARRISON, JOHN R.; AND OTHERS

SCRIPTOR: *ACTIVATED SLUDGE; *COMBINED PROCESSES; *COSTS; LITTERS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; SURVEYS; *TRICKLING FILTERS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1073-79P.

ABSTRACT: FORTY-THREE PLANTS WERE CONTACTED FOR INFORMATION ON TREATMENT PROCESSES COMBINING TRICKLING FILTERS AND ACTIVATED SLUDGE. PLANT OPERATORS GIVE THE COMBINED SYSTEMS HIGH MARKS FOR THEIR ABILITY TO HANDLE SHOCK LOADS, PROCESS FLEXIBILITY, AND EASE OF OPERATION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N10

IRIS ACCESSION NUMBER: EW011698

PUBLICATION DATE: OCT 82

TITLE: OPTIMIZATION OF A WASTEWATER TREATMENT PLANT BY THE EMPLOYEE INVOLVEMENT OPTIMIZATION SYSTEM (EIOS). PERSONAL AUTHOR: SPRINGER, A. M.; AND OTHERS DESCRIPTOR: *EMPLOYEE INVOLVEMENT; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PERSONNEL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1080-92P.

ABSTRACT: PLANT MANAGERS AND OPERATORS ARE A VALUABLE RESOURCE THAT CAN BE USED TO TEST NEW OR IMPROVED OPERATING PROCEDURES. THIS PAPER DISCUSSES TWO OPTIMIZATION STRATEGIES FOR IMPROVING PRACTICES TO OBTAIN HIGHER QUALITY EFFLUENTS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N10

IRIS ACCESSION NUMBER: EW011699

PUBLICATION DATE: OCT 84

TITLE: CASE HISTORY OF INDUSTRIAL PRETREATMENT IN COLUMBUS, OHIO. PERSONAL AUTHOR: STONEROOK, H.; AND OTHERS DESCRIPTOR: *CASE HISTORIES; *INDUSTRIAL WASTES; *INDUSTRY; *METALS; *MONITORING; *OPERATIONS (WASTEWATER); *OHIO; *PRETREATMENT; *PRIORITY POLLUTANTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1093-98P.

ABSTRACT: DESCRIBED IS AN INDUSTRIAL PRETREATMENT PROGRAM IN COLUMBUS, OHIO. TREATMENT MONITORING COSTS WILL BE RECOVERED THROUGH "COMMODITY SPECIFIC" AND "CUSTOMER SPECIFIC" CHARGES IN THE SEWER USE ORDINANCE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N10

IRIS ACCESSION NUMBER: EW011700

PUBLICATION DATE: OCT 84

ITLE: ON-LINE MONITORING DATA REPLACES ANALYTICAL DATA.

PERSONAL AUTHOR: WINTER, FREDERIC J.; OGLE, DALE F.

ESCRIPATOR: *ANALYTICAL TECHNIQUES; *COSTS; *ILLINOIS; LABORATORY PROCEDURES; *MONITORING; *OPERATIONS (WASTEWATER); *ONLINE MONITORING; *PERFORMANCE EVALUATION; SUSPENDED SOLIDS; *WASTEWATER TREATMENT

ESCRIPITIVE NOTE: 1099-1103P.

BSTRACT: DESCRIBED IS AN ONLINE MONITORING SYSTEM USED IN AN ILLINOIS WASTEWATER SYSTEM. ALONG WITH DECREASING THE NUMBER OF SUSPENDED SOLIDS, ANALYSES NEEDED, ON-LINE MONITORING LEADS TO MORE CONSISTENT PLANT PERFORMANCE.

AILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; 56 N10

PERSONAL AUTHOR: LEVINE, PAUL E.

ESCRIPATOR: *EGYPT; *INFILTRATION; *IRRIGATION; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RAPID INFILTRATION; RECYCLING; *WATER REUSE; *WASTEWATER TREATMENT

ESCRIPITIVE NOTE: 1104-09P.

BSTRACT: DESCRIBED IS A RAPID INFILTRATION SYSTEM IN EGYPT, WITH THE EXCEPTION OF SALINITY AND NITRATE, THE ERCOLATE MET ALL GENERALLY ACCEPTED GUIDELINES FOR IRRIGATION WATER SOURCES.

AILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; 56 N10

PERSONAL AUTHOR: BACHELOR, B.; MCDEVITT, M.

IRIS ACCESSION NUMBER: EW011702

PUBLICATION DATE: OCT 84

ITLE: AN INNOVATIVE PROCESS FOR TREATMENT RECYCLED COOLING WATER.

ESCRIPATOR: *COOLING WATER; *COSTS; *LIME; *PERFORMANCE EVALUATION; *RECYCLING; *SILICA; *WATER CONSERVATION; *WATER TREATMENT

ESCRIPITIVE NOTE: 1110-17P.

ABSTRACT: DESCRIBED IS AN INNOVATIVE PROCESS FOR TREATING RECYCLED COOLING WATER. THE KINETICS OF SILICA REMOVAL BY AN ULTRA-HIGH LIME PROCESS ARE RAPID ENOUGH FOR COMPLETE REACTION AT NORMAL RETENTION TIMES.

AILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N10

ESCRIPATOR: *ANALYTICAL TECHNIQUES; *COSTS; *ILLINOIS; LABORATORY PROCEDURES; *MONITORING; *OPERATIONS (WASTEWATER); *ONLINE MONITORING; *PERFORMANCE EVALUATION; SUSPENDED SOLIDS; *WASTEWATER TREATMENT

ESCRIPITIVE NOTE: OCT 84.

TITLE: A METHOD FOR ESTABLISHING SITE-SPECIFIC STREAM DESIGN FLOWS FOR WASTELOAD ALLOCATIONS.

PERSONAL AUTHOR: BISWAS, H.; BELL, B. A.

ESCRIPATOR: *MODELING; *MODELS; *STREAM DESIGN FLOWS; *WASTELOAD ALLOCATIONS; *WATER QUALITY

ESCRIPITIVE NOTE: 1123-30P.

ABSTRACT: THE MAJOR OBJECTIVE OF THIS STUDY WAS TO DEVELOP A SCIENTIFIC METHOD FOR ESTABLISHING THE STREAM DESIGN FLOW FOR USE IN WATER QUALITY MODELING. WITH THE PROPOSED METHOD, ALMOST TWICE THE WASTE LOAD OF MANY POLLUTANTS MAY BE DISCHARGED THAN MAY BE USING THE 7-DAY, 10-YEAR LOW FLOW BASIS.

AILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N10

ESCRIPATOR: *EGYPT; *INFILTRATION; *IRRIGATION; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RAPID INFILTRATION; RECYCLING; *WATER REUSE; *WASTEWATER TREATMENT

ESCRIPITIVE NOTE: OCT 84.

TITLE: STATUS OF WATER QUALITY MODELING IN THE PULP AND PAPER INDUSTRY.

PERSONAL AUTHOR: FIRTH, BARRY K.

ESCRIPATOR: *INDUSTRIAL WASTES; INDUSTRY; *MODELING; *NCASI; *PAPER INDUSTRY; *PULP INDUSTRY; *REVIEWS; *WASTE TREATMENT; *WATER QUALITY

ESCRIPITIVE NOTE: 1131-35P.

ABSTRACT: THE OBJECTIVE OF THIS PAPER IS TO SUMMARIZE THE SIGNIFICANT FINDINGS OF THE NCASI MODELING PROGRAM. TO DATE, THE MAIN FOCUS HAS BEEN MAINTAINING DO STANDARDS, BUT ADVANCES HAVE BEEN MADE IN INPUT PARAMETER ESTIMATION, MODEL SELECTION, AND VERIFICATION.

AILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N10

IRIS ACCESSION NUMBER: EW011795

PUBLICATION DATE: AUG 84

TITLE: ELECTRODIALYSIS DESALINATION. 1970-JULY, 1984
(CITATIONS FROM THE ENGINEERING INDEX DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES;
*DESALINATION; *ELECTRODIALYSIS; *EQUIPMENT; *OPERATIONS
(WATER); *PERFORMANCE EVALUATION; WATER; *WATER RESOURCES

DESCRIPTIVE NOTE: 105P. PRICE CODE: PC N01/MF N01. ORDER
NO.: PB84-873454

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING
THE UTILIZATION OF ELECTRODIALYSIS TECHNIQUES AND EQUIPMENT
IN THE DESALINATION OF SEA WATER, BRACKISH WATER, AND WASTE
WATERS. TOPICS INCLUDE PLANT OPERATIONS AND PERFORMANCE
EVALUATIONS, EMBODIMENT PROCESSES, HYDRODYNAMICS, AND SURFACE
POULING. THEORETICAL STUDIES OF ELECTRODIALYSIS PROCESSES
ARE TREATED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 146
CITATIONS, 27 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS
EDITION.)

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

IRIS ACCESSION NUMBER: EW011796

PUBLICATION DATE: AUG 84

TITLE: SEWAGE EFFECTS IN MARINE AND ESTUARINE ENVIRONMENTS.
1977-AUGUST, 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES;
*EFFLUENTS; *ENVIRONMENTAL IMPACT; *ESTUARIES; *OCEANS;
*OCEAN DUMPING; *RESEARCH; *SEWAGE; *WASTE DISPOSAL;
*WASTEWATER

DESCRIPTIVE NOTE: 136P. PRICE CODE: PC N01/MF N01. ORDER
NO.: PB84-873694

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING
THE EFFECTS THAT SEWAGE EFFLUENTS AND SLUDGE HAVE UPON
MARINE AND ESTUARINE ENVIRONMENTS. THE EFFECTS ON MARINE
PLANTS AND ANIMALS, PROBLEMS DUE TO OCEAN DUMPING,
DISPERSION STUDIES, WATER CHEMISTRY, AND OTHER RELATED
TOPICS ARE INCLUDED. REGIONAL AND SITE STUDIES REGARDING
ENVIRONMENTAL EFFECTS OF OCEAN WASTE DISPOSAL AND SEWAGE
DISPOSAL ARE PRESENTED. (THIS UPDATED BIBLIOGRAPHY CONTAINS
305 CITATIONS, 30 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS
EDITION.)

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

IRIS ACCESSION NUMBER: EW011797

PUBLICATION DATE: JUN 84

TITLE: HYDROLOGICAL SIMULATION PROGRAM - FORTRAN (HSPP):
USERS MANUAL FOR RELEASE 3.0.

PERSONAL AUTHOR: JOHANSON, R. C.; AND OTHERS

DESCRIPTOR: *COMPUTER APPLICATIONS; *HYDROLOGY; *MANUALS;
*SIMULATIONS; *USER MANUALS; *WATER QUALITY

DESCRIPTIVE NOTE: 776P. PRICE CODE: PC A99/MF E04. ORDER
NO.: PB84-224385

ABSTRACT: THE HYDROLOGICAL SIMULATION PROGRAM--FORTRAN (HSPP) IS A SET OF COMPUTER CODES THAT CAN SIMULATE THE HYDROLOGIC, AND ASSOCIATED WATER QUALITY, PROCESSES ON PERVERIOUS AND IMPERVIOUS LAND SURFACES AND IN STREAMS AND WELL MIXED IMPOUNDMENTS. THE MANUAL DISCUSSES THE MODULAR STRUCTURE OF THE SYSTEM, THE PRINCIPLES OF STRUCTURED PROGRAMMING TECHNOLOGY, AND THE USE OF THESE PRINCIPLES IN THE CONSTRUCTION OF THE HSPP SOFTWARE. IN ADDITION TO A PICTORIAL REPRESENTATION OF HOW EACH OF THE 500 SUBPROGRAMS FITS INTO THE SYSTEM, THE MANUAL PRESENTS A DETAILED DISCUSSION OF THE ALGORITHMS USED TO SIMULATE VARIOUS WATER QUALITY AND QUANTITY PROCESSES. DATA USEFUL TO THOSE WHO NEED TO INSTALL, MAINTAIN, OR ALTER THE SYSTEM OR WHO WISH TO EXAMINE ITS STRUCTURE IN GREATER DETAIL ALSO PRESENTED. THE MANUAL IS AN UPDATE OF USERS MANUAL FOR HYDROLOGICAL SIMULATION PROGRAM--FORTRAN (HSPP), EPA-600/9-80-015.

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

IRIS ACCESSION NUMBER: EW011798

PUBLICATION DATE: 84

TITLE: SURVEY OF EMPLOYMENT OPPORTUNITIES IN WATER
RESOURCES. 1984 EDITION.

DESCRIPTOR: *CONSULTING FIRMS; *EMPLOYMENT OPPORTUNITIES;
*INDUSTRY; *MANUFACTURERS; *STATE AGENCIES; *SURVEYS;
*UNIVERSITIES; *WATER RESOURCES

DESCRIPTIVE NOTE: PRICE: \$10.00

ABSTRACT: THIS SURVEY WAS DESIGNED TO PROVIDE INFORMATION
ON CONSULTING FIRMS AND MANUFACTURERS WHO ARE POTENTIAL
EMPLOYERS OF INDIVIDUALS TRAINED IN ANY OF THE VARIOUS
DISCIPLINES CONCERNED WITH WATER RESOURCES. THE SURVEY WAS
UNDERTAKEN BECAUSE THE FIELD OF WATER RESOURCES COVERS MANY
DISCIPLINES AND NO SATISFACTORY JOB PLACEMENT INFORMATION
WAS AVAILABLE. YOU WILL FIND INFORMATION ON A WIDE RANGE OF
EMPLOYERS IN THE PRIVATE SECTOR, STATE AGENCIES, AND
UNIVERSITIES WHO HAVE WATER RESOURCES RELATED INTERESTS. THE
SURVEY WAS COMPILED BY THE STUDENT CHAPTER OF THE UNIVERSITY
OF MINNESOTA, WITH ASSISTANCE FROM THE HEADQUARTERS, THE AWRA NATIONAL
HEADQUARTERS, AS A PUBLIC SERVICE ENDEAVOR.

AVAILABILITY: AMERICAN WATER RESOURCES ASSOCIATION, 5410

49

PUBLICATION DATE: FALL 84

IRIS ACCESSION NUMBER: EW011710

PUBLICATION DATE: MAR 84

TITLE: PUBLIC PARTICIPATION IN ENVIRONMENTAL DECISION MAKING: STRATEGIES FOR CHANGES. PROCEEDINGS OF A NATIONAL WORKSHOP.

PERSONAL AUTHOR: SADLER, BARRY, ED.

DESCRIPTOR: *CANADA; *CHANGE PROCESS; *CONFERENCE PROCEEDINGS; *DECISION MAKING; *ENVIRONMENT; *EVALUATION; *MANAGEMENT; *PLANNING; *PROGRAM DEVELOPMENT; *PUBLIC PARTICIPATION; *POLICY DEVELOPMENT DESCRIPTIVE NOTE: 134P.

ABSTRACT: THE WORKSHOP PROCEEDINGS REPRESENT A RESOURCE DOCUMENT WHICH PROVIDES BROAD STRATEGIES FOR INTEGRATING PUBLIC INVOLVEMENT INTO THE ENVIRONMENTAL DECISION-MAKING PROCESS. EACH PROBLEM AREA WAS THE SUBJECT OF A THREE-PHASE REVIEW. MOST OF THE MATERIALS FOCUS ON THE CANADIAN SITUATION.

AVAILABILITY: ENVIRONMENT COUNCIL OF ALBERTA, 2100 COLLEGE PLAZA, 8215 - 112 STREET, TOWER 3, EDMONTON, ALBERTA T6G 2M6 CANADA

IRIS ACCESSION NUMBER: EW011711
PUBLICATION DATE: MAR 84

TITLE: WETLANDS OF THE UNITED STATES: CURRENT STATUS AND RECENT TRENDS.

DESCRIPTOR: *NATURAL RESOURCES; *WETLANDS; *UNITED STATES

DESCRIPTIVE NOTE: 59P. PRICE: \$3.00. GPO STOCK#: 024-010-00656-1

ABSTRACT: THIS IS A POPULAR REPORT PREPARED BY THE U.S. FISH AND WILDLIFE SERVICE TO INFORM THE GENERAL PUBLIC, GOVERNMENT AGENCIES, PRIVATE INDUSTRY AND OTHERS ABOUT THE PRESENT STATUS OF U.S. WETLANDS. THE REPORT ALSO IDENTIFIES WHERE WETLANDS ARE IN GREATEST JEOPARDY FROM THE NATIONAL STANDPOINT AND PRESENTS EXISTING INFORMATION ON WETLAND TRENDS. IT INCLUDES GENERAL DISCUSSIONS OF THE CONCEPT OF MAJOR U.S. WETLAND TYPES, AND WETLAND VALUES. THE FUTURE OF AMERICA'S REMAINING WETLANDS IS ALSO DISCUSSED.

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

IRIS ACCESSION NUMBER: EW011713

TITLE: PROCEEDINGS OF THE SECOND NATIONAL SYMPOSIUM AND EXPOSITION ON GROUND WATER INSTRUMENTATION.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *EQUIPMENT; *INSTRUMENTATION; *MONITORING; *GROUNDWATER; *POLLUTION; *SAMPLE CONTROL; *SAMPLING; *TECHNOLOGY; *WATER QUALITY

DESCRIPTIVE NOTE: 31-192P.

ABSTRACT: THIS ISSUE IS THE PROCEEDINGS OF THE SECOND NATIONAL SYMPOSIUM AND EXPOSITION ON GROUND WATER INSTRUMENTATION. SECTIONS ARE INCLUDED ON: (1) GROUND WATER SAMPLING DEVICES, (2) SURFACE GEOPHYSICAL EQUIPMENT, (3) GROUND WATER MONITORING TECHNOLOGY, (4) WALL TESTING EQUIPMENT AND TECHNIQUES, (5) VADOS ZONE MONITORING EQUIPMENT, AND (6) BOREHOLE GEOPHYSICAL EQUIPMENT.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V4 N4

PUBLICATION DATE: SEP 84
TITLE: HAZARDOUS MATERIALS EMERGENCY RESPONSE TRAINING: THE COLORADO TRAINING INSTITUTE.
IRIS ACCESSION NUMBER: EW011713

PERSONAL AUTHOR: COLE, LESLIE

DESCRIPTOR: *HAZARDOUS MATERIALS; *INDUSTRIAL WASTES; *PROGRAM DESCRIPTIONS; *STATE PROGRAMS; *SAFETY; SAFETY EDUCATION; *TRANSPORTATION; *TRAINING OBJECTIVES; TRAINING

DESCRIPTIVE NOTE: 12P. PRICE: SINGLE COPIES FREE TO STATE OFFICIALS; \$4.00 EACH TO ALL OTHERS.

ABSTRACT: THE COLORADO TRAINING INSTITUTE (CTI) ESTABLISHED IN 1980, IS A NON-PROFIT, INSTRUCTIONAL PROGRAM DEVOTED TO PROMOTING HAZARDOUS MATERIALS SAFETY THROUGH EDUCATION. IT HAS TRAINED OVER 3,000 EMERGENCY RESPONSE PERSONNEL AND INDUSTRY OFFICIALS AND IS A UNIQUE EXAMPLE OF THE PRIVATE AND PUBLIC SECTORS WORKING TOGETHER TO PROTECT THE PUBLIC FROM INJURY, DEATH, OR OTHER LOSSES RESULTING FROM THE TRANSPORTATION OF HAZARDOUS MATERIALS. THIS DOCUMENT PROVIDES BACKGROUND INFORMATION ON THE CTI AND DESCRIPTIONS AND OBJECTIVES OF FOUR CTI TRAINING PROGRAMS: A 3-DAY HAZARDOUS MATERIALS AWARENESS SEMINAR; A 2-WEEK HAZARDOUS MATERIALS TRAINING COURSE; A 5-DAY SHIPPERS AND CARRIERS SEMINAR; AND A 5-DAY COURSE WHICH INCLUDES SEMINARS ON INSPECTION AND COMPLIANCE OF CARGO TANKS AND COMMERCIAL VEHICLES. DESCRIPTIONS OF TRAINING PROGRAMS IN GEORGIA, PENNSYLVANIA, AND WISCONSIN, AS WELL AS DESCRIPTIONS OF STATE TRAINING FOR HAZARDOUS MATERIALS EMERGENCY RESPONSE AND THE DUTIES AND LOCATION OF STATE EMERGENCY RESPONSE TEAMS ARE ALSO PROVIDED. IT IS POINTED OUT THAT THE ROLE OF THE STATES IN HAZARDOUS MATERIALS REGULATION, COUPLED WITH LIMITED FUNDS, HAS PRESSURED STATES TO FIND INNOVATIVE AND MORE COORDINATED APPROACHES TO ENFORCE REGULATIONS AND PROVIDE ADEQUATE TRAINING, AND THAT CTI IS A GOOD EXAMPLE OF

STATE'S RESPONSE TO MEETING THIS NEED.

AVAILABILITY: THE COUNCIL OF STATE GOVERNMENTS, P. O. BOX 10, IRON WORKS PIKE, LEXINGTON, KY 40578

S ACCESSION NUMBER: EW011714
PUBLICATION DATE: OCT 84
TITLE: A/C INTERFACE: EXPERT SYSTEMS, PART II.
PERSONAL AUTHOR: DESSY, RAYMOND E.

SCRIPTOR: *ANALYTICAL CHEMISTRY; *CHEMICAL ANALYSIS; *ARTIFICIAL INTELLIGENCE; *CHEMISTRY; *CHEMICAL TECHNIQUES; *ARTIFICIAL PROCEDURES
ABSTRACT: DISCUSSES WORKING IMPLEMENTATIONS OF ARTIFICIAL INTELLIGENCE SYSTEMS FOR CHEMICAL LABORATORY APPLICATIONS. THEY INCLUDE EXPERT SYSTEMS FOR LIQUID CHROMATOGRAPHY, INSTRUMENT CONTROL OF A TOTALLY COMPUTERIZED TRIPLE-QUADRUPOLE MASS SPECTROMETER, AND THE DETERMINATION OF THE MINERAL CONSTITUENTS OF A ROCK SAMPLE IN THE POWDER DIFFRACTION SPECTRUM OF THAT SAMPLE.

SCRIPTIVE NOTE: 1312A-14A, 1316AP.

S ACCESSION NUMBER: EW011715
PUBLICATION DATE: OCT 84
TITLE: ANALYZING CHEMICAL DATA WITH COMPUTERS: ERRORS & FALLS.
PERSONAL AUTHOR: SHUKLA, SHYAM S.; RUSLING, JAMES F.

SCRIPTOR: ANALYTICAL TECHNIQUES; *COMPUTATION; COMPUTATIONAL ERRORS; *CHEMICAL ANALYSIS; *DATA ANALYSIS; *STATISTICS
ABSTRACT: HOW COMPUTATIONAL ERRORS ARISE IN COMPUTATIONS OF DATA AND HOW THEY CAN BE MINIMIZED. SHOWS THAT COMPUTATIONS ARE SUBJECT TO ROUNDOFF/TRUNCATION ERRORS. HOW SUCH ERRORS ARE PROPAGATED AND INFLUENCE THE ABILITY AND CONDITION OF A REACTION. PROCEDURES USED IN ANALYTICAL CHEMISTRY ARE ADDRESSED.

SCRIPTIVE NOTE: 1347A-48A, 1350AP.

S ACCESSION NUMBER: EW011716
PUBLICATION DATE: OCT 84
TITLE: SPECTROPHOTOMETRIC DETERMINATION OF NITRITE IN

WATERS WITH 5, 7-DIHYDROXY-4-IMINO-2-OXOCHROMAN.

PERSONAL AUTHOR: NAKAMURA, MOTOSHI; AND OTHERS
DESCRIPTOR: *ANALYTICAL TECHNIQUES; *LABORATORY PROCEDURES; *NITRITES; *SPECTROPHOTOMETRY; *WATER

SCRIPTIVE NOTE: 2242-44P.

ABSTRACT: THIS ARTICLE DESCRIBES A SPECTROPHOTOMETRIC PROCEDURE FOR DETERMINING NITRITE IN WATER.

AVAILABILITY: ANALYTICAL CHEMISTRY; V56 N12

S ACCESSION NUMBER: EW011717
PUBLICATION DATE: NOV 84
TITLE: COMPUTER-BASED INDUSTRIAL TRAINING: A PRIMER.

PERSONAL AUTHOR: GOVAERTS, KENNETH C.; GRILLOT, THOMAS A.
DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER BASED INSTRUCTION; *INSTRUCTION; *RECOMMENDATIONS; *TRAINING
ABSTRACT: THE USES OF COMPUTER-BASED TRAINING KEEP INCREASING. THIS ARTICLE PRESENTS SEVERAL ADVANTAGES AND DISADVANTAGES OF SUCH PROGRAMS.

S ACCESSION NUMBER: EW011718
PUBLICATION DATE: NOV 84
TITLE: WRITING MORE BUT ENJOYING IT LESS?
PERSONAL AUTHOR: BOOHER, DIANNA
DESCRIPTOR: *COMMUNICATION; *RECOMMENDATIONS; *WRITING
ABSTRACT: THIS ARTICLE PROVIDES ADVICE ON IMPROVING WRITING SKILLS.

S ACCESSION NUMBER: EW011719
PUBLICATION DATE: NOV 84
TITLE: COMPETENCY-BASED TRAINING EVALUATION.
PERSONAL AUTHOR: MOORE, ELIZABETH RANDALL

ESCRIPTOR: *COMPETENCY EVALUATION; *BASED INSTRUCTION; *TRAINING;
PERFORMANCE EVALUATION NOTE: 92-94P.

IRIS ACCESSION NUMBER: EW011722
PUBLICATION DATE: OCT 84

BSTRACT: DESCRIBED IS A COMPETENCY BASED TRAINING EVALUATION APPROACH. WHILE THE DESIGN WAS USED WITH AN INSURANCE COMPANY, THE MODEL CAN BE USED WITH OTHER GROUPS.

PERSONAL AUTHOR: TRAINING AND DEVELOPMENT JOURNAL; V38 N11

ESCRITIPE NOTE: 92-94P.

PUBLICATION DATE: NOV 84

TITLE: ATTRIBUTION THEORY AND MANAGEMENT EDUCATION.

PERSONAL AUTHOR: FREEDMAN, STUART C.

ESCRITIPE NOTE: *ATTRIBUTION THEORY; *EMPLOYEE EVALUATION; MANAGEMENT; *ORGANIZATIONAL PROBLEMS; *PERFORMANCE EVALUATION; *PROBLEM DIAGNOSIS; *PRODUCTIVITY; *TRAINING

ESCRITIPE NOTE: 95-99P.

BSTRACT: THIS ARTICLE EXAMINES THE ORGANIZATIONAL PROBLEM OF ATTRIBUTION AND ITS IMPLICATIONS FOR PROBLEM DIAGNOSIS, PERFORMANCE EVALUATION, AND MANAGEMENT EDUCATION. ATTRIBUTION IS THE PROCESS OF MAKING INFERENCES ABOUT THE MOTIVES UNDERLYING ANOTHER'S BEHAVIOR.

PERSONAL AUTHOR: TRAINING AND DEVELOPMENT JOURNAL; V38 N11

ESCRITIPE NOTE: 95-99P.

PUBLICATION DATE: NOV 84

TITLE: AN OVERVIEW OF WATER TREATMENT PRACTICES IN THE UNITED STATES.

PERSONAL AUTHOR: STACHA, JOHN H.; PONTIUS, FREDERICK W.

ESCRITIPE NOTE: *DESIGN; *FACILITIES; *HISTORY; *OPERATIONS WATER; *REGULATIONS; *TRENDS; *UNITED STATES; *WATER TREATMENT; *WATER UTILITIES; *WATER QUALITY

ESCRITIPE NOTE: 73-85P.

BSTRACT: A HISTORY OF WATER TREATMENT PRACTICES AND WATER QUALITY REGULATIONS IN THE UNITED STATES PROVIDES THE BACKGROUND FOR CURRENT TRENDS. NEW DEVELOPMENTS THAT ARE COMING INTO USE TO ADDRESS NEW CONCERNs ARE ALSO DISCUSSED.

PERSONAL AUTHOR: TRAINING AND DEVELOPMENT JOURNAL; V38 N11

IRIS ACCESSION NUMBER: EW011722
PUBLICATION DATE: OCT 84

TITLE: SCUBA DIVING: A TOOL FOR MANAGING WATER QUALITY.
PERSONAL AUTHOR: MEANS, EDWARD G.; AND OTHERS

DESCRIPTOR: *CALIFORNIA; *MONITORING; *MANAGEMENT; *RESERVOIRS; *SCUBA DIVERS; *WATER RESOURCES; *WATER SUPPLY; *WATER QUALITY

DESCRIPTIVE NOTE: 86-92P.

ABSTRACT: INFORMATION GATHERED BY SCUBA DIVERS AUGMENTS LABORATORY ANALYSES OF WATER QUALITY. THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA HAS TRAINED AND USED A GROUP OF SCUBA DIVERS FOR WORK IN STORAGE RESERVOIRS. THIS ARTICLE DESCRIBES HOW TO DEVELOP A SUCCESSFUL PROGRAM AND SOME OF THE PROBLEMS RESOLVED IN PREVIOUS WORK.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N10

IRIS ACCESSION NUMBER: EW011723

PUBLICATION DATE: OCT 84

TITLE: POLYMERIZED IRON CHLORIDE: AN IMPROVED INORGANIC COAGULANT.

PERSONAL AUTHOR: LEPRINCE, ANTOINE; AND OTHERS

DESCRIPTOR: *COAGULANTS; *INORGANIC COAGULANTS; *IRON CHLORIDE; *PERFORMANCE EVALUATION; *POLYMERIZED IRON CHLORIDE; *RESEARCH; *WATER TREATMENT

DESCRIPTIVE NOTE: 93-97P.

ABSTRACT: DESCRIBED ARE EXPERIMENTS THAT WERE DONE TO DETERMINE THE EFFECTIVENESS OF PIC. POLYMERIZED IRON CHLORIDE IS MORE EFFICIENT THAN CONVENTIONAL FERRIC CHLORIDE FOR TURBIDITY REMOVAL, PARTICULARLY AT LOW WATER TEMPERATURES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N10

IRIS ACCESSION NUMBER: EW011724

PUBLICATION DATE: OCT 84

TITLE: CHEMICAL INDICATORS AND SURROGATE PARAMETERS IN WATER TREATMENT.

PERSONAL AUTHOR: MCCARTY, PERRY L.; AIETA, E. MARCO

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CALIFORNIA; *CHEMICAL INDICATORS; *CONTAMINANTS; *LABORATORY PROCEDURES; *MONITORING; *OPERATIONS (WATER); *PARAMETERS; *PERFORMANCE

EVALUATION; *SURROGATE PARAMETERS; *WATER QUALITY; *WATER TREATMENT
 DESCRIPTIVE NOTE: 93-106P.
 STRACT: SURROGATE PARAMETERS ALLOW RELATIVELY INEXPENSIVE MONITORING OF WATER TREATMENT PROCESSES. THIS ARTICLE DESCRIBES A STUDY CONDUCTED AT WATER FACTORY 21 IN ORANGE COUNTY, CALIFORNIA.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION; V76 N10

IRIS ACCESSION NUMBER: EW011725
 PUBLICATION DATE: NOV 84

BLICATION DATE: OCT 84

TLE: ACHIEVING BIOLOGICALLY STABLE DRINKING WATER.

PERSONAL AUTHOR: RITTMANN, BRUCE E.; SNOEYINK, VERNON L.

SCRIPTOR: *AMMONIA; *BIOLOGICALLY STABLE WATER; *DRINKING WATER; *FILTRATION; *MANCAUSE; *NITROGEN; *OPERATIONS; *ORGANIC SUBSTANCES; *WATER QUALITY; *WATER TREATMENT
 DESCRIPTIVE NOTE: 106-14P.

STRACT: EUROPEAN PRACTICE SHOWS THAT DRINKING WATER IS DE-TOXICATED BY TREATING IT IN BIOLOGICALLY ACTIVE PROCESSES. THIS ARTICLE DESCRIBES HOW THESE PROCESSES CAN BE ED WITHIN A WATER TREATMENT PLANT TO REMOVE ORGANIC AND ORGANIC SUBSTRATES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76

IRIS ACCESSION NUMBER: EW011726
 PUBLICATION DATE: NOV 84

BLICATION DATE: NOV 84

TLE: LATERAL SEALING SYSTEM HELPS CONTROL I/I.

SCRIPTOR: *INFILTRATION; *INFLOW; *MAINTENANCE; *REHABILITATION; *SEALING; *SEWER SYSTEMS; *STEWATER COLLECTION
 DESCRIPTIVE NOTE: 53-61P.

STRACT: A NEW LATERAL SEALING PACKER CAN HELP ELIMINATE THE PROBLEM OF EXCESS INFILTRATION AND INFLOW. USE THE PACKER IN MARYLAND IS DESCRIBED.

AVAILABILITY: PUBLIC WORKS; V115 N11

IRIS ACCESSION NUMBER: EW011727
 PUBLICATION DATE: NOV 84

TITLE: INSPECTION METHODS FOR WATER TANKS AND RESERVOIRS.

PERSONAL AUTHOR: COLLINS, THOMAS J.
 DESCRIPTOR: *INSPECTION; *WATER RESERVOIRS; *WATER TANKS;
 *WATER SUPPLY; *WATER STORAGE; *WATER DISTRIBUTION
 DESCRIPTIVE NOTE: 62-64P.

ABSTRACT: DESCRIBED ARE PROCEDURES FOR HOW TO INSPECT WATER STORAGE FACILITIES. AN INSPECTION CHECKLIST IS INCLUDED.

AVAILABILITY: PUBLIC WORKS; V115 N11

IRIS ACCESSION NUMBER: EW011728
 PUBLICATION DATE: NOV 84

TITLE: FORMING A SEWER DISTRICT SAVES CITY FROM DEFAULT.
 PERSONAL AUTHOR: ALESSI, CHARLES J.

SCRIPTOR: *COSTS; *FINANCES; *FUNDING; *NEW YORK; *SEWER DISTRICTS; *SEWERS; *WASTEWATER COLLECTION; *WASTEWATER TREATMENT
 DESCRIPTIVE NOTE: 76-73, 92P.

ABSTRACT: DESCRIBED IS THE FORMATION OF A SEWER DISTRICT THAT SAVED LACKAWANNA, NEW YORK FROM DEFAULTING ON ITS NOTES.

AVAILABILITY: PUBLIC WORKS; V115 N11

IRIS ACCESSION NUMBER: EW011729
 PUBLICATION DATE: NOV 84

TITLE: WATER UTILITY PERSONNEL USE MICROCOMPUTER FOR SMALL SYSTEM ANALYSIS.
 PERSONAL AUTHOR: MCCLAMARRAH, JANE A.; STAUFF, JOHN F.

SCRIPTOR: *COMPUTER APPLICATIONS; *PIPES; *PIPE NETWORKS; *WATER DISTRIBUTION; *WATER SUPPLY; *WATER NETWORK ANALYSIS
 DESCRIPTIVE NOTE: 82-83P.

ABSTRACT: DESCRIBED IS HOW A MICROCOMPUTER PROGRAM WAS APPLIED FOR PIPE NETWORK ANALYSIS IN A SMALL SYSTEM.

AVAILABILITY: PUBLIC WORKS; V115 N11

IS ACCESSION NUMBER: EW011730
 BLICATION DATE: 9/10 84

TLE: POLLUTING SEWERS BROUGHT UNDER CONTROL.

RSONAL AUTHOR: MORSE, ROBERT S.; ECKRICH, HELEN M.

SCRIPTOR: *INDIANA; *MAINTENANCE; *MANAGEMENT;
 MONITORING; *PERFORMANCE EVALUATION; *POLLUTION CONTROL;
 FLOWERS; *SEWER OVERFLOWS; *WASTEWATER COLLECTION; *WATER
 LIUTION CONTROL.

SCRIPTIVE NOTE: 63-70P.

STRACT: DESCRIBED ARE PROCEDURES USED IN MARION COUNTY,
 DIANA TO REDUCE DRY WEATHER OVERFLOWS FROM COMBINED
 SEWERS. EFFORTS PRODUCED SUBSTANTIAL IMPROVEMENTS.

AILABILITY: JOURNAL OF ENVIRONMENTAL HEALTH; V47 N2

IRIS ACCESSION NUMBER: EW011733

IS ACCESSION NUMBER: EW011731
 BLICATION DATE: 30 APR

TLE: HAZARDOUS MATERIALS INFORMATION HOTLINE USING SYSTEM
 00.

RSONAL AUTHOR: BROWER, J. E.; FUCHEL, K.

SCRIPTOR: *CHEMICALS; *COMPUTER HOTLINES; *HEALTH
 FORMATION; *HAZARDOUS MATERIALS; *INFORMATION
 SEMINATION; *SAFETY INFORMATION; *TOXIC SUBSTANCES

SCRIPTIVE NOTE: 13P. PRICE CODE: PC A02/MF A01. ORDER
 NO.: DE84010791

STRACT: THE CENTER FOR ASSESSMENT OF CHEMICAL AND
 YSICAL HAZARDS (CACH) AT BROOKHAVEN NATIONAL LABORATORY
 NL HAS DEVELOPED A COMPUTER HOTLINE SERVICE FOR THE
 PARTIMENT OF ENERGY (DOE) AND ITS CONTRACTORS. THIS SERVICE
 OVIDES ACCESS TO HAZARD AND SAFETY INFORMATION FOR OVER
 0 CHEMICALS AND HAZARDOUS MATERIALS. THE DATA BASE USES
 STEM 2000 ON A CDC 6600 AND PROVIDES INFORMATION ON THE
 EMICAL NAME AND ITS SYNONYMS, 17 CATEGORIES OF HEALTH AND
 FETY INFORMATION, COMPOSITION OF CHEMICAL MIXTURES,
 TEGORIES OF CHEMICALS, USE AND HAZARDS, AND PHYSICAL
 EMICAL AND TOXICITY ATTRIBUTES. IN ORDER TO MAKE THIS
 FORMATION AVAILABLE TO PEOPLE UNFAMILIAR WITH SYSTEM 2000,
 USER-FRIENDLY INTERFACE WAS DEVELOPED USING A FORTRAN PLEX
 OGRAM.

AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285
 RT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011734
 PUBLICATION DATE: AUG 84

IS ACCESSION NUMBER: EW011732
 BLICATION DATE: 83

TLE: HAZARDOUS WASTE: THE SEARCH FOR SOLUTIONS.

SCRIPTOR: *AUDIOVISUAL AIDS; *CONTAMINATION; *FILMS;
 *HAZARDOUS WASTES; *INSTRUCTIONAL MATERIALS; *POSTSECONDARY
 EDUCATION; *PUBLIC PARTICIPATION; *WATER RESOURCES
 DISPOSAL; *TOXIC SUBSTANCES;

SCRIPTIVE NOTE: 35 MINUTE FILM, \$54.5. FILM RENTAL: \$55.

STRACT: THIS TELEVISION DOCUMENTARY FOCUSES ON FIVE
 STATES WHERE CITIZEN INVOLVEMENT HAS POSITIVELY AFFECTED
 PRIVATE INDUSTRY'S POTENTIALLY HAZARDOUS WASTE-DISPOSAL
 METHODS. BY EXPRESSING OPPOSING VIEWPOINTS, EXPERTS FROM
 GOVERNMENT, INDUSTRY, AND PROFESSIONAL ORGANIZATIONS LEND
 BALANCE. EFFORTS OF CITIZEN ACTION GROUPS ARE PRESENTED.

AILABILITY: DIRECT CINEMA, P. O. BOX 69589, LOS ANGELES,
 CA 90069

IRIS ACCESSION NUMBER: EW011733
 PUBLICATION DATE: APR 83

TITLE: WATER POLICY IN TENNESSEE: ISSUES AND ALTERNATIVES.
 PERSONAL AUTHOR: THACKSTON, E. L.; AND OTHERS

SCRIPTOR: *CONSERVATION; *MANAGEMENT; *PLANNING;
 *POLICIES; *REGULATIONS; *STATE ROLE; *TENNESSEE;
 *WATER CODE; *WATER SUPPLY; *WATER RESOURCES; *WATER REUSE

SCRIPTIVE NOTE: 322P. PRICE CODE: PC A14/MF A01. ORDER
 NO.: PB84-227172

STRACT: THE PURPOSE OF THIS STUDY WAS TO PRODUCE A MODEL
 CODE ON THE STATE, REGIONAL AND LOCAL PLANNING FOR, AND
 ALLOCATION OF WATER TO, TENNESSEE PUBLIC WATER SYSTEMS. THE
 METHOD OF CODE CONSTRUCTION BEGAN WITH A THOROUGH REVIEW AND
 EVALUATION OF FEDERAL AND STATE STATUTES, COMMON LAW AND
 REGULATIONS AFFECTING PUBLIC WATER SYSTEMS AND WATER
 RESOURCES PLANNING AND MANAGEMENT. THE FINAL CODE IS A BLEND
 OF EFFECTIVE WATER PLANNING AND MANAGEMENT PROVISIONS AND
 CONCEPTS FROM OTHER STATES. INCORPORATED INTO THE CODE ARE
 STATE AND REGIONAL PLANNING PROVISIONS, AND ENFORCEMENT OF
 WATER SUPPLY DEVELOPMENT AND EXPANSION BASED ON THE PLANS.
 WATER CONSERVATION AND REUSE ARE REQUIRED THROUGHOUT THE
 CODE. ALSO WATER SHORTAGE AND EMERGENCY MANAGEMENT AUTHORITY
 IS CREATED AND DELEGATED TO APPROPRIATE BODIES.

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

IRIS ACCESSION NUMBER: EW011734
 PUBLICATION DATE: AUG 84

TITLE: HYDRAULIC CHARACTERISTICS OF ACTIVATED SLUDGE
 SECONDARY CLARIFIERS.
 PERSONAL AUTHOR: CROSBY, R. M.

SCRIPTOR: *ACTIVATED SLUDGE; *CLARIFIERS; *HYDRAULICS;

PERFORMANCE EVALUATION; *RESEARCH; *SECONDARY CLARIFIERS; WASTEWATER TREATMENT

SCRIPTIVE NOTE: 292P. PRICE CODE: PC A13/MF A01. ORDER NO.: PB84-229665

STRACT: THIS STUDY DOCUMENTED THE HYDRAULIC CHARACTERISTICS OF TYPICAL ACTIVATED SLUDGE CLARIFIERS. TO THE CLARIFIER STRUCTURES WERE MADE IN AN EFFORT TO IMPROVE CLARIFYING CHARACTERISTICS AND PERFORMANCE. INNOVATIVE FLUORESCENT DYE TRACER STUDIES WERE USED TO OBSERVE THE HYDRAULIC PATTERNS WITHIN SEVERAL DIFFERENT TYPES OF CLARIFIERS. FACTORS THAT ARE INTERNAL AND EXTERNAL TO THE CLARIFIER WERE FOUND TO AFFECT THE CHARACTERISTICS AND PERFORMANCE OF THE CLARIFIERS INVESTIGATED.

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

IS ACCESSION NUMBER: E0011735

PUBLICATION DATE: JUN 34

ITLE: NATIONAL STATISTICAL ASSESSMENT OF RURAL WATER CONDITIONS. VOLUME 1.

SONAL AUTHOR: FRANCIS, J. D.; AND OTHERS

RIPTOR: *ASSESSMENT; *COSTS; *DOMESTIC WATER; *HEALTH EFFECTS; *RESEARCH; *RURAL AREAS; *WATER SUPPLY; *WATER QUALITY; *WATER RESOURCES

RIPTIVE NOTE: 424P. PRICE CODE: PC A1B/MF A01. ORDER NO.: PB84-223339

STRACT: THIS STUDY CONSIDERED FIVE DOMINANT DIMENSIONS OF STATUS BY DOMESTIC WATER: QUALITY, QUANTITY, AVAILABILITY, COST, AND AFFORDABILITY. RURAL RESIDENTS WERE REPORTED ADVERSE HEALTH EFFECTS BUT THE RESULTS WERE MODEST. IN TOTAL VERY FEW RURAL RESIDENTS ASSOCIATED WITH THE WATER SUPPLY WITH TOXICITY. THE REPORT GIVES RESULTS OF AN ASSESSMENT OF THE EFFECTS OF THE SAFE DRINKING WATER ACT OF 1974. CONGRESS IS IN MOTION TWO MAJOR EFFORTS TO DEVELOP SYSTEMATIC, CURRENT DATA ON RURAL WATER SUPPLIES ACROSS THE NATION. FIRST, IN RESPONSE TO GROWING CONCERN WITH THE QUALITY OF DRINKING WATER AND ITS EFFECTS ON HUMAN HEALTH, THE SAFE DRINKING WATER ACT PROVIDED FOR A UNIFORM, NATIONAL SET OF STRONGER QUALITY STANDARDS AND EXTENDED THE MONITORING AND REGULATORY RESPONSIBILITY OF THE US GOVERNMENT OVER SMALLER WATER SUPPLIES.

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

S ACCESSION NUMBER: E0011736

PUBLICATION DATE: JUN 34

ITLE: NATIONAL STATISTICAL ASSESSMENT OF RURAL WATER CONDITIONS. VOLUME 4.

CONDITIONS. VOLUME 2.

SCRIPTOR: *ASSESSMENT; *COSTS; *RURAL AREAS; *WATER QUALITY; *WATER RESOURCES

RIPTIVE NOTE: 444P. PRICE CODE: PC A19/MF A01. ORDER NO.: PB84-222348

STRACT: THIS STUDY CONSIDERED FIVE DOMINANT DIMENSIONS OF THE STATUS OF DOMESTIC WATER: QUALITY, QUANTITY, AVAILABILITY, COST, AND AFFORDABILITY. RURAL RESIDENTS WERE ASKED ABOUT HEALTH EFFECTS BUT THE RESULTS WERE MODEST. IN THAT VERY FEW RURAL RESIDENTS REPORTED ADVERSE HEALTH CONDITIONS WHICH THEY ASSOCIATED WITH THE WATER SUPPLY. WITH ENACTMENT OF THE SAFE DRINKING WATER ACT OF 1974, CONGRESS SET IN MOTION TWO MAJOR EFFORTS TO DEVELOP SYSTEMATIC, CURRENT DATA ON RURAL WATER SUPPLIES ACROSS THE NATION. THE ACT MANDATED A ONE-TIME NATIONAL STATISTICAL ASSESSMENT OF THE CURRENT STATUS OF RURAL DOMESTIC WATER CHARACTERISTICS.

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

IRIS ACCESSION NUMBER: E0011737

PUBLICATION DATE: AUG 34

TITLE: TOXICITY TREATABILITY OF IRON AND STEEL PLANT WASTEWATERS: A RESOURCE DOCUMENT.

PERSONAL AUTHOR: CARPENTER, B. H.; AND OTHERS

RIPTOR: *INDUSTRY; *INDUSTRIAL WASTES; *IRON INDUSTRY; *OPERATIONS (WASTEWATER); *RESEARCH; *STEEL INDUSTRY; *TOXIC SUBSTANCES; *WASTEWATER TREATMENT

RIPTIVE NOTE: 113P. PRICE CODE: PC A06/MF A01. ORDER NO.: PB84-232495

STRACT: THE REPORT GIVES RESULTS OF AN ASSESSMENT OF THE TOXICITY TREATABILITY OF KASTEWATERS FROM EIGHT STEELMAKING SUBCATEGORIES, ALL CONSIDERED ASSESSABLE UNDER THE SOMEWHAT LOW PRODUCTION LEVELS OF THE STUDY PERIOD. RESULTS SHOW THE RELATIVE TOXICITY AND VARIABILITY OF WASTEWATER FROM THE DIFFERENT MANUFACTURING SUBCATEGORIES AND THE REDUCTIONS IN TOXICITY. RELATIONSHIPS BETWEEN POLLUTANT CONTENT AND TOXICITY ARE EXAMINED WITH COGNIZANCE OF THE POSSIBLE SITE UNIQUENESS OF THE DATA.

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

IRIS ACCESSION NUMBER: E0011738

PUBLICATION DATE: JUN 34

ITLE: NATIONAL STATISTICAL ASSESSMENT OF RURAL WATER CONDITIONS. VOLUME 4.

SCRIPTOR: *ASSESSMENT; *COSTS; *DOMESTIC WATER; *HEALTH EFFECTS; *RESEARCH; *RURAL AREAS; *WATER SUPPLY; *WATER RECOVERY; *WATER RESOURCES QUALITY; *WATER RESOURCES

BIBLIOGRAPHIES; *ENERGY; *ENERGY CONSERVATION; *HEAT; *INDUSTRY; *POWER PLANTS; *POLICIES; *RECOVERY; *RESOURCES RECOVERY; *WASTE HEAT

SCRIPTIVE NOTE: 316P. PRICE CODE: PC A14/MF A01. ORDER NO.: PB84-22363

ABSTRACT: THIS STUDY CONSIDERED FIVE DOMINANT DIMENSIONS OF THE STATUS OF DOMESTIC WATER: QUALITY, QUANTITY, COST, AFFORDABILITY, AND AFFORDABILITY. RURAL RESIDENTS WERE ASKED ABOUT THE RESULTS BUT THE RESULTS WERE MODEST IN THAT VERY FEW RURAL RESIDENTS REPORTED ADVERSE HEALTH CONDITIONS WHICH THEY ASSOCIATED WITH THE WATER SUPPLY. WITH VACUMENT OF THE SAFE DRINKING WATER ACT OF 1974, CONGRESS IS IN MOTION TWO MAJOR EFFORTS TO DEVELOP SYSTEMATIC, CURRENT DATA ON RURAL WATER SUPPLIES ACROSS THE NATION.

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

IRIS ACCESSION NUMBER: EW011739

PUBLICATION DATE: AUG 84

TITLE: GROUNDWATER TRANSPORT: HANDBOOK OF MATHEMATICAL MODELS.

PERSONAL AUTHOR: JAVANDEL, I. : AND OTHERS

SCRIPTOR: *GROUNDWATER; *HANDBOOKS; *FLUID FLOW; *FLOW MEASUREMENT; *MATHEMATICAL MODELS; *POLLUTION; *SOLUTE TRANSPORT; *WATER QUALITY; *WATER POLLUTION

SCRIPTIVE NOTE: 231P.

ABSTRACT: THIS HANDBOOK INTRODUCES THE READER TO VARIOUS MATHEMATICAL METHODS FOR ESTIMATING SOLUTE TRANSPORT IN GROUND-WATER SYSTEMS. IT CONTAINS TABLES, FIGURES, AND SIMPLE COMPUTER PROGRAMS THAT CAN BE DIRECTLY USED FOR FIELD STUDIES. THREE LEVELS OF MATHEMATICAL METHODS ARE COVERED: (1) ANALYTICAL, (2) SEMIANALYTICAL, AND (3) NUMERICAL. THE RST TWO LEVELS REQUIRE RELATIVELY SMALL AMOUNTS OF DATA. THE THIRD LEVEL, NUMERICAL APPROACHES ARE DISCUSSED AND A NUMBER OF CURRENTLY AVAILABLE NUMERICAL MODELS ARE LISTED, INDICATING CODE CAPABILITIES AND CODE DEVELOPERS TO BE CONTACTED FOR FURTHER INFORMATION. AN EXAMPLE OF THE USE OF IE SUCH MODEL IS PRESENTED IN APPENDIX J. A DISCUSSION ON THOD SELECTION AND DATA REQUIREMENTS IS ALSO INCLUDED.

AVAILABILITY: PUBLISHED IN AMERICAN GEOPHYSICAL UNION, WATER RESOURCES MONOGRAPH 10

IRIS ACCESSION NUMBER: EW011740

PUBLICATION DATE: AUG 84

TITLE: WASTE HEAT UTILIZATION. NOVEMBER, 1981 - JULY, 1984 ; CITATIONS FROM THE NTIS DATA BASE).

SCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BUILDINGS;

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE RECOVERY AND UTILIZATION OF WASTE HEAT IN POWER PLANTS, INDUSTRIAL PROCESSES, AND COMMERCIAL BUILDINGS. TOPICS INCLUDE THE USE OF INDUSTRIAL PROCESS HEAT IN DISTRICT HEATING STUDIES, GREENHOUSE HEATING WITH POWER PLANT WASTE HEAT, AND MATERIALS CONSIDERATIONS FOR HEAT EXCHANGE EQUIPMENT. THE UTILIZATION OF HEAT PUMPS IN THE RECOVERY OF LOW-GRADE INDUSTRIAL HEAT IS DISCUSSED. CITATIONS PERTAINING SPECIFICALLY TO GOVERNMENT POLICIES AND TOTAL ENERGY SYSTEMS IN COMMERCIAL BUILDINGS ARE EXCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 183 CITATIONS, ALL OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW011741

PUBLICATION DATE: AUG 84

TITLE: WASTE TREATMENT BY REVERSE OSMOSIS AND MEMBRANE PROCESSING. 1978-JULY, 1984 (CITATIONS FROM THE NTIS DATA BASE).

SCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *INDUSTRIAL WASTES; *INDUSTRY; *MEMBRANE PROCESSING; *RESEARCH; *REVERSE OSMOSIS; *SEWAGE; *WASTE TREATMENT; *WASTEWATER TREATMENT

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE UTILIZATION OF REVERSE OSMOSIS AND MEMBRANE PROCESSING IN SEWAGE AND INDUSTRIAL WASTE TREATMENT. TOPICS INCLUDE USES IN COAL CONVERSION PLANTS, MINING AND MUNITIONS INDUSTRIES, AND MUNICIPAL SEWAGE TREATMENT PLANTS. CITATIONS PERTAINING SPECIFICALLY TO THE DESALTING OF GROUND WATER, SURFACE WATERS, AND SEA WATER ARE EXCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 183 CITATIONS, 28 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW011742

PUBLICATION DATE: MAY 84

TITLE: REVIEW OF EXISTING ENVIRONMENTAL AND NATURAL RESOURCE DATA BASES.

PERSONAL AUTHOR: OLSON, R. J.

CRYPTOR: *COMPUTERIZED DATA; *DATABASES; *DIRECTORIES;
 VIRONMENT; *INFORMATION SOURCES; *NATURAL RESOURCES;
 FERENCE MATERIALS

RIPTIVE NOTE: 75P. PRICE CODE: PC A04/MF A01. ORDER
 : DEG4012039

TRACT: ENVIRONMENTAL AND NATURAL RESOURCE (E AND NR) ARE REVIEWED IN TERMS OF EXISTING DATA BASES, FUNDING FIFES OF DATA BASES, AND LONG-TERM DATA BASE MAINTENANCE. COMPUTERIZED E AND NR DATA FILES AND INVENTORIES OF DATA ARE DESCRIBED. TWENTY-FOUR FEDERAL AGENCY ARINGHOUSE, REFERRAL, OR DATA CENTERS WERE IDENTIFIED TO MAINTAIN INVENTORIES OF E AND NR MACHINE-READABLE DATA ES. ONE OF THE MORE EXTENSIVE SOURCES THAT CAN BE RCHED TO HELP LOCATE AVAILABLE COMPUTERIZED DATA IS THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONS NATIONAL ENVIRONMENTAL DATA REFERRAL SERVICE (NEDRES). THE NEDRES TAINS DESCRIPTIONS OF OVER 13,500 DATA FILES. OVER 130 NATIONAL, COMPUTERIZED E AND NR DATA BASES ARE IDENTIFIED BY LE, GEOGRAPHIC SCALE, TIME PERIOD, AGENCY, AND CONTACT SON. FIVE LARGE INTEGRATED DATA BASE SYSTEMS CONTAINING E NR DATA ARE DESCRIBED. THE SYSTEMS INCLUDE DATAGRAF, S, GEORECLOGY, SEERDIS, AND UPGRADE. TWO SYSTEMS, ECOLOGY AND UPGRADE, ARE CURRENTLY INACTIVE DUE TO DING CUTS.

AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 T ROYAL ROAD, SPRINGFIELD, VA 22161

5 ACCESSION NUMBER: EW011744

CRYPTOR: *ANALYTICAL TECHNIQUES; *EPA METHOD STUDIES;
 LOETHERS; *LABORATORY PROCEDURES; *METHOD STUDIES;
 EPA; *WATER QUALITY; *WASTEWATER

RIPTIVE NOTE: 3P. FOR COMPLETE REPORT: PB84-205939;
 CE: \$13.60

TRACT: THIS REPORT DESCRIBES THE INTERLABORATORY STUDY AN ANALYTICAL METHOD WHICH DETECTS HALOETHERS IN WATER. ULTS OF THE STUDY ARE REPORTED.

AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 T ROYAL ROAD, SPRINGFIELD, VA 22161

SONAL AUTHOR: MCMILLIN, CARL R.; AND OTHERS

CRYPTOR: *ANALYTICAL TECHNIQUES; *EPA METHOD STUDIES;
 LOETHERS; *LABORATORY PROCEDURES; *METHOD STUDIES;
 EPA; *WATER QUALITY; *WASTEWATER

RIPTIVE NOTE: 3P. FOR COMPLETE REPORT: PB 84-188879;
 CE: \$11.50.

TRACT: THE EXPERIMENTAL DESIGN AND RESULTS OF AN INTERLABORATORY STUDY FOR AN ANALYTICAL METHOD TO DETECT 2, 3, 7, 8-TETRACHLORODIBENZO-P-DIOXIN IN WATER.

PERSONAL AUTHOR: HILEMAN, FRED D.; AND OTHERS

SCRIPTOR: *ANALYTICAL TECHNIQUES; *DIOXIN; *METHOD STUDIES; *WATER ANALYSIS; *WATER

SCRIPTIVE NOTE: 3P. FOR COMPLETE REPORT: PB 84-188879;

ABSTRACT: THE EXPERIMENTAL DESIGN AND RESULTS OF AN INTERLABORATORY STUDY FOR AN ANALYTICAL METHOD TO DETECT 2, 3, 7, 8-TETRACHLORODIBENZO-P-DIOXIN IN WATER.

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

IRIS ACCESSION NUMBER: EW011746

PUBLICATION DATE: 84

TITLE: PROCEDURES FOR WATER AND WASTEWATER ANALYSIS: WITH COLORIMETRIC CALIBRATIONS FOR POPULAR BAUSCH AND LOMB SPECTROPHOTOMETERS.

SCRIPTOR: *ANALYTICAL TECHNIQUES; CHEMICALS; EQUIPMENT; *LABORATORY PROCEDURES; *MANUALS; SAMPLING; WATER; *WATER ANALYSES; WASTEWATER ANALYSIS

SCRIPTIVE NOTE: 149P.

ABSTRACT: THIS PUBLICATION DESCRIBES MANY ANALYTICAL TECHNIQUES FOR ANALYZING WATER AND WASTEWATER USING HACH MATERIALS. THE MATERIAL PROVIDES INFORMATION REGARDING PROCEDURES FOR EACH TEST, SAMPLE HANDLING AND REAGENTS AND APPARATUS NEEDED.

AILABILITY: HACH COMPANY, P. O. BOX 389, LOVELAND, CO 80539

IRIS ACCESSION NUMBER: EW011747

PUBLICATION DATE: AUG 84

TITLE: REPORT OF THE NTP AD HOC PANEL ON CHEMICAL CARCINOGENESIS TESTING AND EVALUATION.

SCRIPTOR: *CARCINOGENS; *CANCER; *CHEMICALS; *EVALUATION; *HEALTH; *NATIONAL TOXICOLOGY PROGRAM; *PROGRAM EVALUATIONS; *RESEARCH REVIEWS; *RESEARCH NEEDS; *SAFETY; *TESTING; *TOXICOLOGY; *TOXIC SUBSTANCES

SCRIPTIVE NOTE: 286P. AVAILABLE FREE.

ABSTRACT: A PANEL ON CHEMICAL CARCINOGENESIS TESTING AND EVALUATION WAS CHARGED BY THE NATIONAL TOXICOLOGY PROGRAMS (NTP) BOARD OF SCIENTIFIC COUNSELORS TO EXAMINE THE CURRENT STATE OF THE SCIENCE. THIS REPORT IS THE RESULT OF THE PANELS REVIEW OF CURRENT TESTS, A REVIEW OF THE LITERATURE, AND WRITTEN COMMENTS RECEIVED FROM INTERESTED PEOPLE. CHAPTERS ARE INCLUDED ON SHORT TERM TESTS, SUBCHRONIC

5 ACCESSION NUMBER: EW011745

LICATION DATE: JUN 84

LE: EPA METHOD STUDY 26, METHOD 613: 2, 3, 7, 8-
 TACHLORODIBENZO-P-DIOXIN. PROJECT SUMMARY.

UDIES, AND CHRONIC STUDIES. EACH CHAPTER INCLUDES ANALYTICAL CONTENTS AND RECOMMENDATIONS.

AILABILITY: NATIONAL TOXICOLOGY PROGRAM, PUBLIC INFORMATION OFFICE, MD 32-04, BOX 12233, RESEARCH TRIANGLE PARK, NC 27709

IS ACCESSION NUMBER: EW011748

PUBLICATION DATE: APR 83

TLE: STATUS AND TRENDS OF WETLANDS AND DEEPWATER HABITATS IN THE CONTERMINOUS UNITED STATES, 1950'S TO 1970'S. PERSONAL AUTHOR: FRAYER, W. E.; AND OTHERS DESCRIPTOR: *SURVEYS; *TRENDS; *WETLANDS DESCRIPTIVE NOTE: 33P. PRICE: \$5.00

STRACT: THIS STUDY DOCUMENTS NATURAL AND MAN-INDUCED HABITAT GAINS AND LOSSES IN THE 48 CONTERMINOUS UNITED STATES BETWEEN THE MID-1950'S AND MID-70'S. WHILE IT PROVIDES ESTIMATES OF THE ABUNDANCE OF THE NATION'S WETLANDS AND DEEPWATER HABITATS, IT DOES NOT PROVIDE INFORMATION ON THEIR QUALITY.

AILABILITY: DEPARTMENT OF FOREST AND WOOD SCIENCES, COLORADO STATE UNIVERSITY, FT. COLLINS, CO 80523

IS ACCESSION NUMBER: EW011749

PUBLICATION DATE: DEC 84

TLE: EXTERNAL COSTS OF COASTAL BEACH POLLUTION: AN ECONOMIC APPROACH.

PERSONAL AUTHOR: WILMAN, ELIZABETH A.

SCRIPTOR: *BEACH POLLUTION; *CASE STUDIES; COASTAL AREAS; COASTAL ZONE MANAGEMENT; *ECONOMICS; *ENVIRONMENTAL PACTS; INDUSTRY; *MANAGEMENT; *OIL INDUSTRY; *NEW ENGLAND; EANS; *POLLUTION CONTROL; RECREATION; *RISK ASSESSMENT; ALUES

SCRIPTIVE NOTE: 206P. PRICE: \$15.00

STRACT: THIS STUDY IS INTENDED TO BE A STEP TOWARD PROVING THE INFORMATION BASE FOR MANAGEMENT DECISIONS. THE STUDY FOCUSES ON THE MEASUREMENT OF THE EXTERNAL BEACH POLLUTION COST ASSOCIATED WITH ENERGY DEVELOPMENT IN THE RM OF OFFSHORE OIL PRODUCTION.

AILABILITY: RESOURCES FOR THE FUTURE, CUSTOMER SERVICES, O. BOX 4852, HAMPDEN STATION, BALTIMORE, MD 21211

IRIS ACCESSION NUMBER: EW011750

PUBLICATION DATE: 84

TITLE: BOULDER COUNTY STORM DRAINAGE CRITERIA MANUAL.

PERSONAL AUTHOR: RUZZO, WILLIAM P.

SCRIPTOR: *COLORADO; *DRAINAGE; *STORM SEWERS; *WASTEWATER COLLECTION AREAS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 341P.

STRACT: THIS MANUAL WAS DESIGNED TO BE A COMPLETE DRAINAGE MANUAL FOR USE BY ENGINEERS FOR PREPARING, REVIEWING, AND EVALUATING DRAINAGE DESIGNS AND CRITERIA IN THE BOULDER COUNTY AREA OF COLORADO. SECTIONS ARE INCLUDED ON: (1) GENERAL PROVISIONS, (2) DRAINAGE PLANNING SUBMITTAL REQUIREMENTS, (3) DRAINAGE POLICY, (4) DRAINAGE FLOW, (5) RAINFALL, (6) STORM RUNOFF, (7) HYDRAULIC STRUCTURES, (8) DETENTION, (9) OPEN CHANNELS, (10) STORM SEWER SYSTEM, (11) STREETS, (12) CULVERTS AND BRIDGES, AND (13) EROSION AND SEDIMENTATION CONTROL.

AVAILABILITY: PUBLIC WORKS DEPARTMENT, BOULDER COUNTY, P.O. BOX 471, BOULDER, CO 80306

IRIS ACCESSION NUMBER: EW011752

PUBLICATION DATE: NOV 84

TITLE: COMPUTERIZED SYSTEM EXTENDS CONTROL.

SCRIPTOR: *COMPUTER APPLICATIONS; *CONTROL SYSTEMS; *MANAGEMENT; *MONITORING; *OPERATIONS (WATER); *PUMPS; *WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: 8P.

STRACT: DESCRIBED ARE ASPECTS OF THE COMPUTERIZED CONTROL SYSTEM USED BY THE CITY OF PUEBLO, COLORADO FOR ITS MUNICIPAL WATER DISTRICT.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N12

IRIS ACCESSION NUMBER: EW011753

PUBLICATION DATE: NOV 84

TITLE: VACUUM WASTEWATER COLLECTION SYSTEM MAKES THE GRADE IN CHARLOTTE, TENNESSEE.

SCRIPTOR: *AIRVAC; *ALTERNATIVE TECHNOLOGY; *PUMPS; *VACUUM SYSTEMS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 12P.

STRACT: DESCRIBED IS THE AIRVAC VACUUM WASTEWATER COLLECTION SYSTEM USED IN CHARLOTTE, TENNESSEE.

LIABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N12

S ACCESION NUMBER: FW011754
LICATION DATE: NOV 84
SONAL AUTHOR: HOOPER, JOHN D.
CRYPTOR: *AERATION; *DRINKING WATER; *ILLINOIS; *IRON; ON REMOVAL; *MECHANICAL AERATION; *OPERATIONS (WATER); IDATION; *WATER SUPPLY; *WATER TREATMENT; *WELLS
RIPTIVE NOTE: 14P.

TRACT: DESCRIBED IS A MECHANICAL AERATION PROCESS FOR OVING IRON FROM A WATER SUPPLY FROM WELLS IN ILLINOIS.

LIABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N12
ESTIONNAIRES; *PERSONNEL; *PERSONAL CHARACTERISTICS
RIPTIVE NOTE: 14P.

S ACCESION NUMBER: FW011755

LICATION DATE: NOV 84
LE: ARE YOU A NATURAL MANAGER?

CRYPTOR: *ATTITUDES; *MANAGERS; *MANAGEMENT; ASUREMENT INSTRUMENTS; *MEYERS-BRIGGS INDICATOR; ESTIONNAIRES; *PERSONNEL; *PERSONAL CHARACTERISTICS
RIPTIVE NOTE: 20P.

TRACT: THIS ARTICLE PRESENTS A QUESTIONNAIRE WHICH IS A LATION OF THE MEYERS-BRIGGS INDICATOR. AN EXPLANATION IS EN FOR INTERPRETING THE RESPONSES AND DEVELOPING A FILE. CHARACTERISTICS OF EFFECTIVE MANAGEMENT ARE SENTED.

LIABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N12
S ACCESION NUMBER: FW011756
LICATION DATE: NOV 84
LE: ENLISTING THE PRODUCING WORK FORCE.

SONAL AUTHOR: SUTTON, GEORGE

CRYPTOR: *EMPLOYEE MOTIVATION; *FLORIDA; *MANAGEMENT; RTICIPATIVE MANAGEMENT; *PRODUCTIVITY; *PROGRAM CRIPTIONS; *PUBLIC WORKS
RIPTIVE NOTE: 22-23P.

TRACT: SHORTCOMINGS OF AN EARLIER ADMINISTRATIVE UCTURE BROUGHT ABOUT ORGANIZATIONAL CHANGES INVOLVING

PUBLIC WORKS EMPLOYEES OF ST. PETERSBURG, FLORIDA, IN A PARTICIPATIVE MANAGEMENT PROGRAM THAT WORKS. SELECTED ACTIVITIES AND PROCESSES ARE DESCRIBED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N12
IRIS ACCESSION NUMBER: FW011757

PUBLICATION DATE: NOV 84

TITLE: AFTERSTORM CLEANUP NEEDS CARE AND COMMON SENSE.
DESCRIPTOR: *CLEANUP; *FLOODS; *INSPECTION; INSURANCE; *RECOMMENDATIONS; SAFETY; SALVAGE; SURFACE RUNOFF; WATER SUPPLY; WATER TREATMENT; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 23-25P.

ABSTRACT: WATER DISTRIBUTION AND WASTEWATER COLLECTION PERSONNEL CAN GET INVOLVED IN FLOOD-OR STORM-RELATED INSPECTION AND CLEANUP. THIS ARTICLE PRESENTS A CHECKLIST THAT CAN BE USED TO HELP THEM TO AVOID DANGER AND CONTAMINATION.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N12
IRIS ACCESSION NUMBER: EW011758

PUBLICATION DATE: NOV 84

TITLE: NO MORE ALKALINITY BURNOUT.

PERSONAL AUTHOR: CASE, RICHARD L.

DESCRIPTOR: *AERATION; *TANKS; *ALKALINITY; *DISSOLVED OXYGEN; *EFFLUENTS; *MANAGEMENT; *NITROGEN; *OPERATIONS (WASTEWATER); *PH; *TROUBLESHOOTING; *WASTEWATER TREATMENT
RIPTIVE NOTE: 26-27P.

ABSTRACT: BENCH EXPERIMENTS AND FULL-SCALE TESTING AT A NEW ENGLAND WASTEWATER TREATMENT PLANT REVEALED THAT REDUCTION AND CONTROL OF DISSOLVED OXYGEN LEVELS COULD PREVENT ALKALINITY BURNOUT IN THE NITRIFICATION PROCESS AND THE SUBSEQUENT DISCHARGE OF LOW PH EFFLUENT.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N12
IRIS ACCESSION NUMBER: EW011759

PUBLICATION DATE: NOV 84

TITLE: CALCULATOR SMOOTH COLOR MEASUREMENT PATH.
PERSONAL AUTHOR: JENKINS, STEPHEN R.; SANDERS, MARIA

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CALCULATIONS; *CALCULATORS; *COLOR; *MONITORING;
TRACT: SHORTCOMINGS OF AN EARLIER ADMINISTRATIVE UCTURE BROUGHT ABOUT ORGANIZATIONAL CHANGES INVOLVING

ASTEWATER TREATMENT
SCRIPTIVE NOTE: 28-30P.

STRACT: METHODS TO PUT A NUMBER ON THE COLOR OF STEWATER SAMPLES WERE TEDIOUS - UNTIL THIS PROGRAM FOR A ND-HELD CALCULATOR WAS WORKED OUT. THIS PROVIDES TREATMENT ANT OPERATORS WITH AN INEXPENSIVE WAY TO SOLVE AN ALYTICAL PROBLEM.

AILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N12

PUBLICATION DATE: NOV 84

IS ACCESSION NUMBER: EW011760

PUBLICATION DATE: AUG 81

ITLE: MICRO DRAWINGS PRODUCE MACRO RESPONSES.

RSONAL AUTHOR: TIPPIN, DAVID L.

RIPTOR: *COMMUNICATIONS; *EMERGENCY RESPONSE; FLORIDA; ENGINEERING DRAWINGS; *MAINTENANCE; *MICROFICHE; *SERVICE LLS; *WATER UTILITIES

SCRIPTIVE NOTE: 31-32P.

STRACT: TAMPA'S WATER DEPARTMENT CAN NOW PROVIDE A SPEEDY SPONSE TO EMERGENCIES. A MICROFICHE SYSTEM HAS BEEN UPLED TO ITS COMMUNICATIONS NETWORK SO THAT ENGINEERING AWINGS ARE AVAILABLE ON CALL TO MAINTENANCE CREWS IN THE ELD.

AILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N12

IS ACCESSION NUMBER: EW011761

PUBLICATION DATE: AUG 81

ITLE: WATERSHED HANDBOOK. A MANAGEMENT TECHNIQUE FOR OOSING AMONG POINT AND NONPOINT CONTROL STRATEGIES.

RSONAL AUTHOR: MONTEITH, T. J.; AND OTHERS

RIPTOR: *DECISION MAKING; *HANDBOOKS; *MANAGEMENT; *POINT SOURCES; *POINT SOURCES; *WATERSHEDS; *WATER ALITY; *WATER POLLUTION CONTROL

SCRIPTIVE NOTE: 112P. PRICE CODE: PC A06/MF A01. ORDER : PB84-23124-0

STRACT: WATERSHED IS A SIMPLE, "DESK TOP" ACCOUNTING STEM DESIGNED TO HELP WATER QUALITY PLANNERS ASSESS TERMINATE MANAGEMENT STRATEGIES FOR CONTROLLING POINT AND NPPOINT SOURCE POLLUTION INPUTS FROM LARGE AREAS (100 SQUARE MILES OR GREATER) TO A RECEIVING WATER. ITS GOAL IS FIND THE BEST MIX OF POINT AND NONPOINT SOURCE MANAGEMENT CHNIQUES TO ACHIEVE A GIVEN LOAD ALLOCATION FOR A RECEIVING WATERBODY. THROUGH A COST-EFFECTIVENESS RANKING HEME, WATERSHED IDENTIFIES THE ORDER IN WHICH REMEDIAL ASURES COULD BE IMPLEMENTED TO ACHIEVE THE GREATEST ANNUAL

WATER QUALITY IMPROVEMENTS AT THE LEAST COST. THIS HANDBOOK PRESENTS THE MECHANICS AND BACKGROUND DATA FOR USING THE WATERSHED SYSTEM.

60

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

IRIS ACCESSION NUMBER: EW011762

PUBLICATION DATE: SEP 84

ITLE: ALGAE: CONTROL AND GROWTH IN LAKES AND STREAMS. 1977-SEPTEMBER, 1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA)

SCRIPTOR: *ALGAE; *BIBLIOGRAPHIES; *BIOMASS; *CHEMICAL CONTROL; *LAKES; *HERBICIDES; *RESEARCH REPORTS; *STREAMS; *WATER QUALITY

SCRIPTIVE NOTE: 161P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB84-874890

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE GROWTH AND CONTROL OF ALGAL GROWTH IN LAKES, STREAMS, RIVERS, AND MANMADE LAGOONS. BIOLOGICAL AND CHEMICAL CONTROL OF ALGAL BLOOMS ARE CONSIDERED AND THEIR ADVANTAGES AND DISADVANTAGES ARE DISCUSSED. BIOLOGICAL CONTROL METHODS, INCLUDING REGULATION OF NUTRIENTS, O₂ AND N₂, PREDATION BY FISH, PLANKTON, SNAILS AND THE USE OF VIRUSES, BACTERIA, AND FUNGI ARE CONSIDERED. THE USE OF HERBICIDES IS ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 140 CITATIONS, 17 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW011763

PUBLICATION DATE: SEP 84

ITLE: FOOD PROCESSING WASTE TREATMENT. 1976-SEPTEMBER, 1984 (CITATIONS FROM THE NTIS DATA BASE).

SCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *EQUIPMENT; *FOOD INDUSTRY; *FOOD PROCESSING; *INDUSTRY; *METHODS; *OPERATIONS; *WASTE TREATMENT

SCRIPTIVE NOTE: 133P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB84-874999

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING METHODS AND EQUIPMENT UTILIZED IN THE TREATMENT OF FOOD PROCESSING WASTES. SPECIFIC FOOD INDUSTRIES INCLUDE MEATPACKING, FRUIT AND VEGETABLE, SEAFOOD, AND POULTRY. PROCESSES AND EQUIPMENT USED IN THE DAIRY INDUSTRY ARE ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 143 CITATIONS, 14 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011764

PUBLICATION DATE: SEP 84

TITLE: ATOMIC ABSORPTION ANALYSIS. 1970-SEPTEMBER, 1984
CITATIONS FROM THE NTIS DATA BASE.

SCRIPTOR: *ANALYTICAL TECHNIQUES; *BIBLIOGRAPHIES;
*ATOMIC ABSORPTION ANALYSIS; *BIBLIOGRAPHIES;
*WATER POLLUTION CONTROL; *LABORATORY PROCEDURES;
*LIQUIDATION CONTROL

SCRIPTIVE NOTE: 163P. PRICE CODE: PC N01/MF N01. ORDER
NO.: PB84-875129

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING
ANALYTICAL TECHNIQUES AND APPLICATIONS OF ATOMIC ABSORPTION
SPECTROSCOPY, INCLUDING FLAME AND FURNACE AAS. DESIGN AND
DEVELOPMENT OF TRACE ELEMENTS, WATER AND BIOLOGICAL MATERIALS ANALYSES ARE
DISCUSSED. APPLICATIONS IN AIR AND WATER POLLUTION
DETECTION, IMPURITY DETERMINATION IN METALS, AND METAL
MEASUREMENTS ARE PRESENTED. (THIS UPDATED
BIBLIOGRAPHY CONTAINS 186 CITATIONS, 16 OF WHICH ARE NEW
CITATIONS TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285

RT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011765

PUBLICATION DATE: SEP 84

TITLE: BIODEGRADATION OF PULPING EFFLUENTS. 1972-
PTEMBER, 1984 (CITATIONS FROM THE INSTITUTE OF PAPER
CHEMISTRY DATA BASE).

SCRIPTOR: *ANNOTATED' BIBLIOGRAPHIES; *BIODEGRADATION;
*BIBLIOGRAPHIES; *CHLORINATION; *EFFLUENTS; *ENVIRONMENTAL
EFFECTS; *INDUSTRIAL WASTES; *PULP INDUSTRY; *WASTE
TREATMENT; *WATER QUALITY; *WATER POLLUTION CONTROL

SCRIPTIVE NOTE: 163P. PRICE CODE: PC N01/MF N01. ORDER
NO.: PB84-875301

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING
PROBLEMS, SOLUTIONS, AND EVALUATIONS OF TREATMENT OF
BIODEGRADABLE EFFLUENTS FROM PULP MILLS. MUTAGENIC
CHARACTERISTICS OF WASTE FROM CHLORINATION OF MOST PULPS ARE
DISCUSSED. RELATIVE TO THE RISKS INVOLVED TO WATER PLANT AND
HUMAN LIFE, LABORATORY MEASUREMENTS DETERMINING TOXICITY OF
EFFLUENTS AND VARIOUS INDUSTRIAL BIODEGRADATION PROCESSES
ARE INCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 170
CITATIONS, 66 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS
EDITION.)

IRIS ACCESSION NUMBER: EW011766

PUBLICATION DATE: JUN 84

TITLE: LANDFILL LINERS AND COVERS:
APPLICATION TO ARMY LANDFILLS.

PERSONAL AUTHOR: SHAFER, R.; AND OTHERS

SCRIPTOR: COVERS; CHEMICALS; LEACHATES; *LANDFILLS;
*LINERS; MONITORING; *POLLUTION CONTROL; *REGULATIONS;
*RECOMMENDATIONS; *U. S. ARMY; *WASTE DISPOSAL

SCRIPTIVE NOTE: 66P. PRICE CODE: PC A04/MF A01. ORDER
NO.: AD-A144 003/1

ABSTRACT: INFORMATION IS PROVIDED TO HELP ARMY
INSTALLATIONS CHOOSE LANDFILL LINER AND COVER SYSTEMS
RESISTANT TO CHEMICAL ATTACK FROM THE LEACHATE GENERATED AND
COMPATIBLE WITH THE ENVIRONMENT. A LINEAR AND COVER SYSTEM
MUST BE DESIGNED WITH CONSIDERATION OF POLLUTION
REGULATIONS, ENVIRONMENT, CLIMATE, AND TYPE OF LEACHATE
PRODUCED. FEDERAL REGULATIONS REQUIRING THE LANDFILL TO
COMPLY WITH THE MOST STRINGENT LOCAL AIR AND WATER QUALITY
STANDARDS ARE SUMMARIZED. THE MATERIAL USED AS A LINER OR
COVER MUST ALSO BE CHOSEN BASED ON THE ENVIRONMENT, CLIMATE,
AND CHEMICAL COMPATIBILITY WITH THE LEACHATE. BOTH NATURAL
AND SYNTHETIC MATERIALS ARE AVAILABLE AND EACH TYPE MUST BE
EXPECTED TO REACT DIFFERENTLY WITH THE LEACHATE PRODUCED AT
A GIVEN SITE. A LINER AND COVER SYSTEM MAY INCLUDE PIPING,
ADDITIONAL GAS CONTROLS, AND ADJACENT LAGOONS FOR
COLLECTION, TREATMENT, OR RECYCLING. THE SYSTEM SHOULD HAVE
MONITORING DEVICES OR SAMPLING POINTS, AS THE LANDFILL'S
CONTINUED SUCCESS DEPENDS ON CAREFUL CONTROL THROUGHOUT THE
SERVICE LIFE AND AFTER CLOSURE. EXAMPLES ARE CITED OF
LANDFILL SITES ACTUALLY USING COMPLETE LINER AND COVER
SYSTEMS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285

RT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011767

PUBLICATION DATE: JUN 84

TITLE: COMPUTER APPLICATIONS; *DATABASES; *HAZARDOUS
MATERIALS TRACKING SYSTEM (TRACKER).

PERSONAL AUTHOR: MESSENGER, M. M.; AND OTHERS

SCRIPTOR: *COMPUTER APPLICATIONS; *DATABASES; *HAZARDOUS
MATERIALS; *REPORTING; *TRACKER; *RCRA;

SCRIPTIVE NOTE: 20P. PRICE CODE: PC A02/MF A01. ORDER
NO.: AD-A144 107/0

TERIALS HAVE BECOME THE FOCUS OF STRINGENT REGULATION UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA). ONE REQUIREMENT OF THIS ACT IS THAT ALL GENERATORS OF LEGALLY FINED HAZARDOUS WASTES REPORT TO THE U. S. ENVIRONMENTAL PROTECTION AGENCY (EPA) ON THE VOLUMES AND TYPES OF WASTES PRODUCED. AMENDMENTS TO THE CLEAN WATER ACT (CWA) ALSO QUOTE THE DEVELOPMENT OF A SPILL PREVENTION, CONTROL, AND UNTERMEASURE (SPCC) PLAN AT EVERY ARMY INSTALLATION. THE CC MUST PINPOINT LOCATIONS ON POST WHERE HAZARDOUS MATERIALS ARE STORED. THIS REPORT OUTLINES THE FEATURES OF A COMPUTERIZED TRACKING SYSTEM THAT INTERFACES THE ARMY STALLATION PROCUREMENT SYSTEM WITH A DATABASE OF KNOWN HAZARDOUS ITEMS TO PRODUCE A MONTHLY LISTING OF THE TYPES AND AMOUNTS OF HAZARDOUS MATERIALS PROCURED BY EACH UNIT ON ST. THIS LISTING CAN BE USED TO COMPLY WITH THE REQUIREMENTS.

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

IS ACCESSION NUMBER: EW011768

PUBLICATION DATE: AUG 84

TITLE: WATER CHEMICALS CODEX: COMMENDATIONS FOR DIRECT ADDITIVES.

SCRIPTOR: *CHEMICAL ADDITIVES; *REFERENCES; *DRINKING WATER; *RECOMMENDATIONS; *WATER TREATMENT

SCRIPTIVE NOTE: 25P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB84-240753

STRACT: REPORT CONTAINS MONOGRAPHS FOR CHEMICALS USED TO

EPARE POTABLE WATER.

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

IS ACCESSION NUMBER: EW011769

PUBLICATION DATE: OCT 82

TITLE: MANUAL FOR HIGHWAY STORM WATER PUMPING STATIONS. LOME 1.

PERSONAL AUTHOR: LEVER, W. F.

SCRIPTOR: *DESIGN; *HIGHWAYS; *ENGINEERING; *MANUALS; *STORM WATER; *SURFACE RUNOFF; ASTEWATER COLLECTION

SCRIPTIVE NOTE: 407P. PRICE CODE: PG A18/MF A01. ORDER NO.: PB84-241017

STRACT: THE PURPOSE OF THIS MANUAL IS TO PROVIDE A COMPREHENSIVE SOURCE OF DESIGN INFORMATION ON STORM WATER PUMPING STATIONS FOR HIGHWAY FACILITIES. HOWEVER, USERS ARE ADVISED TO USE PROPER ENGINEERING JUDGMENT AND MUST THEMSELVES BE ENTIRELY RESPONSIBLE FOR ANY INTERPRETATIONS AND APPLICATIONS OF THE DATA AND OPINIONS SET FORTH HEREIN. AN INITIAL FIELD SURVEY WAS CONDUCTED TO DETERMINE THE PRESENT PRACTICES AND EXPERIENCES IN SEVERAL STATES, WHICH PROVED TO BE EXTREMELY VARIED, WITH SOME BASIC DIFFERENCES IN DESIGN CONCEPTS. VARIOUS TYPES OF PUMPING STATIONS ARE DISCUSSED IN THE EARLY CHAPTERS, WITH GUIDANCE AS TO WHICH MIGHT BE EXPECTED TO BE MOST SUITABLE FOR VARIOUS CONDITIONS. LATER CHAPTERS DEAL WITH STATION MACHINERY AND FEATURES, INCLUDING ELECTRICAL SYSTEMS.

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

IS ACCESSION NUMBER: EW011770

PUBLICATION DATE: OCT 82

TITLE: MANUAL FOR HIGHWAY STORM WATER PUMPING STATIONS.

PERSONAL AUTHOR: LEVER, W. F.

SCRIPTOR: *DESIGN; *HIGHWAYS; *ENGINEERING; *MANUALS; *STORM WATER; *SURFACE RUNOFF; ASTEWATER COLLECTION

SCRIPTIVE NOTE: 228P. PRICE CODE: PC A11/MF A01. ORDER NO.: PB84-241025

STRACT: THE PURPOSE OF THIS MANUAL IS TO PROVIDE A COMPREHENSIVE SOURCE OF DESIGN INFORMATION ON STORM WATER PUMPING STATIONS FOR HIGHWAY FACILITIES. HOWEVER, USERS ARE CAUTIONED TO USE PROPER ENGINEERING JUDGMENT AND MUST THEMSELVES BE ENTIRELY RESPONSIBLE FOR ANY INTERPRETATIONS AND APPLICATIONS OF THE DATA AND OPINIONS SET FORTH HEREIN. AN INITIAL FIELD SURVEY WAS CONDUCTED TO DETERMINE THE PRESENT PRACTICES AND EXPERIENCES IN SEVERAL STATES, WHICH PROVED TO BE EXTREMELY VARIED, WITH SOME BASIC DIFFERENCES IN DESIGN CONCEPTS. VARIOUS TYPES OF PUMPING STATIONS ARE DISCUSSED IN THE EARLY CHAPTERS, WITH GUIDANCE AS TO WHICH MIGHT BE EXPECTED TO BE MOST SUITABLE FOR VARIOUS CONDITIONS. LATER CHAPTERS DEAL WITH STATION MACHINERY AND FEATURES, INCLUDING ELECTRICAL SYSTEMS.

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

IS ACCESSION NUMBER: EW011771

PUBLICATION DATE: MAR 83

TITLE: METHODS FOR WETLAND FUNCTIONAL ASSESSMENT. VOLUME 1. CRITICAL REVIEW AND EVALUATION CONCEPTS.

PERSONAL AUTHOR: ADAMUS, P. R.; AND OTHERS

SCRIPTOR: *ASSESSMENT METHODS; EVALUATION; GROUNDWATER; *MANUALS; HABITATS; LAND USE; *HIGHWAYS; RECREATION; *WETLANDS; WATER RESOURCES

AND APPLICATIONS OF THE DATA AND OPINIONS SET FORTH HEREIN. AN INITIAL FIELD SURVEY WAS CONDUCTED TO DETERMINE THE PRESENT PRACTICES AND EXPERIENCES IN SEVERAL STATES, WHICH PROVED TO BE EXTREMELY VARIED, WITH SOME BASIC DIFFERENCES IN DESIGN CONCEPTS. VARIOUS TYPES OF PUMPING STATIONS ARE DISCUSSED IN THE EARLY CHAPTERS, WITH GUIDANCE AS TO WHICH MIGHT BE EXPECTED TO BE MOST SUITABLE FOR VARIOUS CONDITIONS. LATER CHAPTERS DEAL WITH STATION MACHINERY AND FEATURES, INCLUDING ELECTRICAL SYSTEMS.

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

IS ACCESSION NUMBER: EW011772

PUBLICATION DATE: OCT 82

TITLE: MANUAL FOR HIGHWAY STORM WATER PUMPING STATIONS.

PERSONAL AUTHOR: LEVER, W. F.

SCRIPTOR: *DESIGN; *HIGHWAYS; *ENGINEERING; *MANUALS; *STORM WATER; *SURFACE RUNOFF; ASTEWATER COLLECTION

SCRIPTIVE NOTE: 228P. PRICE CODE: PC A11/MF A01. ORDER NO.: PB84-241025

STRACT: THE PURPOSE OF THIS MANUAL IS TO PROVIDE A COMPREHENSIVE SOURCE OF DESIGN INFORMATION ON STORM WATER PUMPING STATIONS FOR HIGHWAY FACILITIES. HOWEVER, USERS ARE CAUTIONED TO USE PROPER ENGINEERING JUDGMENT AND MUST THEMSELVES BE ENTIRELY RESPONSIBLE FOR ANY INTERPRETATIONS AND APPLICATIONS OF THE DATA AND OPINIONS SET FORTH HEREIN. AN INITIAL FIELD SURVEY WAS CONDUCTED TO DETERMINE THE PRESENT PRACTICES AND EXPERIENCES IN SEVERAL STATES, WHICH PROVED TO BE EXTREMELY VARIED, WITH SOME BASIC DIFFERENCES IN DESIGN CONCEPTS. VARIOUS TYPES OF PUMPING STATIONS ARE DISCUSSED IN THE EARLY CHAPTERS, WITH GUIDANCE AS TO WHICH MIGHT BE EXPECTED TO BE MOST SUITABLE FOR VARIOUS CONDITIONS. LATER CHAPTERS DEAL WITH STATION MACHINERY AND FEATURES, INCLUDING ELECTRICAL SYSTEMS.

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

IS ACCESSION NUMBER: EW011773

PUBLICATION DATE: MAR 83

TITLE: METHODS FOR WETLAND FUNCTIONAL ASSESSMENT. VOLUME 1. CRITICAL REVIEW AND EVALUATION CONCEPTS.

PERSONAL AUTHOR: ADAMUS, P. R.; AND OTHERS

SCRIPTOR: *ASSESSMENT METHODS; EVALUATION; GROUNDWATER; *MANUALS; HABITATS; LAND USE; *HIGHWAYS; RECREATION; *WETLANDS; WATER RESOURCES

SCRIPTIVE NOTE: 185P. PRICE CODE: PC A09/MF A01. ORDER NO.: PB84-241157

STRACT: THE MANUAL PRESENTS A STATE-OF-THE-ART REVIEW OF WETLAND FUNCTIONS. FUNCTIONS COVERED INCLUDE GROUNDWATER CHARGE AND DISCHARGE, FLOOD STORAGE AND DESYNCHRONIZATION, MORELINE ANCHORING, AND DISSIPATION OF EROSION FORCES. DIMENT TRAPPING, NUTRIENT RETENTION AND REMOVAL, FOOD LAIN SUPPORT (DETRITAL EXPORT), HABITAT FOR FISH AND WILDLIFE, AND ACTIVE AND PASSIVE RECREATION. THE MANUAL COVERS ALL WETLAND TYPES IN THE 48 STATES, AND USES THE U.S. SH AND WILDLIFE SERVICE DEFINITION AND CLASSIFICATION SYSTEM. IT EXAMINES THE VALIDITY, INTERACTIONS, AND POSSIBLE SIGNIFICANCE THRESHOLDS FOR THE FUNCTIONS, AS WELL AS DOCUMENTING THEIR UNDERLYING PROCESSES. POTENTIAL IMPACTS OF HIGHWAYS UPON EACH FUNCTION ARE DESCRIBED AND, WHERE AVAILABLE, POSSIBLE THRESHOLDS ARE GIVEN.

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

US ACCESSION NUMBER: EW011772 PUBLICATION DATE: MAR 83

TLE: METHOD FOR WETLAND FUNCTIONAL ASSESSMENT. VOLUME 2. DESCRIPTOR: *METHOD; *WETLAND; *FUNCTIONAL ASSESSMENT; *METHOD. PERSONAL AUTHOR: ADAMUS, P. R.; AND OTHERS

SCRIPTOR: *ASSESSMENT METHODS; GROUNDWATER; *MANUALS; HIGHWAYS; LAND USE; *FEDERAL HIGHWAY ADMINISTRATION; HIGHWAYS; RECREATION; *WETLANDS; WATER RESOURCES

SCRIPTIVE NOTE: 141P. PRICE CODE: PC A07/MF A01. ORDER NO.: PB84-241165

STRACT: THE MANUAL PROVIDES A RAPID ASSESSMENT PROCEDURE FOR SCREENING FUNCTIONAL VALUES OF WETLANDS. FUNCTIONS COVERED INCLUDE GROUNDWATER RECHARGE AND DISCHARGE, FLOOD CHARGE AND DESYNCHRONIZATION, SHORELINE ANCHORING, AND DISSIPATION OF EROSION FORCES. SEDIMENT TRAPPING, NUTRIENT RETENTION AND REMOVAL, FOOD CHAIN SUPPORT (DETRITAL EXPORT), HABITAT FOR FISH AND WILDLIFE, AND ACTIVE AND PASSIVE RECREATION. THE METHOD CAN BE USED FOR ALL WETLAND TYPES IN THE 48 COTERMINOUS STATES, AND USES THE U.S. SH AND WILDLIFE SERVICE DEFINITION AND CLASSIFICATION SCHEME. THE METHOD ALSO CAN BE USED TO EVALUATE FUNCTIONS ON MANY RIVERS AND LAKES.

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

US ACCESSION NUMBER: EW011773 PUBLICATION DATE: JUN 84

TLE: DEVELOPMENT DOCUMENT FOR ALUMINUM FORMING POINT SOURCE CATEGORY. VOLUME 1.

SCRIPTIVE NOTE: 185P. PRICE CODE: PC A09/MF A01. ORDER NO.: PB84-241157

_DESCRIPTOR: *ALUMINUM; *EFLUENT LIMITATIONS; *STANDARDS; *GUIDELINES; *INDUSTRIAL WASTES; *USEPA; *WATER POLLUTION CONTROL

SCRIPTIVE NOTE: 715P. PRICE CODE: PC A99/MF E04. ORDER NO.: PB84-244425

STRACT: THIS DOCUMENT PROVIDES THE DATA AND RATIONALE USED TO DEVELOP THE EFLUENT LIMITATIONS AND STANDARDS FOR THE ALUMINUM FORMING POINT SOURCE CATEGORY.

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

IRIS ACCESSION NUMBER: EW011774 PUBLICATION DATE: JUN 84

TITLE: DEVELOPMENT DOCUMENT FOR ALUMINUM FORMING POINT SOURCE CATEGORY. VOLUME 2.

PERSONAL AUTHOR: GOODWIN, J. K.

_DESCRIPTOR: *ALUMINUM; *EFLUENT LIMITATIONS; *STANDARDS; *GUIDELINES; *INDUSTRIAL WASTES; *USEPA; *WATER POLLUTION CONTROL

SCRIPTIVE NOTE: 594P. PRICE CODE: PC A25/MF A01. ORDER NO.: PB84-244433

STRACT: THIS DOCUMENT PROVIDES THE DATA AND RATIONALE USED TO DEVELOP THE EFLUENT LIMITATIONS AND STANDARDS FOR THE ALUMINUM FORMING POINT SOURCE CATEGORY.

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

IRIS ACCESSION NUMBER: EW011775 PUBLICATION DATE: FEB 84

TITLE: DATA ACQUISITION FOR ENVIRONMENTAL TRANSPORT AND FATE SCREENING FOR COMPOUNDS OF INTEREST TO THE OFFICE OF EMERGENCY AND REMEDIAL R

PERSONAL AUTHOR: JABER, H. M.; AND OTHERS

_DESCRIPTOR: *AQUATIC SYSTEMS; *CHEMICALS; *EQUILIBRIUM; *KINETIC CONSTANTS; *ORGANIC COMPOUNDS; *PHYSICAL PROPERTIES

SCRIPTIVE NOTE: 156P. PRICE CODE: PC A08/MF A01. ORDER NO.: PB84-245281

STRACT: PHYSICAL PROPERTIES, EQUILIBRIUM, AND KINETIC CONSTANTS FOR EVALUATING THE TRANSFORMATION AND TRANSPORT IN AQUATIC SYSTEMS FOR ORGANIC CHEMICALS OF INTEREST TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S OFFICE OF EMERGENCY

D REMEDIAL RESPONSE HAVE BEEN OBTAINED FROM THE LITERATURE D CALCULATED FROM THEORETICAL OR EMPIRICAL RELATIONS. LUES FOR SELECTED PHYSICAL PROPERTIES SUCH AS MELTING POINT, VAPOR PRESSURE, WATER SOLUBILITY, AND TANOL/WATER PARTITIONING, AND FOR RATE CONSTANTS SUCH AS DROLYSIS, MICROBIAL DEGRADATION, PHOTOLYSIS, AND OXIDATION VALUES ARE REPORTED IN UNITS SUITABLE FOR USE IN A CURRENT AQUATIC FATE MODEL. A DISCUSSION OF THE EMPIRICAL RELATIONSHIPS BETWEEN WATER SOLUBILITY, OCTANOL/WATER PARTITION COEFFICIENTS, AND PARTITION COEFFICIENTS FOR DIMENT AND BIOTA IS PRESENTED.

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

PUBLISHED IN JNL. OF OCCUPATIONAL MEDICINE. ORDER NO.: PB84-243971

ABSTRACT: TO DETERMINE IF PARASITIC INFECTIONS OCCUR MORE FREQUENTLY AMONG WORKERS EXPOSED TO WASTEWATER THAN AMONG CONTROLS, PARASITOLOGIC EXAMINATIONS WERE PERFORMED ON STOOL SPECIMENS, COLLECTED OVER A 12-MONTH PERIOD FROM SEWER AND HIGHWAY MAINTENANCE WORKERS. THREE OF 56 SEWER MAINTENANCE WORKERS (5.4%) HAD AT LEAST ONE POSITIVE SPECIMEN COMPARED WITH 10 OF 69 HIGHWAY WORKERS ENGAGED IN STREET CLEANING. CONTRARY TO STUDIES CONDUCTED OUTSIDE THE UNITED STATES, THE PRESENT STUDY DOES NOT INDICATE THAT PARASITIC INFECTIONS OCCUR MORE FREQUENTLY AMONG SEWER WORKERS THAN AMONG CONTROLS IN THE URBAN MIDWESTERN UNITED STATES. THE RESULTS OF THIS STUDY INDICATE THAT THERE MAY BE A RISK OF PARASITIC INFECTIONS AMONG STREET CLEANERS.

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

IRIS ACCESSION NUMBER: EW011776
PUBLICATION DATE: 84

IRIS ACCESSION NUMBER: EW011778
PUBLICATION DATE: 84

TITLE: COMPARATIVE CARCINOGENIC AND MUTAGENIC ACTIVITY OF COAL TAR AND PETROLEUM ASPHALT PAINTS USED IN POTABLE WATER SUPPLY SYSTEMS.
PERSONAL AUTHOR: ROBINSON, M.; AND OTHERS

DESCRIPTOR: *ASPHALT; *COAL TAR; *CARCINOGENS; *PETROLEUM; *PAINTS; *PUBLIC HEALTH; *PIPES; *STORAGE TANKS; *WATER SUPPLY; *WATER QUALITY; *RESEARCH REPORTS
SCRIPTIVE NOTE: 9P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB84-245547
ABSTRACT: THE SELECTION OF BACTERIAL INDICATORS OF CREATATIONAL WATER QUALITY ARE CONSIDERED WITH RESPECT TO IDEAL CHARACTERISTICS, SUCH AS ASSOCIATION WITH THOGENS, GROWTH IN AQUATIC ENVIRONMENTS, RESISTANCE TO S'INFECTION AND EASE OF ENUMERATION, AND THROUGH THE USE OF IDEMOIOLOGICAL MICROBIOLOGICAL TECHNIQUES. ON THE BASIS OF THESE CONSIDERATIONS, THE TRADITIONAL INDICATORS OF WATER QUALITY, TOTAL AND FECAL COLIFORM, WERE FOUND TO BE CLEARLY INADEQUATE. CONVERSELY, E. COLI AND ENTEROCOCCI MET MOST OF THE IDEAL CHARACTERISTICS IN FRESHWATER ENVIRONMENTS, WHEREAS ONLY ENTEROCOCCI WERE FOUND TO BE EFFICIENT FOR INDEXING WATER QUALITY IN MARINE ENVIRONMENTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161
IRIS ACCESSION NUMBER: EW011777
PUBLICATION DATE: 84

IRIS ACCESSION NUMBER: EW011779
PUBLICATION DATE: SEP 84

TITLE: HIGH PERFORMANCE LIQUID CHROMATOGRAPHY. 1976 - JUNE, 1983 (CITATIONS FROM THE ENERGY DATA BASE).
DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHROMATOGRAPHY; *BIBLIOGRAPHIES; *LABORATORY
SCRIPTIVE NOTE: 76P. PRICE CODE: NOT AVAILABLE NTIS.
PERSONAL AUTHOR: CLARK, C. S.; AND OTHERS
DESCRIPTOR: *ENTERIC PARASITES; *HEALTH; *PARASITIC SEASSES; *OCCUPATIONAL HAZARDS; *PERSONNEL; *RESEARCH PORTS; *SAFETY; *PUBLIC UTILITIES; *WASTEWATER TREATMENT
IRIS ACCESSION NUMBER: EW011777
PUBLICATION DATE: SEP 84

OCEDURES; *LIQUID CHROMATOGRAPHY; *ORGANIC COMPOUNDS; POLLUTION; *SEPARATION TECHNIQUES; *WASTES
 SCRIPTIVE NOTE: 336P. PRICE CODE: PC N01/MF N01. ORDER
 .: PB84-8753-43

STRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING GH-PERFORMANCE (OR HIGH-PRESSURE OR HIGH-SPEED) LIQUID CHROMATOGRAPHY TECHNIQUES AND APPLICATIONS. THE ARACTERIZATION, ANALYSIS, DETECTION, AND SEPARATION OF RIOUS SUBSTANCES (INCLUDING POLYCYCLIC AROMATIC COMPOUNDS, ILLUTANTS, AND WASTES) ARE CONSIDERED. (THIS UPDATED BLIOGRAPHY CONTAINS 295 CITATIONS, ALL OF WHICH ARE NEW TRIES TO THE PREVIOUS EDITION.)

AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285
 RT ROYAL ROAD, SPRINGFIELD, VA 22161

.IS ACCESSION NUMBER: EW011780
 BLICATION DATE: SEP 84

TLE: HIGH PERFORMANCE LIQUID CHROMATOGRAPHY. JULY, 1983
 SEPTEMBER, 1984 (CITATIONS FROM THE ENERGY DATA BASE).

SCRIPTOR: *ANALYTICAL TECHNIQUES; *CHROMATOGRAPHY; *LABORATORY BLIOGRAPHIES; BIBLIOGRAPHIES; *CHROMATOGRAPHY; *ORGANIC COMPOUNDS; OCEDURES; *LIQUID CHROMATOGRAPHY; *WATER POLLUTION; *SEPARATION TECHNIQUES; *WASTES

SCRIPTIVE NOTE: 83P. PRICE CODE: PC N01/MF N01. ORDER
 .: PB84-8753-43

STRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING GH-PERFORMANCE (OR HIGH-PRESSURE OR HIGH-SPEED) LIQUID CHROMATOGRAPHY TECHNIQUES AND APPLICATIONS. THE ARACTERIZATION, ANALYSIS, DETECTION, AND SEPARATION OF RIOUS SUBSTANCES (INCLUDING POLYCYCLIC AROMATIC COMPOUNDS, ILLUTANTS, AND WASTES) ARE CONSIDERED. (THIS UPDATED BLIOGRAPHY CONTAINS 73 CITATIONS, ALL OF WHICH ARE NEW TRIES TO THE PREVIOUS EDITION.)

AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285
 RT ROYAL ROAD, SPRINGFIELD, VA 22161

.IS ACCESSION NUMBER: EW011781
 TLE: PRINCIPLES OF WATER RESOURCES PLANNING.
 RSONAL AUTHOR: GOODMAN, ALVIN S.

SCRIPTOR: *ADMINISTRATION; *FINANCES; *GUIDES;
 NSTRUCTIONAL MATERIALS; *LEGAL ASPECTS; *MANAGEMENT;
 ODELING; *PLANNING; *POSTSECONDARY EDUCATION; *PROJECT
 ALUATION; *WATER RESOURCES

SCRIPTIVE NOTE: 563P. PRICE: \$34.95
 STRACT: THE AMOUNT OF DETAIL IN THIS WORK MAKES IT USEFUL
 A GUIDE AND REFERENCE FOR THE PRACTITIONERS OF WATER

RESOURCES PLANNING AND MANAGEMENT. AFTER PROVIDING SOME BASIC CONCEPTS THE AUTHOR DISCUSSES PROJECT ELEMENTS, POPULATION AND WATER NEEDS, PROJECT EVALUATION, REGIONAL PLANNING, PUBLIC INVOLVEMENT, ECONOMIC AND FINANCIAL ANALYSES, MODELING, ENVIRONMENTAL AND SOCIAL IMPACTS, LEGAL ASPECTS, ADMINISTRATION, AND NUMEROUS OTHER TOPICS. IT PROVIDES DIAGRAMS, TABLES, MAPS, AND OTHER USEFUL ILLUSTRATIONS AND DATA.

AILABILITY: PRENTICE-HALL, INC., ENGLEWOOD CLIFFS, NJ
 07632

IRIS ACCESSION NUMBER: EW011782
 TITLE: SEWERAGE REHABILITATION MANUAL.

DESCRIPTOR: *MAINTENANCE; *REHABILITATION; *SEWERS; *UNITED KINGDOM; *WASTEWATER COLLECTION

ABSTRACT: THIS PUBLICATION REPRESENTS THE CULMINATION OF SEVERAL YEARS OF RESEARCH AND SEWER REHABILITATION BY THE WATER RESEARCH CENTER (WRC) IN CONJUNCTION WITH THE UK WATER INDUSTRY. IT OFFERS SEWERAGE ENGINEERS WORLDWIDE THE FIRST SYSTEMATIC AND COMPREHENSIVE APPROACH TO PROBLEMS ASSOCIATED WITH SEWERS.

AILABILITY: WRC ENGINEERING, P. O. BOX 85, FRANKLAND ROAD, BLAGROVE, SWINDON, WILTSHIRE, SN5 8YR, UNITED KINGDOM

IRIS ACCESSION NUMBER: EW011783

PUBLICATION DATE: 84
 TITLE: EUROWATER.

DESCRIPTOR: *EUROPE; HISTORY; FINANCES; LEGISLATION; MANAGEMENT; POLICIES; RESEARCH; TRENDS; *WATER TREATMENT; *WASTEWATER TREATMENT; *WATER SUPPLY; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 98BP. PRICE: \$17.00
 ABSTRACT: THIS BOOK HAS BEEN PRODUCED BY THE EUROPEAN WATER POLLUTION CONTROL ASSOCIATION ON THE ACTIVITIES OF MEMBER COUNTRIES. THERE ARE 13 CHAPTERS UNIFORMLY COVERING THE HISTORY, STRUCTURE, LEGISLATION, FINANCE, WATER SUPPLY, WATER TREATMENT, SEWAGE TREATMENT, SEWAGE DISPOSAL, RIVER MANAGEMENT, WASTEWATER TREATMENT, FUNDING AND RESEARCH POLICIES OF THE MEMBERS IN AUSTRIA, BELGIUM, DENMARK, FEDERAL REPUBLIC OF GERMANY, FINLAND, FRANCE, ITALY, THE NETHERLANDS, NORWAY, SPAIN, SWEDEN, SWITZERLAND AND THE UNITED KINGDOM.

AILABILITY: WATER POLLUTION CONTROL FEDERATION, DATA MANAGEMENT DEPARTMENT, 2626 PENNSYLVANIA AVENUE, N. W., WASHINGTON, DC 20037

IRIS ACCESSION NUMBER: EW011784

IRIS ACCESSION NUMBER: EW011786

PUBLICATION DATE: JUL 84

TITLE: EPA METHOD STUDY 17, METHOD 607 - NITROSAMINES.
OBJECT SUMMARY.

PERSONAL AUTHOR: MILLAR, JOHN D.; AND OTHERS

SCRIPTOR: *ANALYTICAL TECHNIQUES; *EPA METHOD STUDIES;
LABORATORY PROCEDURES; *METHOD STUDIES; *WATER
WATER ANALYSIS; *WATER

SCRIPTIVE NOTE: 3P. FOR COMPLETE REPORT ORDER NO.:
184-207646; PRICE: \$10.00

ABSTRACT: THIS REPORT DESCRIBES THE RESULTS OBTAINED AND
DATA ANALYSES FROM AN INTERLABORATORY EVALUATION OF EPA
METHOD 607 (NITROSAMINES).

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

IRIS ACCESSION NUMBER: EW011785

PUBLICATION DATE: MAR 84

TITLE: WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION
SYSTEM (IRIS) SUPPLEMENT XVII.

SCRIPTOR: *AUDIOVISUAL AIDS; CITIZEN PARTICIPATION;
INDEXES; *INSTRUCTIONAL MATERIALS; PESTICIDES; POSTSECONDARY
EDUCATION; *TECHNOLOGY; WASTE DISPOSAL; WATER POLLUTION;
WATER QUALITY; *WATER RESOURCES; *WATER TREATMENT;
WASTEWATER TREATMENT

SCRIPTIVE NOTE: 121P. PRICE: \$4.00

ABSTRACT: COMPILED ARE ABSTRACTS AND INDEXES TO SELECTED
PRINT AND NON-PRINT MATERIALS RELATED TO WASTEWATER
TREATMENT AND WATER QUALITY EDUCATION AND INSTRUCTION, AS
WELL AS MATERIALS RELATED TO PESTICIDES, HAZARDOUS WASTES,
AND PUBLIC PARTICIPATION. SOURCES OF ABSTRACTED/INDEXED
MATERIALS INCLUDE ALL LEVELS OF GOVERNMENT, PRIVATE
CONCERN, AND EDUCATIONAL INSTITUTIONS. TITLE, AUTHOR(S),
PUBLICATION DATE, CROSS-REFERENCES, DESCRIPTORS, AND
AVAILABILITY ARE PROVIDED FOR EACH ENTRY. 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 OF THEIR PROGRAMS. THIS PUBLICATION
SUPPLEMENTS AND DOES NOT REPLACE "WATER QUALITY
INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS); A
COMPILATION OF ABSTRACTS TO WATER QUALITY AND WATER
RESOURCES MATERIALS" OR IRIS SUPPLEMENTS 1-17.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO
STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH
43212

V56 N11

PUBLICATION DATE: JUL 84

TITLE: WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION
SYSTEM (IRIS) SUPPLEMENT XVIII.

SCRIPTOR: *AUDIOVISUAL AIDS; CITIZEN PARTICIPATION;
INDEXES; *INSTRUCTIONAL MATERIALS; PESTICIDES; POSTSECONDARY
EDUCATION; *TECHNOLOGY; WASTE DISPOSAL; WATER POLLUTION;
WATER QUALITY; *WATER RESOURCES; *WATER TREATMENT;

SCRIPTIVE NOTE: 121P. PRICE: \$4.00

ABSTRACT: COMPILED ARE ABSTRACTS AND INDEXES TO SELECTED
PRINT AND NON-PRINT MATERIALS RELATED TO WASTEWATER
TREATMENT AND WATER QUALITY EDUCATION AND INSTRUCTION, AS
WELL AS MATERIALS RELATED TO PESTICIDES, HAZARDOUS WASTES,
AND PUBLIC PARTICIPATION. SOURCES OF ABSTRACTED/INDEXED
MATERIALS INCLUDE ALL LEVELS OF GOVERNMENT, PRIVATE
CONCERN, AND EDUCATIONAL INSTITUTIONS. TITLE, AUTHOR(S),
PUBLICATION DATE, CROSS-REFERENCES, DESCRIPTORS, AND
AVAILABILITY ARE PROVIDED FOR EACH ENTRY. 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 OF THEIR PROGRAMS. THIS PUBLICATION
SUPPLEMENTS AND DOES NOT REPLACE "WATER QUALITY
INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS); A
COMPILATION OF ABSTRACTS TO WATER QUALITY AND WATER
RESOURCES MATERIALS" OR IRIS SUPPLEMENTS 1-16.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO
STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH
43212

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION;
V56 N11

U.S. ACCESSION NUMBER: EW011789

PUBLICATION DATE: 23

TITLE: A MODULAR THREE-DIMENSIONAL FINITE-DIFFERENCE SOUND-WATER FLOW MODEL.

PERSONAL AUTHOR: McDONALD, MICHAEL C.; HARBCHAFF, ARLEN W.
SCRIPTOR: *COMPUTER APPLICATIONS; *MODELS; *WATER RESOURCES
ROUNDWATER; *FLOW MEASUREMENT; *POSTSECONDARY EDUCATION

SCRIPTIVE NOTE: 528P. PRICE: \$39.00. COMPUTER PROGRAM
PE ALSO AVAILABLE.

STRAC: A MODULAR THREE-DIMENSIONAL FINITE-DIFFERENCE SOUND-WATER FLOW MODEL (OF REPORT 83-875) AND ITS ASSOCIATED COMPUTER PROGRAM WERE RECENTLY DEVELOPED BY THE S. GEOLOGICAL SURVEY. THE MAIN OBJECTIVES IN DESIGNING A NEW MODEL WERE TO PRODUCE A PROGRAM THAT CAN BE READILY DEFINED, IS SIMPLE TO USE AND MAINTAIN, CAN BE EXECUTED ON A VARIETY OF COMPUTERS WITH MINIMAL CHANGES, AND HAS THE ABILITY TO MANAGE THE LARGE DATA SETS REQUIRED WHEN RUNNING LARGE PROBLEMS. THE MODEL CONSISTS OF APPROXIMATELY 5,000 1-CHARACTER RECORDS AND MAY BE USED FOR EITHER TWO- OR THREE-DIMENSIONAL APPLICATIONS. THE MODULAR STRUCTURE CONSISTS OF A MAIN PROGRAM AND A SERIES OF HIGHLY DEPENDENT SUBROUTINES CALLED MODULES WHICH ARE GROUPED INTO PACKAGES. EACH PACKAGE EITHER CONTRIBUTES TERMS TO THE FORMULATION OF FLOW EQUATIONS FOR A SPECIFIC HYDROLOGIC MATURE OR SOLVES THE FLOW EQUATIONS. THE MODULAR STRUCTURE ALLOWS USE OF THE PROGRAM AND UNDERSTANDING OF THE THEMATICAL AND PHYSICAL CONCEPTS ON WHICH THE MODEL IS BASED. IT ALSO FACILITATES DEVELOPMENT OF ADDITIONAL CAPABILITIES BECAUSE NEW MODULES OR PACKAGES CAN BE ADDED TO THE PROGRAM WITHOUT MODIFYING THE EXISTING ONES. THE PROGRAM CAN BE COMPILED UNDER BOTH FORTRAN '66 AND FORTRAN '77. IT HAS BEEN RUN, WITHOUT MODIFICATION, ON COMPUTERS MANUFACTURED BY MOST MAJOR COMPUTER COMPANIES. IT SHOULD RUN ON MOST MICRO-COMPUTERS WITH A MEMORY OF 512K. DOCUMENTATION (28 PAGES) PRESENTED IN THE REPORT INCLUDES A NARRATIVE DESCRIPTION, A FLOW CHART, A LIST OF VARIABLES, AND A PROGRAM LISTING FOR EACH MODULE. THE COMPUTER PROGRAM TAPE IS RECORDED WITH AN 800-BYTE BLOCKSIZE, 9-TRACK, AND LABELED. A CHOICE OF ASCII/EBCDIC AND 600 BPI/1600 BPI IS AVAILABLE. WHEN ORDERING TAPE, BE SURE TO SPECIFY TYPE AND NUMBER.

AVAILABILITY: SCIENTIFIC PUBLICATIONS COMPANY, P.O. BOX 041, WASHINGTON, DC 20026-3041

U.S. ACCESSION NUMBER: EW011790
TITLE: CONTINENTAL RADIOECOLOGY: SOIL AND FRESHWATER ECOSYSTEMS.
PERSONAL AUTHOR: KULIKOV, N. V.

SCRIPTOR: *BIOLOGY; *AQUATIC ENVIRONMENTS; *ECOLOGY; ECOSYSTEMS; *INSTRUCTIONAL MATERIALS; *SOILS
ECOSYSTEM; *RADIONUCLIDES; *RESEARCH; *SOILS
AVAILABILITY: ANALYST'S BOOKSTORE, P. O. BOX 2097, CORVALLIS, OR 97339

DESCRIPTIVE NOTE: 174P. PRICE: \$29.50

ABSTRACT: THIS BOOK CONCERN THE FIELD OF BIOLOGICAL SCIENCE THAT INVESTIGATES THE MECHANISMS OF THE MIGRATION, DISTRIBUTION, AND BIOLOGICAL EFFECTS OF RADIONUCLIDES IN ECOSYSTEMS OF DRY LAND AND INLAND WATERS.

AVAILABILITY: PLenum Publishing Corporation, 233 SPRING STREET, NEW YORK, NY 10013

IRIS ACCESSION NUMBER: EW011791

TITLE: MASS SPECTROMETRY IN ENVIRONMENTAL SCIENCES.
PERSONAL AUTHOR: KARASEK, F. W.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANALYTICAL CHEMISTRY; *ENVIRONMENTAL SCIENCES; *INSTRUCTIONAL MATERIALS; *LABORATORY PROCEDURES; *MASS SPECTROMETRY; *POSTSECONDARY EDUCATION; *RESEARCH; *SPECTROSCOPY; *TOXICOLOGY

DESCRIPTIVE NOTE: 530P. PRICE: \$75.00

ABSTRACT: THIS VOLUME PRESENTS AN IN-DEPTH PICTURE OF THE ADVANCES AND GROWTH IN THE FIELD OF MASS SPECTROSCOPY DEVELOPED FOR THE ANALYSIS OF ENVIRONMENTALLY IMPORTANT COMPOUNDS.

AVAILABILITY: PLenum Publishing Corporation, 233 SPRING STREET, NEW YORK, NY 10013

IRIS ACCESSION NUMBER: EW011792

PUBLICATION DATE: 81
TITLE: PERSONAL COMPUTERS IN CHEMISTRY.

PERSONAL AUTHOR: LYKOS, P.; WILKINS, C.
DESCRIPTOR: *CHEMISTRY; *COMPUTERS; *COMPUTER APPLICATIONS; *INSTRUCTIONAL MATERIALS; *MICROCOMPUTERS; *POSTSECONDARY EDUCATION

DESCRIPTIVE NOTE: PRICE: \$33.50

ABSTRACT: THIS IS AN INTRODUCTION TO THE APPLICATION OF MICROPROCESSOR BASED COMPUTER SYSTEMS IN CHEMISTRY ENCOMPASSING USES FOR RESEARCH, MANAGEMENT, EDUCATION, AND WRITING. DISCUSSED ARE CONSIDERATIONS OF COST, RELIABILITY, MAINTENANCE, GRAPHIC DISPLAY, OPERATING SYSTEMS, AND LANGUAGES. APPLICATIONS DESCRIBED RANGE FROM USE OF A SMALL COMPUTER TO COLLECT DATA FROM OR CONTROL A SINGLE INTERACTIVE LABORATORY DATA SYSTEM, "TALKING" MICROCOMPUTERS, CAPABLE OF SPEECH RECOGNITION AND SPEECH GENERATION, AND A DEVICE WHICH ENABLES CHEMISTS TO USE MANY MATHEMATICAL TOOLS EASILY.

AVAILABILITY: ANALYST'S BOOKSTORE, P. O. BOX 2097, CORVALLIS, OR 97339

- RIS ACCESSION NUMBER: EW011793
UBLICATION DATE: 83
TITLE: MEETING THE NEEDS OF THE POOR FOR WATER SUPPLY AND ASTE DISPOSAL. A WORLD BANK TECHNICAL PAPER. VOLUME 13.
PERSONAL AUTHOR: COLLADAY, FREDRICK L.
ESCRIPTOR: *BARRIERS; *ECONOMICS; *INCENTIVES; *LOW-INCOME EOPLE; *RURAL AREAS; *WASTE DISPOSAL; *WATER SUPPLY; *WORLD ROBLEMS
ESCRITIVE NOTE: 62P.
- ABSTRACT: THIS PAPER EXAMINES ECONOMIC, POLITICAL, SOCIAL ND CULTURAL OBSTACLES TO MEETING THE NEEDS OF LOW-INCOME EOPLE FOR WATER SUPPLY AND WASTE DISPOSAL. IT SUGGESTS WAYS N WHICH COMMUNICATIONS, PEER AND FAMILY SUPPORT FOR INNOVATORS, AND INCENTIVES CAN BE STRENGTHENED.
AVAILABILITY: THE INTERNATIONAL BANK FOR RECONSTRUCTION AND EVELOPMENT/THE WORLD BANK, 1818 H STREET, N. W., WASHINGT, DC 20433
RIS ACCESSION NUMBER: EW011794
UBLICATION DATE: 84
TITLE: APPLIED STREAM SANITATION. SECOND EDITION.
PERSONAL AUTHOR: VELZ, CLARENCE J.
ESCRIPTOR: *INSTRUCTIONAL MATERIALS; *POSTSECONDARY EDUCATION; *SANITATION; *STREAMS; *RIVERS; *WATER POLLUTION ONTROL; *WATER QUALITY
ESCRITIVE NOTE: 800P. PRICE: \$79.95
- ABSTRACT: THIS PUBLICATION EMPHASIZES THE PRACTICAL OVER HE THEORETICAL IN DETAILLING STREAM POLLUTION PROBLEMS AND RIVER QUALITY ASSOCIATED WITH VARIOUS TYPES OF WASTES AS HEY REACT IN THE REAL RIVER ENVIRONMENT. IT REDRESSES THE ACK OF SCIENTIFIC-ENGINEERING INTELLIGENCE AND DIRECTION IN HE FIELD OF WATER POLLUTION CONTROL AND MAKES RELIABLE OJOCTIONS ON WASTE ASSIMILATION CAPACITY AND THE RESULTANT ATER QUALITY OF THE STREAM.
AVAILABILITY: WILEY-INTERSCIENCE, 605 THIRD AVENUE, NEW YORK, NY 10158
RIS ACCESSION NUMBER: EW011795
UBLICATION DATE: 84
TITLE: FLOW MEASURING FLUMES FOR OPEN CHANNEL SYSTEMS.
PERSONAL AUTHOR: BOS, MARINUS G.; AND OTHERS
ESCRIPTOR: *CANALS; *DESIGN; *DRAINS; *FLOW MEASUREMENT;
- *INSTRUCTIONAL MATERIALS; *FLUIDS; *OPEN CHANNEL SYSTEMS; *POSTSECONDARY EDUCATION; *SEWERS; *STREAMS; *WATER DESCRIPTIVE NOTE: 336P. PRICE: \$42.95
- ABSTRACT: THIS IS A GUIDE TO THE DESIGN OF FLUMES FOR THE MEASUREMENT OF OPEN CHANNEL FLOWS IN IRRIGATION CANALS, DRAINS, NATURAL STREAMS, AND SEWERS. IT PROVIDES PRETESTED READY-TO-APPLY MEASURING-STRUCTURE DESIGNS--BOTH "LONG-THROATED FLUMES" AND "BROAD-CRESTED WEIRS."
AVAILABILITY: WILEY-INTERSCIENCE, 605 THIRD AVENUE, NEW YORK, NY 10158
RIS ACCESSION NUMBER: EW011796
PUBLICATION DATE: 84
TITLE: SURFACE WATER TREATMENT FOR COMMUNITIES IN DEVELOPING COUNTRIES.
PERSONAL AUTHOR: SCHULZ, CHRISTOPHER R.; OKUN, DANIEL A.
DESCRIPTOR: *DESIGN; *DEVELOPING COUNTRIES; *OPERATIONS (WATER); *SURFACE WATER; *SURVEYS; *UNIT PROCESSES; *WATER TREATMENT
DESCRIPTIVE NOTE: 312P. PRICE: \$44.95
- ABSTRACT: THIS IS A SURVEY OF WATER TREATMENT PRACTICES AROUND THE WORLD. COVERED ARE THE DESIGN AND CONSTRUCTION OF SURFACE WATER TREATMENT PLANTS IN DEVELOPING COUNTRIES. DETAILED ARE UNIT PROCESSES IN WATER TREATMENT; THE FUNCTION OF EACH PROCESS, AND DIFFERENCES BETWEEN DESIGN APPROACHES IN INDUSTRIALIZED AND DEVELOPING COUNTRIES.
AVAILABILITY: WILEY-INTERSCIENCE, 605 THIRD AVENUE, NEW YORK, NY 10158
RIS ACCESSION NUMBER: EW011797
PUBLICATION DATE: 84
TITLE: AN INTRODUCTION TO WATER QUALITY MODELLING.
PERSONAL AUTHOR: JAMES, A.
DESCRIPTOR: BIOLOGY; DESIGN; CHEMISTRY; *COMPUTER MODELS; HYDROLOGY; *INSTRUCTIONAL MATERIALS; *MODELS; POLLUTION; *POSTSECONDARY EDUCATION; *WATER QUALITY; WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 234P. PRICE: \$34.95
- ABSTRACT: THIS COLLECTION OF ESSAYS PRESENTS A SIMPLE INTRODUCTION TO THE USE OF MODELLING TECHNIQUES AND THEIR APPLICATIONS IN THE MANAGEMENT OF WATER QUALITY AND THE DESIGN AND OPERATION OF WASTEWATER TREATMENT PLANTS.
AVAILABILITY: WILEY-INTERSCIENCE, 605 THIRD AVENUE, NEW

ORK, NY 10158

OBJECTIVES MORE EFFICIENTLY AND ECONOMICALLY. IN THE FOURTH THEME, MORE INFORMATION IS PROVIDED FOR DEVELOPING RIVER BASIN MANAGEMENT STRATEGIES, AND THE FINAL THEME DRAWS TOGETHER RECENT RESEARCH AND ADMINISTRATIVE IDEAS FROM SEVERAL COUNTRIES.

. IIS ACCESSION NUMBER: EW011798

UBLICATION DATE: 84

ITLE: POST-ACCIDENT PROCEDURES FOR CHEMICALS AND
ROPELLANTS.

PERSONAL AUTHOR: SHAVER, DEBORAH K.; BERKOWITZ, ROBERT L.

SCRIPTOR: *ACCIDENT MANAGEMENT; *CONTAINMENT; *CHEMICALS;
HAZARDOUS MATERIALS; *INFORMATION SOURCES; *INSTRUCTIONAL
MATERIALS; *MANAGEMENT; *POSTSECONDARY EDUCATION;
ROPELLANTS; *REPORTING; *REFERENCE MATERIALS

SCRIPTIVE NOTE: 236P. PRICE: \$32.00

ABSTRACT: THIS MANUAL PRESENTS SPECIFIC DATA ON THE CONTROL OF ACCIDENT MANAGEMENT OF HAZARDOUS MATERIALS. THE BOOK IS DIVIDED INTO FIVE SECTIONS, EACH OF WHICH CORRESPONDS TO A SEPARATE AREA OF ACCIDENT MANAGEMENT--FROM PRECAUTIONARY GUIDELINES FOR REPORTING ACCIDENTS AND ASSESSING THE MAGNITUDE OF THE PROBLEM, TO MANAGEMENT AND CONTAINMENT. APPENDICES PROVIDE INFORMATION ON CHEMICAL AND PHYSICAL PROPERTIES, ON-LINE RETRIEVAL SYSTEMS, INFORMATION SOURCES, AND LOCATIONS OF REGIONAL U.S. COAST GUARD AND EPA OFFICES, AND HAZARDOUS WASTE DISPOSAL SITES.

AILABILITY: NOYES PUBLICATIONS, MILL ROAD AT GRAND
AVENUE, PARK RIDGE, NJ 07656

. IIS ACCESSION NUMBER: EW011799

UBLICATION DATE: 84

ITLE: WATER SCIENCE AND TECHNOLOGY: RIVER BASIN
NAGEMENT.PERSONAL AUTHOR: NEWSOME, D. H., ED.; EDWARDS, A. M. C.,
. .SCRIPTOR: *ADMINISTRATION; *CONFERENCE PROCEEDINGS;
ENVIRONMENTAL QUALITY; *MANAGEMENT; *PLANNING; *POLLUTION
NTROL; *RESEARCH; *RIVERS; *TECHNOLOGY;
ATER QUALITY

SCRIPTIVE NOTE: 665P.

ABSTRACT: BASED ON THE PROCEEDINGS OF A IAWPRC CONFERENCE HELD IN YORK, U.K., IN JULY 1983, THIS BOOK BRINGS TOGETHER RECENT WORK ON WATER QUALITY ASPECTS OF RIVER BASIN MANAGEMENT. THE MATERIAL IS ORGANIZED INTO FIVE THEMES. THE FIRST OF WHICH IS CONCERNED WITH CROSS FRONTIER MANAGEMENT OF WATER QUALITY AND THE EXTRAPOLITICAL AND ADMINISTRATIVE DIMENSIONS THIS ENTAILS. THE SECOND THEME, THE CONTRIBUTION OF RIVER SYSTEMS TO ESTUARIAL AND MARINE POLLUTION, DISCUSSES THE IMPACT RIVER SYSTEMS CAN HAVE ON TIDAL WATER QUALITY. THE THIRD THEME IS DESIGNED TO ESTABLISH UNIFORM CRITERIA THAT MEET ENVIRONMENTAL QUALITY

OBJECTIVES MORE EFFICIENTLY AND ECONOMICALLY. IN THE FOURTH THEME, MORE INFORMATION IS PROVIDED FOR DEVELOPING RIVER BASIN MANAGEMENT STRATEGIES, AND THE FINAL THEME DRAWS TOGETHER RECENT RESEARCH AND ADMINISTRATIVE IDEAS FROM SEVERAL COUNTRIES.

AVAILABILITY: PERGAMON PRESS, MAXWELL HOUSE, FAIRVIEW PARK,
ELMSFORD, NY 10523

. IIS ACCESSION NUMBER: EW011800

UBLICATION DATE: 84

ITLE: TOXIC CONTAMINANTS IN THE GREAT LAKES.
PERSONAL AUTHOR: NRIAGU, JEROME O., ED.; SIMMONS, M. S.,
ED.

SCRIPTOR: *CHEMICALS; *GREAT LAKES; *HAZARDOUS SUBSTANCES; *METALS; *ORGANIC COMPOUNDS; *POLLUTION CONTROL; *TOXIC SUBSTANCES; *WATER POLLUTION; *WATER QUALITY DESCRIPTIVE NOTE: 527P. PRICE: \$95.00

ABSTRACT: THIS BOOK PROVIDES A PERSPECTIVE ON CONTAMINANTS IN THE GREAT LAKES. THE REVIEW INCLUDES METHODOLOGIES FOR MONITORING THE MAGNITUDE, EFFECTS, AND PERSISTENCE OF HAZARDOUS SUBSTANCES SUCH AS CHLORINATED HYDROCARBONS, POLYNUCLEAR AROMATIC HYDROCARBONS, METALS, AND METALLOIDS. AVAILABILITY: JOHN WILEY AND SONS, 605 THIRD AVENUE, NEW YORK, NY 10158

. IIS ACCESSION NUMBER: EW011801

UBLICATION DATE: 84

ITLE: GROUNDWATER POLLUTION: ENVIRONMENTAL AND LEGAL
PROBLEMS.
PERSONAL AUTHOR: TRAVIS, C. C., ED.; ETNIER, E. L., ED.

SCRIPTOR: *FEDERAL ROLE; *GROUNDWATER; *ENVIRONMENT; *HYDROLOGY; *LEGAL PROBLEMS; *STATE ROLE; *SYMPOSIA; *WATER POLLUTION CONTROL; *WATER QUALITY DESCRIPTIVE NOTE: 149P. PRICE: \$23.00

ABSTRACT: THIS BOOK HIGHLIGHTS THE METHODOLOGICAL AND CONCEPTUAL DIFFICULTIES INHERENT IN PROTECTING THE NATION'S GROUNDWATER SUPPLIES AND PROVIDES UP-TO-DATE INFORMATION ON GROUNDWATER HYDROLOGY, THE NATURE AND EXTENT OF THE GROUNDWATER POLLUTION PROBLEM, AND THE POSSIBLE EFFECTS OF EXPOSURE TO CONTAMINATED DRINKING WATER. THE AUTHORS PROVIDE INSIGHT INTO THE DIFFICULT LEGAL ISSUES INVOLVED IN PROTECTING GROUNDWATER QUALITY AND STRESS THE NEED FOR A COMPREHENSIVE FEDERAL AND STATE GROUNDWATER PROTECTION PROGRAM. THE MATERIAL IS BASED ON A SYMPOSIUM THAT WAS HELD AT THE 1982 NATIONAL ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

AVAILABILITY: WESTVIEW PRESS, 5500 CENTRAL AVENUE, BOULDER,
IRIS ACCESSION NUMBER: EW011802

PUBLICATION DATE: 84
IRIS ACCESSION NUMBER: EW011804
PUBLICATION DATE: JUN 84

TITLE: WATER SCIENCE AND TECHNOLOGY: RAINFALL AS THE BASIS
FOR URBAN RUN-OFF DESIGN AND ANALYSIS.
PERSONAL AUTHOR: HAREMOES, P., ED.

SCRIPTOR: *DESIGN; *DRAINAGE SYSTEMS; *ENGINEERING;
RAINFALL; *SURFACE RUNOFF; *TECHNOLOGY;
WASTEWATER COLLECTION
SCRIPTIVE NOTE: 363P.
ABSTRACT: THIS BOOK IS BASED ON MATERIAL PRESENTED IN THE
'EVALUATED SEMINAR HELD IN 1983 IN DENMARK, WHICH REVIEWED
SIGNIFICANT RECENT DEVELOPMENTS IN DESIGN METHODS OF URBAN
DRAINAGE SYSTEMS. ONE BASIS FOR THESE DEVELOPMENTS IS
THE AVAILABILITY OF COMPUTERS FOR DATA STORAGE AND
COMPLICATED COMPUTATIONS. THE ARTICLES INCLUDED IN THIS WORK
ATTEMPT TO SYNTHESIZE AVAILABLE RESULTS INTO NEW ENGINEERING
APPROACHES. ALSO HIGHLIGHTED IS THE NEED FOR INCREASED
STEREORLOGICAL AND STATISTICAL KNOWLEDGE ON RAIN EVENTS,
ENABLING UP TO LAST MINUTE FORECASTS.
AVAILABILITY: PERCAMON PRESS, MAXWELL HOUSE, FAIRVIEW PARK,
MSFORD, NY 10523

IRIS ACCESSION NUMBER: EW011803
PUBLICATION DATE: 84
TITLE: EFFECTS OF POLLUTANTS AT THE ECOSYSTEM LEVEL.
PERSONAL AUTHOR: SHEELAN, PATRICK J.
SCRIPTOR: *CASE HISTORIES; *CHEMICALS; *ECOSYSTEMS;
ENVIRONMENTAL IMPACTS; *POLLUTANTS
SCRIPTIVE NOTE: 443P.

ABSTRACT: THIS COLLECTION OF REPORTS SUMMARIZES CURRENT
KNOWLEDGE OF THE EFFECTS OF MAN-MADE CHEMICALS AND OTHER
STURBANCES ON WHOLE ECOSYSTEMS. EACH FOCUSES ON EFFECTS TO
STRUCTURE AND FUNCTION OF THE SYSTEM RATHER THAN ON
IMACT TO INDIVIDUALS OR POPULATIONS CAUSED BY SPECIFIC
CHEMICALS. A NUMBER OF CASE HISTORIES OF AQUATIC, MARINE,
AND TERRESTRIAL SYSTEMS ARE GIVEN, INCLUDING SOME CASES IN
WHICH SYSTEMS HAVE BEEN DAMAGED OR ARE ON THEIR WAY TO
RECOVERY.

AVAILABILITY: JOHN WILEY AND SONS, 605 THIRD AVENUE, NEW
YORK, NY 10016

AVAILABILITY: PERMANENT WASTE WATER POLLUTION.
PERSONAL AUTHOR: CANTER, L.; KNOX, R. C.
SCRIPTOR: *EFFLUENTS; *GROUNDWATER; *SEPTIC TANKS;
*WASTEWATER TREATMENT; *WATER QUALITY; *WATER POLLUTION
CONTROL

SCRIPTIVE NOTE: 381P. PRICE CODE: PC A17/MF A01. ORDER
NO.: PB84-244441

ABSTRACT: THIS STUDY SUMMARIZES LITERATURE CONCERNING THE
TYPES AND MECHANISMS OF GROUND-WATER POLLUTION FROM SEPTIC
TANK SYSTEMS AND PROVIDES INFORMATION ON METHODOLOGIES FOR
EVALUATING THE GROUND-WATER POLLUTION POTENTIAL. THE
CONCLUSIONS ARE: (1) SEPTIC TANK SYSTEMS REPRESENT A
SIGNIFICANT SOURCE OF GROUND-WATER POLLUTION IN THE UNITED
STATES SINCE MANY SYSTEMS ARE EXCEEDING THEIR DESIGN LIFE,
THE USAGE OF SYNTHETIC ORGANIC CHEMICALS IN THE HOUSEHOLD IS
INCREASING, AND LARGER-SCALE SYSTEMS ARE BEING DESIGNED AND
USED; (2) A KEY ISSUE IS RELATED TO UNDERSTANDING THE SUBSURFACE
TRANSPORT AND FATE OF SYSTEM EFFLUENTS IN THE SUBSURFACE
ENVIRONMENT; (3) NO SPECIFIC TECHNICAL METHODOLOGY EXISTS
FOR EVALUATING GROUND-WATER EFFECTS OF SEPTIC TANK SYSTEMS,
HOWEVER, APPLICATION OF TWO EMPIRICAL ASSESSMENT
METHODOLOGIES (SURFACE IMPOUNDMENT ASSESSMENT AND WASTE-
SOIL-SITE INTERACTION MATRIX) ADJUSTED FOR ANNUAL WASTEWATER
FLOW AND ANALYTICAL METHOD FOR DETERMINING WATER TABLE RISE,
AND A SOLUTE-TRANSPORT MODEL FOR GROUND-WATER FLOW AND
POLLUTANT CONCENTRATIONS HAS MET WITH SOME SUCCESS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5235
PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011805
PUBLICATION DATE: SEP 84
TITLE: ALTERNATIVE DISINFECTION PROCESSES.
PERSONAL AUTHOR: STEVENS, A. A.; SYMONS, J. M.
SCRIPTOR: *ALTERNATIVE TECHNOLOGY; *DISINFECTION;
*DRINKING WATER; *WATER TREATMENT

SCRIPTIVE NOTE: 44P. PRICE CODE: PC A03/MF A01. ORDER
NO.: PB84-246248

ABSTRACT: TRIHALOMETHANES ARE FORMED DURING DRINKING WATER
TREATMENT WHEN THE FREE CHLORINE USED AS A DISINFECTANT
COMBINES WITH TRIHALOMETHANE PRECURSORS, MAINLY HUMIC
MATERIALS, PRESENT IN THE WATER. ONE APPROACH TO LOWERING
TRIHALOMETHANE CONCENTRATIONS IN FINISHED DRINKING WATER IS
BY SWITCHING FROM FREE CHLORINATION TO AN ALTERNATIVE
DISINFECTION PROCESS. THE ALTERNATIVE PROCESSES VARY WIDELY
IN THEIR TENDENCIES TO FORM BYPRODUCTS OTHER THAN
TRIHALOMETHANES, THE STATE OF KNOWLEDGE OF THEIR RESPECTIVE

PRODUCT PRODUCTION, THEIR DISINFECTING CAPABILITIES, AND ENGINEERING CONSIDERATIONS ASSOCIATED WITH THEIR APPLICATION AS A TREATMENT PROCESS.

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

IRIS ACCESSION NUMBER: EN011896

PUBLICATION DATE: SEP 84

TITLE: TOXICOLOGY OF NATURAL AND MAN-MADE TOXICANTS IN INKING WATER.

PERSONAL AUTHOR: BULL, R. J.

SCRIPTOR: *CHEMICAL REACTIONS; *DISINFECTION; *DRINKING WATER; *CHLORINE; *ORGANIC CHEMICALS; *TOXIC SUBSTANCES; OXICOLOGY

SCRIPTIVE NOTE: 17P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB84-246235

ABSTRACT: DRINKING WATER OBTAINED FROM SURFACE SOURCES CONTAINS A VERY LARGE VARIETY OF ORGANIC CHEMICALS. THE TOTAL ORGANIC CARBON PRESENT IN THE SOURCE WATER IS MADE UP BOTH NATURAL AND MAN-MADE CHEMICALS. IN MOST INSTANCES TURAL ORGANIC MATERIAL PREDOMINATES AND IS LARGELY MADE UP HUMIC AND FULVIC ACIDS. THE INTRODUCTION OF CHLORINE INTO DRINKING WATER RESULTS IN THE FORMATION OF A VARIETY OF PRODUCTS INCLUDING THE TRIHALOMETHANES, HALOACETONITRILES, LOGENATED ALDEHYDE AND HALOGENATED KETONE DERIVATIVES. REPRESENTATIVES OF THESE CLASSES OF CHEMICALS HAVE BEEN OWN TO BE MUTAGENIC AND/OR CARCINOGENIC. MORE RECENT STUDIES HAVE SHOWN THAT SIMILAR CHEMICALS ARE FORMED UPON DIRECT ADMINISTRATION OF CHLORINE SOLUTIONS TO RATS. THESE CHEMICALS THAT HAVE BEEN GENERALLY REGARDED AS SAFE (THE INFECTANTS) AND OTHER CHEMICALS OF A LOW LEVEL OF INTRINSIC TOXICITY (HUMIC ACIDS, STOMACH CONTENTS) PRODUCE POTENTIALLY HAZARDOUS PRODUCTS.

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

IRIS ACCESSION NUMBER: EW011897

PUBLICATION DATE: AUG 84

TITLE: TECHNOLOGY ASSESSMENT OF AQUACULTURE SYSTEMS FOR MUNICIPAL WASTEWATER TREATMENT.

PERSONAL AUTHOR: HYDE, H. C.; AND OTHERS

SCRIPTOR: *ALTERNATIVE TECHNOLOGY; *AQUACULTURE SYSTEMS; *ECONOMICS; *TECHNOLOGY; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 133P. PRICE CODE: PC A07/MF A01. ORDER NO.: PB84-246347

ABSTRACT: THE INNOVATIVE AND ALTERNATIVE TECHNOLOGY PROVISIONS OF THE CLEAN WATER ACT OF 1977 (PL 95-217) PROVIDE FINANCIAL INCENTIVES TO COMMUNITIES THAT USE WASTEWATER TREATMENT ALTERNATIVES TO REDUCE COSTS OR ENERGY CONSUMPTION OVER CONVENTIONAL SYSTEMS. SOME OF THESE TECHNOLOGIES HAVE BEEN ONLY RECENTLY DEVELOPED AND ARE NOT IN WIDESPREAD USE IN THE UNITED STATES. THIS DOCUMENT DISCUSSES THE APPLICABILITY AND TECHNICAL AND ECONOMIC FEASIBILITY OF USING AQUACULTURE SYSTEMS FOR MUNICIPAL WASTEWATER TREATMENT FACILITIES.

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

IRIS ACCESSION NUMBER: EW011898

PUBLICATION DATE: OCT 84

TITLE: ACTIVATED CARBON. 1979-SEPTEMBER, 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *ACTIVATED CARBON; *INDUSTRIAL WASTES; *PERFORMANCE EVALUATION; *WASTE TREATMENT; *WASTEWATER TREATMENT FROM THE NTIS DATA BASE).

DESCRIPTIVE NOTE: 243P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB84-875905

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE UTILIZATION OF ACTIVATED CARBON FOR THE TREATMENT OF SEWAGE AND INDUSTRIAL WASTES. TOPICS INCLUDE PERFORMANCE EVALUATIONS AT SPECIFIC SITES, ENGINEERING STUDIES, AND REGENERATION TECHNIQUES. APPLICATIONS IN SEWAGE TREATMENT, COAL CONVERSION, PETROCHEMICAL, AND VARIOUS OTHER INDUSTRIES ARE PRESENTED. CITATIONS PERTAINING TO AIR POLLUTION CONTROL ARE EXCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 244 CITATIONS, 88 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW011899

PUBLICATION DATE: 83

TITLE: WETLANDS, FLOODPLAINS, EROSION, AND STORM WATER PUMPING.

PERSONAL AUTHOR: JUFFER, H. D.; AND OTHERS DESCRIPTOR: *EROSION; *FLOODPLAINS; *HIGHWAYS; *REPORTS; *STORMWATER; *WETLANDS; *TRANSPORTATION

DESCRIPTIVE NOTE: 78P. PRICE CODE: PC A05/MF A01. ORDER NO.: PB85-102291

ABSTRACT: THE 10 PAPERS IN THIS REPORT DEAL WITH THE FOLLOWING AREAS: INNOVATIVE TECHNIQUE FOR PRELIMINARY HIGHWAY LOCATION; CONTROLLING ACIDIC-TOXIC METAL LEACHATES

SOUTHERN APPALACHIAN CONSTRUCTION SLOPES: MITIGATING HIGHWAY IMPACTS ON WETLANDS: ASSESSMENT, MITIGATION, AND ENHANCEMENT MEASURES; EVALUATION OF ARTIFICIAL WETLANDS IN NORTH DAKOTA: RECOMMENDATIONS FOR FUTURE DESIGN AND CONSTRUCTION; IMPACT OF BRIDGING ON SOODPLAINS; GUIDE FOR ASSESSING WATER-QUALITY IMPACTS OF HIGHWAY OPERATIONS AND MAINTENANCE; SOIL EROSION STUDY OF EXPOSED HIGHWAY CONSTRUCTION SLOPES AND ROADWAYS; Erosion causes and factors: Minnesota Survey Analysis; SCOUR CULVERT OUTLETS IN MULTIBED MATERIALS; AND, HYDRAULIC SIGN OF STORMWATER PUMPING STATIONS: THE EFFECT OF ORAGE.

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

IRIS ACCESSION NUMBER: EW011810
PUBLICATION DATE: JUL 84

TITLE: ECONOMIC IMPACT ANALYSIS OF EFFLUENT LIMITATIONS GUIDELINES AND STANDARDS FOR THE INORGANIC CHEMICALS INDUSTRY, PHASE 2.

SCRIPTOR: *ECONOMICS; *EFFLUENT GUIDELINES; *GUIDELINES; INORGANIC CHEMICALS; *INDUSTRIES; *REGULATIONS; *STANDARDS; *SEPA

SCRIPTIVE NOTE: 98P . PRICE CODE: PC A05/MF A01 . ORDER NO.: PB85-102374

ABSTRACT: THE U.S. EPA ISSUED EFFLUENT GUIDELINES AND LIMITATIONS FOR PHASE II OF THE INORGANIC CHEMICALS INDUSTRY IN JULY 1984. THIS REPORT EVALUATES THE EFFECTS THAT THIS REGULATION WILL HAVE ON 46 FACILITIES WHICH MANUFACTURE ONE OR MORE OF THE 17 INORGANIC CHEMICALS WHICH COMprise PHASE OF THE INORGANIC CHEMICALS INDUSTRY.

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

IRIS ACCESSION NUMBER: EW011811
PUBLICATION DATE: 84

TITLE: COMPUTER EDUCATION OF CHEMISTS.
PERSONAL AUTHOR: LYKOS, PETER

SCRIPTOR: *COMPUTERS; *COMPUTER APPLICATIONS; *CHEMISTRY; DATA PROCESSING; *EQUIPMENT; *INSTRUCTIONAL MATERIALS; *LABORATORY EQUIPMENT; *INSTRUMENTATION; *POSTSECONDARY EDUCATION

SCRIPTIVE NOTE: 220P . PRICE: \$32.50

ABSTRACT: THIS COMPENDIUM EXPLAINS STATE-OF-THE-ART COMPUTERS TO CHEMISTRY FROM INTERFACING COMPUTERS WITH EXPERIMENTAL APPARATUS TO GRAPHIC PRESENTATION OF DATA. A VARIETY OF COMPUTERS AND COMPUTER

LANGUAGES ARE EXAMINED. THOROUGHLY EXPLORED ARE SIGNAL ANALYSIS, REAL-TIME CONTROL, CLUSTER ANALYSIS, ROBOTICS, CHEMOMETRICS, AND SERVO DEVICES.

AVAILABILITY: JOHN WILEY AND SONS, INC., ONE WILEY DRIVE, SOMERSET, NJ 08873

IRIS ACCESSION NUMBER: EW011812
PUBLICATION DATE: 84

TITLE: THE LABORATORY MICROCOMPUTER: PROGRAMMING IN PASCAL AND MC68000 ASSEMBLY LANGUAGE ON THE IBM SYSTEM 9000.

PERSONAL AUTHOR: COOPER, JAMES W.

SCRIPTOR: *ASSEMBLY LANGUAGE; *COMPUTERS; *COMPUTER SOFTWARE; *COMPUTER APPLICATIONS; *GUIDES; *IBM SYSTEM 9000; *LABORATORY ACTIVITIES; *MICROCOMPUTERS; *PASCAL

SCRIPTIVE NOTE: 384P . PRICE: \$29.00

ABSTRACT: THIS MANUAL SHOWS HOW TO COMPILE, EDIT, AND PRINT WITH CS/9000 PASCAL, AS WELL AS INTERFACE PASCAL TO MC68000 ASSEMBLY LANGUAGE ROUTINES FOR EVEN MORE POWERFUL PROGRAMS. PROVIDED ARE OVER 100 SAMPLE LABORATORY PROGRAMS THAT WILL RUN ON THE GS/9000 EXACTLY AS SHOWN. IN ADDITION, THE AUTHOR DEMONSTRATES HOW TO OPTIMIZE TIME-CRITICAL ROUTINES, GRAPHICS ROUTINES, AND FAST SPECTRUM DISPLAY ROUTINES. HE ALSO PROVIDES VALUABLE GUIDANCE ON USING THE ASM ASSEMBLY PROGRAM.

AVAILABILITY: JOHN WILEY AND SONS, INC., ONE WILEY DRIVE, SOMERSET, NJ 08873

IRIS ACCESSION NUMBER: EW011813
PUBLICATION DATE: 84

TITLE: HAZARDOUS AND TOXIC MATERIALS: SAFE HANDLING AND DISPOSAL.
PERSONAL AUTHOR: FAWCETT, HOWARD E.

SCRIPTOR: *ACCIDENT PREVENTION; *CHEMICALS; *HAZARDOUS MATERIALS; *HAZARDOUS WASTES; *MATERIALS HANDLING; *GUIDES; *REGULATIONS; *SAFETY; *TOXIC MATERIALS; *WASTE DISPOSAL

SCRIPTIVE NOTE: 296P . PRICE: \$35.00

ABSTRACT: THIS GUIDE DISCUSSES PROVEN TECHNIQUES FOR SAFE HANDLING, STORAGE, AND DISPOSAL OF CHEMICALS USED IN A WIDE VARIETY OF SITUATIONS. PROVIDED IS ADVICE ON HOW TO AVOID TOXIC, FIRE, AND EXPLOSION HAZARDS IN THE LABORATORY AS WELL AS THE DUMP SITE. NUMEROUS EXAMPLES ARE GIVEN ON (1) HANDLING PCBs, DIOXIN, PBBS, AND MORE, (2) WHAT PROTECTIVE EQUIPMENT IS NEEDED, (3) HOW TO MONITOR WORKER EXPOSURE, AND (4) HOW TO IMPLEMENT EPA REGULATIONS ECONOMICALLY. OVER 500 HAZARDOUS WASTE SITES ACROSS THE COUNTRY ARE LISTED BY

AILABILITY: JOHN WILEY AND SONS, INC., ONE WILEY DRIVE,
MERSET, NJ 08873

.IRIS ACCESSION NUMBER: EW011814
BLICATION DATE: 84

TLE: SAFE STORAGE OF LABORATORY CHEMICALS.

PERSONAL AUTHOR: PIPITONE, DAVID A., ED.

SCRIPTOR: *ACCIDENT PREVENTION; *CHEMICALS; *CHEMICAL ORAGE; *HAZARDOUS MATERIALS; *LABORATORY SAFETY; *SAFETY; *OXIC SUBSTANCES; *WASTE DISPOSAL

SCRIPTIVE NOTE: 238P. PRICE: \$60.00

STRACT: THIS BOOK WILL ASSIST YOU IN MAINTAINING CHEMICAL ALTH AND SAFETY IN YOUR WORKPLACE; THIS VOLUME PROVIDES FORMATION AS TO FUNDAMENTAL PRINCIPLES OF CHEMICAL ORAGE. INCLUDED IS INFORMATION ON THE VARIETY AND TYPE OF EMICAL STORAGE HAZARD, DEGREES OF HAZARDS, AND PRACTICAL IDELINES FOR ANALYZING AND CORRECTING DEFICIENCIES. OBLEMS RELATED TO HAZARDOUS, FLAMMABLE, UNSTABLE AND COMPATIBLE CHEMICALS ARE DISCUSSED. ALSO INCLUDED ARE CTS ABOUT SURVEYS AND INSPECTIONS, STORAGE SYSTEM, COMPUTERIZED WAREHOUSING FUNCTIONS, AND CHOOSING A COMPUTER R ITS INFORMATION RETRIEVAL FUNCTIONS.

AILABILITY: JOHN WILEY AND SONS, INC., ONE WILEY DRIVE,
MERSET, NJ 08873

.IRIS ACCESSION NUMBER: EW011816
BLICATION DATE: 31

TLE: SANITATION IN DEVELOPING COUNTRIES: PROCEEDINGS OF WORKSHOP ON TRAINING HELD IN LOBATSE, BOTSWANA, 14-20 AUGUST 1980.

SCRIPTOR: *CONFERENCE PROCEEDINGS; *DEVELOPING COUNTRIES; URAL AREAS; *SANITATION; *TRAINING; *WASTE DISPOSAL

SCRIPTIVE NOTE: 172P.

STRACT: THIS PROCEEDINGS DISCUSSES SANITATION AND WASTE-SPOSAL TECHNIQUES IN ETHIOPIA, KENYA, TANZANIA, MALAWI, TSWANA, ZAMBIA, MOZAMBIQUE, AND LESOTHO. IT EXAMINES DEVELOPMENT AND TRAINING PROGRAMS FOR PROFESSIONAL, CHNICAL, AND VILLAGE-LEVEL PERSONNEL. RECOMMENDATIONS FOR ECIFIC FOLLOWUP ACTIVITIES ARE INCLUDED.

AILABILITY: PUBLICATIONS MANAGER, INTERMEDIATE TECHNOLOGY PUBLICATIONS, LTD., 9 KING STREET, LONDON WC2E 8HN, UNITED NDOM

IRIS ACCESSION NUMBER: EW011817

PUBLICATION DATE: 81

TLE: RURAL WATER SUPPLY IN DEVELOPING COUNTRIES: PROCEEDINGS OF A WORKSHOP ON TRAINING HELD IN ZOMBA, MALAWI, 5-12 AUGUST 1980

SCRIPTOR: *CONFERENCE PROCEEDINGS; *DEVELOPING COUNTRIES; *GUIDELINES; *RURAL AREAS; *TRAINING; *WATER SUPPLY

SCRIPTIVE NOTE: 144P.

ABSTRACT: DISCUSSED ARE LOW-COST RENEWABLE ENERGY TECHNOLOGIES NOW AVAILABLE OR BEING FIELD TESTED. EXAMINED ARE THE ROLE OF TRAINING IN OPERATION AND MAINTENANCE, COMMUNITY PARTICIPATION, HEALTH, EDUCATION, ECONOMIC, AND SOCIOCULTURAL ASPECTS OF WATER-SUPPLY DELIVERY. PRESENTED ARE GUIDELINES FOR NEW DIRECTIONS IN RURAL WATER SUPPLY TRAINING.

AVAILABILITY: PUBLICATIONS MANAGER, INTERMEDIATE TECHNOLOGY PUBLICATIONS LTD., 9 KING STREET, LONDON WC2E 8HN, UNITED KINGDOM

IRIS ACCESSION NUMBER: EW011818
PUBLICATION DATE: 81

TLE: RURAL WATER SUPPLY IN CHINA.
SCRIPTOR: *CHINA; *RURAL AREAS; *WATER SUPPLY; *WATER TREATMENT

SCRIPTIVE NOTE: 92P.

ABSTRACT: A TRANSLATION FROM FIVE CHINESE MANUALS ON WATER SUPPLY TECHNIQUES. THIS REPORT DISCUSSES POTABLE WATER, SOURCE IMPROVEMENT, WATER TREATMENT, SUPPLY CONFIGURATIONS, AND WELL DRILLING AND REPAIRS.

AVAILABILITY: PUBLICATIONS MANAGER, INTERMEDIATE TECHNOLOGY PUBLICATIONS LTD., 9 KING STREET, LONDON WC2E 8HN, UNITED KINGDOM

IRIS ACCESSION NUMBER: EW011819

PUBLICATION DATE: 83
TITLE: ENVIRONMENTAL CARCINOGENS: POLYCYCLIC AROMATIC HYDROCARBONS.

PERSONAL AUTHOR: GRIMMER, GERNOT
SCRIPTOR: *CARCINOGENS; *HYDROCARBONS; *ENVIRONMENT; *INSTRUCTIONAL MATERIALS; *POLYCYCLIC AROMATIC HYDROCARBONS; *POSTSECONDARY EDUCATION

SCRIPTIVE NOTE: 272P. PRICE: \$85.00. CATALOG NO.: 6561VZ

ABSTRACT: INCLUDED ARE PRESENTATIONS ON THE OCCURRENCE OF ANALYTICAL CHEMISTRY, BIOCHEMISTRY, AND CARCINOGENIC ACTIVITY OF THE MOST WIDELY DISTRIBUTED POLYCYCLIC AROMATIC HYDROCARBONS (PAH) IN THE ENVIRONMENT. DISCUSSED ARE THE SIGNIFICANCE OF CARCINOGENIC HYDROCARBONS AS POTENTIAL DANGERS TO MAN AND INTERPRETATIONS OF OCCUPATIONAL MEDICINE, VITAL BIOASSAYS, AND EPIDEMIOLOGICAL STUDIES.

AVAILABILITY: CRC PRESS, INC., 2000 CORPORATE BLVD., N. W., P.O. BOX 33431, FL 33431

IRIS ACCESSION NUMBER: EW011821

PUBLICATION DATE: NOV 84

TITLE: DEVELOPMENT OF REVISED PRIMARY DRINKING WATER REGULATIONS.

PERSONAL AUTHOR: COTRUVO, JOSEPH A.; VOET, CRAIG

SCRIPTOR: *DRINKING WATER; *PUBLIC HEALTH; *REGULATIONS; USEPA; *WATER SUPPLY; *WATER TREATMENT; *WATER QUALITY

SCRIPTIVE NOTE: 34-38P.

ABSTRACT: USEPA OFFICIALS OUTLINE THE APPROACHES AND THE METABLE FOR DEVELOPING REVISED DRINKING WATER REGULATIONS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATIONS JOURNAL; N1

IRIS ACCESSION NUMBER: EW011822

PUBLICATION DATE: NOV 84

TITLE: WATER HAMMER: CAUSES AND EFFECTS.

PERSONAL AUTHOR: KROON, JOSEPH R.; AND OTHERS

SCRIPTOR: *DESIGN; *HYDRAULICS; *PIPES; *PLUMBING; *WATER DISTRIBUTION; *WATER HAMMER

SCRIPTIVE NOTE: 39-45P.

ABSTRACT: THE DESTRUCTIVE FORCES OF WATER HAMMER ARE SCRIBED TO REFRESH DESIGN ENGINEERS' UNDERSTANDING OF THE CIRCUMSTANCES UNDER WHICH IT CAN OCCUR.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76

ABSTRACT: INCLUDED ARE PRESENTATIONS ON THE OCCURRENCE OF ANALYTICAL CHEMISTRY, BIOCHEMISTRY, AND CARCINOGENIC ACTIVITY OF THE MOST WIDELY DISTRIBUTED POLYCYCLIC AROMATIC HYDROCARBONS (PAH) IN THE ENVIRONMENT. DISCUSSED ARE THE SIGNIFICANCE OF CARCINOGENIC HYDROCARBONS AS POTENTIAL DANGERS TO MAN AND INTERPRETATIONS OF OCCUPATIONAL MEDICINE, VITAL BIOASSAYS, AND EPIDEMIOLOGICAL STUDIES.

AVAILABILITY: CRC PRESS, INC., 2000 CORPORATE BLVD., N. W., P.O. BOX 33431, FL 33431

IRIS ACCESSION NUMBER: EW011823

PUBLICATION DATE: NOV 84

TITLE: POSTPRECIPITATION IN DISTRIBUTION SYSTEMS.

PERSONAL AUTHOR: COSTELLO, JAMES J.

DESCRIPTOR: CALCUIUM; CARBONATE; *CHEMICAL PRECIPITATION; ALUMINUM; IRON; LEAD; *POSTPRECIPITATION; *RECOMMENDATIONS; *WATER DISTRIBUTION; *WATER TREATMENT; ZINC

SCRIPTIVE NOTE: 46-49P.

ABSTRACT: AS A RESULT OF CERTAIN WATER TREATMENT PRACTICES, PRECIPITATION OF METALS IN THE DISTRIBUTION SYSTEM CAN RESTRICT FLOW BY AS MUCH AS ONE HALF. A DESCRIPTION OF THE CAUSES OF POSTPRECIPITATION IS FOLLOWED BY A DISCUSSION OF THE EFFECTS OF THE PHENOMENON ON DISTRIBUTION PIPELINES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW011824

PUBLICATION DATE: NOV 84

TITLE: DISTRIBUTION SYSTEM MAPS AND RECORD-KEEPING.

PERSONAL AUTHOR: BAITS, LEONARD R.

DESCRIPTOR: *CASE STUDIES; MAPS; MICHIGAN; MAINTENANCE; *RECORDS; *RECORDKEEPING; TRAINING; *WATER DISTRIBUTION; *WATER SUPPLY

SCRIPTIVE NOTE: 50-53P.

ABSTRACT: ACCURATE MAPS AND RECORDS ARE VITAL TO THE FUNCTIONING OF A WATER DISTRIBUTION SYSTEM. DESCRIBED IS THE RECORDS SYSTEM FOR KALAMAZOO, MICHIGAN.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW011825

PUBLICATION DATE: NOV 84

TITLE: ESTIMATING MEAN COLIFORM DENSITIES OF WATER DISTRIBUTION SYSTEMS.

PERSONAL AUTHOR: PIPES, WESLEY O.; CHRISTIAN, ROBERT R.

DESCRIPTOR: *BACTERIA; *COLIFORMS; *CONTAMINATION; MICROBIOLOGY; *MONITORING; *REGULATIONS; *SAMPLING; *WATER DISTRIBUTION; *WATER QUALITY; *WATER SUPPLY; *WATER TREATMENT

SCRIPTIVE NOTE: 60-64P.

ABSTRACT: THIS ARTICLE PRESENTS EVIDENCE THAT THE AVERAGE NUMBER OF COLIFORMS IN MONITORING SAMPLES IS A POOR ESTIMATE OF THE MEAN COLIFORM DENSITY OF THE DISTRIBUTION SYSTEM.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW011826

PUBLICATION DATE: DEC 84

TITLE: WATER SYSTEM MAINTENANCE "RECORD KEEPING" MADE EASY.

PERSONAL AUTHOR: REEVES, PATRICK J.; KEARNS, H. J. PATRICK
SCRIPTOR: *EQUIPMENT; *FACILITIES; *MAINTENANCE; *RECORD
KEEPING; *RECORDS; *WATER DISTRIBUTION; *WATER SUPPLY;
WATER TREATMENT

SCRIPTIVE NOTE: 40-41, 89P.

ABSTRACT: ONE WAY TO RUN A SUCCESSFUL WATER OPERATION IS TO
KEEP GOOD RECORDS. THE AUTHORS DISCUSS THE TYPES OF RECORDS
THAT ARE NEEDED.

AVAILABILITY: PUBLIC WORKS; V115 N12

SCRIPTOR: *AIR STRIPPING; *CHEMICALS; *DRINKING WATER;

GRANULAR ACTIVATED CARBON; *ORGANIC COMPOUNDS; *RESEARCH
REPORTS; *WATER TREATMENT

SCRIPTIVE NOTE: 54-58P.

PERSONAL AUTHOR: O'BRIEN, ROBERT P.; STENZEL, MARK H.

SCRIPTOR: *AIR STRIPPING; *CHEMICALS; *DRINKING WATER;
GRANULAR ACTIVATED CARBON; *ORGANIC COMPOUNDS; *RESEARCH
REPORTS; *WATER TREATMENT

SCRIPTIVE NOTE: 54-58P.

ABSTRACT: REPORTED ARE THE RESULTS OF A STUDY CONDUCTED TO
TERMINATE BENEFITS AND COST-EFFECTIVENESS OF COMBINING TWO
TECHNOLOGIES FOR REMOVAL OF ORGANIC CHEMICALS FROM WATER.
AVAILABILITY: PUBLIC WORKS; V115 N12

IRIS ACCESSION NUMBER: EW011828

PUBLICATION DATE: DEC 84

TITLE: WATER STORAGE TANK INSPECTION AND CLEANING USING
CUBA.

PERSONAL AUTHOR: CONRADY, JOHN R.

SCRIPTOR: *CLEANING; *COSTS; *INSPECTION; *MAINTENANCE;
CUBA; *STORAGE TANKS; *WATER STORAGE; *WATER SUPPLY

SCRIPTIVE NOTE: 60-61P.

ABSTRACT: BECAUSE OF THE DIFFICULTIES INVOLVED, INTERIOR
TANK INSPECTIONS ARE OFTEN NEGLECTED. AN ALTERNATIVE
DISCUSSED.

AVAILABILITY: PUBLIC WORKS; V115 N12

IRIS ACCESSION NUMBER: EW011835

PUBLICATION DATE: JUN 84

TITLE: SIMPLIFIED PROCEDURE FOR CALCULATING CHEMICAL DOSES
FOR WATER STABILIZATION FOR PREVENTION OF INTERNAL CORROSION
AND SCALING.

PERSONAL AUTHOR: MORGAN, J. M.; COREY, T. M.

SCRIPTOR: *COMPUTER APPLICATIONS; *CORROSION PREVENTION;
*CORROSION; *CHEMICALS; *SCALING; *SCALE PREVENTION; *WATER
STABILIZATION; *WATER TREATMENT; *WATER DISTRIBUTION

SCRIPTIVE NOTE: AD-A144 670/7
NO.: AD-A144 670/7

ABSTRACT: THIS REPORT DOCUMENTS TWO APPROACHES FOR
CALCULATING CHEMICAL FEED (I.E., LIME AND CARBON DIOXIDE) TO
PRODUCE A STABLE WATER TO BE DISTRIBUTED IN A DRINKING WATER
SYSTEM. THE PROCEDURES INCLUDE: (A) A GRAPHICAL SOLUTION
EMBODIED IN NOMOGRAMS CONTAINED IN APPENDIX A OF THIS
REPORT, AND (B) A COMPUTERIZED PROCEDURE, WRITTEN IN BASIC,
WHICH CAN BE IMMEDIATELY IMPLEMENTED ON AN IBM PERSONAL
COMPUTER OR APPLE II AND CAN BE USED ON OTHER SYSTEMS WITH
ONLY MINOR MODIFICATIONS.

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

IRIS ACCESSION NUMBER: EW011836

PUBLICATION DATE: OCT 84

TITLE: WATER QUALITY MODELING: HYDROLOGICAL AND
LIMNOLOGICAL SYSTEMS. OCTOBER, 1981 - SEPTEMBER, 1984
CITATIONS FROM THE NTIS DATA BASE

SCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES;
*HYDROLOGY; *LIMNOLOGY; *MODELING; *MATHEMATICAL MODELS;
*WATER QUALITY

SCRIPTIVE NOTE: 52P.
NO.: PB84-376796

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING
THE APPLICATION OF MATHEMATICAL MODELING TO HYDROLOGICAL AND
LIMNOLOGICAL SYSTEMS. NUTRIENT REMOVAL IN LAKES AND
RESERVOIRS, EFFECTS OF MINE DRAINAGE ON WATER QUALITY, AND
VARIOUS PARAMETERS AFFECTING POLLUTANT FLOW IN AQUIFERS,
STREAMS, AND RIVERS ARE DISCUSSED. PHYSICAL PROCESSES
AFFECTING WATER QUALITY ARE INCLUDED. (THIS UPDATED
BIBLIOGRAPHY CONTAINS 48 CITATIONS, 31 OF WHICH ARE NEW
ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW011837

PUBLICATION DATE: AUG 84

TITLE: UTILIZATIONS OF SEWAGE SLUDGE COMPOST AS A SOIL CONDITIONER AND FERTILIZER FOR PLANT GROWTH.

PERSONAL AUTHOR: HORNICK, S. B.; AND OTHERS

SCRIPTOR: *AGRICULTURE; *COMPOST; *FERTILIZER; *LAND OIL CONDITIONER; *SEWAGE SLUDGE; *SLUDGE;

SCRIPTIVE NOTE: 37P. PRICE CODE: PC A03/MF A01. ORDER NO.: PB85-103216

ABSTRACT: THIS BULLETIN PRESENTS INFORMATION ON HOW SEWAGE SLUDGE COMPOST CAN BE USED MOST EFFECTIVELY. IT INCLUDES DISCUSSIONS ON THE PROPERTIES OF SEWAGE SLUDGE COMPOST AS A LAND CONDITIONER AND FERTILIZER FOR PLANT GROWTH AND ITS USE IN VEGETABLE CROPS, NURSERY CROPS AND ORNAMENTALS, RFGRASES, FIELD CROPS, FORAGE GRASSES, AND THE CLAMATION OF MARGINAL LANDS. RECOMMENDATIONS BASED ON BORATORY, GREENHOUSE, AND FIELD EXPERIMENTS PROVIDE THODS, AND RATES OF COMPOST APPLICATION FOR DIFFERENT NAGEMENT PRACTICES.

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

IRIS ACCESSION NUMBER: EW011838

PUBLICATION DATE: 84

TITLE: EFFECTS OF NONCOLIFORMS ON COLIFORM DETECTION IN TABLE GROUNDWATER: IMPROVED RECOVERY WITH AN ANAEROBIC MEMRANE FILTER TECHNIQU

PERSONAL AUTHOR: FRANZBLAU, S. G.; AND OTHERS

SCRIPTOR: *ANALYTICAL TECHNIQUES; *COLIFORMS; *DRINKING WATER; *GROUNDWATER; *MONITORING; *WATER SUPPLY

SCRIPTIVE NOTE: 10P. NOT AVAILABLE NTIS. PUBLISHED IN PLIED AND ENVIRONMENTAL MICROBIOLOGY, V48 N1 P142-148 JUL

ABSTRACT: A TOTAL OF 529 WELL AND DISTRIBUTION POTABLE WATER SAMPLES WERE ANALYZED FOR TOTAL COLIFORMS BY THE MOST-OBABLE-NUMBER AND MEMBRANE FILTER (MF) TECHNIQUES. STANDARD PLATE COUNT BACTERIA AND MF NONCOLIFORM BACTERIA RE ALSO ENUMERATED. THIS ANAEROBIC MODIFICATION OF THE STANDARD MF TECHNIQUE SIGNIFICANTLY REDUCED OVERGROWTH AND HANCED RECOVERY OF COLIFORMS FROM POTABLE GROUNDWATER. IS TECHNIQUE IS SIMPLE, COST EFFECTIVE, AND SUITABLE FOR MONITORING OF UNTREATED GROUND WATER COMMON TO SOME SMALL WATER SYSTEMS AND PRIVATE WATER SUPPLIES.

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

IRIS ACCESSION NUMBER: EW011839

PUBLICATION DATE: SEP 82

TITLE: NATIONWIDE URBAN RUNOFF PROGRAM, PRIORITY POLLUTANT ANALYSIS: FINAL REPORT.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *PRIORITY POLLUTANTS; *REPORTS; *SURFACE RUNOFF; *URBAN AREAS; *WASTEWATER COLLECTION

SCRIPTIVE NOTE: 23P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB85-104529

ABSTRACT: THIS REPORT WAS DEVELOPED BASED ON THE ANALYTICAL ANALYSES PERFORMED TO ESTABLISH THE PRESENCE AND CONCENTRATION OF PRIORITY POLLUTANTS. IT INCLUDES QUALITY ASSURANCE/CONTROL DOCUMENTATION, ANALYTICAL RESULTS AND CONCLUSION BASED ON FINDINGS.

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

IRIS ACCESSION NUMBER: EW011840

PUBLICATION DATE: OCT 84

TITLE: ENGINEERING ASPECTS OF WATERBORNE OUTBREAK INVESTIGATION.

PERSONAL AUTHOR: LIPPY, E. G.

DESCRIPTOR: *DISINFECTION; *ENGINEERING; *PUBLIC HEALTH; *SAMPLING; *WATER SUPPLY; *WATER TREATMENT; *WATER DISTRIBUTION; *WATERBORNE DISEASE

SCRIPTIVE NOTE: 42P. PRICE CODE: PC A03/MF A01. ORDER NO.: PB85-106102

ABSTRACT: THE SUBJECT MATERIAL IN THIS MANUSCRIPT COVEHS THE ENGINEERING ASPECTS OF WATERBORNE OUTBREAK INVESTIGATION. MAJOR AREAS INCLUDED IN THIS DISCUSSION ARE: EVALUATION OF DISINFECTION (CONCENTRATION AND CONTACT TIME, PH AND TEMPERATURE, INTERFERENCE); EVALUATION OF THE WATER SYSTEM ITSELF (SOURCE OF SUPPLY, TREATMENT, DISTRIBUTION NETWORK); SAMPLING FOR THE AGENT; AND COMMUNICATION.

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

IRIS ACCESSION NUMBER: EW011841

PUBLICATION DATE: JUL 84

TITLE: REPORT TO THE CONGRESS ON OCEAN POLLUTION, MONITORING AND RESEARCH, OCTOBER 1982 THROUGH SEPTEMBER 1983.

DESCRIPTOR: *CONGRESSIONAL REPORTS; *OCEANS; *OCEAN POLLUTION; *MONITORING; *OCEANOGRAPHY; *OCEAN POLLUTION; *ENVIRONMENTAL QUALITY;

RESEARCH; *WATER QUALITY

SCRIPTIVE NOTE: 79P. PRICE CODE: PC A05/MF A01. ORDER
.: PB85-107076

STRACT: THIS REPORT SUMMARIZES ACTIVITIES OF THE OCEAN ASSESSMENTS DIVISION (OADD), OFFICE OF OCEANOGRAPHY AND MARINE SERVICES, NATIONAL OCEANIC SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), PERFORMED DURING SCAL YEAR 1983. THE OADD CONDUCTS A COMPREHENSIVE, CONTINUING PROGRAM OF ASSESSMENT ACTIVITIES, INCLUDING SEARCH, DEVELOPMENT, AND MONITORING, ON THE SHORT- AND LONG-TERM EFFECTS OF HUMAN ACTIVITIES ON THE MARINE ENVIRONMENT. THESE ACTIVITIES RESULT IN INFORMATION PRODUCTS AND SERVICES USEFUL FOR PLANNING AND DECISIONMAKING RELATED TO THE RESOLUTION OF MULTIPLE RESOURCE-USE CONFLICTS, INCLUDING ENVIRONMENTAL QUALITY PROBLEMS, IN THE ESTUARINE, ASTAL, AND OCEANIC AREAS OF THE UNITED STATES. OCEAN WASTE ASSESSMENT REMAINED A HIGH PRIORITY DURING FISCAL YEAR 1983.

AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 RT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011342
PUBLICATION DATE: SEP 84

SCRIPTOR: MANUAL - PERFORMANCE EVALUATION AND TROUBLESHOOTING AT METAL-FINISHING WASTEWATER TREATMENT FACILITIES

PERSONAL AUTHOR: SARGENT, T. N.; AND OTHERS

SCRIPTIVE NOTE: *FACILITIES; *MANUALS; *INDUSTRIAL WASTES; ETALS; *MAINTENANCE; *METAL INDUSTRY; *PERFORMANCE EVALUATION; *TROUBLESHOOTING; *UNIT PROCESSES; *WASTE TREATMENT

SCRIPTIVE NOTE: 283P. PRICE CODE: PC A13/MF A01. ORDER
.: PB85-107274

STRACT: THIS MANUAL PROVIDES A TECHNICAL FIELD GUIDE OR REFERENCE DOCUMENT FOR USE IN IMPROVING THE PERFORMANCE OF FACILITIES FOR THE TREATMENT OF METAL FINISHING WASTES. THE PURPOSE OF THE MANUAL IS TO PROVIDE A TROUBLESHOOTING GUIDE FOR IDENTIFYING PROBLEMS, ANALYZING PROBLEMS, AND SOLVING PROBLEMS. THE MANUAL DESCRIBES GENERAL PROCEDURES FOR EVALUATING THE PERFORMANCE OF TREATMENT PROCESSES AND EQUIPMENT COMMONLY USED IN METAL FINISHING WASTE TREATMENT. THE PROCEDURES ALSO COVER OTHER ITEMS RELATED TO THE EFFECTIVE OPERATION OF TREATMENT FACILITIES. THE METHODOLOGY USED TO EVALUATE COMPLIANCE PROBLEMS AND DEVELOP OPERATION AND MAINTENANCE SPECIFICS ARE DESCRIBED IN A REVIEW OF THE LITERATURE, FOLLOWED BY AN ASSESSMENT OF THE CAUSES OF PERMIT VIOLATIONS AND THE RECOMMENDED MEASURES FOR IMPROVING COMPLIANCE. THE UNIT PROCESSES DESCRIBED IN THIS MANUAL ARE COMMONLY USED IN THE TREATMENT OF METAL FINISHING WASTES.

AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 RT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011843

PUBLICATION DATE: SEP 82

TITLE: INDUSTRIAL HYGIENE REVIEW MANUAL.

PERSONAL AUTHOR: DALEY, P. S.; RICCIARDI, R. M.

SCRIPTOR: *ACCIDENT PREVENTION; *BIOCHEMISTRY; *CHEMISTRY; *HEAT; *INDUSTRIAL HYGIENE; *MANUALS; *NOISE; *POLLUTION; *PUBLIC HEALTH; *SAFETY; *TOXICOLOGY
DESCRIPTIVE NOTE: 278P. PRICE CODE: PC A13/MF A01. ORDER
NO.: PB85-103836

ABSTRACT: THE PURPOSE OF THE MANUAL IS TO PROVIDE A REVIEW COMPENDIUM FOR PRACTICING INDUSTRIAL HYGIENISTS. THE MANUAL DETAILS THOSE ASPECTS OF EACH SUBJECT WITH WHICH INDUSTRIAL HYGIENISTS SHOULD BE FAMILIAR. OUTLINES ARE SUPPLEMENTED BY QUESTIONS AND ANSWERS THAT ARE REPRESENTATIVE OF THE KNOWLEDGE USED IN THE FIELD. QUESTIONS AND ANSWERS WERE COLLECTED FROM A WIDE VARIETY OF SOURCES TO PROVIDE A BROAD VIEW OF INDUSTRIAL HYGIENE. TOPIC OUTLINES INCLUDE BIOCHEMISTRY, PHYSICS, TOXICOLOGY, RESPIRATORY CHEMISTRY, DISEASES, OCCUPATIONAL DERMATOSES, EXPOSURE CRITERIA, MEDICAL MONITORING, HEAT STRESS, EFFECTS OF AND PROTECTION FROM NOISE, EXPOSURE, NOISE MEASUREMENT, EVALUATION AND CONTROL, RESPIRATORY AND EYE PROTECTION, AIR SAMPLING AND ANALYSIS, AIR POLLUTION, ENVIRONMENTS WITH LIMITED OXYGEN, INDUSTRIAL VENTILATION, ERGONOMICS, HEALTH PHYSICS, NONIONIZING RADIATION, ILLUMINATION, STATISTICS IN INDUSTRIAL HYGIENE, AND OCCUPATIONAL SAFETY. THE MANUAL IS SUGGESTED FOR PERSONS PREPARING FOR INDUSTRIAL HYGIENE CERTIFICATION EXAMINATIONS.

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

IRIS ACCESSION NUMBER: EW011844
PUBLICATION DATE: 84

TITLE: THERMAL DISCHARGES.

PERSONAL AUTHOR: MILLER, DONALD S.; BRIGHOUSE, BARBARA A.

SCRIPTOR: *INSTRUCTIONAL MATERIALS; *POSTSECONDARY EDUCATION; *SURFACE DISCHARGES; *SUBSURFACE DISCHARGES; *THERMAL DISCHARGES; *THERMAL POLLUTION; *WATER DISCHARGES
DESCRIPTIVE NOTE: 221P. PRICE: \$53.00

ABSTRACT: THE FIRST PART OF THIS GUIDE IS AN INTRODUCTION TO THERMAL DISCHARGES. ITS AIM IS TO ALLOW THE PREDICTION OF DATA FROM THE SECOND PART TO BE APPLIED WITH AN AWARENESS OF THE MAJOR FACTORS INFLUENCING THERMAL DISCHARGES. THE SECOND PART CONTAINS RECOMMENDED DATA PREDICTION METHODS AND EXAMPLE PREDICTIONS FOR A RANGE OF DIFFERENT DISCHARGE ARRANGEMENTS. DETAILS OF THE ORIGINS OF THE DATA, FORMULAE AND FIGURES IN THE TEXT ARE GIVEN IN ONE OF THE CHAPTERS.

AILABILITY: LEARNED INFORMATION, INC., 143 OLD MARLTON

5285

RT ROYAL ROAD, SPRINGFIELD, VA 22161

PUBLICATION DATE: DEC 84

IRIS ACCESSION NUMBER: EW011845

PUBLICATION DATE: 84

TITLE: COMPRESSIBLE INTERNAL FLOW.

PERSONAL AUTHOR: MILLER, DONALD S.

SCRIPTIVE NOTE: *CALCULATIONS; *COMPRESSIBLE FLOW; *GAS FLOW; INSTRUCTIONAL MATERIALS; *PIPES; *POSTSECONDARY EDUCATION; ALVES

ABSTRACT: THE IMPORTANT FEATURES OF COMPRESSIBLE FLOW IN PIPE AND DUCT SYSTEMS ARE OUTLINED. CALCULATION PROCEDURES ARE GIVEN FOR GAS FLOWS THROUGH COMPONENTS AND SYSTEMS ALONG WITH METHODS OF CORRECTING INCOMPRESSIBLE FLOW LOSS DEFICIENCIES TO APPLY TO COMPRESSIBLE FLOWS. EXAMPLE CALCULATIONS ARE INCLUDED, WHICH COVER COMPONENT AND PIPING SYSTEM PERFORMANCE, AS WELL AS THE PERFORMANCE OF CONTROL LIVES AND PRESSURE RELIEVING SYSTEMS.

AILABILITY: LEARNED INFORMATION, INC., 143 OLD MARLTON KE, MEDFORD, NJ 08055

IRIS ACCESSION NUMBER: EW011847

PUBLICATION DATE: 84

TITLE: PIPE PROTECTION: A REVIEW OF CURRENT PRACTICE. (COND EDITION).

PERSONAL AUTHOR: GALKA, R. J.; YATES, A. P. J.

SCRIPTOR: *ABRASION; *CORROSION; *INSTALLATION; INSPECTION; *MAINTENANCE; *PIPES; *PIPE PROTECTION

SCRIPTIVE NOTE: 109P. PRICE: \$75.00

ABSTRACT: WITH EVER INCREASING DEMANDS BEING PUT UPON THE PIPELINE DESIGNER AND OPERATOR FROM GOVERNMENTAL LEGISLATION AND SOCIO-ECONOMIC CONSTRAINTS, CERTAIN ASPECTS OF PIPELINE DESIGN REQUIRE CONSTANT RESEARCH AND DEVELOPMENT. A MAJOR PROBLEM ASSOCIATED WITH PIPELINES HAS ALWAYS BEEN CORROSION, AND WHEN USED TO TRANSPORT ABRASIVE SLURRIES, ABRASION, THERE ARE NUMEROUS SYSTEMS AND MATERIALS AVAILABLE TO COMBAT THE CORROSION AND EROSION. HOWEVER, THE SEARCH FOR NEW AND PROVED TECHNIQUES IS EVER CONSTANT. THIS PUBLICATION PROVIDES A VARIETY OF INFORMATION ON PIPE LINE PROTECTION.

AILABILITY: LEARNED INFORMATION, INC., 143 OLD MARLTON KE, MEDFORD, NJ 08055

IRIS ACCESSION NUMBER: EW011851

PUBLICATION DATE: 83

TITLE: FATE OF CHEMICALS IN THE ENVIRONMENT: COMPARTMENTAL MODELING FOR PREDICTIONS.

PERSONAL AUTHOR: SWANN, ROBERT L., ED.; ESCHENROEDER, ALAN,

TITLE: AN OPERATIONAL APPROACH TO TRAINING NEEDS ANALYSIS.

PERSONAL AUTHOR: BUCALO, JOHN P., JR.

DESCRIPTOR: *ADMINISTRATION; *NEEDS ANALYSIS; *MANAGEMENT; *PERFORMANCE EVALUATION; *PLANNING; *RECOMMENDATIONS; *TRAINING

SCRIPTIVE NOTE: 80-84P.

ABSTRACT: ORGANIZATIONAL OPERATIONS ARE THE HEART OF AN EFFECTIVE NEEDS ANALYSIS. ONCE THE DATA ARE ANALYZED THEN OPERATING ISSUES AND TRAINING ISSUES CAN BE IDENTIFIED.

AILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V33 N12

IRIS ACCESSION NUMBER: EW011850

PUBLICATION DATE: 84

TITLE: A CITIZEN'S HANDBOOK ON GROUNDWATER PROTECTION.

PERSONAL AUTHOR: GORDON, WENDY

DESCRIPTOR: *CONTAMINATION; *GROUNDWATER; *POLICIES; *POLLUTION CONTROL; *REGULATIONS; *WATER POLLUTION CONTROL; *WATER QUALITY; *WATER RESOURCES; *WATER SUPPLY

SCRIPTIVE NOTE: 200P. PRICE: \$7.50

ABSTRACT: THIS NEW BOOK, A CITIZEN'S HANDBOOK ON GROUNDWATER PROTECTION, PROVIDES CITIZENS WITH WAYS TO STEM THE TIDE OF GROUNDWATER CONTAMINATION AND PROTECT THIS VITAL RESOURCE FROM FURTHER DESPOIL. THE 200-PAGE HANDBOOK WAS WRITTEN BY WENDY GORDON, A SCIENTIST WITH THE NATURAL RESOURCES DEFENSE COUNCIL, FOR THE PURPOSE OF SUPPLYING CITIZENS, COMMUNITY GROUPS AND GOVERNMENT OFFICIALS WITH BASIC INFORMATION ABOUT GROUNDWATER, ITS CONTAMINATION, AND THE REGULATIONS AND METHODS BEING USED OR CONSIDERED TO PROTECT IT. WITH THIS INFORMATION, THE AUTHOR STATES, "CITIZENS ARE MUCH BETTER ABLE TO PARTICIPATE IN AND INFLUENCE THE DECISION-MAKING PROCESSES AT ALL LEVELS OF GOVERNMENT THAT WILL AFFECT THEIR GROUNDWATER SUPPLIES AND INITIATE FAR-SIGHTED GROUNDWATER PROTECTION PROGRAMS."

AILABILITY: NRDC GROUNDWATER HANDBOOK, 122 E. 42ND STREET, 45TH FLOOR, NEW YORK, NY 10168

IRIS ACCESSION NUMBER: EW011851

PUBLICATION DATE: 83

TITLE: FATE OF CHEMICALS IN THE ENVIRONMENT: COMPARTMENTAL MODELING FOR PREDICTIONS.

PERSONAL AUTHOR: SWANN, ROBERT L., ED.; ESCHENROEDER, ALAN,

*TOXIC SUBSTANCES

SCRIPTOR: *AIR POLLUTION; *CHEMICALS; *ENVIRONMENTAL POLLUTION; *ORGANIC COMPOUNDS; *PUBLIC HEALTH; *RISK ASSESSMENT; *WATER POLLUTION
 DESCRIPTIVE NOTE: 326P. PRICE: \$44.95
 ABSTRACT: BRINGS TOGETHER USER-ORIENTED INFORMATION COVERING MANY ASPECTS OF ENVIRONMENTAL FATE MODELING. PRESENTS A COMPREHENSIVE VIEW OF THE MODELS AVAILABLE AND THEIR PRACTICAL APPLICATIONS. INCLUDES A GENERIC OVERVIEW OF THE MAIN BUILDING BLOCKS OF MODELS AND THE FRAMEWORK OF GIC CONNECTING THE COMPONENTS. FIVE SECTIONS COVER EMICAL RELEASE, ENVIRONMENTAL MODELS, MULTIMEDIA MODELS, DEL VALIDATION, MODEL PARAMETERS, AND HUMAN RISK ASSESSMENT.

AVAILABILITY: AMERICAN CHEMICAL SOCIETY, DISTRIBUTION OFFICE DEPT. 399, 1155 SIXTEENTH STREET, N. W., WASHINGTON, DC 20036

IRIS ACCESSION NUMBER: EW011352
 PUBLICATION DATE: 84

SCRIPTOR: SCHWEITZER, GLENN E., ED.: SANTOLUCITO, HN A.
 DESCRIPTIVE NOTE: 144P. PRICE: \$34.95
 ABSTRACT: UNDERLINES THE CONCERN AND NEED FOR IMPROVED METHODS OF ENVIRONMENTAL SAMPLING. SURVEYS THE PROBLEMS OF COLLECTING REPRESENTATIVE SAMPLES, ENSURING THE CHEMICAL INTEGRITY OF SAMPLES FROM COLLECTION TO ANALYSES, AND CHARACTERIZING AND MONITORING CONTAMINATION SITES. EXAMINES IMPORTANT ASPECTS OF DESIGNING AND IMPLEMENTING SAMPLING PROGRAMS, EMPHASIZING SURFACE AND SUBSURFACE SAMPLING FOR HAZARDOUS WASTES.

AVAILABILITY: AMERICAN CHEMICAL SOCIETY, DISTRIBUTION OFFICE DEPT. 339, 1155 SIXTEENTH STREET, N. W., WASHINGTON, DC 20036

IRIS ACCESSION NUMBER: EW011353
 PUBLICATION DATE: 84

SCRIPTOR: SEARLE, CHARLES E., ED.
 DESCRIPTIVE NOTE: 413P. PRICE: \$79.95
 ABSTRACT: EXAMINES THE COMPLEX ISSUE OF RADIOACTIVE WASTE DISPOSAL AND THE HEALTH HAZARDS AT UNDERGROUND WASTE SITES.

*TOXIC SUBSTANCES

SCRIPTOR: *CARCINOGENS; *ENVIRONMENTAL POLLUTION; *HEALTH; *POLLUTION; *PUBLIC HEALTH; *RISK ASSESSMENT; *WATER POLLUTION
 DESCRIPTIVE NOTE: 1430P. PRICE: \$129.95
 ABSTRACT: THIS PUBLICATION IS A REVISION OF A PREVIOUS PUBLICATION. IT HAS BEEN UPDATED AND EXPANDED TO PROVIDE IMPORTANT NEW INFORMATION IN THE STUDY OF CHEMICAL CARCINOGENS AND THE PREVENTION OF CANCER. OFFERS THE LATEST RESEARCH ON CHEMICAL CARCINOGENIC AGENTS AND THEIR IMPORTANCE FOR IDENTIFYING OCCUPATIONAL AND ENVIRONMENTAL CAUSES FOR CANCER PREVENTION.

AVAILABILITY: AMERICAN CHEMICAL SOCIETY, DISTRIBUTION OFFICE DEPT. 399, 1155 SIXTEENTH STREET, N. W., WASHINGTON, DC 20036

IRIS ACCESSION NUMBER: EW011354
 PUBLICATION DATE: 84

TITLE: ASSESSMENT AND MANAGEMENT OF CHEMICAL RISKS.
 PERSONAL AUTHOR: RODRICKS, JOSEPH V., ED.; TARDIFF, ROBERT G., ED.

SCRIPTOR: *CHEMICALS; *CHEMICAL RISKS; *MANAGEMENT; *PUBLIC HEALTH; *REGULATIONS; *RISK ASSESSMENT; *RISK MANAGEMENT

DESCRIPTIVE NOTE: 184P. PRICE: \$34.95

ABSTRACT: IDENTIFIES THE ESSENTIAL ELEMENTS OF RISK ASSESSMENT AND MANAGEMENT FOR THOSE HAVING TO MAKE DECISIONS ABOUT CHEMICAL RISKS. EXAMINES THE RELATIONSHIP BETWEEN RISK MANAGEMENT AND RISK ASSESSMENT AND SHOWS HOW BOTH MANAGEMENT AND ASSESSMENT ARE NEEDED TO MAKE DECISIONS ABOUT CHEMICAL RISKS. POINTS OUT THE FUNDAMENTAL PROBLEMS FACING CHEMICAL RISK MANAGERS AND LOOKS AT THE PROCESS OF DECIDING WHETHER AN ASSESSED RISK NEEDS TO BE CONTROLLED AND VARIOUS OPTIONS FOR MANAGING THE RISK.

AVAILABILITY: AMERICAN CHEMICAL SOCIETY, DISTRIBUTION OFFICE DEPT. 399, 1155 SIXTEENTH STREET, N. W., WASHINGTON, DC 20036

IRIS ACCESSION NUMBER: EW011355
 PUBLICATION DATE: 84

TITLE: GEOCHEMICAL BEHAVIOR OF DISPOSED RADIOACTIVE WASTES.
 PERSONAL AUTHOR: BARNEY, G. S., ED.; AND OTHERS
 DESCRIPTOR: *MONITORING; *PUBLIC HEALTH; *RADIOACTIVE WASTES; *RESEARCH; *WASTE DISPOSAL; *WASTE TREATMENT

SCRIPTOR: *ANALYTICAL TECHNIQUES; *CANCER; *CARCINOGENS; *CHEMICALS; *ENVIRONMENT; *HEALTH; *OCCUPATIONAL HEALTH; *ORGANIC COMPOUNDS; *PREVENTIVE MEDICINE; *PUBLIC HEALTH;

SESSES THE CHEMICAL AND PHYSICAL BEHAVIOR OF WASTES FROM THE NUCLEAR FUEL CYCLE, FROM NUCLEAR WEAPONS TESTING, AND OTHER MEDICAL AND RESEARCH ACTIVITIES. REPORTS IN A SINGLE SOURCE, THE MOST RECENT AND SIGNIFICANT FINDINGS IN THIS CONTROVERSIAL AREA AND LOOKS AT IMPORTANT ONGOING RESEARCH.

AVAILABILITY: AMERICAN CHEMICAL SOCIETY, DISTRIBUTION OFFICE DEPT. 399, 1155 SIXTEENTH STREET, N. W., WASHINGTON, 20036

IRIS ACCESSION NUMBER: EW011856
BLICATION DATE: 84

TITLE: TREATMENT AND DISPOSAL OF PESTICIDE WASTES.

PERSONAL AUTHOR: KRUEGER, RAYMOND F., ED.; SEIBER, JAMES , ED.
SCRIPTOR: *ORGANIC COMPOUNDS; *PESTICIDES; *POLLUTION CONTROL; *REGULATIONS; *SAFETY; *WASTE DISPOSAL; *WATER POLLUTION CONTROL; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 373P. PRICE: \$64. 95

ABSTRACT: OUTLINES THE PROBLEMS OF PESTICIDE WASTE DISPOSAL WITH SPECIAL EMPHASIS ON DEVELOPING BETTER DISPOSAL METHODS. EXAMINES THE CHEMICAL, BIOLOGICAL, AND PHYSICAL METHODS OF DISPOSAL, THE BASIC PRINCIPLES UNDERLYING EACH OF THESE METHODS, AND ANALYTICAL AND MODELING APPROACHES APPLICABLE TO WASTE DISPOSAL CONDITIONS. ALSO LOOKS AT THE A REGULATORY VIEWPOINT ON SAFE DISPOSAL. INCLUDES SOME NEW APPROACHES THAT HAVE POTENTIAL FOR WIDE SCALE USE IN THE FUTURE.

AVAILABILITY: AMERICAN CHEMICAL SOCIETY, DISTRIBUTION OFFICE DEPT. 399, 1155 SIXTEENTH STREET, N. W., WASHINGTON, 20036

IRIS ACCESSION NUMBER: EW011857
BLICATION DATE: AUG 84

TITLE: EPA METHOD STUDY 18 METHOD 608 - ORGANOCHLORINE STICIDES AND PCB'S. PROJECT SUMMARY.
PERSONAL AUTHOR: MILLER, JOHN D.; AND OTHERS
SCRIPTOR: *ANALYTICAL TECHNIQUES; *EPA METHOD STUDY; *LABORATORY PROCEDURES; *ORGANIC COMPOUNDS; *METHOD STUDIES; CBS; *PESTICIDES; *WASTEWATER; *WATER

SCRIPTIVE NOTE: 4P. PRICE: \$17. 50. ORDER NO.: PBB4-1 358

ABSTRACT: THIS REPORT DESCRIBES THE RESULTS OBTAINED AND TA ANALYSES FROM AN INTERLABORATORY STUDY OF EPA METHOD 8 (ORGANOCHLORINE PESTICIDES AND PCB'S). THE METHOD IS SESSED QUANTITATIVELY WITH RESPECT TO THE ACCURACY AND PRECISION THAT CAN BE EXPECTED. IN ADDITION, RESULTS OF

IRIS ACCESSION NUMBER: EW011858

PUBLICATION DATE: 84

TITLE: ATOMIC ABSORPTION SPECTROMETRY IN OCCUPATIONAL AND ENVIRONMENTAL HEALTH PRACTICE. VOLUME I: ANALYTICAL ASPECTS AND HEALTH SIGNIFI

PERSONAL AUTHOR: TSALEV, D. L., ED.

SCRIPTOR: *ANALYTICAL TECHNIQUES; *ATOMIC ABSORPTION SPECTROMETRY; *CHEMICALS; *ENVIRONMENTAL HEALTH; *METALS; *OCCUPATIONAL HEALTH; *TOXICOLOGY; *TRACE ELEMENTS

SCRIPTIVE NOTE: 264P. CATALOG NO.: 5603WN. PRICE:

\$78. 00. FOR A RELATED DOCUMENT SEE ALSO EW 011 859.

ABSTRACT: THIS PUBLICATION CONTAINS SECTIONS ON THE FOLLOWING TOPICS: (1) ATOMIC ABSORPTION SPECTROMETRY AS AN ANALYTICAL METHOD IN OCCUPATIONAL AND ENVIRONMENTAL HEALTH PRACTICE; AND (2) BIOLOGICAL AND TOXICOLOGICAL CHARACTERISTICS OF INDIVIDUAL ELEMENTS.

AVAILABILITY: CRC PRESS, INC., 2000 CORPORATE BLVD., N. W., BOCA RATON, FL 33431

IRIS ACCESSION NUMBER: EW011859
PUBLICATION DATE: 84

TITLE: ATOMIC ABSORPTION SPECTROMETRY IN OCCUPATIONAL AND ENVIRONMENTAL HEALTH PRACTICE. VOLUME II: DETERMINATION OF INDIVIDUAL ELEMENTS

PERSONAL AUTHOR: TSALEV, D. L., ED.

SCRIPTOR: *ANALYTICAL TECHNIQUES; *ATOMIC ABSORPTION SPECTROMETRY; *CHEMICALS; *ELEMENTAL ANALYSIS; *ENVIRONMENTAL HEALTH; *OCCUPATIONAL HEALTH; *TOXICOLOGY; *TRACE ELEMENTS

SCRIPTIVE NOTE: 312P. CATALOG NO.: 5604 WN. PRICE:

\$78. 00. FOR A RELATED DOCUMENT SEE ALSO EW 011 858.

ABSTRACT: THIS PUBLICATION CONTAINS INFORMATION ON THE FOLLOWING ELEMENTS: ALUMINUM, ARSENIC, BARIUM, BERYLLIUM, BISMUTH, BORON, CADMIUM, CHROMIUM, COBALT, COPPER, GALLIUM, GERMANIUM, GOLD, INDIUM, IRON, LEAD, LITHIUM, MANGANESE, MERCURY, MOLYBDENUM, NICKEL, PALLADIUM, PLATINUM, RUBIDIUM, SELENIUM, SILICON, SILVER, STRONTIUM, TELLURIUM, THALLIUM, TIN, VANADIUM, AND ZINC.

AVAILABILITY: CRC PRESS, INC., 2000 CORPORATE BLVD., N. W.,

BOCA RATON, FL 33431

IRIS ACCESSION NUMBER: EW011360

PUBLICATION DATE: 84

TITLE: CRC HANDBOOK OF ATOMIC ABSORPTION ANALYSIS: VOLUME

PERSONAL AUTHOR: VARMA, ASHA

SCRIPTOR: *ATOMIC ABSORPTION ANALYSIS; *ANALYTICAL TECHNIQUES; *CHEMICALS; *HANDBOOKS; *INSTRUMENTATION; LABORATORY PROCEDURES; *METALS

SCRIPTIVE NOTE: 523P. CATALOG NO.: 2985WN. PRICE: \$9.90. FOR RELATED DOCUMENT SEE EW 011 861.

ABSTRACT: THIS HANDBOOK IS A COMPREHENSIVE REFERENCE TO AND CRITICAL EVALUATION OF THE WORLD LITERATURE ON ATOMIC ABSORPTION SPECTROSCOPY. IT INCLUDES AN INTRODUCTION TO THE STANDARD AND INSTRUMENTATION, EXPLAINS PREPARATION OF SOLUTIONS, AND CONSIDERS CAUSES OF INTERFERENCES AND INSTRUMENTATION. THE DEVELOPMENT OF THE PROVIDED IN EACH OF THE TWO VOLUMES, AND EACH REFERENCE IS CROSS-INDEXED IN SUBJECT AND AUTHOR INDEXES AT THE END OF THE VOLUME. INDIVIDUAL CHAPTERS COVER A GROUP OF ELEMENTS, WITH AN INTRODUCTION, INSTRUMENTAL SET-UP AND PARAMETERS, INTERFERENCES AND REFERENCES GIVEN FOR EACH ELEMENT. VOLUME I CONTAINS THE FOLLOWING TOPICS: (1) ATOMIC ABSORPTION SPECTROSCOPY, GENERAL INSTRUMENTATION; (2) GROUP ELEMENTS - ALKALI METALS; (3) GROUP IIA ELEMENTS - KALIINE EARTH METALS; (4) GROUP IIB ELEMENTS; (5) GROUP VB ELEMENTS; (6) GROUP VII B ELEMENTS; (7) GROUP VII B ELEMENTS; (8) GROUP VIII ELEMENTS; AND (9) GROUP VIII ELEMENTS.

AVAILABILITY: CRC PRESS, INC., 2000 CORPORATE BLVD., N. W., BOCA RATON, FL 33431

IRIS ACCESSION NUMBER: EW011361

PUBLICATION DATE: 84

TITLE: CRC HANDBOOK OF ATOMIC ABSORPTION ANALYSIS: VOLUME

PERSONAL AUTHOR: VARMA, ASHA

SCRIPTOR: *ATOMIC ABSORPTION ANALYSIS; *ANALYTICAL TECHNIQUES; *CHEMICALS; *HANDBOOKS; *INSTRUMENTATION; LABORATORY PROCEDURES

SCRIPTIVE NOTE: 464P. CATALOG NO.: 2986WN. PRICE: \$9.90. FOR RELATED DOCUMENT SEE EW 011 860.

ABSTRACT: THIS IS VOLUME II IN THE SERIES. SEE EW 011 860 FOR VOLUME I. VOLUME II CONTAINS THE FOLLOWING: (1) GROUP IIA ELEMENTS; (2) GROUP IIB ELEMENTS; (3) GROUP VII B ELEMENTS; (4) GROUP IVA ELEMENTS; (5) GROUP VI ELEMENTS; (6) GROUP VII ELEMENTS.

ELEMENTS; (7) GROUP VIIA ELEMENTS; (8) ZERO GROUP ELEMENTS; (9) ZERO GROUP (INSERT GASES; NOBLE GASES); (10) APPENDIXES; GLOSSARY; (11) LIST OF ABSTRACTS AND REVIEWS; (12) GENERAL REFERENCES; (13) LIST OF HOLLOW CATHODE LAMPS; AND (14) LIST OF MANUFACTURERS OF SPECTROMETERS AND ACCESSORIES.

AVAILABILITY: CRC PRESS, INC., 2000 CORPORATE BLVD., N. W., BOCA RATON, FL 33431

IRIS ACCESSION NUMBER: EW011362

PUBLICATION DATE: OCT 84

TITLE: ACID PRECIPITATION: EFFECTS ON THE AQUATIC ECOSYSTEM. 1977 - SEPTEMBER, 1984 (CITATIONS FROM THE ENERGY DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ACID PRECIPITATION; *AQUATIC ECOSYSTEMS; BIBLIOGRAPHIES; *ENVIRONMENTAL IMPACTS; *RESEARCH DESCRIPTIVE NOTE: BP84-876879. PRICE CODE: PC NO1/MF NO1. ORDER NO.:

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING ACID RAIN AND ITS EFFECT ON AQUATIC ECOSYSTEMS. PHYSIOLOGICAL AND REPRODUCTIVE EFFECTS ON FISH AND OTHER AQUATIC POPULATIONS ARE CONSIDERED. EXPOSURE PATHWAYS, FACTORS AFFECTING THE ACIDIFICATION OF LAKES AND PONDS, AND THE KNOWN AND PROJECTED CONSEQUENCES ARE DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 364 CITATIONS, 122 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW011363

PUBLICATION DATE: OCT 84

TITLE: DEEP-WELL DISPOSAL. 1976 - OCTOBER, 1984 (CITATIONS FROM THE ENERGY DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *DEEP-WELL DISPOSAL; *POLLUTION CONTROL; *REGULATIONS; *RISK ANALYSIS; *WASTE DISPOSAL DESCRIPTIVE NOTE: PB84-877042. PRICE CODE: PC NO1/MF NO1. ORDER NO.:

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING DEEP WELL DISPOSAL TECHNOLOGY, INCLUDING DEEP GEOLOGIC, DEEP ROCK, AND DEEP SHAFT REPOSITORIES. WASTE DISPOSALS TREATED ARE: RADIONUCLIDE, CHEMICAL AND GEOPRESURRED. REGULATIONS; ENVIRONMENTAL PROTECTION, RISK AND SAFETY ANALYSIS, FLUID AND RADIONUCLIDE MIGRATION ARE DISCUSSED. RESEARCH WORK ON MICROBIAL DECOMPOSITION OF ORGANIC WASTE IN DEEP WELLS IS MENTIONED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 221 CITATIONS, 29 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

U.S. ACCESSION NUMBER: EW011364

PUBLICATION DATE: 84

TITLE: BASIC ISSUES IN WATER CHLORINATION: A CHEMICAL
RESPECTIVE.

PERSONAL AUTHOR: JOLLEY, R. L.

SCRIPTOR: *CHEMICALS; *CHLORINATION; *DISINFECTION;
HEALTH; *ISSUES; *RESEARCH REPORTS; *TRIHALOMETHANES;
WATER TREATMENT

SCRIPTIVE NOTE: 32P. PRICE CODE: PC A03/MF A01. ORDER
NO.: DE84014031

ABSTRACT: RESULTS FROM SELECTED RESEARCH PAPERS PUBLISHED
DURING THE LAST CONFERENCE (ASILOMAR, 1981) ARE REVIEWED AND
SUMMARIZED. ALTHOUGH MUCH PROGRESS HAS BEEN MADE IN
DEVELOPING PREDICTIVE MODELS FOR CHLORINATION DISCHARGES,
ADDITIONAL DATA ARE NEEDED FOR REACTION RATES AND MECHANISMS
OVER A WIDER TEMPERATURE RANGE, ESPECIALLY FOR
TRANSFORMATION AND DECOMPOSITION REACTIONS OF CHLORINE AND
CHLORINE-PRODUCED OXIDANTS. SIGNIFICANT ADVANCES HAVE ALSO
MADE TOWARD UNDERSTANDING THE FORMATION OF
TRIHALOMETHANES AND THE CHLORINATION OF HUMIC MATERIALS, AND
TOWARD IDENTIFICATION OF CHLORINATION PRODUCTS IN COOLING
WATERS, PAPER INDUSTRY EFFLUENTS, AND WASTEWATERS. HOWEVER,
BECAUSE OF THE VAST NUMBER OF CHLORINATION PRODUCTS, MUCH
REMAINS UNKNOWN IN THIS AREA. FURTHER RESEARCH IS ESPECIALLY
NEEDED TO EXPAND OUR KNOWLEDGE CONCERNING PRODUCTS FROM THE
CHLORINATION TREATMENT OF FOOD MATERIALS BECAUSE ONLY
VERY LIMITED INFORMATION IS AVAILABLE. 102 REFERENCES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285

PORT ROYAL ROAD, SPRINGFIELD, VA 22161

PUBLICATION DATE: OCT 84

TITLE: WATER RESOURCES AND WATER QUALITY: EFFECTS OF LAND
USE AND URBANIZATION. SEPTEMBER, 1981 - SEPTEMBER, 1984
CITATIONS FROM THE NT

SCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES;
AND USE; *MODELS; *POLICIES; *URBAN AREAS;
WATER RESOURCES; *WATER SUPPLY

SCRIPTIVE NOTE: 64P. PRICE CODE: PC N01/MF N01. ORDER
NO.: PB84-377075

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING
THE EFFECTS OF LAND USE AND URBAN DEVELOPMENT ON WATER
SUPPLY QUALITY AND QUANTITY. TOPICS INCLUDE APPROPRIATE
LOCAL, STATE, AND FEDERAL GOVERNMENT POLICIES, AND THE
UTILIZATION OF MATHEMATICAL MODELS AS PREDICTIVE TOOLS.

STUDIES PERFORMED AT SPECIFIC LOCALITIES ARE INCLUDED IF
THEY PROVIDE COMPREHENSIVE STRATEGIES THAT CAN BE APPLIED TO
OTHER LOCATIONS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 71
CITATIONS, 30 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS
EDITION.)

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

U.S. ACCESSION NUMBER: EW011366

PUBLICATION DATE: SEP 84

TITLE: TECHNOLOGY ASSESSMENT OF WETLANDS FOR MUNICIPAL
WASTEWATER TREATMENT.

PERSONAL AUTHOR: HYDE, H. C.; AND OTHERS

SCRIPTOR: *ALTERNATIVE TECHNOLOGY; *WETLANDS;
*WASTEWATER TREATMENT

ABSTRACT: THE INNOVATIVE AND ALTERNATIVE TECHNOLOGY
PROVISIONS OF THE CLEAN WATER ACT OF 1972 (PL 95-217)
PROVIDE FINANCIAL INCENTIVES TO COMMUNITIES THAT USE
WASTEWATER TREATMENT ALTERNATIVES TO REDUCE COSTS OR ENERGY
CONSUMPTION OVER CONVENTIONAL SYSTEMS. SOME OF THESE
TECHNOLOGIES HAVE BEEN ONLY RECENTLY DEVELOPED AND ARE NOT
IN WIDESPREAD USE IN THE UNITED STATES. IN AN EFFORT TO
INCREASE AWARENESS OF THE POTENTIAL BENEFITS OF SUCH
ALTERNATIVES AND TO ENCOURAGE THEIR IMPLEMENTATION WHERE
APPLICABLE, THE MUNICIPAL ENVIRONMENTAL RESEARCH LABORATORY
HAS INITIATED THIS SERIES OF EMERGING TECHNOLOGY ASSESSMENT
REPORTS. THIS DOCUMENT DISCUSSES THE APPLICABILITY AND
TECHNICAL AND ECONOMIC FEASIBILITY OF USING NATURAL AND
ARTIFICIAL WETLAND SYSTEMS FOR MUNICIPAL WASTEWATER
TREATMENT FACILITIES.

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

U.S. ACCESSION NUMBER: EW011367

PUBLICATION DATE: JUL 83

TITLE: PRINCIPLES OF OCCUPATIONAL SAFETY AND HEALTH
ENGINEERING. INSTRUCTOR'S GUIDE.

PERSONAL AUTHOR: ZIMMERMAN, N. J.

SCRIPTOR: *HEALTH; *GUIDES; *OCCUPATIONAL SAFETY;
EDUCATION; *SAFETY; *TEACHING GUIDES
ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING
THE EFFECTS OF LAND USE AND URBAN DEVELOPMENT ON WATER
SUPPLY QUALITY AND QUANTITY. TOPICS INCLUDE APPROPRIATE
LOCAL, STATE, AND FEDERAL GOVERNMENT POLICIES, AND THE
UTILIZATION OF MATHEMATICAL MODELS AS PREDICTIVE TOOLS.

ABSTRACT: AN INSTRUCTOR'S GUIDE OF COURSE MATERIALS ON PRINCIPLES OF OCCUPATIONAL SAFETY AND HEALTH IS REVIEWED. THE MATERIALS WERE PREPARED FOR A COURSE PRESENTED AT PURDUE UNIVERSITY AND CONSIST OF 112 UNITS OF INSTRUCTION. THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (OSHA) IS EXAMINED. OCCUPATIONAL SAFETY AND HEALTH LEGISLATION IN THE UNITED STATES IS LISTED CHRONOLOGICALLY FROM 1708 TO 1978. STANDARDS AND STANDARDS OF THE OSHA ARE OUTLINED. AREAS OF STANDARD DEVELOPMENT ARE IDENTIFIED AS ORIGINAL STANDARDS AND PERMANENT STANDARDS. GUIDELINES ARE PRESENTED FOR THE INDUCTION OF INSPECTIONS, INCLUDING PRIORITIES, INSPECTION PROCEDURES, AND CITATIONS. OCCUPATIONAL EXPOSURE LIMITS ARE DISCUSSED. AREAS OF INFORMATION COVERED IN THIS GUIDE INCLUDE INDUSTRIAL TOXICOLOGY, DERMATITIS, RESPIRATORY PROTECTION, HEAT STRESS, VIBRATION, IONIZING RADIATION, DISEASE, INDUSTRIAL VENTILATION, AND ERGONOMICS. THE AUTHOR INCLUDES THAT THE INSTRUCTIONAL RESOURCE MATERIAL WILL BE PARTICULARLY USEFUL TO ENGINEERING EDUCATORS WHO ARE INSTRUCTING STUDENTS IN THE FIELD OF OCCUPATIONAL SAFETY AND HEALTH AND WHO ARE DEVELOPING AN AWARENESS OF HAZARDS AND METHODS TO PREVENT THEIR OCCURRENCE THROUGH ENGINEERING DESIGN AND PRACTICE.

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

IRIS ACCESSION NUMBER: EW011869
PUBLICATION DATE: OCT 84

TITLE: DEFOAMERS. 1970 - SEPTEMBER, 1984 (CITATIONS FROM THE U.S. PATENT DATA BASE).
DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *DEFoAMERS; *FOAM INHIBITION; *INDUSTRY; *PATENTS
NO.: PB84-877263

DESCRIPTIVE NOTE: 73P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB84-877263
ABSTRACT: THIS BIBLIOGRAPHY CONTAINS SELECTED PATENTS CONCERNING ANTI FOAM COMPOSITIONS AND PROCESSES FOR REDUCING FOAMING. FOAM INHIBITION AND DEPRESSION IN INDUSTRIAL MILIEU SUCH AS BOILER WATER, FERMENTATION, AND TEXTILE OPERATIONS ARE INCLUDED. BOTH AQUEOUS AND NON-AQUEOUS SYSTEMS ARE DISCUSSED. (CONTAINS 105 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

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

IRIS ACCESSION NUMBER: EW011868
PUBLICATION DATE: 74

TITLE: RECOGNITION OF OCCUPATIONAL HEALTH HAZARDS. COURSE MANUAL. VOLUME 1.
DESCRIPTOR: *HEALTH HAZARDS; *INSTRUCTIONAL MATERIALS; INDUSTRIAL HYGIENE; *SAFETY EDUCATION; *SAFETY

DESCRIPTIVE NOTE: 537P. PRICE CODE: PC A23/MF A01. ORDER NO.: PB85-107662

ABSTRACT: THE NIOSH COURSE WAS DEVELOPED FOR USE THROUGH THE RECENTLY ESTABLISHED REGIONAL TRAINING PROGRAM (RTP) TO TRAIN PROFESSIONALS AND PARA-PROFESSIONALS WHO WILL BECOME INVOLVED IN THE RECOGNITION, EVALUATION, AND CONTROL OF OCCUPATIONAL HEALTH AND SAFETY HAZARDS. THE RTP WAS ESTABLISHED TO MULTIPLY THE EFFORTS OF NIOSH'S DIVISION OF TRAINING BY CONTRACTING WITH A CENTER FOR CONTINUING EDUCATION IN EACH GEOGRAPHICAL REGION OF THE UNITED STATES TO CONDUCT COURSES IN THAT REGION. THESE CENTERS WILL USE AS INSTRUCTORS TECHNICALLY COMPETENT PROFESSIONALS IN THE FIELD OF INDUSTRIAL HYGIENE. LEADERSHIP FOR THE INSTRUCTORS OF A SINGLE COURSE OR SERIES OF RELATED COURSES WILL BE PROVIDED BY AN OUTSTANDING INDUSTRIAL HYGIENIST WHO IS NOT ONLY A TECHNICAL EXPERT, BUT ALSO A SPECIALIST IN TRAINING.

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

IRIS ACCESSION NUMBER: EW011869

PUBLICATION DATE: OCT 84

TITLE: EUTROPHICATION. DECEMBER, 1981 - SEPTEMBER, 1984 (CITATIONS FROM THE NTIS DATA BASE).

IRIS ACCESSION NUMBER: EW011870
PUBLICATION DATE: OCT 84

TITLE: AQUATIC WEED CONTROL. DECEMBER, 1981 - SEPTEMBER, 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *BIOLOGICAL CONTROL METHODS; *AQUATIC WEEDS; *ENVIRONMENTAL EFFECTS; *HERBICIDES; *MECHANICAL CONTROL METHODS; *PROGRAM DESCRIPTIONS; *WEED CONTROL

DESCRIPTIVE NOTE: 116P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB84-877393

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE UTILIZATION OF HERBICIDES AND BIOLOGICAL METHODS IN THE MANAGEMENT OF RUISEANCE AQUATIC WEEDS. DESCRIPTIONS OF PROGRAMS UNDERTAKEN IN VARIOUS REGIONS OF THE UNITED STATES ARE PRESENTED AS WELL AS SPECIFIC HERBICIDES AND BIOLOGICAL CONTROL METHODS. WATER HYACINTH, ALGAE, SEAGRASSES, EURASIAN WATERMILFOIL, AND HYDRILLA ARE AMONG THE AQUATIC PLANTS DISCUSSED. SOME ATTENTION IS GIVEN TO MECHANICAL CONTROL METHODS AND ENVIRONMENTAL EFFECTS OF VARIOUS PROGRAMS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 111 CITATIONS, 75 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW011871

PUBLICATION DATE: OCT 84

TITLE: EUTROPHICATION. DECEMBER, 1981 - SEPTEMBER, 1984 (CITATIONS FROM THE NTIS DATA BASE).

ESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *RESEARCH REPORTS; EUTROPHICATION; *LAKES; *MODELS; RESERVOIRS

ESCRIPITIVE NOTE: 72P. PRICE CODE: PC N01-MF N01. ORDER O.: PB84-377463

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING UTROPHICATION PROCESSES AND EFFECTS IN LAKES, RESERVOIRS, ND OTHER SURFACE WATER BODIES. TOPICS INCLUDE NUTRIENT DYNAMICS, PLANKTON ABUNDANCE AND DISTRIBUTION, AND PRIMARY PRODUCTIVITY STUDIES. MATHEMATICAL MODELS OF EUTROPHIFICATION PROCESSES ARE DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 60 CITATIONS, 38 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

PUBLICATION DATE: 83

TITLE: ASBESTOS IN WATER SUPPLIES OF THE UNITED STATES.

PERSONAL AUTHOR: MILLETTE, J. R.; AND OTHERS

ESCRIPTOR: *ASBESTOS; *HEALTH; *PUBLIC HEALTH; *POLLUTION CONTROL; *WATER SUPPLY; *WATER POLLUTION CONTROL

ESCRIPITIVE NOTE: 5P. PRICE CODE: PC A02-MF A01. ORDER O.: PB85-108636

ABSTRACT: THE REVIEW OF AVAILABLE DATA ON THE CONCENTRATIONS OF ASBESTOS IN U.S. WATER SUPPLIES SUGGESTS THAT THE MAJORITY OF WATER CONSUMERS ARE NOT EXPOSED TO ASBESTOS CONCENTRATIONS OVER 1 MILLION FIBERS PER LITER. A NEW POPULATION, HOWEVER, MAY BE EXPOSED TO CONCENTRATIONS OVER 1 BILLION FIBERS PER LITER. EIGHT PERCENT OF THE 538 WATER SUPPLIES FOR WHICH WATERBORNE ASBESTOS DATA IS AVAILABLE HAVE CONCENTRATIONS OF FIBERS OVER 10 MILLION FIBERS PER LITER. THE VAST MAJORITY OF ASBESTOS FIBERS WHICH ARE FOUND IN U.S. WATER SUPPLIES ARE UNDER 5 MICROMETERS IN LENGTH.

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

PUBLICATION DATE: DEC 84

TITLE: COMMON SENSE SAFETY FOR DEVICE TESTERS.

ESCRIPTOR: *ACCIDENT PREVENTION; *BACKFLOW PREVENTION; EQUIPMENT; *MAINTENANCE; *SAFETY; *WATER DISTRIBUTION

ESCRIPITIVE NOTE: 1, 6P.

ABSTRACT: THIS ARTICLE DESCRIBES SITUATIONS WHEN

Maintenance for Backflow Prevention Devices May Require Safety Precautions.

AVAILABILITY: BACKFLOW PREVENTION; V1 N6

IRIS ACCESSION NUMBER: EW011874

PUBLICATION DATE: DEC 84

TITLE: IRRIGATION SYSTEMS NEED BACKFLOW PROTECTION.

PERSONAL AUTHOR: ASAY, STUART

ESCRIPTOR: *BACKFLOW PREVENTION; *EQUIPMENT; *IRRIGATION *IRRIGATION SYSTEMS; *WATER DISTRIBUTION; *WATER SUPPLY

DESCRIPTIVE NOTE: 3-5P.

ABSTRACT: THIS ARTICLE DESCRIBES BACKFLOW PREVENTION DEVICES AND TECHNIQUES FOR USE IN IRRIGATION SYSTEMS.

AVAILABILITY: BACKFLOW PREVENTION; V1 N6

IRIS ACCESSION NUMBER: EW011885

PUBLICATION DATE: FEB 78

TITLE: CHARACTERIZATION OF REUSABLE MUNICIPAL WASTEWATER EFFLUENTS AND CONCENTRATION OF ORGANIC CONSTITUENTS.

PERSONAL AUTHOR: SMITH, JAMES K.; AND OTHERS

ESCRIPTOR: *ADVANCED WASTEWATER TREATMENT; *DRINKING WATER; *EFFLUENTS; *ORGANIC COMPOUNDS; *RECYCLING; *RESEARCH; *WASTEWATER TREATMENT; *WATER TREATMENT; *WATER REUSE; *WATER QUALITY

DESCRIPTIVE NOTE: 144P. PRICE: \$9.64

ABSTRACT: THIS REPORT IS CONCERNED WITH THE CHARACTERIZATION OF REUSABLE MUNICIPAL WASTEWATER EFFLUENTS FROM COST-EFFECTIVE TREATMENT PROCESSES. PHYSICAL, CHEMICAL, AND BIOLOGICAL PARAMETERS WERE USED TO DEFINE POTABLE WATER QUALITY. A REVERSE OSMOSIS CONCENTRATION TECHNIQUE WAS EVALUATED AND USED TO OBTAIN QUANTITIES OF ORGANIC RESIDUES IN THE EFFLUENTS FOR IDENTIFICATION AND TOXICITY TESTING. OTHER ONGOING RESEARCH EFFORTS. PARAMETERS FOUND TO EXCEED DRINKING WATER REGULATIONS IN MOST OF THE TREATED EFFLUENTS INCLUDED NITROGEN, PHENOL, ODOR, CARBON CHLOROFORM EXTRACT, TURBIDITY, AND SPECIFIC HEAVY METALS.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW011886

PUBLICATION DATE: FEB 84

TITLE: GUIDANCE MANUAL FOR ELECTROPLATING AND METAL FINISHING PRETREATMENT STANDARDS.

DESCRIPTOR: *COMPLIANCE; *ELECTROPLATING; *INDUSTRY; *METALS; *METAL FINISHING; *MONITORING; *PRETREATMENT; *STANDARDS; *POLUTION CONTROL; *REPORTING; *REGULATIONS; *STANDARDS; *TECHNOLOGY

DESCRIPTIVE NOTE: 73P. PRICE: \$5.38

ABSTRACT: THIS MANUAL PROVIDES INFORMATION TO ASSIST CONTROL AUTHORITIES AND APPROVAL AUTHORITIES IN IMPLEMENTING THE NATIONAL CATEGORICAL PRETREATMENT STANDARDS FOR THE ELECTROPLATING AND METAL FINISHING POINT SOURCE CATEGORIES. IT IS DESIGNED TO SUPPLEMENT THE MORE DETAILED DOCUMENTS LISTED AS REFERENCES IN THE MANUAL; IT IS NOT DESIGNED TO REPLACE THEM. THE MANUAL ADDRESSES APPLICATION OF THE COMBINED WASTESTREAM FORMULA TO INTEGRATED FACILITIES WITH REGULATED AND UNREGULATED WASTESTREAMS. IT ALSO PROVIDES INFORMATION ON REMOVAL CREDITS AND THE STATUS OF THE FUNDAMENTALLY DIFFERENT FACTORS VARIANCE PROVISION IN LIGHT OF THE RECENT COURT DECISION. IT FURTHER EXPLAINS HOW FACILITIES SUBJECT TO THESE REGULATIONS MAY USE THE CERTIFICATION PROCEDURE TO MINIMIZE THEIR SAMPLING AND ANALYSIS FOR TOTAL TOXIC ORGANIC POLLUTANTS.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW011896

PUBLICATION DATE: FEB 84

TITLE: SLUDGE DEMETALIZATION BY THE UNION CARBIDE CORPORATION ELECTROCHEMICAL PROCESS.

PERSONAL AUTHOR: HAAS, OSCAR W.
DESCRIPTOR: *COSTS; *ELECTROCHEMICAL PROCESSES; *HEAVY METALS; *METALS; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *SLUDGE; *SEWAGE SLUDGE; *TECHNOLOGY; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 14SP. PRICE: \$8.40

ABSTRACT: THE PURPOSE OF THIS STUDY WAS TO INVESTIGATE AN ELECTRO-CHEMICAL PROCESS FOR THE REMOVAL OF HEAVY METALS FROM SEWAGE SLUDGE WITHOUT PRIOR DEWATERING. A LABORATORY SCALE APPARATUS WAS DESIGNED AND CONSTRUCTED FOR THE PROCESS TESTS AND A BENCH SCALE APPARATUS WAS MODIFIED AND USED FOR TESTS. WHILE METALS WERE REMOVED, PROJECTED TREATMENT COSTS WERE HIGHER THAN MOST METHODS OF SLUDGE DISPOSAL CURRENTLY IN USE. MORE IMPROVEMENTS IN THE PROCESS ARE NEEDED BEFORE IT CAN BE COMMERCIALLY SUCCESSFUL.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW011907

PUBLICATION DATE: B4

TITLE: LET THE SEAS DO THE DISPOSAL.

PERSONAL AUTHOR: FRENCH, VICTOR

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *EFFLUENTS; *OCEAN OUTFALLS; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 22-24P.

ABSTRACT: MODERN METHODS MAKE WASTEWATER DISCHARGE THROUGH AN OCEAN OUTFALL A BETTER DISPOSAL OPTION THAN IT USED TO BE. VARIABLES TO CONSIDER FOR DESIGN AND SITE SELECTION ARE DISCUSSED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT: V131 N13

IRIS ACCESSION NUMBER: EW011908

PUBLICATION DATE: DEC 84

TITLE: THERMAL TREATMENT "ENERGIZES" SAN MATEO SLUDGE.
PERSONAL AUTHOR: CEBALT, FRED

DESCRIPTOR: *CALIFORNIA; *ENERGY; *OPERATIONS (WASTEWATER); *THERMAL HEAT RECOVERY; *SLUDGE; *WASTE HEAT RECOVERY; *WASTEWATER TREATMENT;

85

ABSTRACT: THIS IS A REPORT BY THE U.S. GENERAL ACCOUNTING OFFICE REGARDING THE STATUS OF CIVILIAN FEDERAL AGENCIES' EFFORTS TO ADDRESS HAZARDOUS WASTE PROBLEMS ON THEIR LANDS. FINDINGS AND RECOMMENDATIONS ARE INCLUDED.

DESCRIPTOR: *CLEANUP; *DEPARTMENT OF ENERGY; *HAZARDOUS WASTES; *LAND USE; *MONITORING; *PERFORMANCE EVALUATION; *SITE IDENTIFICATION; *SUPERFUND; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 116P. FIRST FIVE COPIES FREE; ADDITIONAL COPIES \$3.25.

ABSTRACT: THIS IS A REPORT BY THE U.S. GENERAL ACCOUNTING OFFICE REGARDING THE STATUS OF CIVILIAN FEDERAL AGENCIES' EFFORTS TO ADDRESS HAZARDOUS WASTE PROBLEMS ON THEIR LANDS. FINDINGS AND RECOMMENDATIONS ARE INCLUDED.

DESCRIPTOR: *GENERAL ACCOUNTING OFFICE, DOCUMENT HANDLING AND INFORMATION SERVICES FACILITY, P. O. BOX 6015, FAITHERSBURG, MD 20760

DESCRIPTIVE NOTE: 116P. FIRST FIVE COPIES FREE; ADDITIONAL COPIES \$3.25.

DESCRIPTIVE NOTE: 25-27P.

PUBLICATION DATE: 83
TITLE: BASIC LANGUAGE PROGRAMS FOR URBAN STORMWATER MANAGEMENT PLANNING AND DESIGN. VOLUME II.PERSONAL AUTHOR: GOLDING, BERNARD L.
ABSTRACT: A FOUR-YEAR OPERATING EXPERIENCE WITH A THERMAL PROCESS INCORPORATING WASTE HEAT RECOVERY HAS DEMONSTRATED TO THE STAFF OF A SAN MATEO, CALIFORNIA WASTEWATER TREATMENT PLANT THAT SLUDGE IS INDEED A VIABLE SOURCE OF USABLE ENERGY.AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N13
IRIS ACCESSION NUMBER: EW011909
PUBLICATION DATE: DEC 84
TITLE: THE TRICK TO SELLING SLUDGE AS FERTILIZER.
PERSONAL AUTHOR: BOONE, TONY
DESCRIPTOR: *AGRICULTURE; *COSTS; *FERTILIZER; *ILLINOIS;
*LAND APPLICATION; *RECYCLING; *SLUDGE; *SLUDGE DISPOSAL;
*WASTE DISPOSAL; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 28-29P.ABSTRACT: SOLVING A PUBLIC RELATIONS PROBLEM RELATED TO THE PUBLIC'S PERCEPTION OF MUNICIPAL TREATMENT PLANT SLUDGE CLEARED THE WAY FOR THE START OF PROFITABLE LAND APPLICATION PROGRAMS. A PROGRAM IN ILLINOIS IS DISCUSSED.
AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N13IRIS ACCESSION NUMBER: EW011910
PUBLICATION DATE: DEC 84
TITLE: DRIER SLUDGE ENDS LANDFILL LEACHING CONCERN.PERSONAL AUTHOR: TAYLOR, MICHAEL
DESCRIPTOR: *EQUIPMENT; *FILTER PRESSES; *INDUSTRIAL WASTES; *LEACHING; *LANDFILLS; *MAINE; *SLUDGE DEWATERING; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 30-31P.ABSTRACT: LEACHING PROBLEMS AT A MAINE LANDFILL WERE LARGELY RESOLVED WHEN A NEW BELT FILTER PRESS WENT INTO OPERATION TO PRODUCE A MUCH DRIER SLUDGE AT THE LOCAL WASTEWATER TREATMENT FACILITY. THERE WERE IMPORTANT COST BENEFITS TOO.
AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N13

PUBLICATION DATE: 83

TITLE: BASIC LANGUAGE PROGRAMS FOR URBAN STORMWATER MANAGEMENT PLANNING AND DESIGN. VOLUME II.

PERSONAL AUTHOR: GOLDING, BERNARD L.
DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BASIC LANGUAGE;
*COMPUTER SOFTWARE; *CULVERTS; *DESIGN; *HYDRAULICS;
*MANAGEMENT; *PIPES; *PLANNING; *STORMWATER;
RUNOFF; *URBAN AREAS; *WASTEWATER COLLECTION
DESCRIPTIVE NOTE: 114P. PRICES: BOOK AND LISTINGS,
\$35.00; DISKETTES, \$50.00.

ABSTRACT: LIKE VOLUME I, ALL OF THE PROGRAMS ARE USER-FRIENDLY, FULLY INTERACTIVE AND ARE PRESENTED IN A CLEAR, EASY TO FOLLOW STEP-BY-STEP FORMAT. THE HYDRAULIC PROGRAMS IN THIS BOOK ENABLE THE RAPID COMPUTATION OF CRITICAL AND NORMAL DEPTHS AND THE HEAD LOSSES THROUGH BOTH OVAL (CONCRETE) AND ARCH (CMP) PIPE CULVERTS UNDER A VARIETY OF CONDITIONS. THE HYDROLOGIC PROGRAMS ENABLE ANALYTIC FREQUENCY ANALYSIS BY BOTH THE EXTREME VALUE-TYPE I (GUMBEL) AND THE LOG PEARSON TYPE III PROCEDURES. INCLUDED WITH EACH PROGRAM IS A DISCUSSION OF THE THEORY, DERIVED EQUATIONS, DETAILED STEP-BY-STEP USER INSTRUCTIONS AND SAMPLE PROBLEMS. ALL OF THESE PROGRAMS ARE COMPLETELY NEW AND HAVE NOT BEEN PREVIOUSLY PUBLISHED.

AVAILABILITY: HILBERN ENGINEERING SOFTWARE, 3982 ISLESWORTH COURT, BAY HILL, ORLANDO, FL 32819

IRIS ACCESSION NUMBER: EW011912
PUBLICATION DATE: 84TITLE: PUMPING STATION ANALYSIS. A BASIC LANGUAGE PROGRAM FOR ANALYZING STORM WATER PUMPING STATIONS.
PERSONAL AUTHOR: GOLDING, BERNARD L.
DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BASIC;
*MANAGEMENT; *MONITORING; *PUMPS; *PUMPING
STATIONS; *STORMWATER; *SURFACE RUNOFF; *WASTEWATER
COLLECTION
DESCRIPTIVE NOTE: 48P. PRICES: BOOK AND LISTINGS, \$25.00;

ABSTRACT: THIS PROGRAM FOR ANALYSIS OF STORM WATER PUMPING STATIONS KEEPS A RUNNING ACCOUNT OF PUMPING STATION OPERATION WITH TIME. AT THE END OF EACH SELECTED TIME INTERVAL, THE INFLOW IN CFS TO THE STATION, THE WATER SURFACE ELEVATION IN THE STORAGE BASIN, THE STORAGE IN ACRES FEET IN THE STORAGE BASIN AND THE PUMP DISCHARGE IN CFS ARE LISTED. INPUTS TO THE PROGRAM ARE THE STORAGE IN THE BASIN AT SUCCESSIVELY HIGHER ELEVATIONS; THE PUMP ON AND OFF ELEVATIONS AND THE PUMP CAPACITIES IN GPM. INFLOW HYDROGRAPHS TO THE PUMPING INSTALLATION (STATION AND ADJACENT STORAGE BASIN) MAY BE INPUT TO THE COMPUTER

ANUALLY OR FROM DISK FILE. THE PROGRAM IS USER-FRIENDLY AND COMPLETELY INTERACTIVE. THE USER IS GIVEN STEP-BY-STEP INSTRUCTIONS AS TO NECESSARY INPUTS.

AVAILABILITY: HILBERN ENGINEERING SOFTWARE, 8982 ISLESWORTH COURT, BAY HILL, ORLANDO, FL 32819

IRIS ACCESSION NUMBER: EW911913

33

TITLE: BASIC LANGUAGE PROGRAMS FOR URBAN STORMWATER MANAGEMENT PLANNING AND DESIGN. VOLUME 1.

PERSONAL AUTHOR: GOLDING, BERNARD L.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DESIGN; *HYDROLOGY; COMPUTER SOFTWARE; *PLANNING; *SURFACE RUNOFF; *STORMWATER MANAGEMENT; WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 353P. PRICES: BOOK AND LISTINGS, 150.00; METRIC UNIT EDITION, 3125.00; DISKETTES, \$150.00.

ABSTRACT: THIS BOOK CONTAINS ALL OF THE COMPUTER PROGRAMS REQUIRED FOR THE PRELIMINARY ANALYSIS AND FINAL DESIGN OF URBAN WATER MANAGEMENT SYSTEMS FOR MUNICIPALITIES AND DEVELOPMENTS; A TOTAL OF 28. ALL OF THE PROGRAMS WERE DEVELOPED, REFINED AND TESTED OVER A LONG PERIOD OF TIME AND HAVE BEEN USED FOR THE DESIGN OF MANY STORM WATER MANAGEMENT SYSTEMS UNDER A VARIETY OF CIRCUMSTANCES. THE EIGHT PROGRAMS UNDER HYDROLOGY ENABLE RAPID COMPUTATION OF HYDROGRAPHS FOR BOTH THE PREDEVELOPMENT AND POST-DEVELOPMENT CONDITION AND THE ROUTING OF THESE HYDROGRAPHS THROUGH RESERVOIR AND CHANNEL STORAGE. INCLUDED IN THIS BOOK ARE TWO MODELS FOR HYDROGRAPH COMPUTATION, THE HNV-SANTA BARBARA URBAN HYDROGRAPH METHOD AND THE DABRO MODEL (A UNIT HYDROGRAPH MODEL). BOTH OF WHICH MODELS HAVE BEEN SUCCESSFULLY USED TO SIMULATE HYDROGRAPHS FROM SMALL DRAINAGE BASINS USING GAUGED DATA WITH LITTLE OR NO CALIBRATION. THE 20 PROGRAMS IN HYDRAULICS ENABLE THE RAPID COMPUTATION OF DETENTION BASIN AND RESERVOIR RATING CURVES AND THE REQUIRED SIZES OF CONVEYANCE CHANNELS. PROGRAMS FOR COMPUTATION OF NORMAL AND CRITICAL DEPTHS IN TRAPEZOIDAL AND RECTANGULAR CHANNELS AND PIPES; FOR THE COMPUTATION OF WATER SURFACE PROFILES IN TRAPEZOIDAL, RECTANGULAR AND NATURAL RIVER CHANNELS AND FOR THE DETERMINATION OF HEAD LOSSES IN CULVERTS UNDER ALL FLOW CONDITIONS ARE INCLUDED.

AVAILABILITY: HILBERN ENGINEERING SOFTWARE, 8982 ISLESWORTH COURT, BAY HILL, ORLANDO, FL 32819

IRIS ACCESSION NUMBER: EW911914

TITLE: BASIC LANGUAGE PROGRAMS FOR SANITARY SEWER SYSTEM ANALYSIS AND DESIGN.

PERSONAL AUTHOR: GOLDING, BERNARD L.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BASIC LANGUAGE;

*COMPUTER SOFTWARE; *DESIGN; *PLANNING; *PIPES; *SEWERS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: PRICE: DISKETTE, \$100.00.

BOOK AND LISTINGS, \$85.00;

ABSTRACT: CONTAINED IN THIS BOOK ARE SIX BASIC LANGUAGE INTERACTIVE PROGRAMS FOR THE ANALYSIS AND DESIGN OF SANITARY SEWER SYSTEMS AND A SEVENTH PROGRAM (PIPE SYSTEM ANALYSIS) FOR THE COMPUTATION OF HEAD LOSS IN A FORCE MAIN. EACH PROGRAM INCLUDES A FULL EXPLANATION OF THE THEORY AND PROGRAM OPERATION, DETAILED STEP-BY-STEP USER INSTRUCTIONS AND SAMPLE PROBLEMS. THE THREE PROGRAMS FOR THE ANALYSIS OF EXISTING SANITARY SEWER SYSTEMS ARE LISTED AS FOLLOWS: (1) PART 1 - DATA INPUT FILES; (2) PART 2 - READ DATA FILES; AND (3) PART 3 - SYSTEMS ANALYSIS. THE THREE PROGRAMS FOR THE DESIGN OF NEW SANITARY SEWER SYSTEMS ARE LISTED AS FOLLOWS: (1) PART 1 - DATA INPUT FILES; (2) PART 2 - READ DATA; AND (3) PART 3 - SYSTEMS DESIGN.

AVAILABILITY: HILBERN ENGINEERING SOFTWARE, 8982 ISLESWORTH COURT, BAY HILL, ORLANDO, FL 32819

IRIS ACCESSION NUMBER: EW011915

TITLE: DESIGN HYDROGRAPHS BY THE DRAINEAGE BASIN RUNOFF MODEL (DABRO).

PERSONAL AUTHOR: GOLDING, BERNARD L.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BASIC LANGUAGE; COMPUTER SOFTWARE; *DABRO MODEL; *DESIGN; *HYDROGRAPHS; *FLOW MEASUREMENT; *MODELS; *RURAL AREAS; *SURFACE RUNOFF; *URBAN AREAS; *WATER SUPPLY

DESCRIPTIVE NOTE: PRICE:

DISKETTE, \$100.00.

ABSTRACT: THE MODEL PRESENTED IN THIS BOOK, WILL COMPUTE A HYDROGRAPH OF RUNOFF (DESIGN HYDROGRAPH) FROM A BASIN BY COMPUTING THE HYDROGRAPHS OF RUNOFF OF THE VARIOUS SUBBASINS COMPRISING THE TOTAL DRAINAGE BASIN (BY THE APPLICATION OF RAINFALL-EXCESS TO THE UNIT HYDROGRAPH OF EACH SUBBASIN) AND THEN COMBINING AND/OR FLOOD ROUTING THE RESULTING SUBBASIN HYDROGRAPHS DOWN THE RIVER CHANNEL AND THROUGH RESERVOIRS TO GIVE THE TOTAL HYDROGRAPH OF RUNOFF FROM THE BASIN. IT WILL THEN PLOT A GRAPH (TIME IN HOURS VS DISCHARGE IN CFS) OF THE FINAL TOTAL BASIN HYDROGRAPH. THE DABRO MODEL HAS BEEN USED TO SUCCESSFULLY SIMULATE RUNOFF FROM BOTH LARGE AND SMALL BASINS (BOTH RURAL AND URBAN) AND HAS BEEN USED IN THE PRELIMINARY AND FINAL DESIGN OF MANY WATER RESOURCES PROJECTS AND IN REAL TIME RESERVOIR REGULATION. THIS BOOK CONTAINS A FULL EXPLANATION OF BOTH THE MODEL AND PROGRAM OPERATION, DETAILED STEP-BY-STEP USER INSTRUCTIONS AND SAMPLE PROBLEMS.

AVAILABILITY: HILBERN ENGINEERING SOFTWARE, 8982 ISLESWORTH COURT, BAY HILL, ORLANDO, FL 32819

RIS ACCESSION NUMBER: EW011916

IRIS ACCESSION NUMBER: EW011918

PUBLICATION DATE: 83
TITLE: SANTA BARBARA URBAN HYDROGRAPH METHOD UTILIZING
.UNOFF CURVE NUMBERS.

DESCRIPTOR: *BASIC LANGUAGE; *COMPUTER SOFTWARE;
HYDROGRAPHS; *MANAGEMENT; *PLANNING; *SURFACE RUNOFF;
STORMWATER; *URBAN AREAS; *WASTEWATER COLLECTION
DESCRIPTIVE NOTE: 45P. PRICE: BOOK AND LISTINGS, \$25.00;
DISKETTE, \$25.00.

ABSTRACT: IN THIS PROGRAM, RAINFALL-EXCESS INCREMENTS ARE COMPUTED BY A MODIFICATION OF THE STANDARD SOIL CONSERVATION SERVICE RAINFALL-RUNOFF EQUATION. IN THIS MODIFICATION, RUNOFF IS ASSUMED TO COME FROM THREE SOURCES: FROM THE URBAN (GRADED) AND NON-DIRECTLY CONNECTED IMPERVIOUS AREA, FROM THE URBAN PVIOUS AREAS, AND FROM THE RURAL AREAS. THE SUMMED RAINFALL-EXCESS INCREMENTS ARE THEN ROUTED THROUGH AN IMAGINARY LINEAR RESERVOIR WITH A TIME DELAY EQUAL TO THE TIME OF CONCENTRATION OF THE BASIN (SANTA BARBARA ROUTING). THE COMPUTED RUNOFF HYDROGRAPH IS THEN PLOTTED WHICH PLOT ROUTINE WILL WORK ON ANY DOT-MATRIX PRINTER. THE SEQUENTIAL RAINFALL INCREMENTS COMPRISING THE DESIGN STORM MAY BE STORED ON A DISK FILE (A SHORT PROGRAM 'O' STORE THESE INCREMENTS IS ALSO INCLUDED) OR PLACED IN THE MAIN PROGRAM AS DATA STATEMENTS. THE PROGRAMS ARE FULLY INTERACTIVE AND USER-FRIENDLY. FULL EXPLANATIONS, USER INSTRUCTIONS, SAMPLE PROBLEMS AND PROGRAM LISTINGS ARE INCLUDED.

AVAILABILITY: HILBERN ENGINEERING SOFTWARE, 8982 ISLESWORTH COURT, BAY HILL, ORLANDO, FL 32819

RIS ACCESSION NUMBER: EW011917

TITLE: SANTA BARBARA URBAN HYDROGRAPH METHOD UTILIZING SINGLE OR MULTIPLE BASINS WITH FLOOD OUTING.
.UNOFF CURVE NUMBERS.
DESCRIPTOR: *BASIC LANGUAGE; *COMPUTATION; *FLOW MEASUREMENT; *HYDROGRAPHS; *WATER
DESCRIPTIVE NOTE: PRICE: BOOK AND LISTINGS, \$100.00;
DISKETTE, \$100.00.

ABSTRACT: IN ADDITION TO COMPUTING HYDROGRAPHS FROM A SINGLE BASIN, THE PROGRAMS IN THIS BOOK ENABLE RESERVOIR AND CHANNEL FLOOD ROUTING, HYDROGRAPH SUMMATION, PLOTTING, ETC. THROUGH THAT A RUNOFF HYDROGRAPH FROM A COMPLEX BASIN CAN BE COMPUTED. HYDROGRAPHS OF RUNOFF FROM THE VARIOUS SUBBASINS CAN BE INDIVIDUALLY COMPUTED AND STORED ON DISK FILE FOR SUBSEQUENT OPERATIONS (PROGRAM NO. 1). A PROGRAM FOR THE SOLUTION OF COMPLEX BASINS WITH UP TO FIVE SUBBASINS IS ALSO INCLUDED (PROGRAM NO. 2).

AVAILABILITY: HILBERN ENGINEERING SOFTWARE, 8982 ISLESWORTH COURT, BAY HILL, ORLANDO, FL 32819

IRIS ACCESSION NUMBER: EW011919
TITLE: BASIC LANGUAGE PROGRAMS FOR STORM SEWER ANALYSIS AND DESIGN.
PERSONAL AUTHOR: GOLDRING, BERNARD L.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BASIC LANGUAGE;
*COMPUTER SOFTWARE; *DESIGN; *PIPES; *SURFACE RUNOFF;
*SEWERS; *WASTEWATER COLLECTION
DESCRIPTIVE NOTE: PRICE: BOOK AND LISTINGS, \$100.00;
DISKETTE, \$150.00

ABSTRACT: THIS BOOK CONTAINS EIGHT BASIC LANGUAGE INTERACTIVE PROGRAMS FOR THE ANALYSIS AND DESIGN OF STORM SEWER SYSTEMS BY THE RATIONAL METHOD. ALL OF THE PROGRAMS MAKE EXTENSIVE USE OF DISK FILES AND ARE EASY TO USE AND APPLY. EACH PROGRAM INCLUDES A FULL EXPLANATION OF THE THEORY AND PROGRAM OPERATION, DETAILED STEP-BY-STEP USER INSTRUCTIONS AND SAMPLE PROBLEMS. THE FIRST THREE PROGRAMS ARE FOR THE ANALYSIS OF EXISTING STORM SEWER SYSTEMS AND ARE LISTED AS FOLLOWS: (1) PART 1 - DATA INPUT FILES; (2) PART 2 - READ DATA FILES; AND (3) PART 3 - SYSTEMS ANALYSIS. THE SECOND THREE PROGRAMS ARE FOR THE DESIGN OF STORM SEWER SYSTEMS. THEY ARE LISTED AS FOLLOWS: (1) PART 1 - DATA INPUT FILES; (2) PART 2 - READ DATA FILES; AND (3) PART 3 - SUBSYSTEM DESIGN. A SEVENTH PROGRAM WILL STORE RAINFALL INTENSITY-DURATION DATA ON DISK FILES. AS AN ALTERNATIVE, AN EQUATION FOR RAINFALL INTENSITY-DURATION DATA MAY BE USED. AN EIGHTH PROGRAM WILL COMPUTE A HYDRAULIC GRADE LINE UP A STORM SEWER SYSTEM UNDER PRESSURE.

AVAILABILITY: HILBERN ENGINEERING SOFTWARE, 8982 ISLESWORTH COURT, BAY HILL, ORLANDO, FL 32819

IRIS ACCESSION NUMBER: EW011919

PUBLICATION DATE: 84
TITLE: HAZARD ASSESSMENT OF CHEMICALS: CURRENT DEVELOPMENTS.
PERSONAL AUTHOR: SAXENA, JITENDRA, ED.
DESCRIPTOR: CASE STUDIES; *CHEMICALS; FORMALDEHYDE; *HAZARD ASSESSMENTS; CHLORINATED ETHANES; *ENVIRONMENTAL EFFECTS; OZONE; *TOXIC SUBSTANCES
DESCRIPTIVE NOTE: 48BP. PRICE: \$65.00

ABSTRACT: THIS SERIES PROVIDES MONOGRAPHS OF SIGNIFICANT DEVELOPMENTS IN THE AREA OF ENVIRONMENTAL AND HEALTH EFFECTS OF CHEMICALS. IN ADDITION, EACH VOLUME OF HAZARD ASSESSMENT OF CHEMICALS INCLUDES CASE STUDIES OF CHEMICALS/ CHEMICAL CLASSES OR CHEMICAL SPILLS. WHILE PROVIDING COMPLETE ASSESSMENT OF THE APPLICATION OF SPECIFIC STUDIES ALSO OFFER EXAMPLES OF THE AVAILABLE METHODS AND APPROACHES TO ENVIRONMENTAL AND HEALTH HAZARD ASSESSMENT OF CHEMICALS. VOLUME 3 OF THE SERIES PRESENTS A COLLECTION OF SEVEN SUBJECT REVIEWS AND CASE STUDIES ON FORMALDEHYDE AND CHLORINATED ETHANES. SALIENT

IRIS ACCESSION NUMBER: EW011920
TITLE: BASIC LANGUAGE PROGRAMS FOR STORM SEWER ANALYSIS AND DESIGN.
PERSONAL AUTHOR: GOLDRING, BERNARD L.

OBJECT REVIEWS ARE: HAZARD PRIORITY RANKING SYSTEMS FOR ENVIRONMENTAL CHEMICALS, ROLE OF MEDICAL EXAMINATIONS IN VALUATING HAZARDOUS CHEMICAL EXPOSURE, METAL SPECIATION, EFFECT OF PARTICULATES ON THE TOXIC MANIFESTATIONS OF CHEMICALS, POTENTIAL IMPACT OF CONTAMINANTS ON STRATOSPHERIC ZONE, AND OTHERS. THE HEALTH EFFECTS OF FORMALDEHYDE WITH A DISCUSSION OF RELEVANT CHEMISTRY, SOURCES OF EXPOSURE, AND HE CURRENT REGULATORY STATUS IN THE U.S. AND ABROAD ARE REVIEWED. INFORMATION ON CHEMISTRY, PRODUCTION, USE, AND ENVIRONMENTAL AND BIOLOGICAL EFFECTS IS REVIEWED FOR HALORINATED ETHANES.

AVAILABILITY: ACADEMIC PRESS, INC., 6277 SEA HARBOR DRIVE, MELBOURNE, FL 32921

IRIS ACCESSION NUMBER: EW011921

PUBLICATION DATE: 84

ITLE: CHEMICAL TOXICOLOGY AND CLINICAL CHEMISTRY OF ETAILS.

PERSONAL AUTHOR: BROWN, STANLEY S., ED.; SAVORY, JOHN, ED.

ESCRIPTOR: *CONFERENCE PROCEEDINGS; *CHEMICALS; *CHEMICAL TOXICOLOGY; *ENVIRONMENTAL EFFECTS; *METALS; *PUBLIC HEALTH; *RESEARCH REPORTS; *TOXICOLOGY

ESCRIPITIVE NOTE: 432P. PRICE: \$35.00

ABSTRACT: THIS BOOK CONTAINS THE FIFTEEN PLENARY LECTURES AND A SELECTION OF COMMUNICATIONS GIVEN AT THE SECOND INTERNATIONAL CONFERENCE OF CLINICAL CHEMISTRY AND CHEMICAL TOXICOLOGY. BRINGING TOGETHER THE VIEWS OF SCIENTISTS AND PHYSICIANS, THE VOLUME PRESENTS A BROAD UP-TO-DATE PERSPECTIVE ON THE SUBJECT. TOPICS COVERED RANGE FROM CLINICAL AND EPIDEMIOLOGICAL CASE HISTORIES TO STUDIES OF CELLULAR AND MOLECULAR MECHANISMS. THE BOOK IS DIVIDED INTO OUR SECTIONS: QUALITY ASSURANCE AND METAL ANALYSIS, OCCUPATIONAL AND ENVIRONMENTAL EXPOSURES TO TOXIC METALS, SPECIATION AND INTERACTIONS, AND CLINICAL AND ANIMAL EXPERIMENTAL STUDIES OF TOXIC METALS. THE TOXICITIES OF CADMIUM, MERCURY, CADMIUM, AND NICKEL ARE DISCUSSED ALONG WITH JOSE OF LESSER KNOWN TOXIC METALS SUCH AS ALUMINUM, MANGANESE, SELENIUM, CHROMIUM, AND URANIUM.

AVAILABILITY: ACADEMIC PRESS, INC., 6277 SEA HARBOR DRIVE, MELBOURNE, FL 32921

IRIS ACCESSION NUMBER: EW011922

PUBLICATION DATE: JAN 80

ITLE: DAMAGES AND THREATS CAUSED BY HAZARDOUS MATERIALS.

ESCRIPTOR: *DAMAGES; DRINKING WATER; *ENVIRONMENTAL EFFECTS; GROUND WATER; *HAZARDOUS MATERIALS; *HEALTH; *PUBLIC HEALTH; *SAFETY; *WASTE DISPOSAL; *WATER POLLUTION; *WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 268P. PRICE: \$17.00

ABSTRACT: THIS DOCUMENT IS A PARTIAL COMPILATION OF DAMAGES AND THREATS FROM HAZARDOUS WASTE SITES IN THE UNITED STATES. IT WAS COMPILED FROM DATA AVAILABLE IN 1980. THE DAMAGES COVERED IN THE MORE THAN 350 SITE DESCRIPTIONS CONTAINED IN THIS REPORT INCLUDED GROUNDWATER CONTAMINATION, DRINKING WATER WELL CLOSURES, FISH KILLS, PROPERTY DAMAGE, KIDNEY DISORDERS, CANCER, AND DEATH. THE REPORT IS DIVIDED INTO TWO SECTIONS: (1) DETAILED DESCRIPTIONS OF 24 SITES AND (2) ABSTRACTS OF APPROXIMATELY 350 SITES.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 316, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW011923

PUBLICATION DATE: JAN 82

TITLE: IRRIGATION WITH MUNICIPAL EFFLUENT: A SOCIOECONOMIC STUDY OF COMMUNITY EXPERIENCES.

PERSONAL AUTHOR: CHRISTENSEN, LEE A.

DESCRIPTOR: AGRICULTURE; *CASE STUDIES; ECONOMICS; *IRRIGATION; *LAND APPLICATION; MANAGEMENT; PLANNING; PUBLIC PARTICIPATION; RECYCLING; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 53P.

ABSTRACT: THIS STUDY EXAMINES EXPERIENCES OF EIGHT COMMUNITIES USING LAND TO TREAT MUNICIPAL EFFLUENTS. MOST SYSTEMS EVOLVED WITHOUT LONG-RANGE PLANNING. NO DISTINCT METHODS FOR LAND ACQUISITION AND MANAGEMENT RELATED TO THE SIZE OF THE COMMUNITY WERE IDENTIFIED. FACTORS IDENTIFIED AS IMPORTANT FOR SUCCESSFUL SYSTEMS OPERATION INCLUDED A LONG PLANNING HORIZON AND GOOD WORKING RELATIONSHIPS BETWEEN COMMUNITY OFFICIALS AND LANDOWNERS. LEGAL CONTRACTS WERE OF SECONDARY IMPORTANCE. FARMERS DID NOT ADJUST THEIR FERTILIZATION RATES, ALTHOUGH THEY RECOGNIZED THE VALUE OF NUTRIENTS IN THE EFFLUENT.

AVAILABILITY: NATURAL RESOURCE ECONOMICS DIVISION, ECONOMIC RESEARCH SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE, WASHINGTON, DC 20250

IRIS ACCESSION NUMBER: EW011924

PUBLICATION DATE: 84

TITLE: ASBESTIFORM FIBERS: NONOCCUPATIONAL HEALTH RISKS.

DESCRIPTOR: *ASBESTOS; *DISEASES; *FIBERS; *HEALTH; *PUBLIC HEALTH; *RESEARCH; *RISK ASSESSMENT; *POLLUTION CONTROL

DESCRIPTIVE NOTE: 351P. PRICE: \$22.50

ABSTRACT: THIS STUDY WAS UNDERTAKEN TO REACH A BETTER

DERSTANDING OF THE RELATIONSHIP BETWEEN CHARACTERISTICS OF BESTIFORM FIBERS AND NONOCCUPATIONAL EXPOSURES. FINDINGS AND RECOMMENDATIONS ARE PRESENTED.

AVAILABILITY: NATIONAL ACADEMY PRESS, 2101 CONSTITUTION AVENUE, N.W., WASHINGTON, DC 20413

U.S. ACCESSION NUMBER: EW011925

PUBLICATION DATE: MAY 84

[TITLE: MANUAL OF ANALYTICAL METHODS FOR WASTEWATERS (OIL SHALE RETORT WATERS). SECOND EDITION.

PERSONAL AUTHOR: DAUGHTON, C. G.

SCRIPTOR: *ANALYTICAL TECHNIQUES; *LABORATORY PROCEDURES; *OIL SHALE RETORT WATER; *OIL SHALE PROCESSING; *WASTE DISPOSAL; *WASTE TREATMENT; *WASTEWATER

SCRIPTIVE NOTE: 259P. PRICE CODE: PC A12/MF A01. ORDER NO.: DEG4015967

ABSTRACT: THIS MANUAL OF METHODS WAS DEVELOPED FOR THE DUTINE CHEMICAL ANALYSIS OF VARIOUS WATER-QULITY CRITERIA. EACH METHOD IS SPECIFICALLY ADAPTED FOR APPLICATION TO THE HIGHLY COMPLEX SAMPLE MATRICES OF AQUEOUS WASTES THAT ARE GENERATED BY THE PYROLYTIC PRODUCTION OF SHALE OIL. THESE METHODS HAVE EVOLVED FROM SPECIFIC NEEDS OF THE LBL-SEHRL SHALE PROJECT FOR THE STUDY OF WASTE-TREATMENT DISCUSSIONS OF THEORY, LITERATURE REVIEW, METHODS OF COMPARISONS, VALIDATION AND PRECISION DATA, AND DETAILED OPERATOR PROTOCOLS ARE PRESENTED FOR EACH OF THE METHODS, INCLUDING: QUANTITATION OF ORGANIC AND INORGANIC CARBON, AMMONIA, ORGANIC NITROGEN, TOTAL NITROGEN, CHEMICAL OXYGEN DEMAND, AND MICROBIAL BIOMASS. METHODS ARE ALSO PRESENTED FOR SIMPLE AND RAPID FRACTIONATION OF ORGANIC CARBON (ALSO USED FOR QUANTIFYING OIL AND GREASE) AND FOR SEPARATING AMMONIA FROM ROUTINE STANDARD METHODOLOGIES THAT HAVE BEEN VALIDATED FOR OIL SHALE PROCESS WASTEWATERS, WHILE OTHERS ARE MODIFIED STANDARD METHODS OR TOTALLY NEW APPROACHES.

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

U.S. ACCESSION NUMBER: EW011926

PUBLICATION DATE: NOV 84

[TITLE: WASTEWATER TREATMENT: CHEMICAL INDUSTRY. 1976 - OCTOBER, 1984 (CITATIONS FROM POLLUTION ABSTRACTS).

SCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *CHEMICAL INDUSTRY; *INDUSTRY; *WASTEWATER TREATMENT (WASTEWATER); *WATER QUALITY;

SCRIPTIVE NOTE: 144P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB84-877596

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING

IRIS ACCESSION NUMBER: EW011927

PUBLICATION DATE: NOV 84

[TITLE: OIL SPILL REMOVAL TECHNIQUES AND EQUIPMENT. 1976 - NOVEMBER, 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CLEANUP; *EQUIPMENT; *OIL SPILLS; *POLLUTION CONTROL; *WATER POLLUTION CONTROL

SCRIPTIVE NOTE: 166P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB84-877828

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING METHODS AND EQUIPMENT USED FOR THE CONTAINMENT AND REMOVAL OF OIL AS A RESULT OF OIL SPILL MISHAPS. DISPERSANTS, SEPARATORS, SKIMMERS, AND ABSORBANTS ARE DISCUSSED. RELATED STUDIES REGARDING FILM SPREADING AND DISPERSION ARE PRESENTED. STUDIES PERTAINING TO SHIPBOARD BALLAST AND BILGEWATER CLEANING ARE EXCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 180 CITATIONS, 44 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW011928

PUBLICATION DATE: NOV 84

[TITLE: ACID MINE DRAINAGE. 1977 - NOVEMBER, 1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *ACID MINE DRAINAGE; BIBLIOGRAPHIES; *ENVIRONMENTAL IMPACT; *HEAVY METALS; *INDUSTRY; *INDUSTRIAL WASTES; *MINING; *METALS; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 246P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB84-878362

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE CONTROL AND TREATMENT OF ACID MINE DRAINAGE. TECHNIQUES DISCUSSED FOR TREATING WASTES WITH HEAVY METALS INCLUDE PRECIPITATION, CEMENTATION, ION EXCHANGE, CHARGED MEMBRANE, ULTRAFILTRATION, OZONATION, SOLVENT EXTRACTION, AND

ELECTRODIALYSIS. THE ENVIRONMENTAL IMPACT OF ACID MINE DRAINAGE ON RIVERS, STREAMS, AND LAKES IS ALSO INCLUDED. THIS UPDATED BIBLIOGRAPHY CONTAINS 223 CITATIONS, 26 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)
 AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011929
 PUBLICATION DATE: NOV 84

TITLE: WATER HYACINTHS: WASTE TREATMENT AND METHANE PRODUCTION. 1979 - OCTOBER, 1984 (CITATIONS FROM THE ENERGY DATA BASE).

SCRIPTOR: *ALTERNATIVE TECHNOLOGY; *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *ENERGY PRODUCTION; *ENERGY CONSERVATION; *HYACINTHS; *METHANE; *WASTE TREATMENT; *WASTEWATER TREATMENT; *WATER QUALITY
 DESCRIPTIVE NOTE: 114P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB84-878396

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE USE OF WATER HYACINTHS IN WASTE TREATMENT AND METHANE PRODUCTION. ANAEROBIC DIGESTION PROCESSES, WASTE PROCESSING AND DIGESTION CONDITIONS ARE DISCUSSED. WATER HYACINTH SEWATER TREATMENT AND WATER QUALITY CONTROL ARE INCLUDED. ENERGY FARMING AND CROPPING THROUGH AQUATIC BIOMASS, FORESTRY, AND AGRICULTURE PLANTS ARE CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 124 CITATIONS, 38 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)
 AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011930
 PUBLICATION DATE: OCT 84
 PERSONAL AUTHOR: TIPPIN, D. L.; AND OTHERS

TITLE: CITY OF TAMPA MANAGEMENT ANALYSIS AND REPORT SYSTEM (ARS). VOLUME 1. CASE STUDY.
 DESCRIPTOR: *COMPUTER SOFTWARE; *COMPUTER APPLICATIONS; *MANAGEMENT; *MARS; *PROGRAM DESCRIPTIONS; *REPORTING; UTILITIES; *WASTEWATER UTILITIES; *WATER TREATMENT; *WASTEWATER TREATMENT

SCRIPTIVE NOTE: 135P. PRICE CODE: PC A07/MF A01. ORDER NO.: PB85-106177

ABSTRACT: THIS THREE-VOLUME REPORT DESCRIBES THE DEVELOPMENT AND IMPLEMENTATION OF A MANAGEMENT ANALYSIS AND PORT SYSTEM (MARS) IN THE TAMPA, FLORIDA, WATER AND SANITARY SEWER DEPARTMENTS. ORIGINAL SYSTEM DEVELOPMENT WAS BASED ON RESEARCH CONDUCTED IN A SMALLER WATER UTILITY IN KENTON COUNTY, KENTUCKY. MARS WILL HELP BOTH THE WATER AND SANITARY SEWER DEPARTMENTS CONTROL COSTS AND MANAGE EXPANDING SERVICE REQUIREMENTS MORE EFFECTIVELY AND EFFICIENTLY. VOLUME 11 CONTAINS OPERATING INSTRUCTIONS FOR THE MARS PROGRAMS.

SANITARY SEWER DEPARTMENTS CONTROL COSTS AND MANAGE EXPANDING SERVICE REQUIREMENTS MORE EFFECTIVELY AND EFFICIENTLY. VOLUME 1 DOCUMENTS THE RESULTS OF 2 YEARS OF ACTIVITIES IN ADOPTING THE MARS TO A LARGE WATER UTILITY AND TO A WASTEWATER UTILITY. VOLUME 11 CONTAINS OPERATING INSTRUCTIONS FOR THE MARS PROGRAMS; AND VOLUME 111, PRIMARILY A SYSTEM ANALYST'S/PROGRAMMER'S GUIDE, CONTAINS THE SOURCE CODE FOR ALL COMPUTER PROGRAMS IN TAEPAS MARS.

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

IRIS ACCESSION NUMBER: EW011931
 PUBLICATION DATE: OCT 84

TITLE: CITY OF TAMPA MANAGEMENT ANALYSIS AND REPORT SYSTEM (MARS). VOLUME 2. OPERATIONS MANUAL.
 PERSONAL AUTHOR: TIPPIN, D. L.; AND OTHERS

SCRIPTOR: *COMPUTER SOFTWARE; *COMPUTER APPLICATIONS; *MANAGEMENT; *MARS; *MANUALS; *REPORTING; UTILITIES; *WATER UTILITIES; *WASTEWATER UTILITIES; *WATER TREATMENT;
 DESCRIPTIVE NOTE: 134P. PRICE CODE: PG A07/MF A01. ORDER NO.: PB85-106185

ABSTRACT: THIS THREE-VOLUME REPORT DESCRIBES THE DEVELOPMENT AND IMPLEMENTATION OF A MANAGEMENT ANALYSIS AND REPORT SYSTEM (MARS) IN THE TAMPA, FLORIDA, WATER AND SANITARY SEWER DEPARTMENTS. ORIGINAL SYSTEM DEVELOPMENT WAS BASED ON RESEARCH CONDUCTED IN A SMALLER WATER UTILITY IN KENTON COUNTY, KENTUCKY. MARS WILL HELP BOTH THE WATER AND SANITARY SEWER DEPARTMENTS CONTROL COSTS AND MANAGE EXPANDING SERVICE REQUIREMENTS MORE EFFECTIVELY AND EFFICIENTLY. VOLUME 11 CONTAINS OPERATING INSTRUCTIONS FOR THE MARS PROGRAMS.

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

IRIS ACCESSION NUMBER: EW011932
 PUBLICATION DATE: MAY 84

TITLE: URBAN EFFECTS ON WATER QUALITY AND QUANTITY: PROCEEDINGS OF CONFERENCE HELD AT URBANA, ILLINOIS ON OCTOBER 20 AND 21, 1983.
 PERSONAL AUTHOR: BLAKE-COLEMAN, W.

SCRIPTOR: *CONFERENCE PROCEEDINGS; *ENVIRONMENT EFFECTS; *LEGISLATION; *MODELS; *REGULATIONS; *SURFACE RUNOFF; *TECHNOLOGY; *URBAN AREAS; *WATER QUALITY; *WATER RESOURCES
 DESCRIPTIVE NOTE: 371P. PRICE CODE: PC A16/MF A01. ORDER NO.: PB85-107035

STRACT: THE CONFERENCE "URBAN EFFECTS ON WATER QUALITY" WAS HELD IN URBANA, ILLINOIS, ON OCTOBER 20-21, 1983. THE PRIMARY TECHNICAL AREAS CONTAINED IN THE PROCEEDINGS ARE: NATIONALWIDE URBAN RUNOFF PROGRAM-REGIONAL MMARIES; MODELING AND QUANTITY ISSUES; TECHNICAL AND LEGAL PECTS OF COMBINED SEWER OVERFLOWS AND THEIR REGULATION; D URBAN EFFECTS ON STREAM AND LAKE SEDIMENTS.

AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE; 5285
RT ROYAL ROAD, SPRINGFIELD, VA 22161

IS ACCESSION NUMBER: EW011933
BLICATION DATE: NOV 84

TLE: TOXICITY OF TRANSITION METALS AND TRANSITION METAL MPOUNDS. JUNE, 1970 - OCTOBER, 1984 (CITATIONS FROM THE GINEERING INDEX DAT

RIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES;
ENVIRONMENTAL EFFECTS; *HEALTH; *METALS; *PUBLIC HEALTH;
AFETY; *TOXIC SUBSTANCES; *TRANSITION METALS

RIPTIVE NOTE: 148P. PRICE CODE: PC N01/MF N01. ORDER
.: PB84-878461

STRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING E TOXICITY, HEALTH HAZARDS, AND INDUSTRIAL HYGIENE OF TRANSITION METALS AND THEIR COMPOUNDS. THE EFFECTS ON LIVING ORGANISMS, INCLUDING HUMANS, FISH, AND OTHER MARINE LIFE, ANTS, AND ANIMALS ARE DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 202 CITATIONS, 44 OF WHICH ARE NEW TRIES TO THE PREVIOUS EDITION.)

AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285
RT ROYAL ROAD, SPRINGFIELD, VA 22161

IS ACCESSION NUMBER: EW011934
BLICATION DATE: NOV 84

TLE: REMOTE SENSING APPLIED TO ENVIRONMENTAL POLLUTION TECITION AND MANAGEMENT. 1979-NOVEMBER, 1984 (CITATIONS OM THE NTIS DATA BASE

RIPTOR: *AIR POLLUTION CONTROL; *ANNOTATED BIBLIOGRAPHIES; *COMPLIANCE; BIBLIOGRAPHIES; *DETECTION; ENVIRONMENT; *MONITORING; *POLLUTION CONTROL; *REMOTE NSING; *WATER POLLUTION CONTROL

RIPTIVE NOTE: 211P. PRICE CODE: PC N01/MF N01. ORDER
.: PB84-877760

STRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING E UTILIZATION OF REMOTE SENSING TECHNIQUES AND EQUIPMENT STUDY AIR AND WATER POLLUTION PROBLEMS. TOPICS INCLUDE USE OF AERIAL PHOTOGRAPHS, VARIOUS RADAR TECHNIQUES, AND AEROBINE PHOTOGRAPHY TO STUDY OIL SPILLS; OCEAN DUMPING TESTS, PLUME DISPERSIONS, AND POLLUTION PROBLEMS IN TUARIES. DATA INTERPRETATION AND PROCESSING TECHNIQUES ARE

ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 236 CITATIONS, 13 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)
AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285
RT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011935

PUBLICATION DATE: MAY 84

TITLE: TOXICS '95: OUTLOOK OF FACTORS AND TRENDS FOR TOXIC CHEMICALS.

PERSONAL AUTHOR: COATES, V. T.; AND OTHERS

DESCRIPTOR: *BUDGET; *CHEMICALS; *OFFICE OF TOXIC SUBSTANCES; *PLANNING; *POLICIES; *TOXIC SUBSTANCES; *TOXIC SUBSTANCES CONTROL; *TRENDS

RIPTIVE NOTE: 233P. PRICE CODE: PC A11/MF A01. ORDER NO.: PB85-114114

ABSTRACT: THE OBJECTIVE OF THIS PROJECT IS TO ASSIST THE OFFICE OF TOXIC SUBSTANCES IN IDENTIFYING THE FACTORS AND TRENDS THAT WILL SHAPE THE NEXT DECADE OF TOXIC SUBSTANCES CONTROL AND THERE-BY SUPPORT OTS' LONG-TERM POLICY AND BUDGET PLANNING. THE CORE OF THIS DOCUMENT, CHAPTER 2, IS THREE HEURISTIC SCENARIOS OF THE CHEMICAL INDUSTRY IN 1995. ONE SCENARIO ENVISONS THE RESULTS OF "RAPID EVOLUTION;" ANOTHER THE RESULTS OF "MULTIDIMENSIONAL CHANGE;" AND THE THIRD A STATE OF RELATIVE "STABILITY." THE AUTHORS HAVE GROUNDED THESE SCENARIOS IN THEIR IDEAS GENERATED FROM WIDE RANGING READING AND DISCUSSIONS DURING TWO TOXICS WORKSHOPS.

AILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285
RT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011936

PUBLICATION DATE: DEC 84

TITLE: CONSERVING ENERGY IN WATER SYSTEMS.

PERSONAL AUTHOR: DAFFER, ROBERT A., JR.

DESCRIPTOR: *DESIGN; *ENERGY; *MANAGEMENT; *OPERATIONS (WATER); *ENERGY CONSERVATION; *WATER SUPPLY; *WATER TREATMENT

RIPTIVE NOTE: 34-37P.

ABSTRACT: ALTERNATIVE SOURCES OF ENERGY AND THE DESIGN OF ENERGY-EFFICIENT TREATMENT AND DISTRIBUTION SYSTEMS HELP CUT PUMPING COSTS. EXAMPLES OF ALTERNATIVE SOURCES AND IDEAS FOR SAVING POWER ARE DESCRIBED.

AILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL;
V76 N12

THIS ACCESSION NUMBER: EW011937

PUBLICATION DATE: DEC 84

TITLE: THE APPLICATION AND EFFECTIVENESS OF SLOW SAND FILTRATION IN THE UNITED STATES.

PERSONAL AUTHOR: SLEZAK, LLOYD A.; SIMS, RONALD C.

SCRIPTOR: *COSTS; *FILTRATION; *OPERATIONS (WATER); PERFORMANCE EVALUATION; *SAND FILTRATION; *SURVEYS; *WATER TREATMENT

SCRIPTIVE NOTE: 33-43P.

ABSTRACT: A SURVEY OF WATER TREATMENT PLANTS WITH SLOW-RATE AND FILTRATION WAS CONDUCTED. THE OPERATIONS WERE ASSESSED FOR EFFICIENCY AND COST.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N2

THIS ACCESSION NUMBER: EW011938

PUBLICATION DATE: DEC 84

TITLE: DECLINING-RATE FILTERS: REGULATORY ASPECTS AND OPERATING RESULTS.

PERSONAL AUTHOR: CRONWELL, DAVID A.; AND OTHERS

SCRIPTOR: *DECLINING-RATE FILTERS; *DESIGN; *FILTRATION; FILTERS; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; REGULATIONS; *WATER TREATMENT

SCRIPTIVE NOTE: 53-61P.

ABSTRACT: ALTHOUGH THE CURRENT DESIGN TREND IS TO USE INSTANT-RATE FILTERS, SIGNIFICANT OPERATING DATA NOW SHOW THAT USE OF DECLINING-RATE FILTERS INCLUDES SUCH BENEFITS AS ECONOMY AND EASE OF OPERATION. A SURVEY OF STATE REGULATIONS OWNED THAT NO SPECIFIC REQUIREMENTS EXIST FOR THE DESIGN OF OPERATION OF DECLINING-RATE FILTERS AND THAT THE REGULATIONS OFTEN DO NOT DISTINGUISH BETWEEN THE TWO TYPES OF FILTERS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N2

THIS ACCESSION NUMBER: EW011939

PUBLICATION DATE: DEC 84

TITLE: PILOT-PLANT STUDIES OF SLOW-RATE FILTRATION.

PERSONAL AUTHOR: FOX, KIM R.; AND OTHERS

SCRIPTOR: BACTERIA; DISSOLVED OXYGEN; *FILTRATION; ANIC COMPOUNDS; *OPERATIONS (WATER); PARTICULATES; *PILOT ANTS; *PERFORMANCE EVALUATION; *RESEARCH; *WATER

THIS ACCESSION NUMBER: EW011940

PUBLICATION DATE: JAN 85

TITLE: "NO FRILLS" APPROACH SAVES NORTH CAROLINA \$12 MILLION.

PERSONAL AUTHOR:

SCRIPTOR: *CONSTRUCTION; *COST EFFECTIVENESS; *ECONOMICS; *COSTS; *EQUIPMENT; *FACILITIES; *MANAGEMENT; *PLANNING; *TOOLS; *UTILITIES; *WASTEWATER COLLECTION; *WASTEWATER TREATMENT; *WATER SUPPLY

SCRIPTIVE NOTE: 53-61, 98, 100P.

ABSTRACT: A VALUE DETERMINATION PROGRAM REDUCED THE COST OF WASTEWATER TREATMENT FACILITIES FOR MANY COMMUNITIES IN NORTH CAROLINA. FEATURES OF THE PROGRAM ARE DESCRIBED.

AVAILABILITY: PUBLIC WORKS; V116 N1

THIS ACCESSION NUMBER: EW011941

PUBLICATION DATE: JAN 85

TITLE: NO REBATE: WATER UTILITY CASHES IN ON ENERGY CONSERVATION PROGRAM.

PERSONAL AUTHOR:

SCRIPTOR: NELSON, JOHN O.; REARDON, DAVID J.

SCRIPTIVE NOTE: 69-72F.

ABSTRACT: WITH THE HELP OF A LOCAL UTILITY ENERGY CONSERVATION INCENTIVE PROGRAM, WATER PLANT MODIFICATIONS WILL HAVE A SIMPLE PAYBACK IN LESS THAN TWO YEARS. FEATURES OF THE PROGRAM ARE DESCRIBED.

AVAILABILITY: PUBLIC WORKS; V116 N1

THIS ACCESSION NUMBER: EW011942

PUBLICATION DATE: DEC 84

TITLE: PILOT-PLANT STUDIES OF SLOW-RATE FILTRATION.

PERSONAL AUTHOR: FOX, KIM R.; AND OTHERS

SCRIPTOR: BACTERIA; DISSOLVED OXYGEN; *FILTRATION; ANIC COMPOUNDS; *OPERATIONS (WATER); PARTICULATES; *PILOT ANTS; *PERFORMANCE EVALUATION; *RESEARCH; *WATER

IS ACCESSION NUMBER: EW011945

PUBLICATION DATE: DEC 84

TITLE: SAFE DRINKING WATER: THE IMPACT OF CHEMICALS ON A MITED RESOURCE.
PERSONAL AUTHOR: RICE, RIP G., ED.

SCRIPTOR: *CHEMICALS; *DRINKING WATER; *ANALYTICAL CHNIQUES; *DISINFECTION; *MONITORING; *REGULATIONS; *WATER EATMENT; *WORLD PROBLEMS; *WATER QUALITY

SCRIPTIVE NOTE: PRICE: \$34.95

STRACT: THIS BOOK ADDRESSES CHEMICAL CONTAMINATION, ONE THE MAJOR ISSUES CONFRONTING THE NATION'S CURRENT ANDTURE WATER SUPPLY. THE BOOK IS ORGANIZED INTO FIVE MAIN CITIONS: (1) NATIONAL AND INTERNATIONAL PERSPECTIVES; (2) URCES AND DISTRIBUTION OF SAFE DRINKING WATER; (3) EMICALS IN DRINKING WATER; (4) MONITORING AND ANALYSIS; D (5) REGULATORY ASPECTS.

AILABILITY: DRINKING WATER RESEARCH FOUNDATION, 113 N. MARY STREET, ALEXANDRIA, VA 22314.

IS ACCESSION NUMBER: EW011946

PUBLICATION DATE: 83

TITLE: A LOW-DOLLAR SLUDGE BLANKET FINDER.

PERSONAL AUTHOR: JACKSON, GAINES B.; CULBERTSON, J. DWIGHT

SCRIPTOR: *CLARIFIERS; *DESIGN; *EQUIPMENT; *MONITORING; OPERATIONS (WASTEWATER); *SLUDGE; *SLUDGE BLANKET; ASTEWATER TREATMENT

SCRIPTIVE NOTE: 3P. ARTICLE APPEARED IN THE JOURNAL IP; V8 N3 FALL 1983.

STRACT: THIS ARTICLE DESCRIBES THE CONSTRUCTION AND USE AN EXPENSIVE SLUDGE BLANKET FINDER.

AILABILITY: GAINES B. JACKSON, OKLAHOMA WATER UTILITY AINING CENTER, ROSE STATE COLLEGE, 6420 S.E. 15TH STREET, DWEST CITY, OK 73110

*WATER SUPPLY

DESCRIPTIVE NOTE: 65P. PRICE: \$4.00

ABSTRACT: THIS DOCUMENT EXAMINES VARIOUS TOPICS AND ISSUES RELATED TO THE MANAGEMENT OF FRESHWATER SUPPLIES. MAJOR AREAS CONSIDERED INCLUDE: (1) THE WATER CYCLE AND RENEWABLE SUPPLIES; PROVIDING DATA ON DISTRIBUTION OF SUCH SUPPLIES BY CONTINENT AND AVERAGE ANNUAL PER CAPITA RUNOFF PRODUCED IN SELECTED COUNTRIES, WITH PROJECTIONS FOR THE YEAR 2000; (2) COMPETING USES FOR WATER, PROVIDING DATA ON WORLD WATER USE (TOTAL AND PER CAPITA) FOR 1940-80, GROWTH IN IRRIGATED AREAS (BY CONTINENT) FOR 1950-82, AND ESTIMATED WATER USE IN SELECTED COUNTRIES (TOTAL, PER CAPITA, AND SECTOR) FOR 1980; (3) THE ENVIRONMENTAL AND ECONOMIC CONSEQUENCES OF MISMANAGING WATER SUPPLIES, INDICATING THE STATUS OF EXCESSIVE WATER WITHDRAWALS IN SELECTED REGIONS; (4) THE AUGMENTING OF DEPENDABLE SUPPLIES, PROVIDING DATA ON RESERVOIR CAPACITY IN SELECTED COUNTRIES FOR 1970 WITH PROJECTIONS TO 1990 AND LISTING SELECTED MAJOR RIVER DIVERSION PROJECTS; (5) WATER CONSERVATION IN THE UNITED STATES AND FOREIGN COUNTRIES; AND (6) PRIORITIES FOR A NEW WATER ECONOMY. ONE SUGGESTION OFFERED IS THAT PLANNERS AND EDUCATORS DISPEL THE MYTH THAT WATER CONSERVATION IS EXCLUSIVELY A SHORT-TERM STRATEGY TO ALLEVIATE DROUGHTS AND OTHER IMMEDIATE CRISES.

AVAILABILITY: WORLDWATCH INSTITUTE, 1776 MASSACHUSETTS AVENUE, N.W., WASHINGTON, DC 20036

IS ACCESSION NUMBER: EW011952

PUBLICATION DATE: DEC 84

TITLE: WATER: RETHINKING MANAGEMENT IN AN AGE OF SCARCITY. RLDWATCH PAPER 62.

PERSONAL AUTHOR: POSTEL, SANDRA

SCRIPTOR: *AGRICULTURE; *CONSERVATION; *INDUSTRY; *MANAGEMENT; *NATURAL RESOURCES; *POLICIES; *WATER POLLUTION; *WATER QUALITY; *WATER RESOURCES; *WORLD PROBLEMS;

AUTHOR INDEX

BOTT, F. S.
EW 011 683

AMUS, P. R.
EW 011 771
EW 011 772

ETA, E. MARCO
EW 011 724

ESSI, CHARLES J.
EW 011 728

GELE, GUSTAVE J.
EW 011 632

ASMITH, E. E.
EW 011 629

ANO, TAKASHI
EW 011 596

ANO, TAKASHI,
ED.
EW 011 397

HAYDE, D. N.
EW 011 556
EW 011 557
EW 011 558
EW 011 568

ERBACK, STANLEY I.
EW 011 631

RDEN, DREW S.
EW 011 599

RNEY, G. S., ED.
EW 011 855

TCHELOR, B.
EW 011 702

TTS, LEONARD R.
EW 011 824

SHREND, JACK
EW 011 682

JLL, B. A.
EW 011 703

ENNITT, BARBARA
EW 011 523

IRKOWITZ, ROBERT L.
EW 011 798

SWAS, H.
EW 011 703

BITTON, GABRIEL, ED.
EW 011 567

BLAKE-COLEMAN, W.
EW 011 932

BOOMER, DIANNA
EW 011 718

BOONE, TONY
EW 011 909

EGS, MARINUS G.
EW 011 795

EWERS, ROBERT G.
EW 011 374

BRETTON, THEODORE R.
EW 011 525

BRIGHOUSE, BARBARA A.
EW 011 374

BYLOWE, J. E.
EW 011 731

BROWN, STANLEY S., ED.
EW 011 921

BUCALO, JOHN P., JR.
EW 011 849

BULL, R. J.
EW 011 806

BURRIS, B. E.
EW 010 863

DAFFER, ROBERT A., JR.
EW 011 936

ERBACK, STANLEY I.
EW 011 631

RDEN, DREW S.
EW 011 599

CARTER, L.
EW 011 804

CARPENTER, B. H.
EW 011 737

CASE, RICHARD L.
EW 011 738

CEBALT, FRED
EW 011 908

CHRISTENSEN, LEE A.
EW 011 923

CHRISTIAN, ROBERT R.
EW 011 825

CLARK, C. S.
EW 011 777

COATES, V. T.
EW 011 935

COCKER, C. G.
EW 011 585

COLE, LESLIE
EW 011 713

COLLINS, THOMAS J.
EW 011 727

CONRADY, JOHN R.
EW 011 828

COOPER, JAMES W.
EW 011 812

COREV, T. M.
EW 011 835

COSTELLO, JAMES J.
EW 011 823

COTRUVO, JOSEPH A.
EW 011 821

CRONWELL, DAVID A.
EW 011 938

CROSBY, R. M.
EW 011 734

CULBERTSON, J. DWIGHT
EW 011 946

D'ITRI, FRANK M., ED.
EW 011 676

DAFFER, ROBERT A., JR.
EW 011 936

DALEY, P. S.
EW 011 843

DAUGHTON, C. G.
EW 011 925

DAVIES, J. CLARENCE
EW 011 591

DENNIG/ISOM, EDS.
EW 011 562

DESSY, RAYMOND E.
EW 011 714

DOCTOR, RONALD D.
EW 011 576

DONIGIAN, A. S. JR.
EW 011 586

DUFOUR, A. P.
EW 011 776

ECKRICH, HELEN M.
EW 011 730

EDWARDS, A. M. C., ED.
EW 011 799

ESCHENROEDER, ALAN, ED.
EW 011 851

ETNIER, E. L., ED.
EW 011 301

FANCEIT, HOWARD E.
EW 011 813

FIRTH, BARRY K.
EW 011 704

FLEMING, W. L.
EW 011 554

FOX, KIM R.
EW 011 939

FRANCIS, CHESTER W.
EW 011 681

FRANCIS, J. D.
EW 011 735

FRAZBLAU, S. G.
EW 011 838

FRAZER, W. E.
EW 011 748

FREEDMAN, STUART C.
EW 011 720

FREEMAN, A. MYRICK, III
EW 011 136

FRENCH, VICTOR
EW 011 907

FRENCH, WILLIAM W.
EW 011 443

FUCHEL, K.
EW 011 731

GENTY, YVES R.
EW 011 631

GALKA, R. J.
EW 011 847

GERBA, CHARLES P.
EW 011 367

GOLDING, BERNARD L.
EW 011 911
EW 011 912
EW 011 913

HORNICK, S. B.	EW 011 914	KRUEGER, RAYMOND F., ED.	MCMILLIN, CARL R.
	EW 011 915		EW 011 744
	EW 011 918	KRUTZSCH, WILLIAM C.	MCNAIR, HAROLD M.
LLADAY, FREDRICK L.	L / 011 793	EW 011 442	EW 011 412
		EW 011 440	EW 011 413
ODMAN, ALVIN S.	EW 011 781	KULIKOV, N. V.	MEANS, EDWARD G.
JAEER, H. M.	E / 011 775	EW 011 790	EW 011 722
JACKSON, GAINES B.	EW 011 946	LANE, OTTEN, ED.	MESSENGER, N. M.
ODWIN, J. K.	EW 011 773	EW 011 559	EW 011 767
	EW 011 774	LEE, G. FRED	MILLAR, JOHN D.
ORDON, WENDY	EW 011 850	EW 011 694	EW 011 784
RISCH, JOHN	EW 011 637	LEPRINCE, ANTOINE	MILLER, DONALD S.
JAVANDEL, I.	EW 011 739	EW 011 723	EW 011 844
		LEVER, W. F.	EW 011 845
WAERTS, KENNETH C.	EW 011 717	EW 011 769	MILLER, JAMES W.
BILLOT, THOMAS A.	EW 011 717	EW 011 770	EW 011 598
LIMMER, GERNOT	EW 011 819	JENKINS, STEPHEN R.	MILLER, JOHN D.
		EW 011 605	EW 011 857
WISOLD, DAVID F.	EW 011 583	JOHANGON, R. C.	MILLETT, J. R.
JOLLEY, R. L.	EW 011 864	EW 011 601	EW 011 872
AS, OSCAR W.	EW 011 896	LIPPY, E. C.	MINEAR, ROGER A., ED.
LL, JACK R.	EW 011 526	EW 011 340	EW 011 673
	EW 011 363	LYKOS, P.	MONTGOMERY, T. J.
RBAUGH, ARLEN W.	EW 011 789	EW 011 792	EW 011 761
REMOES, P. ED.	EW 011 802	LYKOS, PETER	MOORE, ELIZABETH RANDALL
		EW 011 604	EW 011 719
RSCH, PAUL	EW 011 685	LYLES, BARBARA D.	MORGAN, J. M.
LEMAN, FRED D.	EW 011 745	EW 011 311	EW 011 835
RDY, JUSTIN T.	EW 011 578	JUFFIER, H. D.	MORSE, ROBERT S.
		EW 011 809	EW 011 730
RRISSON, JOHN R.	EW 011 697	JUNKINS, RANDY	MOUNT, D. I.
		EW 011 351	EW 011 588
KEITH, LAWRENCE H., ED.	EW 011 791	KAPLAU, EDWARD	NAKAMURA, MOTOSHI
		EW 011 582	EW 011 716
REMOES, P. ED.	EW 011 673	KEARNS, H. J. PATRICK	NEWSOME, D. H., ED.
		EW 011 826	EW 011 799
RSCH, PAUL	EW 011 685	KEMP, ROGER L.	NICOLAI, BRUNO
LEEL, DANIEL, ED.	EW 011 112	EW 011 689	EW 011 577
OPER, JOHN D.	EW 011 754	XIBKLAND, J. J.	NRIAGU, JEROME O., ED.
KROON, JOSEPH R.	EW 011 822	EW 011 415	EW 011 800
		KNOX, R. C.	EW 011 827

AWA, HISASHI
EW 011 530

LE, DALE F.
EW 011 700

UN, DANIEL A.
EW 011 796

COITT, JOHN Z.
EW 011 379

SON, R. J.
EW 011 742

GE, G. WILLIAM
EW 011 634

YNE, STEVEN N.
EW 011 525

ARSON/FOSTER/BISHOP, EDS.
EW 011 561

DERSEN, TOM A.
EW 011 579

ITYGROVE, G. STUART, ED.
EW 011 597

PES, WESLEY O.
EW 011 825

PITONE, DAVID A., ED.
EW 011 814

NTIUS, FREDERICK W.
EW 011 721

STELL, SANDRA
EW 011 932

KNESS, KERWIN L.
EW 011 788

MALHO, R. S.
EW 011 592

ARDON, DAVID J.
EW 011 941

EVES, PATRICK J.
EW 011 826

CCARDI, R. M.
EW 011 843

CE, RIP G., ED.
EW 011 945

ITTMANN, BRUCE E.
EW 011 725

ROBBICKS, JOSEPH V., ED.
EW 011 854

RUBIN, A. R.
EW 011 585

RUSLING, JAMES F.
EW 011 715

RUSSELL, JOHN D.
EW 011 603

RUZZO, WILLIAM P.
EW 011 750

RYAN, BEVERLY A.
EW 011 569

SADLER, BAURY, ED.
EW 011 710

SANDERS, MARIA
EW 011 759

SANTOLUCITO, JOHN A.
EW 011 832

SARGENT, T. N.
EW 011 842

SAVORY, JOHN, ED.
EW 011 921

CAXENA, JITENDRA, ED.
EW 011 919

SCHULZ, CHRISTOPHER R.
EW 011 796

SCHWEITZER, GLENN E., ED.
EW 011 832

SEARLE, CHARLES E., ED.
EW 011 853

SEIEER, JAMES N., ED.
EW 011 856

SHAFFER, R.
EW 011 766

SHAVER, DEBORAH K.
EW 011 798

SHEEHAN, PATRICK J.
EW 011 893

SHEPPARD, STEPHEN M.
EW 011 581

SHUKLA, SHYAM S.
EW 011 715

SIMMONS, H. S., ED.
EW 011 390

SIMS, RONALD G.
EW 011 937

SLEZAK, LLOYD A.
EW 011 937

SMITH, JAMES K.
EW 011 835

SMITH, M. A.
EW 011 571

SNOEYLINK, VERNON L.
EW 011 725

SNYDER, LLOYD R.
EW 011 414

SPRINGER, A. M.
EW 011 693

STACHA, JOHN H.
EW 011 721

STAUSS, JOHN F.
EW 011 729

STENZEL, MARK H.
EW 011 827

STEPP, RUSSELL J.
EW 011 599

STEVENS, A. A.
EW 011 305

STEWART, L. E.
EW 011 555

STONEHOOK, H.
EW 011 699

SUTTON, GEORGE
EW 011 756

SWANN, ROBERT L., ED.
EW 011 851

SYMONS, J. M.
EW 011 805

TARDIFF, ROBERT G., ED.
EW 011 854

TAYLOR, MICHAEL
EW 011 910

THACKSTON, E. L.
EW 011 733

THORNTON, IAIN, ED.
EW 011 675

TIPPIN, D. L.
EW 011 330
EW 011 931

TIPPIN, DAVID L.
EW 011 760

TRAVIS, C. C.; ED.
EW 011 351

TSALEV, D. L.; ED.
EW 011 358
EW 011 359

VARMA, ASHA
EW 011 350
EW 011 361

VELZ, CLARENCE J.
EW 011 794

VOCT, CRAIG
EW 011 321

WALSKI, THOMAS
EW 011 686

WARNER, J. S.
EW 011 156

WEISNER, G. M.
EW 011 363

WILKINS, G.
EW 011 792

WILMAN, ELIZABETH A.
EW 011 749

WINTER, FREDERIC J.
EW 011 700

WOODCOCK, JOHN J.
EW 011 602

WOODS, CHARLES E.
EW 011 600

YATES, A. P. J.
EW 011 847

ZAPOL'SKI, A. K.
EW 011 534

ZEH, THURBIR G., JR.
EW 011 375

ZIMMERMAN, N. J.
EW 011 367

SUBJECT INDEX

BRASION	(1)	EW011847
ACCIDENT MANAGEMENT	(1)	EW011798
ACCIDENT PREVENTION	(6)	EW011448
CID MINE DRAINAGE	(1)	EW011928
CID PRECIPITATION	(1)	EW011862
CID RAIN	(1)	EW011535
ACTIVATED CARBON	(2)	EW011621
ACTIVATED SLUDGE	(3)	EW011351
ACTIVATED SLUDGE	(1)	EW011615
ADMINISTRATION	(3)	EW011781
ADVANCED WASTEWATER TREATMENT	(1)	EW011885
AFERATED FILTERS	(1)	EW011618
ERATION	(2)	EW011619
ERATION TANKS	(1)	EW011758
ESTHETICS	(1)	EW011579
ESTHICS	(1)	EW01136
FRICA	(1)	EW011569
GRICULTURE	(8)	EW011107
GRICULTURE	EW011952	EW011112
GRICULTURE	(1)	EW011923
IR	(1)	EW011107
IR POLLUTION	(2)	EW011136
IR POLLUTION CONTROL	(2)	EW011764
AIR STRIPPING	(1)	EW011827
AIRVAC	(1)	EW011753
LGAE	(1)	EW011762
M.KALINITY	(1)	EW011758
ALTERNATIVE FUEL PRODUCTION	(1)	EW011560
ALTERNATIVE TECHNOLOGIES	(1)	EW011607
ALTERNATIVE TECHNOLOGY	(10)	EW011609
ALUMINUM	EW011866	EW011610
ALUMINUM	(2)	EW011773
ALUMINUM	(1)	EW011823

MNONIA

- (1) **EW011725**
- (1) **EW011587**
- (1) **EW011791**
- (41) **EW011156** **EW011363** **EW011412** **EW011413** **EW011415**
EW011561 **EW011563** **EW011595** **EW011673** **EW011700** **EW011714** **EW011724**
EW011744 **EW011745** **EW011746** **EW011759** **EW011764** **EW011779** **EW011780** **EW011784**
EW011791 **EW011838** **EW011839** **EW011852** **EW011853** **EW011858** **EW011859** **EW011860**
EW011861 **EW011912** **EW011913** **EW011915** **EW011915** **EW011915** **EW011915**
- NALYTICAL TECHNIQUES**
- (1) **EW011715**
- (1) **EW011590**
- (28) **EW011589** **EW011593** **EW011594** **EW011595** **EW011705** **EW011706** **EW011740**
EW011741 **EW011762** **EW011763** **EW011764** **EW011779** **EW011780** **EW011808**
EW011836 **EW011862** **EW011863** **EW011865** **EW011869** **EW011870** **EW011871** **EW011926**
EW011927 **EW011928** **EW011929** **EW011933** **EW011934**
- NNUAL REPORTS**
- (1) **EW011535**
- (2) **EW011608** **EW011627**
- (1) **EW011611**
- (1) **EW011807**
- (1) **EW011562**
- (1) **EW011862**
- (1) **EW011790**
- (1) **EW011561**
- (1) **EW011775**
- (1) **EW011561**
- (1) **EW011870**
- (1) **EW011714**
- (2) **EW011872** **EW011924**
- ARTIFICIAL INTELLIGENCE**
- (1) **EW011778**
- (1) **EW011812**
- (4) **EW011561** **EW011735** **EW011736** **EW011738**
- SESSMENT METHODS**
- (2) **EW011771** **EW011772**
- (3) **EW011764** **EW011860** **EW011861**
- TOMIC ABSORPTION ANALYSIS**
- (2) **EW011858** **EW011859**
- (1) **EW011755**
- (1) **EW011720**
- DISTRIBUTION THEORY**

UDIOVISUAL AIDS	(10)	EW01141 EW011732	EW011511 EW011785	EW011577	EW011589	EW011629	EW011630	EW011682
USTRALIA	(2)	EW011571	EW011572					
ACKFLOW	(2)	EW011631	EW011632					
ACKFLOW PREVENTION	(4)	EW011631	EW011632	EW011873	EW011874			
ACTERIA	(3)	EW011571	EW011776	EW011825				
ACTERIA	(1)	EW011939						
BACTERIAL INDICATORS	(1)	EW011776						
ARRIERS	(1)	EW011793						
ASIC	(1)	EW011912						
BASIC LANGUAGE	(7)	EW011911	EW011913	EW011914	EW011915	EW011916	EW011917	EW011918
BATCH REACTORS	(1)	EW011615						
EACH POLLUTION	(1)	EW011749						
ENEFIT-COST ASSESSMENT	(1)	EW011136						
IBLIOGRAPHIES	(2)	EW011418	EW011741					
IBLIOGRAPHIES	(27)	EW011589 EW011762 EW011862 EW011928	EW011593 EW011763 EW011863 EW011929	EW011594 EW011764 EW011865 EW011933	EW011595 EW011765 EW011869 EW011934	EW011705 EW011779 EW011870 EW011871	EW011706 EW011808 EW011926	EW011740 EW011836 EW011927
OCHEMISTRY	(1)	EW011843						
OODEGRADATION	(1)	EW011765						
OLOGICAL AERATED FILTERS	(1)	EW011618						
OLOGICAL CONTROL	(1)	EW011762						
OLOGICAL CONTROL METHODS	(1)	EW011870						
OLOGICAL EFFECTS	(1)	EW011566						
OLOGICALLY STABLE WATER	(1)	EW011725						
OLOGICAL OXYGEN DEMAND	(1)	EW011594						
OLOGY	(1)	EW011790						
OLOGY	(1)	EW011797						
OTANY	(1)	EW011562						
OTTOM SAMPLING	(1)	EW011595						
ROMINE CHLORIDE	(1)	EW011575						
UDGET	(1)	EW011935						
UDGETTING	(1)	EW009163						

BUILDINGS	(1)	EW011740
ALCIUM	(1)	EW011605
ALCIUM CARBONATE	(1)	EW011823
ALCULATIONS	(2)	EW011759
ALCULATOR PROGRAMS	(1)	EW011759
ALCULATORS	(1)	EW011759
ALIFORNIA	(4)	EW01198
ANADA	(1)	EW011722
ANALS	(1)	EW011724
ANCER	(1)	EW011968
APITAL COSTS	(1)	
ARCINOGENS	(4)	
ASE HISTORIES	(3)	
ASE STUDIES	(5)	
ASE STUDIES	(1)	
ERTIFICATION	(1)	
HANGE PROCESS	(1)	
HEMICAL ADDITIVES	(1)	
HEMICAL ANALYSIS	(2)	
HEMICAL CONTAMINATES	(1)	
HEMICAL INDICATORS	(1)	
HEMICAL CONTROL	(1)	
HEMICAL INDUSTRY	(1)	
HEMICAL PRECIPITATION	(1)	
HEMICAL PROPERTIES	(1)	
HEMICAL REACTIONS	(1)	
HEMICAL RISKS	(1)	
HEMICALS	(29)	
HEMICALS	(2)	
HEMICAL STORAGE	(2)	
HEMICAL TOXICOLOGY	(1)	

CHEMISTRY	(9)	EW011412	EW011413	EW011414	EW011415	EW011714	EW011715	EW011792
	EW011811	EW011843						
CHEMISTRY	(1)	EW011797						
CHINA	(1)	EW011818						
CHLORINATED BENZENES	(1)	EW011590						
CHLORINATED ETHANES	(1)	EW011919						
CHLORINATED HYDROCARBONS	(1)	EW011363						
CHLORINATION	(2)	EW011765	EW011864					
CHLORINE	(2)	EW011788	EW011806					
CHROMATOGRAPHY	(6)	EW011412	EW011413	EW011414	EW011415	EW011779	EW011780	
CITIZEN PARTICIPATION	(2)	EW011785	EW011786					
CLARIFICATION	(1)	EW011617						
CLARIFIERS	(2)	EW011734	EW011946					
CLEANING	(2)	EW011688	EW011828					
CLEANUP	(4)	EW011604	EW011757	EW011894	EW011927			
COAGULANTS	(2)	EW011584	EW011723					
COAGULATION	(2)	EW011198	EW011596					
COAL TAR	(1)	EW011778						
COASTAL AREAS	(1)	EW011749						
COASTAL ZONE MANAGEMENT	(1)	EW011749						
COLIFORMS	(2)	EW011825	EW011838					
COLOR	(1)	EW011759						
COLORADO	(2)	EW011631	EW011750					
COLUMN SELECTION	(1)	EW011413						
COMBINED PROCESSES	(1)	EW011697						
COMMUNICATION	(1)	EW011718						
COMMUNICATIONS	(1)	EW011760						
COMPETENCY BASED INSTRUCTION	(1)	EW011719						
COMPLIANCE	(3)	EW011665	EW011886	EW011934				
COMPOST	(2)	EW011612	EW011837					
COMPOSTING	(1)	EW011612						
COMPRESSIBLE FLOW	(1)	EW011845						
COMPUTATION	(2)	EW011715	EW011917					

COMPUTATIONAL ERRORS	(1)	EW011715						
COMPUTER ANALYSIS	(1)	EW011593						
COMPUTER APPLICATIONS	(13)	EW011586	EW011707	EW011729	EW011752	EW011767	EW011789	
COMPUTER APPLICATIONS	EW011792	EW011811	EW011812	EW011835	EW011930	EW011931		
COMPUTER APPLICATIONS	(1)	EW011593						
COMPUTER BASED INSTRUCTION	(1)	EW011717						
COMPUTER HOTLINES	(1)	EW011731						
COMPUTERIZED DATA	(1)	EW011742						
COMPUTER MODELS	(1)	EW011797						
COMPUTERS	(3)	EW011792	EW011811	EW011812				
COMPUTER SOFTWARE	(12)	EW011789	EW011812	EW011911	EW011912	EW011913	EW011914	EW011915
CONFERENCE PROCEEDINGS	EW011916	EW011917	EW011918	EW011930	EW011931			
CONFERENCE PROCEEDINGS	(19)	EW011584	EW011676	EW011681	EW011710	EW011712	EW011799	EW011816
CONGRESSIONAL REPORTS	(2)	EW011347	EW011841					
CONSERTATION	(3)	EW010863	EW011733	EW011952				
ONSERVATION EDUCATION	(1)	EW011591						
ONSTRUCTION	(7)	EW011606	EW011613	EW011624	EW011626	EW011627	EW011667	EW011940
ONSULTING FIRMS	(1)	EW011708						
ONTAINMENT	(1)	EW011798						
ONTAMINANTS	(1)	EW011724						
ONTAMINATION	(6)	EW011525	EW011567	EW011684	EW011732	EW011825	EW011850	
ONTRACTING	(3)	EW009163	EW011576	EW011578				
ONTROL SYSTEMS	(1)	EW011752						
ONVERSATION TABLES	(1)	EW011447						
OOLING WATER	(1)	EW011702						
ORPS OF ENGINEERS	(1)	EW011581						
ORROSION	(2)	EW011835	EW011847					
ORROSION PREVENTION	(1)	EW011835						
OST CONTROLS	(1)	EW011628						
OST EFFECTIVENESS	(1)	EW011940						
OST RECOVERY SYSTEMS	(1)	EW011663						
OSTS	(49)	EW011576	EW011580	EW011583	EW011598	EW011599	EW011607	EW011608
OSTS	EW011609	EW011610	EW011611	EW011612	EW011613	EW011614	EW011615	EW011616
OSTS	EW011618	EW011619	EW011623	EW011625	EW011627	EW011628	EW011649	EW011665

EW011667 EW011736 EW011941	EW011676 EW011738 EW011788	EW011689 EW011828 EW011896	EW011697 EW011828 EW011909	EW011700 EW011896	EW011728 EW011937	EW011735 EW011940
OUNTERCURRENT AERATION						
(1)	EW011619					
OURSE OUTLINES	(1)	EW011141				
OVERS	(1)	EW011766				
RITERIA	(1)	EW011588				
ROPS	(1)	EW011571				
ULVERTS	(1)	EW011911				
ABRO MODEL	(1)	EW011915				
DAMAGES	(1)	EW011922				
ATA ANALYSIS	(3)	EW011557	EW011588	EW011715		
ATABASES	(2)	EW011742	EW011767			
ATA PROCESSING	(1)	EW011811				
ECISION MAKING	(3)	EW011540	EW011710	EW011761		
ECLINING-RATE FILTERS	(1)	EW011938				
EEP-WELL DISPOSAL	(1)	EW011863				
EFOAMERS	(1)	EW011869				
EPARTMENT OF ENERGY	(1)	EW011894				
EPARTMENT OF INTERIOR	(1)	EW011894				
ESALINATION	(1)	EW011705				
ETECTION	(1)	EW011934				
ETOXIFICATION	(1)	EW011604				
DEVELOPING COUNTRIES	(3)	EW011796	EW011816	EW011817		
ELOPMENT CHARGES	(1)	EW011599				
IOXIN	(1)	EW011745				
IRECTORIES	(1)	EW011742				
ISEASES	(2)	EW011924				
ISINFECTION	(7)	EW011575	EW011788	EW011805	EW011840	EW011864

(1)	DISPERSANTS	EW011683
(1)	DISSOLVED OXYGEN	EW011758
(1)	DISSOLVED OXYGEN	EW011939
(3)	DOMESTIC WATER	EW011735
(1)	RAINAGE	EW011736
(1)	RAINAGE SYSTEMS	EW011750
(1)	RAINS	EW011802
(1)	RINKING WATER	EW011795
(14)	RINKING WATER	EW011418
EW011805	RINKING WATER	EW011825
(1)	RINKING WATER	EW011827
(1)	COLOGY	EW011922
(1)	ECONOMICS	EW011790
(14)	ECONOMICS	EW009163
EW011749	ECONOMICS	EW011793
(1)	COSYSTEMS	EW011923
(2)	COSYSTEMS	EW011790
(1)	DUICATION	EW011581
(1)	DUCATIONAL RESOURCES	EW011589
(1)	EFFICIENCY	EW011689
(5)	FFLUENT	EW011572
(1)	FFLUENT GUIDELINES	EW011810
(3)	FFLUENT LIMITATIONS	EW011773
(6)	FFLUENTS	EW011589
(1)	LECTRICITY	EW011701
(1)	LECTRICAL CONTROL PANELS	EW011630
(1)	LECTROCHEMICAL PROCESSES	EW011896
(1)	LECTRODIALYSIS	EW011705
(1)	LECTROPLATING	EW011886
(1)	EMENTAL ANALYSIS	EW011859
(1)	TERGENCY RESPONSE	EW011760
(2)	MPLOYEE EVALUATION	EW011720
(1)	MPLOYEE INVOLVEMENT	EW011698
(1)	MPLOYEE MOTIVATION	EW011756

EMPLOYMENT OPPORTUNITIES	(1)	EW011768						
ENERGY CONSERVATION	(6)	EW011610	EW011625	EW011740	EW011908	EW011936	EW011941	
ENERGY PRODUCTION	(5)	EW011740	EW011908	EW011929	EW011936	EW011941		
ENGINEERING DRAWINGS	(1)	EW011929						
ENGINEERING EDUCATION	(6)	EW011570	EW011628	EW011769	EW011770	EW011802	EW011840	
INTERIC PARASITES	(1)	EW011760						
ENVIRONMENT	(1)	EW011581						
ENVIRONMENTAL EDUCATION	(1)	EW011777						
ENVIRONMENTAL EFFECTS	(15)	EW011607 EW011675	EW011136 EW011681	EW011564 EW011742	EW011590 EW011801	EW011591 EW011819	EW011595 EW011934	
ENVIRONMENTAL HEALTH	(1)	EW011591						
ENVIRONMENTAL IMPACT	(6)	EW011765	EW011870	EW011919	EW011921	EW011922	EW011933	
ENVIRONMENTAL IMPACTS	(3)	EW011589	EW011858	EW011859	EW011859			
ENVIRONMENTAL PROBLEMS	(3)	EW011706	EW011851	EW011928				
ENVIRONMENTAL PROTECTION	(5)	EW011535	EW011593	EW011749	EW011803	EW011862		
ENVIRONMENTAL QUALITY	(1)	EW010863						
ENVIRONMENTAL SCIENCES	(1)	EW009163						
ENVIRONMENT EFFECTS	(1)	EW011932						
PA	(6)	EW011526	EW011625	EW011667	EW011672	EW011773	EW011774	
PA	(1)	EW011894						
PA METHOD STUDIES	(3)	EW011744	EW011745	EW011784				
PA METHOD STUDY	(2)	EW011363	EW011857					
QUILLIUM	(1)	EW011775						
QUIPMENT	(18)	EW011443 EW011712 EW011927	EW011444 EW011763 EW011940	EW011445 EW011788 EW011946	EW011446 EW011826	EW011448 EW011873	EW011705 EW011874	EW011910 EW011910
QUIPMENT	(1)	EW011746						
QUIPMENT SELECTION	(1)	EW011442						
ROSION	(1)	EW011809						
STUARIES	(1)	EW011706						
UROPE	(1)	EW011783						
UTROPHICATION	(1)	EW011871						

VALUATION	(8) EW011747	EW01156	EW011583	EW011649	EW011672	EW011685	EW011710	EW011719
VALUATION	(1)	EW011771						
ACILITIES	(27) EW011594 EW011609 EW011624 EW011807	EW011347 EW011611 EW011626 EW011826	EW011417 EW011613 EW011627 EW011842	EW011574 EW011613 EW011628 EW011940	EW011576 EW011615 EW011665	EW011585 EW011617 EW011667	EW011587 EW011621 EW011672	EW011592 EW011623 EW011721
EASIBILITY	(1)	EW011866						
EDEERAL AGENCIES	(1)	EW011894						
EDEERAL HIGHWAY ADMINISTRATION	(1)	EW011772						
EDEERAL PROGRAMS	(2)	EW009163						
EDEERAL ROLE	(3)	EW009163	EW01107	EW011801				
ERTILIZER	(2)	EW011837	EW011909					
IBERS	(1)	EW011924						
ILMS	(1)	EW011732						
ILTER PRESSES	(1)	EW011910						
ILTERS	(6)	EW01198	EW011446	EW011618	EW011623	EW011697	EW011938	EW011938
ILTRATION	(8) EW011939	EW01198	EW011447	EW011596	EW011622	EW011725	EW011937	EW011938
INANCES	(4)	EW011576	EW011613	EW011728	EW011781			
INANCES	(1)	EW011783						
LOCCELLANTS	(1)	EW011584						
LOCCLULATION	(1)	EW011596						
LOODPLAINS	(1)	EW011809						
LOODS	(1)	EW011757						
LORIDA	(1)	EW011756						
LORIDA	(1)	EW011760						
LOW MEASUREMENT	(7)	EW011564	EW011686	EW011739	EW011789	EW011795	EW011915	EW011917
LOW METERS	(1)	EW011444						
LUID FLOW	(1)	EW011739						
LUIDS	(1)	EW011795						
LUMES	(1)	EW011444						
LUORIDATION	(1)	EW0114418						
OAM INHIBITION	(1)	EW011869						
OOD INDUSTRY	(1)	EW011763						

'OOD PROCESSING	(1)	EW011763
'ORMALDEHYDE	(1)	EW011919
'UELS	(1)	EW011560
'UNDING	(2)	EW011625 EW011728
'AS CHROMATOGRAPHY	(2)	EW011412 EW011413
'AS FEEDERS	(1)	EW011445
'AS FLOW	(1)	EW011845
'EOCHEMISTRY	(1)	EW011675
'LOSSARIES	(1)	EW011447
'RANULAR ACTIVATED CARBON	(2)	EW011621 EW011827
'REAT LAKES	(1)	EW011800
'ROUNDWATER	(10)	EW011525 EW011567 EW011804 EW011838 EW011850
'ROUND WATER	(1)	EW011922
'ROUNDWATER	(2)	EW011771 EW011772
'ROUNDWATER RECHARGE	(1)	EW011572
'ROUT	(1)	EW011573
'ROUNDWATER RECHARGE	(1)	EW011569 EW011585 EW011810 EW011817
'UIDLES	(5)	EW011586 EW011781 EW011663 EW011683
'ABITATS	(2)	EW011771 EW011772 EW011744
'ALOETHERS	(1)	EW011447 EW011761 EW011860
'ANDBOOKS	(5)	EW011575 EW011620 EW011813 EW011861
'ANDLING	(2)	EW011919
'AZARD ASSESSMENTS	(1)	
'AZARDOUS MATERIALS	(8)	EW011540 EW011731 EW011767 EW011798 EW011813 EW011814 EW011852 EW011922
'AZARDOUS SUBSTANCES	(2)	EW011566 EW011800
'AZARDOUS WASTES	(3)	EW011894 EW011604 EW011681 EW011732 EW011813 EW011852
'EALTH	(13)	EW011567 EW011590 EW011675 EW011684 EW011864 EW011867 EW011872 EW011922 EW011924 EW011933
'EALTH EDUCATION	(1)	EW011511
'EALTH EFFECTS	(3)	EW011735 EW011736 EW011738

HEALTH ENGINEERING	(1)	EW011867
HEALTH HAZARDS	(1)	EW011868
HEALTH INFORMATION	(1)	EW011731
EAT	(2)	EW011740
EATING	(1)	EW011941
EAT RECOVERY	(1)	EW011908
EAZY METALS	(4)	EW011571
EBICIDES	(2)	EW011762
HIGHER EDUCATION	(1)	EW011581
HIGHER EDUCATION	(1)	EW011591
HIGHWAYS	(5)	EW011769
HISTORY	(1)	EW011721
HISTORY	(1)	EW011783
HOSPITALS	(1)	EW011632
HUMAN ACTIVITIES	(1)	EW011593
HUMAN RESOURCES DEVELOPMENT	(1)	EW011583
HUMANS	(1)	EW011590
HYACINTHS	(1)	EW011929
HYDRAULICS	(4)	EW011445
HYDROCARBONS	(2)	EW011363
HYDROGRAPHS	(4)	EW011913
HYDROLOGY	(6)	EW011567
HYDROLOGY	(1)	EW011797
IBM SYSTEM 9000	(1)	EW011812
ILLINOIS	(2)	EW011754
ILLINOIS	(1)	EW011700
INCENTIVES	(2)	EW011672
INDEXES	(2)	EW011785
INDIANA	(1)	EW011730
INDUSTRIAL COST RECOVERY	(2)	EW011347
INDUSTRIAL HYGIENE	(2)	EW011843
INDUSTRIAL WASTES	(13)	EW011347 EW011773 EW011774
INDUSTRIAL WASTES		EW011704 EW011808 EW011842 EW011910 EW011928 EW011765

*INDUSTRIES (2) EW011532 EW011810
 *INDUSTRY (12) EW011763 EW011347 EW011663 EW011699 EW011708 EW011737 EW011740 EW011741
 INDUSTRY (3) EW011764 EW011869 EW011886 EW011926 EW011928
 *INFILTRATION (5) EW011573 EW011579 EW011649 EW011701 EW011726
 *INFLOW (3) EW011573 EW011649 EW011726
 *INFORMATION DISSEMINATION (1) EW011731
 *INFORMATION SOURCES (2) EW011742 EW011798
 *INNOVATIVE TECHNOLOGY (2) EW011625 EW011672
 *INORGANIC CHEMICALS (1) EW011810
 *INORGANIC COAGULANTS (1) EW011723
 *INORGANIC COMPOUNDS (1) EW011560
 *INSPECTION (4) EW011727 EW011757 EW011828 EW011847
 *INSTALLATION (1) EW011847
 *INSTRUCTION (3) EW011441 EW011682 EW011717
 *INSTRUCTIONAL MATERIALS (34) EW011511 EW011441 EW011351 EW011412 EW011413 EW011415
 EW011559 EW011559 EW011562 EW011563 EW011577 EW011592 EW011629
 EW011673 EW011675 EW011732 EW011781 EW011785 EW011786 EW011790
 EW011792 EW011794 EW011795 EW011797 EW011798 EW011811 EW011844
 EW011845 EW011867 EW011868
 *INSTRUMENTATION (7) EW011559 EW011686 EW011687 EW011712 EW011811 EW011860 EW011861
 INSULATION (1) EW011941
 INSURANCE (1) EW011757
 *INTERMITTENT SAND FILTERS (1) EW011623
 *INTRACHANNEL CLARIFICATION (1) EW011617
 *INVESTMENT (1) EW011576
 *IRON (1) EW011754
 IRON (1) EW011823
 *IRON CHLORIDE (1) EW011723
 *IRON INDUSTRY (1) EW011737
 *IRON REMOVAL (1) EW011754
 *IRRIGATION SYSTEMS (7) EW011112 EW011555 EW011571 EW011597 EW011701 EW011874 EW011923
 *ISSUES (1) EW011874
 (2) EW011537 EW011864
 *JOB ANALYSIS (1) EW011141

ENYA	(1)	EW011570
KINETIC CONSTANTS	(1)	EW011775
ABORATORIES	(1)	EW011201
ABORATORY ACTIVITIES	(1)	EW011812
ABORATORY APPLICATIONS	(1)	EW011812
ABORATORY EQUIPMENT	(5)	EW011412 EW011413 EW011414 EW011415 EW011811
ABORATORY PROCEDURES	(25)	EW011556 EW011363 EW011412 EW011415 EW011526 EW011559 EW011563 EW011673 EW011714 EW011745 EW011746 EW011764 EW011779 EW011780 EW011744 EW011861 EW011925 EW011791 EW011860 EW011745 EW011857 EW011860
ABORATORY SAFETY	(1)	EW011700
AGOONS	(1)	EW011814
AKES	(2)	EW011594 EW011609
AND APPLICATION	(3)	EW011595 EW011762 EW011871
ANDFILLS	(10)	EW011540 EW011554 EW011585 EW011597 EW011608 EW011614 EW011616
ANDSCAPING	(2)	EW011837 EW011909 EW011923
AND TREATMENT	(1)	EW011579
AND USE	(2)	EW011766 EW011910
AND USE	(9)	EW011554 EW011555 EW011585 EW011606 EW011614 EW011616
EACHATES	(4)	EW011624 EW011676
ATRINES	(3)	EW011554 EW011676 EW011865 EW011866
EACHATES	(1)	EW011107 EW011676 EW011894
EACHATES	(1)	EW011771
EACHING	(1)	EW011569
EAD	(1)	EW011156
EGAL ASPECTS	(3)	EW011772
EGAL PROBLEMS	(1)	EW011156
EGISLATION	(2)	EW011771
EGISLATION	(1)	EW011107
IME	(3)	EW011676 EW011932
IMNOLOGY	(1)	EW011836
INERS	(1)	EW011766
IQUID CHROMATOGRAPHY	(4)	EW011414 EW011415 EW011779 EW011780

LOCAL GOVERNMENT	(1)	EW011689
LOW-INCOME PEOPLE	(1)	EW011793
MACROPHYTES	(1)	EW011562
M AINE	(1)	EW011910
M AINTENANCE	(23)	EW011443 EW011623 EW011730
M AINTENANCE	(2)	EW011622
M ANAGEMENT	(44)	EW009163 EW011576 EW011681 EW011733 EW011793 EW011930
M ANAGEMENT	(2)	EW011783
M ANAGERS	(1)	EW011755
M ANGANESE	(2)	EW011605
M ANHOLES	(1)	EW011573
M ANUALS	(15)	EW011563 EW011769
M ANUFACTURERS	(1)	EW011708
MAPS	(1)	EW011824
MARS	(2)	EW011930
MARYLAND	(1)	EW011726
MASS SPECTROMETRY	(1)	EW011791
MATERIAL HANDLING	(1)	EW011448
MATERIALS HANDLING	(1)	EW011813
MATHEMATICAL MODELS	(2)	EW011739
MEASUREMENT	(4)	EW011447 EW011559
MEASUREMENT INSTRUMENTS	(1)	EW011755
MECHANICAL AERATION	(1)	EW011754
MECHANICAL CONTROL METHODS	(1)	EW011870
MEMBRANE PROCESSING	(1)	EW011741
METAL FINISHING	(1)	EW011886
METAL INDUSTRY	(1)	EW011842

METALS	(13) EW011860	EW011695 EW011886	EW011773 EW011921	EW011800 EW011928	EW011842 EW011933
HECTERS	(1) EW011447				
METHANE	(2) EW011610	EW011929			
METHODS					
METHOD STUDIES					
METHOD-604	(1) EW011763	(4) EW011744	(2) EW011745	(1) EW011784	(1) EW011857
HEYERS-BRIGGS INDICATOR	(1) EW011526	(2) EW011563	(1) EW011526		
ICHIGAN	(1) EW011824	(1) EW011824			
CROBIOLOGY	(2) EW011565	(2) EW011565			
CROBIOLOGY	(1) EW011825	(1) EW011825			
CROCOMPUTERS	(3) EW011447	(3) EW011447	(1) EW011792	(1) EW011812	
CROFICHE	(1) EW011760	(1) EW011760			
MIDDLE ATLANTIC STATES	(1) EW011582	(1) EW011928			
LIVING	(1) EW011703	(1) EW011703			
ODELING	(4) EW011572	(4) EW011580	(4) EW011704	(1) EW011781	(1) EW011836
ODELS	(15) EW011763	(15) EW011789	(15) EW011797	(15) EW011853	(15) EW011865
MONITORING	(26) EW011681	(26) EW011687	(26) EW011525	(26) EW011535	(26) EW011540
MONITORING	(26) EW011752	(26) EW011759	(26) EW011825	(26) EW011838	(26) EW011841
MONITORING	(26) EW011934	(26) EW011945	(26) EW011946		
ONITORING	(2) EW011766	(2) EW011894			
ONITORING DATA	(1) EW011556	(1) EW011556			
APAP	(1) EW011535				
ATIONAL TOXICOLOGY PROGRAM					
ATIONAL WIDE URBAN RUNOFF PROGRAM	(1) EW011747	(3) EW011556	(1) EW011557	(1) EW011568	
ATIONAL WIDE URBAN RUNOFF PROGRAM	(1) EW011558				
NATURAL RESOURCES	(4) EW011107	(4) EW011711	(4) EW011742	(4) EW011952	
CASI	(1) EW011704				
EEDS	(1) EW011667				
EEDS ANALYSIS	(1) EW011849				
EEDS ASSESSMENT	(2) EW011583	(2) EW011591			
EEDS SURVEYS	(1) EW011667				

NEW ENGLAND	(1)	EW011749						
NEW ENGLAND REGION	(1)	EW011582						
NEW YORK	(1)	EW011728						
NITRITES	(1)	EW011716						
NITROGEN	(3)	EW011572	EW011725	EW011758				
NITROSAMINES	(1)	EW011784						
NOISE	(1)	EW011843						
NONPOINT SOURCES	(1)	EW011761						
NORTH CAROLINA	(1)	EW011585						
OBJECTIVES	(2)	EW011583	EW011667					
OCCUPATIONAL HAZARDS	(1)	EW011777						
OCCUPATIONAL HEALTH	(5)	EW011589	EW011853	EW011858				
OCCUPATIONAL SAFETY	(1)	EW011867						
OCEAN DUMPING	(1)	EW011706						
OCEANOGRAPHY	(1)	EW011841						
OCEAN OUTFALLS	(1)	EW011907						
OCEAN POLLUTION	(1)	EW011841						
OCEANS	(2)	EW011706	EW011841					
OCEANS	(1)	EW011749						
OFFICE OF TOXIC SUBSTANCES	(1)	EW011935						
OHIO	(1)	EW011699						
OIL	(1)	EW011925						
OIL INDUSTRY	(1)	EW011749						
OIL SHALE PROCESSING	(1)	EW011925						
OIL SHALE REPORT WATER	(1)	EW011925						
OIL SPILLS	(3)	EW011566	EW011683	EW011927				
ONLINE MONITORING	(1)	EW011700						
ONSITE TREATMENT	(1)	EW011623						
OPEN CHANNEL SYSTEMS	(1)	EW011795						
OPERATIONS	(1)	EW011763						
OPERATIONS (WASTEWATER)	(48)	EW011347	EW011351	EW011444	EW011554	EW011555	EW011575	EW011576
		EW011577	EW011578	EW011584	EW011592	EW011597	EW011606	EW011609
		EW011610	EW011611	EW011612	EW011613	EW011615	EW011617	EW011618
		EW011619	EW011620	EW011621	EW011622	EW011623	EW011624	EW011625

ORGANIC COMPOUNDS	(1)	EW011939	EW011663	EW011665	EW011672	EW011697	EW011698
ORGANIC SUBSTANCES	(1)	EW011725	EW011701	EW011737	EW011758	EW011788	EW011908
ORGANIZATIONAL PROBLEMS	(1)	EW011720	EW011988	EW011417	EW011444	EW011576	EW011605
ORGANIZATIONS (GROUPS)	(1)	EW011591	EW011936	EW011721	EW011724	EW011752	EW011754
OVERLAND FLOW	(2)	EW011684	EW011806	EW011156	EW011363	EW011525	EW011584
KIDLATION	(1)	EW011606	EW011606	EW011800	EW011827	EW011560	EW011621
ZONE	(1)	EW011754	EW011617	EW011617	EW011788	EW011851	EW011853
ZONE	(1)	EW011919	EW011919	EW011778	EW011704	EW011724	EW011730
PLANTS	(1)	EW011778	EW011777	EW011777	EW011756	EW011756	EW011756
APER INDUSTRY	(1)	EW011704	EW011704	EW011704	EW011756	EW011756	EW011756
PARAMETERS	(1)	EW011724	EW011724	EW011724	EW011939	EW011939	EW011939
PARASITIC DISEASES	(1)	EW011777	EW011777	EW011777	EW011812	EW011812	EW011812
ARTICULATES	(1)	EW011756	EW011756	EW011756	EW011869	EW011869	EW011869
ASCAL	(1)	EW011939	EW011939	EW011939	EW011857	EW011857	EW011857
ATENTS	(1)	EW011869	EW011869	EW011869	EW011937	EW011937	EW011937
ZBS	(1)	EW011857	EW011937	EW011556	EW011442	EW011526	EW011596
PERFORMANCE EVALUATION	(42)	EW009163	EW01163	EW011611	EW011614	EW011616	EW011605
PERSONNEL	(4)	EW011606	EW011607	EW011611	EW011614	EW011618	EW011621
ESTICIDES	(3)	EW011623	EW011625	EW011627	EW011672	EW011685	EW011622
ESTICIDES	(2)	EW011702	EW011705	EW011719	EW011720	EW011723	EW011701
PERSONAL CHARACTERISTICS	(1)	EW011755	EW011755	EW011755	EW011755	EW011777	EW011777

**PETROLEUM	(1)	EW011778
*PH	(1)	EW011758
*PHENOLS	(1)	EW011526
**PHYSICAL PROPERTIES	(1)	EW011775
*PILOT PLANTS	(1)	EW011939
*PILOT STUDIES	(1)	EW011617
*PIPE NETWORKS	(1)	EW011729
*PIPE PROTECTION	(1)	EW011847
**PIPES	(10)	EW011444 EW011911
		EW011444 EW011914
		EW011688 EW011918
*PLANNING	(26)	EW011136 EW011613
		EW011626 EW011733
		EW011665 EW011759
		EW011781 EW011935
		EW011849 EW011940
PLANNING	(1)	EW011923
*PLANT COLLECTION	(1)	EW011562
*PLANTS	(2)	EW011562
*PLANT STARTUP	(1)	EW011351
*PLUMBING	(1)	EW011822
*POINT SOURCES	(1)	EW011761
**POLICIES	(18)	EW011197 EW011602 EW011865
		EW011136 EW011603 EW011935
		EW011544 EW011604 EW011952
POLICIES	(1)	EW011783
*POLICY DEVELOPMENT	(1)	EW011710
POLICY FORMATION	(1)	EW011591
*POLLUTANTS	(1)	EW011803
*POLLUTION	(6)	EW011572
POLLUTION	(1)	EW011797
**POLLUTION CONTROL	(24)	EW009163 EW011667 EW011860
		EW011347 EW011681 EW011850
		EW011556 EW011712 EW011856
		EW011557 EW011739 EW011872
**POLYCYCLIC AROMATIC HYDROCARBONS	(1)	EW011819
**POLYMERIZED IRON CHLORIDE	(1)	EW011723
**PONDS	(1)	EW011595

POSTSECONDARY EDUCATION	(31)	EW011141 EW011562 EW011563 EW011675 EW011732 EW011798 EW011811	EW011351 EW011577 EW011781 EW011790 EW011819	EW011414 EW011581 EW011791 EW011844	EW011511 EW011629 EW011792 EW011845	EW011559 EW011673 EW011795 EW011868
POWER PLANTS	(2)	EW011563	EW011785	EW011786		
PRESSURE FILTERS	(1)	EW011446				
PRETREATMENT	(1)	EW011699				
PRETREATMENT STANDARDS	(1)	EW011886				
PREVENTIVE MAINTENANCE	(1)	EW011574				
PREVENTIVE MEDICINE	(1)	EW011853				
PRIMARY TREATMENT	(1)	EW011592				
PRIMING	(1)	EW011443				
PRIORITY POLLUTANTS	(2)	EW011699	EW011839			
PRIVATIZATION	(1)	EW011576				
PROBLEM DIAGNOSIS	(1)	EW011720				
PROCESS CONTROL	(1)	EW011351				
PROCESS DESCRIPTION	(1)	EW011614				
PROCESS DESCRIPTIONS	(8)	EW011351 EW011622	EW011615 EW011617	EW011616 EW011617	EW011618 EW011619	EW011621
PROCESS EVALUATION	(1)	EW011623				
PRODUCTIVITY	(3)	EW011685	EW011720	EW011756		
PROGRAM DESCRIPTIONS	(8)	EW011198 EW011936	EW011574 EW011591	EW011581 EW011713	EW011756	EW011870
PROGRAM DEVELOPMENT	(1)	EW011710				
PROGRAM EVALUATION	(2)	EW009163	EW011347			
PROGRAM EVALUATIONS	(1)	EW011747				
PROJECT DESCRIPTIONS	(1)	EW011625				
PROJECT EVALUATION	(1)	EW011781				
PROJECTION SYSTEMS	(1)	EW011682				
ROPELLANTS	(1)	EW011798				
PUBLICATIONS	(1)	EW011589				
PUBLIC HEALTH	(22)	EW011136 EW011776 EW011855	EW011418 EW011778 EW011863	EW011590 EW011843 EW011922	EW011684 EW011853 EW011924	EW011732 EW011854 EW011933

*PUBLIC PARTICIPATION (2) EW011710 EW011732
 PUBLIC PARTICIPATION (1) EW011923
 PUBLIC UTILITIES (1) EW011777
 PUBLIC WORKS (1) EW011756
 *PULP INDUSTRY (2) EW011704 EW011765
 *PUMPING STATIONS (3) EW011769 EW011770 EW011912
 *PUMPS (7) EW011442 EW011443 EW011444 EW011629 EW011752 EW011753 EW011912
 PUMPS (1) EW011941
 *QUESTIONNAIRES (1) EW011755
 *RADIOACTIVE WASTES (1) EW011855
 *RADIOACTIVITY (1) EW011675
 *RADIONUCLIDES (1) EW011790
 *RAINFALL (1) EW011802
 *RAPID INFILTRATION (2) EW011624 EW011701
 *RATES (1) EW011598
 *RATE SETTING (2) EW011601 EW011603
 *RATE-SETTING (1) EW011602
 *RATE SETTING PROCESS (1) EW011600
 *RCRA (1) EW011767
 *REAGENTS (1) EW011564
 *RECLAIMED WASTEWATER (1) EW011597
 *RECLAIMED WATER (1) EW011571
 *RECOMMENDATIONS (12) EW009163 EW011156 EW011685 EW011717 EW011718 EW011757
 EW011766 EW011768 EW011823 EW011837 EW011849
 *RECORD KEEPING (1) EW011826
 *RECORDKEEPING (1) EW011824
 *RECORDS (3) EW011663 EW011824 EW011826
 *RECOVERY (1) EW011740
 *RECREATION (1) EW011776
 RECREATION (3) EW011749 EW011771 EW011772
 *RECYCLING (7) EW011582 EW011610 EW011612 EW011701 EW011702 EW011885 EW011909
 RECYCLING (1) EW011923

REFERENCE MATERIALS

(2)	EW011742	EW011798
(2)	EW011613	EW011768
(19)	EW011810	EW011107
REGULATIONS	EW011886	EW011821
	EW011932	EW011938
REHABILITATION		EW011945
REMOTE SENSING		
REPORTING		
REPORTS		
RESEARCH		
RESEARCH NEEDS		
RESEARCH REPORTS		
RESEARCH REPORTS		
RESEARCH REVIEW		
RESEARCH REVIEWS		
RESERVOIRS		
RESOURCE ALLOCATION		
RESOURCE RECOVERY		
SOURCES RECOVERY		
STRENCHMENT		
IVERSE OSMOSIS		
IEWS		
SK ANALYSIS		
SK ASSESSMENT		
SK MANAGEMENT		
VER BASINS		
VERS		
STATING BIOLOGICAL CONTACTORS		
TRAL AREAS		
TRAL AREAS		

*SAFETY
 EW011201
 EW011448
 EW011561
 EW011575
 EW011713
 EW011867
 EW011868
 EW011777
 EW011788
 EW011813
 EW011843
 EW011856
 EW011867
 EW011868
 EW011873
 EW011922
 EW011933

SAFETY EDUCATION
 (1) EW011757
 (1) EW011713
 (1) EW011731
 (1) EW011565
 (1) EW011757
 (2) EW011559
 EW011564
 EW011595
 EW011712
 EW011825
 EW011840
 EW011852

SAFETY INFORMATION
 (1) EW011937
 (4) EW011570
 EW011794
 EW011816

SALINITY
 (1) EW011569
 EW011570
 EW011794
 EW011816

SALVAGE
 (1) EW011746
 EW011935

SAMPLING
 (1) EW011937
 (4) EW011570
 EW011794
 EW011816

SAMPLING
 (1) EW011746
 EW011935

SAND FILTRATION
 (1) EW011569
 EW011570
 EW011794
 EW011816

SCALING
 (1) EW011835
 EW011561
 EW011682

SCALE PREVENTION
 (1) EW011835
 (1) EW011828
 (1) EW011722
 (1) EW011726
 (1) EW011565
 (1) EW011734
 (1) EW011592
 (1) EW011198
 (2) EW011779
 EW011780

SCUBA
 (1) EW011828
 (1) EW011722
 (1) EW011726
 (1) EW011565
 (1) EW011734
 (1) EW011592
 (1) EW011198
 (2) EW011779
 EW011780

SCUBA DIVERS
 (1) EW011828
 (1) EW011722
 (1) EW011726
 (1) EW011565
 (1) EW011734
 (1) EW011592
 (1) EW011198
 (2) EW011779
 EW011780

SCREENING
 (1) EW011835
 EW011561
 EW011682

SCREENING
 (1) EW011835
 EW011561
 EW011682

SCREENS
 (1) EW011835
 EW011561
 EW011682

SCALING
 (1) EW011835
 EW011561
 EW011682

SEALING
 (1) EW011835
 EW011561
 EW011682

SEA WATER
 (1) EW011835
 EW011561
 EW011682

SECONDARY CLARIFIERS
 (1) EW011835
 EW011561
 EW011682

SECONDARY TREATMENT
 (1) EW011835
 EW011561
 EW011682

SEDIMENTATION
 (1) EW011835
 EW011561
 EW011682

SEPARATION TECHNIQUES
 (1) EW011835
 EW011561
 EW011682

SEPTIC TANKS
 (1) EW011804
 (1) EW011598
 (1) EW011760
 (2) EW011576
 EW011578

SERVICE
 (1) EW011804
 (1) EW011598
 (1) EW011760
 (2) EW011576
 EW011578

SERVICE CALLS
 (1) EW011804
 (1) EW011598
 (1) EW011760
 (2) EW011576
 EW011578

SERVICE CONTRACTS
 (3) EW011570
 EW011706
 EW011741

SEWAGE
 (3) EW011608
 EW011837
 EW011896

SEWAGE SLUDGE
 (1) EW011728
 (1) EW011730

SEWER DISTRICTS
 (1) EW011728
 (1) EW011730

SEWER OVERFLOWS
 (2) EW011602
 EW011603

SEWER RATES
 (2) EW011602
 EW011603

SEWERS
 (9) EW011914 EW011649
 EW011918 EW011667 EW011728 EW011730 EW011750 EW011782 EW011795

SEWER SYSTEMS
 (3) EW011607 EW011649 EW011726

SILICA
 (1) EW011702 EW011593 EW011707 EW011915

SIMULATIONS
 (4) EW011586 EW011593 EW011707 EW011915

SITE IDENTIFICATION
 (1) EW011894 EW011707 EW011915

SKILL DEVELOPMENT
 (1) EW011591 EW011629

SLIDES
 (2) EW011511 EW011629

LOW-RATE FILTRATION
 (1) EW011939 EW011585 EW011608 EW011610
 EW011908 EW011909 EW011910 EW011946

SLUDGE BLANKET
 (1) EW011946 EW011637 EW011896 EW011907

SLUDGE DEWATERING
 (1) EW011910

SLUDGE DISPOSAL
 (1) EW011909 EW011623 EW011627

SMALL FLOWS
 (3) EW011607 EW011623 EW011627

OIL CONDITIONER
 (1) EW011837 EW011675 EW011790

OILS
 (3) EW011572 EW011675 EW011790

SLIDS
 (1) EW011596 EW011681

SOLID WASTES
 (2) EW011156 EW011681

SOLID TRANSPORT
 (1) EW011739

SOURCES
 (1) EW011535

SOUTH CAROLINA
 (1) EW011574

SPOTPHOTOMETRY
 (1) EW011716

PECTROSCOPY
 (1) EW011791

STANDARDS
 (8) EW011418 EW011560 EW011564 EW011565 EW011773 EW011774 EW011810
 EW011886

STATE AGENCIES
 (1) EW011708

STATE PROGRAMS
 (1) EW011713

STATE ROLE
 (3) EW009163 EW011733 EW011801

STATISTICAL INFORMATION
 (1) EW011588 EW011715

STATISTICS
 (1) EW011564

TEAM
 (1) EW011737

TEEL INDUSTRY
 (1) EW011620

TORAGE

*STORAGE TANKS
 (2) EW011778 EW011828
 (1) EW011750
 *STORM SEWERS
 (1) EW011750
 *STORM WATER
 (2) EW011769 EW011770
 (9) EW011556 EW011558 EW011568 EW011667 EW011809 EW011911 EW011912
 **STORMWATER
 EW011913 EW011916
 *STREAM DESIGN FLOWS
 (1) EW011703
 (1) EW011580
 *STREAMFLOW
 (3) EW011762 EW011794 EW011795
 *STREAMS
 (1) EW011844
 *SUBSURFACE DISCHARGES
 (1) EW011555
 (1) EW011585
 (1) EW011894
 (1) EW011844
 (1.6) EW011556 EW011557 EW011558 EW011568 EW011769 EW011770
 EW011839 EW011911 EW011912 EW011913 EW011915 EW011916 EW011917 EW011918
 EW011932
 SURFACE RUNOFF
 (1) EW011757
 (1) EW011796
 *SURFACE WATER
 (1) EW011724
 *SURROGATE PARAMETERS
 (7) EW011649 EW011667 EW011697 EW011708 EW011748 EW011796 EW011937
 *SURVEYS
 (1) EW011700
 (1) EW011801
 (1) EW011584
 (1) EW011141
 (1) EW011867
 (21) EW010863 EW011564 EW011566 EW011570 EW011587 EW011611 EW011614
 EW011615 EW011618 EW011619 EW011625 EW011672 EW011712 EW011785 EW011799
 EW011802 EW011807 EW011866 EW011886 EW011932
 TECHNOLOGY
 (1) EW011786
 (1) EW011733
 *TENNESSEE
 *TERTIAL GRANULAR FILTRATION
 (2) EW011555 EW011592
 (1) EW011747
 (1) EW011844
 *TESTING
 *THERMAL DISCHARGES

THERMAL POLLUTION	(1)	EW011844
THERMAL TREATMENT	(1)	EW011908
TOOLS	(2)	EW011448 EW011940
TOXIC CHEMICALS	(1)	EW011684
TOXIC MATERIALS	(1)	EW011813
TOXICOLOGY	(8)	EW011561 EW011747
TOXIC SUBSTANCES	(13)	EW011590 EW011684 EW011806 EW011814 EW011853
TOXIC SUBSTANCES CONTROL	(1)	EW011935
TRACE ELEMENTS	(2)	EW011858 EW011859
TRACKER	(1)	EW011767
TRAINING	(16)	EW011411 EW011412 EW011583 EW011630 EW011631
TRAINING	(1)	EW011849
TRAINING	(3)	EW011591 EW011713 EW011824
TRAINING METHODS	(1)	EW011591
TRAINING NEEDS	(1)	EW011591
TRAINING OBJECTIVES	(1)	EW011713
TRAINING OBJECTIVES	(1)	EW011591
TRAINING PROGRAMS	(1)	EW011583
TRANSITION METALS	(1)	EW011933
TRANSPORT	(1)	EW011620
TRANSPORTATION	(2)	EW011713 EW011809
RENDS	(8)	EW010863 EW011107 EW011525 EW011582
RENDS	(1)	EW011935
RENDS	(1)	EW011783
RICKLING FILTERS	(1)	EW011697
RIHALOMETHANES	(1)	EW011864
ROUBLESHOOTING	(6)	EW011351 EW011620
NITED KINGDOM	(1)	EW011782
NITED STATES	(2)	EW011711 EW011721
NIT PROCESSES	(2)	EW011796 EW011842
NIVERSITIES	(1)	EW011708
RBAN AREAS	(13)	EW011556 EW011557 EW011558 EW011568 EW011750 EW011802 EW011839

*URBAN EFFECTS
 (1) EW011865 EW011911 EW011915 EW011916 EW011917 EW011932
 *U. S. ARMY
 (1) EW011932
 (1) EW011766
 (1) EW011767
 (13) EW009163 EW011347 EW011363 EW011526 EW011663
 *USEPA EW011672 EW011744 EW011773 EW011774 EW011810 EW011821
 EW011667 EW011665 EW011663 EW011663
 *USER CHARGES
 (1) EW011347
 (1) EW011707
 (1) EW011584
 (3) EW011930 EW011931 EW011940
 *VACUUM SYSTEMS
 (1) EW011753
 (1) EW011628
 (2) EW011711 EW011749
 (1) EW011569
 (1) EW011845
 (1) EW011569
 (1) EW011577
 (3) EW011441 EW011511 EW011630
 *VALUES
 (1) EW011596
 (1) EW011571
 (1) EW011447
 (32) EW011156 EW011201 EW011540 EW011566 EW011585
 EW011608 EW011610 EW011612 EW011681 EW011706 EW011732
 EW011793 EW011813 EW011814 EW011816 EW011837 EW011852
 EW011863 EW011894 EW011896 EW011907 EW011909 EW011910
 EW011925 EW011925
 *VENT PIPES
 *VIDEO TAPES
 *VIDEOTAPES
 *VIRUS
 (1) EW011596
 (1) EW011571
 (1) EW011447
 *VOCABULARY
 *WASTE DISPOSAL
 (1) EW011785 EW011786
 (1) EW011740
 (1) EW011908
 (1) EW011703
 (2) EW011779 EW011780
 (1) EW011894
 (10) EW011704 EW011741 EW011763 EW011765
 *WASTE HEAT
 (10) EW011856 EW011925 EW011929
 *WASTE HEAT RECOVERY
 (10) EW011363 EW011554 EW011571 EW011588
 *WASTELOAD ALLOCATIONS
 (10) EW011744 EW011857 EW011925
 *WASTES
 *WASTE SITES
 *WASTE TREATMENT
 *WASTEWATER
 *WASTEWATER

ASTEWATER ANALYSIS

ASTEWATER COLLECTION

(1)	EW011746
(26)	EW011556
EW011667	EW011557
EW011726	EW011728
EW011770	EW011802
EW011916	EW011918

ASTEWATER DISPOSAL

(1)	EW011555
(77)	EW011347
EW011576	EW011577
EW011596	EW011602
EW011614	EW011615
EW011622	EW011623
EW011665	EW011667
EW011701	EW011728
EW011783	EW011785
EW011866	EW011885
EW011928	EW011929

ASTEWATER TREATMENT

(1)	EW011745
(2)	EW011351
(2)	EW011578
EW011606	EW011607
EW011616	EW011617
EW011624	EW011625
EW011672	EW011676
EW011734	EW011737
EW011786	EW011788
EW011907	EW011908
EW011930	EW011931
(3)	EW011592
(2)	EW011930
(12)	EW011560
EW011784	EW011795
(2)	EW011705
(1)	EW011746
(5)	EW011560
EW010863	EW011563
(1)	EW011840
(1)	EW011560
(1)	EW011733
(3)	EW011347
(1)	EW010863
(1)	EW011844
(16)	EW011442
EW011823	EW011824
EW011936	
(1)	EW011822
(3)	EW011686
(1)	EW011729
(6)	EW01136
EW011785	EW011786
(3)	EW011785
(18)	EW011347
EW011773	EW011774
EW011922	EW011927

ATER HAMMER

ATER MAINS

ATER NETWORK ANALYSIS

(1)	EW011686
(3)	EW011687
(1)	EW011729
(6)	EW011566
EW011785	EW011786
(3)	EW011952
(18)	EW011347
EW011773	EW011794
EW011922	EW011934

ATER POLLUTION

ATER POLLUTION CONTROL

(1)	EW011761
(1)	EW011851
(1)	EW011922
(1)	EW011764
(1)	EW011856
(1)	EW011872

WATER PRESSURE	(2)	EW011686	EW011687						
WATER QUALITY	(53)	EW011107	EW011556	EW011557	EW011558	EW011559	EW011563	EW011568	EW011568
WATER RECYCLING	EW011586	EW011587	EW011588	EW011594	EW011675	EW011684	EW011693	EW011693	EW011693
WATER RESERVOIRS	EW011707	EW011721	EW011722	EW011724	EW011725	EW011725	EW011735	EW011735	EW011735
WATER RESOURCES	EW011738	EW011739	EW011744	EW011761	EW011762	EW011765	EW011776	EW011776	EW011776
WATER RESOURCES	EW011785	EW011786	EW011794	EW011797	EW011799	EW011800	EW011801	EW011801	EW011801
WATER RESOURCES	EW011821	EW011825	EW011836	EW011841	EW011850	EW011865	EW011885	EW011885	EW011885
WATER QUALITY	(1)	EW011922	EW011926	EW011929	EW011932	EW011945	EW011952		
WATER RATES	(6)	EW011598	EW011599	EW011600	EW011601	EW011602	EW011603		
WATER RECYCLING	(1)	EW011582							
WATER RESERVOIRS	(1)	EW011727							
WATER RESOURCES	(28)	EW010863	EW011107	EW011112	EW011417	EW011525	EW011572	EW011579	EW011579
WATER RESOURCES	EW011581	EW011582	EW011587	EW011597	EW011684	EW011705	EW011708	EW011722	EW011722
WATER RESOURCES	EW011732	EW011733	EW011735	EW011736	EW011738	EW011781	EW011785	EW011786	EW011786
WATER RESOURCES	EW011789	EW011850	EW011865	EW011932	EW011952				
WATER RESOURCES	(2)	EW011771	EW011772						
WATER REUSE	(7)	EW011571	EW011572	EW011582	EW011676	EW011701	EW011733	EW011885	
WATER SCIENCE AND TECHNOLOGY BOARD	(1)	EW011587							
WATERSHEDS	(1)	EW011761							
WATER STABILIZATION	(1)	EW011835							
WATER STORAGE	(2)	EW011727	EW011828						
WATER SUPPLY	(44)	EW010863	EW011442	EW011579	EW011582	EW011597	EW011598	EW011599	EW011599
WATER SYSTEMS	EW011600	EW011601	EW011602	EW011603	EW011605	EW011631	EW011632	EW011722	EW011722
WATER TANKS	EW011727	EW011729	EW011733	EW011735	EW011736	EW011738	EW011752	EW011754	EW011754
WATER TREATMENT	EW011778	EW011783	EW011793	EW011817	EW011818	EW011821	EW011824	EW011825	EW011825
WATER UTILITIES	EW011826	EW011828	EW011838	EW011840	EW011850	EW011865	EW011872	EW011874	EW011874
WATER WORKS	EW011915	EW011936	EW011940	EW011941	EW011952				
WATER TREATMENT	(1)	EW011757							
WATER USE	(2)	EW011599	EW011601						
WATER UTILITIES	(1)	EW010863							
WATERWORKS	(4)	EW011721	EW011760	EW011930	EW011931				
WATERWORKS	(1)	EW011442							

TEED CONTROL	
/EIRS	(1) EW011870
'ELLS	(1) EW011444
/ETLANDS	(1) EW011754
/ORLD PROBLEMS	(8) EW011585 EW011614 EW011711 EW011748 EW011771 EW011772 EW011809
/RITING	(3) EW011793 EW011945 EW011952
ZINC	(1) EW011718
	(1) EW011823

U.S. Environmental Protection Agency
Region V, Library
230 South Dearborn Street
Chicago, Illinois 60604