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 concerns, 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 the 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" or IRIS supplements 1-22. (JN)
WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS)

A Compilation of Abstracts to Water Quality and Water Resources Materials

Supplement 23 (1985)

October 1985
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Preface

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

Supplements to this publication will be issued periodically.

For further information about these materials contact:

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

(614) 422-6717
I. General Information about Materials in IRIS.

A. What types of materials are included in IRIS?

The Environmental Quality Instructional Resources Center 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 Environmental Quality Instructional Resources Center is the source of the materials.

B. How are materials entered into IRIS?

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

Environmental Quality (EQ) Instructional Resources Center
200 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 supplement, and also by computer.

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

C. How can a user locate materials in IRIS?

1. All materials placed in IRIS (water) collection.

Materials entered into the IRIS (water) collection can be located in two ways: (1) by manual search of the 1983 compilation and supplements that follow and (2) by computer.
The compilation produced in 1983 includes the original IRIS (1979) and Supplements 1-15. It is available for $75.00.

Quarterly updates of the compilation are available by subscription on a yearly basis. Information regarding an annual subscription to IRIS (water) Quarterly Compilations can be obtained by writing to the EQ Instructional Resources Center. A subscription to the quarterly supplements for 1985 is $12.00 (within the U.S.). Price to Canada and Mexico is $14.00. Prices in other countries is $18.00. Separate quarterly supplements are $5.00 each.

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. The IRIS tapes are available for searching at The Ohio State University and will again be available for computer searching at other sites in the future.

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 EQ Instructional Resources Center for assistance.

Many libraries subscribe to RIE. Materials announced in RIE can be searched manually each month by scanning RIE or by checking the index terms in the back of each issue. Materials announced in RIE can be searched by computer also. ERIC computer tapes may be purchased outright, but users can access them through Dialog, BRS, CompuServe and Systems Development Corporation (Orbit). For the address of search services in your state that can search these databases, contact the:

EQ Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212
(614) 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 EQ 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 EQ 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
221/ 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. For prices and 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.
Sample resume of material entered into ERIC (Resources in Education).

Items entered into ERIC (Resources in Education) will have a few additional data fields. See letter references "a" and "b" below.

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

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 WATERSHED LANDS. (ED 197 941)

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

EPIC 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)
3900 Wheeler Avenue
Alexandria, VA 22304
1-800-227-3742

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 EQ 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:

EQ 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 four times a year as information is available.

If you are not on the mailing list write to the EQ Instructional Resources Center for subscription information.

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

V. Requests for Assistance in Using IRIS

If you need help in using the IRIS manuals, phone (614) 422-6717 or write to the EQ Instructional Resources Center. Staff are normally available from about 8:30 a.m. to 4:30 p.m. Eastern time to answer your questions.
VI. How to 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 EQ Instructional Resources Center has developed or obtained some materials in these 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
1787 Agate Street
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, Room 030  
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  
1118 "22nd" Street, NW  
Washington, DC 20037  
Telephone: (202) 429-9292  

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 Chawbers 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 specialty 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 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 EQ Instructional Resources Center. Most items previously available from the NTOTC office are available from the EQ Instructional Resources Center at The Ohio State University. For further information write or call.

B. Some of the 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  
3900 Wheeler Avenue  
Alexandria, VA  22304  
1-800-227-3742

C. The EQ Instructional Resources Center will provide Xerox copies of materials that are not copyrighted for $1.00 per document plus $0.06 per page.

If you cannot obtain materials that are listed or have difficulty obtaining materials, please contact the EQ Instructional Resources Center. We can provide assistance in obtaining materials from some sources. If materials become unavailable, we will remove them from the IRIS data base.
IRIS accession number: EW811975
Publication date: 84
Title: Standard Methods for the Examination of Water and Wastewater - 16th Edition.
Descriptor: Analytical techniques; chemicals; laboratory procedures; operations (water); operations (wastewater); regulations; sampling; standards; testing; water treatment; wastewater treatment; water quality

Abstract: This is the 16th edition of this publication. It updates EW 868 864. The book provides comprehensive and detailed guidelines for the analysis of water and wastewater. This edition presents the latest advances in analytical technology. The methods presented are believed to be the best available and accepted procedures. More than 50 percent of this edition has been revised, updated, or completely rewritten. More than 150 standard analytical procedures are included.

Availability: American Water Works Association, Computer Services Dept., 6666 West Quincy Ave., Denver, CO 80235

IRIS accession number: EW812156
Publication date: 84
Title: Is your proposed wastewater project too costly? Options for small communities.
Descriptor: Appropriate technology; costs; facilities; planning; rural areas; technology; wastewater treatment; wastewater collection

Abstract: This publication considers some of the wastewater treatment alternatives for small communities. The emphasis is on appropriate technology at a reasonable cost.

Availability: Environmental Quality Instructional Resources Center, 1280 Chambers Road, Room 316, Columbus, OH 43212

IRIS accession number: EW812157
Publication date: 85
Title: Innovative and alternative technology projects: 1985 progress report.
Descriptor: Alternative technology; equipment; facilities; innovations; operations (wastewater); sludge; technology; wastewater treatment

Abstract: This is a revised and updated version of the "Regulation and Policy Matrix", published in December 1983. Updates to this publication (insertable sheets) will be produced annually. This matrix was developed to clearly delineate the applicable regulations and policies in effect at particular intervals of time - thus providing construction grant staff and auditors with a comprehensive body of information needed to effectively assess eligible and allowable costs during the life of a grant project.

Availability: Environmental Quality Instructional Resources Center, 1280 Chambers Road, Room 316, Columbus, OH 43212
ABSTRACT: THIS PUBLICATION ATTEMPTS TO ACQUAINT THE LAZEPERSON WITH SOME ALTERNATIVE WASTEWATER SYSTEMS FOR SMALL COMMUNITIES AND RURAL AREAS. TWENTY-ONE DIFFERENT SYSTEMS ARE DESCRIBED AND SKETCHED WITH POSSIBLE LOCATIONS INDICATED ON A HYPOTHETICAL COMMUNITY MAP. IN ADDITION, BRIEF INFORMATION IS PRESENTED ON THE EPA CONSTRUCTION GRANTS PROGRAM FOR ALTERNATIVE SYSTEMS. UPDATES SOME INFORMATION AND ADDRESSES TO THE EARLIER PUBLICATION.

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

ABSTRACT: THIS PUBLICATION CONTAINS THE FIRST UPDATING TO THE HANDBOOK OF PROCEDURES. PAGES FOR THE UPDATES (REPLACEMENT PAGES) ARE INCLUDED. A SUMMARY CHART LISTING EACH REVISED PAGE AND THE REASON FOR THE CHANGES IS ALSO INCLUDED.

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

ABSTRACT: A SERIES OF SIX STUDIES WAS CONDUCTED TO EVALUATE SELECTED MICROBIAL AND CHEMICAL ASPECTS OF COMPOSTING AND SLUDGE SPREADING. AMMONIA (NH3) WAS SHOWN TO BE VIRICIDAL AT PH 7 TO 9. ENZYMATIC ACTIVITY WAS NOT INHIBITED WHEN WELL STABILIZED OR COMPOSTED SLUDGE CONTAINING HIGH CONCENTRATIONS OF METALS AND CHLORINATED HYDROCARBONS WAS ADDED TO SOILS. NITROGEN AND PHOSPHORUS MOVED DOWN THE SOIL PROFILE WHERE PLOTS WERE TREATED WITH 180 MG/HA ONCE OR 20 MG/HA FIVE TIMES. LABORATORY STUDIES OF COMPOSTING SHOWED
THAT CONTROLLED AERATION TO MAINTAIN TEMPERATURES BETWEEN 55 AND 55 DEGREES CELCIUS ALLOWED THERMOPHILIC DECOMPOSITION TO REMAIN CONSTANT, PRODUCED MORE DRYING AND CO2 THAN CONSTANT AERATION COMPOSTING. ASPERGILLUS FUMIGATUS AND THERMOPHILIC ACTINOMYCETES. LOW IN NON-AGRICULTURAL SITES, ARE COMMON AROUND COMPOSTING AND CROP RESIDUES.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1210 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012165
PUBLICATION DATE: 85
TITLE: GUIDANCE FOR THE REREGISTRATION OF PESTICIDE PRODUCTS CONTAINING TRICHLORFON AS THE ACTIVE INGREDIENT.
DESCRIPTORS: *CHEMICALS; *PESTICIDES; *HAZARDOUS MATERIALS; *REGISTRATION; *REGULATIONS; *TOXIC SUBSTANCES; *TRICHLORFON

Abstract: A series of laboratory studies was conducted to determine the effects of soil pH and redox potential on levels of trace metals (Cu, Zn, Cd, Pb, Cr, Ni, and As) in sludge-amended soils and their availability to plants. This research demonstrates the importance of soil redox potential conditions in regulating the chemical mobility and plant availability of Zn and Cd. Two key contaminants in sludge materials that may be applied to soils, where alternatives exist for disposal of contaminated sludge, wet or poorly oxidized soils would be more effective in immobilizing Zn and Cd, and application to these soils would result in less accumulation of these metals in most crops or plants in uncultivated habitats. Unlike results for Cu, Zn, and Cd, oxidation status had little, if any, effect on plant uptake of all metals. Predominant chemical forms in the sludge-amended soils and oxidation effects on levels of Zn and Cd in the chemical forms are discussed in the report. Chemical availability and plant uptake studies under controlled pH and redox potential conditions indicate different and varied organic phases predominate in retaining Cu under reducing conditions. Results with rice were mixed, but increasing oxidation conditions tended to increase Cu in corn.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1210 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012272
PUBLICATION DATE: 85
TITLE: ARTIFICIAL RECHARGE OF GROUNDWATER.
DESCRIPTORS: *PESTICIDES; *HAZARDOUS MATERIALS; *REGISTRATION; *REGULATIONS; *TOXIC SUBSTANCES; *TRICHLORFON

Abstract: This document contains information regarding reregistration of pesticide products containing the subject active ingredient. The document includes how to register under a registration standard, regulatory position and rationale, and summaries of data requirements and data gaps. Also included is a bibliography containing citations of all studies reviewed by EPA in arriving at the positions and conclusions contained in the standard.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161
DEPOSITION EVEN AT LOW FLOW. EXPERIMENTS WITH THE SEDIMENT MODEL INDICATE THAT IT CAN BE USED FOR QUALITATIVE ASSESSMENTS OF THE FATE OF VARIOUS SIZE SEDIMENT SIZE FRACTIONS IF PROPERLY CALIBRATED.

AVAILABILITY: EO INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1211 CHAMBERS ROAD, ROOM 311, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW12295
PUBLICATION DATE: 85
TITLE: CHARACTERIZING AND CONTROLLING URBAN RUNOFF THROUGH STREET AND SEWERAGE CLEANING.
PERSONAL AUTHOR: PITTS, ROBERT
DESCRIPTOR: *MAINTENANCE; *MONITORING; *RESEARCH REPORTS; SURVEYS; *SURFACE RUNOFF; *STREET CLEANING; *URBAN AREAS; *WASHINGTON
DESCRIPTIVE NOTE: 474P. PRICE: $29.44
ABSTRACT: A SERIES OF PROJECTS WERE CONDUCTED FROM 1978 THROUGH 1983 IN BELLEVUE, WASHINGTON, TO INVESTIGATE THE CITY OF BELLEVUE'S URBAN RUNOFF SOURCES, EFFECTS, AND POTENTIAL CONTROLS. THIS REPORT PRESENTS RESULTS OF THE PROJECT CONDUCTED BY THE CITY OF BELLEVUE THAT WAS SPONSORED BY THE U.S. EPA. THE PROJECT LASTED FROM 1988 TO 1993 AND WAS MOSTLY CONCERNED WITH URBAN RUNOFF CHARACTERIZATION AND CONTROL BY STREET AND SEWERAGE CLEANING. THIS PROJECT COMPLETELY MONITORED MORE THAN 300 URBAN RUNOFF EVENTS IN TWO RESIDENTIAL AREAS DURING THE PROJECT PERIOD. FLOW-WEIGHTED COMPOSITE SAMPLES WERE ANALYZED FOR A CORE LIST OF IMPORTANT CONSTITUENTS. COMPLETE FLOW MONITORING RESULTS ALLOWED DETAILED DESCRIPTIONS OF URBAN RUNOFF QUALITY AND QUANTITY, AND ALLOWED ESTIMATES TO BE MADE CONCERNING THE CONTRIBUTIONS OF FLOWS AND POLLUTANTS FROM DIFFERENT SOURCE AREAS. STREET SURFACE AND SEWERAGE PARTICULATES WERE ALSO COLLECTED AND ANALYZED TO DETERMINE THE FRACTION OF STREET AND SEWERAGE CLEANING, MOST OF THE HEAVY METALS WERE DETERMINED TO ORIGINATE FROM STREET DIRT, BUT STREET CLEANING WAS FOUND TO ONLY CONTROL URBAN RUNOFF BY A MAXIMUM OF ABOUT TEN PERCENT. A MODIFIED STREET CLEANER WAS TESTED AND FOUND TO BE MUCH MORE EFFECTIVE IN REMOVING THE SMALLER SIZE STREET DIRT THAT IS WASHED OFF THESE STREETS BY RAINS. CATCHBASIN CLEANING TWICE A YEAR, WAS ESTIMATED TO BE ABOUT 25 PERCENT EFFECTIVE, AT THE MOST.
AVAILABILITY: EO INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1211 CHAMBERS ROAD, ROOM 311, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW12296
PUBLICATION DATE: 85
TITLE: RECOMMENDED PRACTICES FOR ON-LINE MEASUREMENT OF RESIDUAL CHLORINE IN WASTEWATERS.
PERSONAL AUTHOR: KULIN, GERSHON
DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHLORINE ANALYZERS; *DISINFECTION; *MAINTENANCE; *MEASUREMENT; OPERATIONS (WASTEWATER); *RESIDUAL CHLORINE; *SAMPLING; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 288P. PRICE: $18.28
ABSTRACT: THIS DOCUMENT PROVIDES USERS WITH INFORMATION THAT ASSISTS THEM IN SPECIFYING, INSTALLING, CALIBRATING, MAINTAINING AND MONITORING THE SUBSEQUENT PERFORMANCE OF ON-LINE RESIDUAL CHLORINE ANALYZERS IN WASTEWATER TREATMENT PLANTS. AN ON-LINE RESIDUAL CHLORINE ANALYZER MUST HAVE, AMONG OTHER CHARACTERISTICS: CAPABILITY FOR CONTINUOUS OPERATION; A SAMPLING SYSTEM THAT ASSURES A REPRESENTATIVE SAMPLE WITH THE PROPER CONTACT TIME; RANGE OF FROM 0 TO 10 MG/L OF CHLORINE RESIDUAL DEPENDING UPON THE APPLICATION; ACCURACY AND PRECISION WITHIN 3 PERCENT AND 1 PERCENT OF RANGE, RESPECTIVELY; RESPONSE TIME LESS THAN THREE MINUTES; AND ON-SITE READOUT AND OUTPUT CAPABILITY FOR TRANSMISSION TO A CONTROLLER AND/OR RECORDER. CALIBRATIONS SHOULD BE BASED ON AMPEROMETRIC BACK TITRATION AND SHOULD BE PERFORMED AT FREQUENCIES THAT ARE BASED ON DOCUMENTATION OBTAINED DURING THE Laboratory METHODS FOR DEVELOPING THIS INFORMATION AND OTHER PROCEDURES FOR MEASUREMENT ASSURANCE ARE DISCUSSED. RECOMMENDED MAINTENANCE GUIDELINES ARE GIVEN.
AVAILABILITY: EO INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1211 CHAMBERS ROAD, ROOM 311, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW12297
PUBLICATION DATE: 85
TITLE: REMOVAL OF HEAVY METALS USING ALUMINUM SALTS FOR PHOSPHORUS REMOVAL.
PERSONAL AUTHOR: AULENBACK, DONALD B. AND OTHERS
DESCRIPTOR: ALUMINUM; *ALUMINUM SALTS; *HEAVY METALS; METALS; *METAL REMOVAL; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; PHOSPHORUS; *PHOSPHORUS REMOVAL; *PERFORMANCE EVALUATION; WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 288P. PRICE: $18.28
ABSTRACT: THE USE OF ALUMINUM SALTS TO REMOVE PHOSPHORUS IS COMMON PRACTICE. IT HAS BEEN SHOWN THAT ALUMINUM SALTS ARE ALSO CAPABLE OF REMOVING HEAVY METALS, BUT THE DOSAGES WERE RATIONALLY APPLIED FOR PHOSPHORUS REMOVAL. THIS STUDY INVESTIGATED THE REMOVAL OF HEAVY METALS IN TREATMENT PLANTS WHICH UTILIZE ALUMINUM SALTS FOR PHOSPHORUS REMOVAL. BY CHOOSING POTWs WHICH PRACTICED PHOSPHORUS REMOVAL DURING THE SUMMER ONLY AND SAMPLING BEFORE AND AFTER THE DISCONTINUATION OF ALUMINUM SALT ADDITION, THE EFFECT OF ALUMINUM SALT PRECIPITATION ON HEAVY METAL REMOVAL WAS DETERMINED. THE RESULTS SHOW THAT COPPER, CHROMIUM, AND TO SOME EXTENT, LEAD REMOVAL WAS ENHANCED BY ALUMINUM SALT
Addition. For chromium, it appears that sodium aluminate addition improved removal but alum addition had no effect. The results confirm that phosphorus removal is enhanced by the precipitant addition. Of the other metals evaluated, aluminum salt addition appeared to have no significant effect on cadmium and antimony removal, nor did it affect TOC removal.

Availability: EQ Instructional Resources Center, The Ohio State University, 1288 Chambers Road, Room 318, Columbus, OH 43212

IRIS Accession Number: EW012298
Publication Date: 85
Title: Demonstration of Acceptable Systems for Land Disposal of Sewage Sludge
Descriptor: *Demonstrations; Fertilizers; *Land Application; *Land Disposal; Public Health; *Research Reports; Sludge; *Waste Disposal; Wastewater Treatment
Descriptive Note: 544P. Price: $33.64
Abstract: The objective was to demonstrate sludge application systems for farmland that would minimize any adverse effects on the environment and public health and achieve both urban and rural acceptance, and be generally beneficial for producer and receptor of the sludge. A comprehensive health effects study of the families living on sludge-receiving farms was conducted. Health status of residents of 47 sludge-using farms were compared with 46 control farms. Neither incidence of disease, nor evidence of viral infections differed significantly between sludge-using and control farms. Neither was the health of livestock found to be different between the two groups of farms. The sludge was effective in increasing crop yields over yields without sludge or fertilizer.

Availability: EQ Instructional Resources Center, The Ohio State University, 1288 Chambers Road, Room 318, Columbus, OH 43212

IRIS Accession Number: EW012299
Publication Date: 85
Title: Evaluation of Color Infrared Aerial Surveys of Wastewater Soil Absorption Systems
Personal Author: Farrell, Susan O.
Descriptor: *Aerial Surveys; *Color Infrared; *Effluents; Land Application; *Monitoring; *Literature Reviews; *Operations (Wastewater); *Performance Evaluation; Soil; *Soil Absorption Systems; *Surveys; *Technology; *Wastewater Treatment
Descriptive Note: 81P. Price: $5.96
Abstract: Color infrared (CIR) aerial surveys can identify soil absorption systems in which the effluent rises rather than percolates into the ground water. This report reviews the technique’s scientific basis and effectiveness, and discusses the procedures and equipment required for such surveys, and survey costs.

Availability: EQ Instructional Resources Center, The Ohio State University, 1288 Chambers Road, Room 318, Columbus, OH 43212

IRIS Accession Number: EW012300
Publication Date: 85
Title: Determining the Stability of Treated Municipal Sludges
Personal Author: Jeris, John S.; and Others
Descriptor: *Laboratory Studies; *Literature Reviews; *Operations (Wastewater); *Sludge Digestion; *Sludge Stability; *Sludge; *Wastewater Treatment
Descriptive Note: 283P. Price: $13.18
Abstract: The objective of this project was to determine the potential for further biological degradation biologically of municipal sludges which have undergone essentially complete treatment. A literature survey was conducted to determine the most fruitful approaches, followed by laboratory scale studies. The literature survey summarizes available information related to the characteristics and various stability parameters of municipal sludges that have undergone treatment by anaerobic, aerobic or thermal conditioning processes. The laboratory study built upon methods described in the literature for evaluating stability of sludges. Stability of a variety of received sludges was evaluated by measuring response to additional aerobic or anaerobic digestion of land disposal. By cumulative generation of hydrogen sulfide, responses to aerobic digestion of the as-received sludges were generally similar and showed substantial reductions in parameters such as BOD and COD. Oxygen uptake eventually reached a low stable value. The same kind of reduction in parameters occurred with anaerobic digestion. The hydrogen sulfide generation test generally showed well defined points at which H2S generation virtually ceased as sludge storage increased. This test shows promise as a method for comparing sludges for potential for further biological decomposition. Although much has been learned about the response of various parameters indicative of sludge stability to further digestion, a simple measurement indicating sludge stability was not developed.

Availability: EQ Instructional Resources Center, The Ohio State University, 1288 Chambers Road, Room 318, Columbus, OH 43212
IRIS ACCESSION NUMBER: EW012327
PUBLIC SCATION DATE: 90
TITLE: A STRATEGY FOR SMALL ALTERNATIVE WASTEWATER SYSTEMS.
DESCRIPTOR: *MANAGEMENT; *OPERATIONS (WASTEWATER); *PROGRAM DESCRIPTIONS; *RURAL AREAS; *ON-SITE WASTEWATER TREATMENT; *PLANNING; *PERFORMANCE; *SAWS; *WASTEWATER TREATMENT; *WASTEWATER COLLECTION
DESCRIPTIVE NOTE: 44P. PRICE: $2.64
ABSTRACT: THIS PAPER DESCRIBES RECENT FEDERAL, STATE, AND LOCAL SMALL ALTERNATIVE WASTEWATER SYSTEM (SAWS) PROGRAMS AND IDENTIFIES A NUMBER OF PROBLEMS AND ISSUES HINHIBITING IMPLEMENTATION OF ADEQUATE SAWs MANAGEMENT PROGRAMS. SECTIONS INCLUDED FOR (1) INTRODUCTION AND BACKGROUND, (2) STRATEGIES FOR IMPROVING SAWs MANAGEMENT, (3) ISSUES AND OPPORTUNITIES, AND (4) EXISTING SAWs PROGRAMS.
AVAILABILITY: EO INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 318, COLUMBUS, OH 43212
IRIS ACCESSION NUMBER: EW012332
PUBLICATION DATE: 83
TITLE: OPERATING PROCEDURES FOR "MONITORING CONSTRUCTION ACTIVITIES"—AT PROJECTS FUNDED UNDER THE EPA
DESCRIPTOR: *COMPLIANCE; *CONSTRUCTION; *CONSTRUCTION GRANTS PROGRAM; *FACILITIES; *GUIDELINES; *INSPECTION; *MONITORING; *OPERATING PROCEDURES; *REPORTING; USEPA; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 29P. PRICE: $2.74
ABSTRACT: THE PURPOSE OF THIS DOCUMENT IS TO PROVIDE GENERAL OPERATING GUIDANCE TO "AGENCIES" (CORPS. STATES, EPA) FOR PERFORMING CONSTRUCTION INSPECTIONS AND RELATED ACTIVITIES ON PROJECTS FUNDED UNDER THE ENVIRONMENTAL PROTECTION AGENCY’S CONSTRUCTION GRANTS PROGRAM. SECTIONS INCLUDE ON INTERIM INSPECTION, FREQUENCY OF INSPECTIONS, PRECONSTRUCTION CONFERENCE, DOCUMENTATION AND PREPARATION, CONSTRUCTION MANAGEMENT, CONSTRUCTION, FINAL CONSTRUCTION INSPECTION, REPORTING, AND FOLLOW-UP.
AVAILABILITY: EO INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 318, COLUMBUS, OH 43212
IRIS ACCESSION NUMBER: EW012335
PUBLICATION DATE: 82
TITLE: MANAGEMENT OF ON-SITE AND SMALL COMMUNITY WASTEWATER SYSTEMS.
DESCRIPTOR: DESIGN; FACILITIES; FINANCES; *MANAGEMENT; MAINTENANCE; WASTEWATER TREATMENT; *OPERATIONS (WASTEWATER); *PLANNING; *RURAL AREAS; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 239P. PRICE: $7.66
ABSTRACT: THIS DOCUMENT REPRESENTS A RELATIVELY SIMPLE, YET COMPREHENSIVE GUIDE TO SMALL COMMUNITIES AND THEIR ENGINEERS TO DEVELOP AN EFFECTIVE AND, HOPEFULLY, OPTIMAL MANAGEMENT PROGRAM FOR ALTERNATIVE TECHNOLOGIES WHICH ARE APPROPRIATE TO SOLVING THEIR WASTEWATER POLLUTION PROBLEMS. ALTHOUGH IT IS PREPARED TO RESPOND TO THE REQUIREMENTS OF THE U.S. EPA CONSTRUCTION GRANTS PROGRAM, THE TEXT IS APPLICABLE TO ALL EXISTING SMALL COMMUNITIES WISHING TO OPTIMIZE THE PERFORMANCE OF EXISTING OR PLANNED ON-SITE OR SMALL COMMUNITY WASTEWATER TREATMENT AND DISPOSAL SYSTEMS. BY PRESENTING OPTIMUM MANAGEMENT PROGRAM SELECTION IN A SIMPLE STEP-BY-STEP FASHION, THIS GUIDE PERMITS THE USER TO DESIGN THE APPROPRIATE PROGRAM BASED ON TECHNICAL PROCESSES AND PHYSICAL, ECONOMIC AND ADMINISTRATIVE CONSTRAINTS EXTANT IN THE SERVICE AREA.
AVAILABILITY: EO INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 318, COLUMBUS, OH 43212
IRIS ACCESSION NUMBER: EW012336
PUBLICATION DATE: 84
TITLE: CONSTRUCTION GRANTS PROGRAM FOR MUNICIPAL WASTEWATER TREATMENT WORKS HANDBOOK OF PROCEDURES.
DESCRIPTOR: *CONSTRUCTION GRANTS; *FEDERAL ROLE; *GRANTS; *FEDERAL ROLE; *HANDBOOKS; *LEGISLATION; *POLICIES; *PROCEDURES; *REGULATIONS; *STATE ROLE; USEPA
DESCRIPTIVE NOTE: 615P. PRICE: $13.65; ALSO AVAILABLE FROM EO/IRC AT $13.65 EACH WHILE SUPPLY LASTS.
AVAILABILITY: GOVERNMENT PRINTING OFFICE, SUPERINTENDENT OF DOCUMENTS, WASHINGTON, DC
IRIS ACCESSION NUMBER: EW12337
PUBLICATION DATE: 85
TITLE: NPDES SELF-MONITORING SYSTEM-USER GUIDE.
DESCRIPTOR: *COMPLIANCE; *FACILITIES; *MONITORING; *OPERATIONS (WASTEWATER); *NPDES; *PERMIT REQUIREMENT'S; *REPORTING; *USER GUIDES; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 28P. PRICE: $1.50
ABSTRACT: THIS BOOKLET IS DESIGNED TO ASSIST THE NPDES PERMITTEE IN DEVELOPING, OPERATING, AND MAINTAINING A SELF-MONITORING SYSTEM THAT WILL ENABLE THE PERMITTEE TO COMPLY WITH PERMIT REQUIREMENTS. THE AMOUNTS OF TIME SPENT EACH DAY ON MONITORING, RECORDING, AND REPORTING WILL PAY OFF IN MORE EFFICIENT PLANT OPERATION, AND WILL ULTIMATELY RESULT IN ACHIEVING THE GOAL OF IMPROVED WATER QUALITY.
AVAILABILITY: EO INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 311, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW12337
PUBLICATION DATE: 84
TITLE: CHLORINATED ORGANIC COMPOUNDS IN DIGESTED, HEAT-CONDITIONED, AND PURIFAX-TREATED SLUDGES.
PERSONAL AUTHOR: PINCINCE, ALBERT B.; FOURNIER, CHRISTOPHER J.
DESCRIPTOR: *CHLORINATED COMPOUNDS; *OPERATIONS (WASTEWATER); *ORGANIC CHEMICALS; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *SLUDGE STABILIZATION; *WASTE DISPOSAL
DESCRIPTIVE NOTE: PRICE CODE: PB84-212695. COST: $13.88
ABSTRACT: A STUDY WAS CONDUCTED TO INVESTIGATE THE EFFECTS OF SLUDGE STABILIZATION METHODS ON THE PRODUCTION OF PRIORITY POLLUTANTS AND CHLORINATED ORGANICS. THREE STABILIZATION METHODS WERE EXAMINED IN PILOT STUDIES - THE PURIFAX PROCESS, ANAEROBIC DIGESTION, AND HEAT CONDITIONING. RESULTS ARE REPORTED.
AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW12337
PUBLICATION DATE: 85
TITLE: UNDERGROUND PIPING HANDBOOK.
PERSONAL AUTHOR: PEGGS, LAWRENCE A.
DESCRIPTOR: *DESIGN; *CONSTRUCTION; *INSPECTION; *PIPES; *SEWERS; *WASTEWATER COLLECTION; *WATER DISTRIBUTION
DESCRIPTIVE NOTE: 283P. PRICE: $23.68
ABSTRACT: THIS BOOK PROVIDES THE INFORMATION REQUIRED TO DESIGN, PREPARE CONSTRUCTION DRAWINGS, INSTALL, INSPECT, TEST, AND COMMISSION BURIED PIPING. BOTH PRESSURE AND GRAVITY PIPING ARE COVERED INCLUDING WATER, STEAM, GASES, AND SEWERS.
AVAILABILITY: KRIEGER PUBLISHING CO., INC., P.O. BOX 9542, MELBOURNE, FL 32902-9542

IRIS ACCESSION NUMBER: EW12337
PUBLICATION DATE: 85
TITLE: WHEN IN ROME.
PERSONAL AUTHOR: CATHCART, JIM; ALESSANDRA, TONY
DESCRIPTOR: *BEHAVIOR; *COMMUNICATION; *SPEAKING
DESCRIPTIVE NOTE: 22-24P.
ABSTRACT: THIS ARTICLE EXPLAINS HOW TO GEAR A PRESENTATION TO AN AUDIENCE TYPE.
AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N6
ABSTRACT: DESCRIBED ARE WAYS TO MAKE THE CLIMATE OF A CLASS MORE COMFORTABLE AND MORE CONducTIVE TO EFFECTIVE AND ENJOYABLE LEARNING.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N6

IRIS ACCESSION NUMBER: EW#12387
PUBLICATION DATE: 85
TITLE: PLEASANT WEATHER FOR LEARNING.
PERSONAL AUTHOR: BELL, CHIP R.; MARGOLIS, FREDRIC H.
DESCRIPTOR: *CLASSROOM CLIMATE; *INSTRUCTION; *LEARNING; *MOTIVATION; *TEACHER BEHAVIOR; *TRAINING; *WORKSHOPS
DESCRIPTIVE NOTE: 30-31P.
ABSTRACT: THIS ARTICLE DESCRIBES WAYS TO IMPROVE CLASSROOM CLIMATE.
AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N6

IRIS ACCESSION NUMBER: EW#12388
PUBLICATION DATE: 85
TITLE: SURVIVING THE Q & A PERIOD
PERSONAL AUTHOR: LYNCH, PATRICIA L.
DESCRIPTOR: *COMMUNICATION; *INSTRUCTION; *SPEECHES; *TRAINING; *WORKSHOPS
DESCRIPTIVE NOTE: 32-33P.
ABSTRACT: SUGGESTIONS AND GUIDELINES ARE PROVIDED FOR HANDLING QUESTION AND ANSWER PERIODS AFTER A SPEECH OR PRESENTATION.
AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N6

IRIS ACCESSION NUMBER: EW#12389
PUBLICATION DATE: 85
TITLE: STIMULATION.
PERSONAL AUTHOR: WLODKOWSKI, RAYMOND J.
DESCRIPTOR: *INSTRUCTION; *LEARNING; *MOTIVATION; *TEACHER BEHAVIOR; *TRAINING; *WORKSHOPS
DESCRIPTIVE NOTE: 38-43P.
ABSTRACT: THIS ARTICLE PRESENTS SEVERAL SUGGESTIONS FOR MOTIVATING AND STIMULATING STUDENTS TO IMPROVE LEARNING.
AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N6

IRIS ACCESSION NUMBER: EW#12390
PUBLICATION DATE: 85
TITLE: 16 TIPS TO INCREASE YOUR EFFECTIVENESS.
PERSONAL AUTHOR: FETTEROLL, EUGENE C.
DESCRIPTOR: *INSTRUCTION; *LEARNING; *TEACHER BEHAVIOR; *TRAINING; *WORKSHOPS
DESCRIPTIVE NOTE: 68-70P.
ABSTRACT: PROVIDED ARE 16 PRACTICAL TIPS TO INCREASE INSTRUCTOR EFFECTIVENESS.
AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N6

IRIS ACCESSION NUMBER: EW#12466
PUBLICATION DATE: 85
TITLE: WATER MAIN CLEANOUT RESTORES EFFICIENT SERVICE.
DESCRIPTOR: *CLEANING; *CONTRACT SERVICES; *DRINKING WATER; *MAINTENANCE; *OPERATIONS (WATER); *WATER PIPES; *WATER DISTRIBUTION; *WATER SUPPLY
DESCRIPTIVE NOTE: 76-77P.
ABSTRACT: DESCRIBED IS HOW A CONTRACT CLEANING SERVICE RESTORED CAPACITY OF A MAJOR WATER TRANSMISSION MAIN WITH MINIMUM INCONVENIENCE TO CUSTOMERS.
AVAILABILITY: PUBLIC WORKS; V116 NO 38

IRIS ACCESSION NUMBER: EW#12467
PUBLICATION DATE: 85
TITLE: DRILLING A WELL? CONSULT A HYDROGEOLOGIST.
PERSONAL AUTHOR: POPKO, KATHERINE A.; FORD, M. E., JR.
DESCRIPTOR: *CONSTRUCTION; *DRILLING; *DRINKING WATER; *HYDROGEOLOGISTS; *PLANNING; *WATER WELLS; *WELLS; *WATER SUPPLY
DESCRIPTIVE NOTE: 81-81P.
ABSTRACT: DESCRIBED IS A STEP-BY-STEP REVIEW OF WELL CONSTRUCTION DETAILS USING A HYDROGEOLOGIST'S EXPERTISE.
AVAILABILITY: PUBLIC WORKS; V116 NO 38
IRIS ACCESSION NUMBER: EW012468
PUBLICATION DATE: 85
TITLE: WHEN ONE WATER TANK IS BETTER THAN THREE.
PERSONAL AUTHOR: BIGGS, JEFFREY A., P.E., P.P.
DESCRIPTOR: *COSTS; *DESIGN; *DRINKING WATER; *NEW JERSEY; *OPERATIONS (WATER); *PLANNING; *PUMPING STATIONS; *WATER DISTRIBUTION; *WATER STORAGE; *WATER SUPPLY; *WATER TANKS
DESCRIPTIVE NOTE: 84-85P.
ABSTRACT: DEVELOPERS IN A NEW JERSEY TOWNSHIP BUILD ONE CENTRAL FACILITY INSTEAD OF BUILDING A SERIES OF SMALL WATER STORAGE TANKS AND PUMPING STATIONS.
AVAILABILITY: PUBLIC WORKS; V116 N8

IRIS ACCESSION NUMBER: EW012469
PUBLICATION DATE: 85
TITLE: ENFORCING INDUSTRIAL WASTE PRETREATMENT REGULATIONS: A CASE HISTORY.
PERSONAL AUTHOR: GRANDIN, WAYNE T.; MANNIX, DAVID E.
DESCRIPTOR: *CASE STUDIES; *COMPLIANCE; *ENFORCEMENT; *ENFORCEMENT PROCEDURES; *INDUSTRIAL WASTES; *MASSACHUSETTS; *OPERATIONS (WASTEWATER); *PLANNING; *PRETREATMENT; *PROGRAM DESCRIPTIONS; *REGULATIONS; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 86-88P.
ABSTRACT: EFFECTIVE ENFORCEMENT PROCEDURES ARE CRUCIAL TO THE SUCCESS OF AN INDUSTRIAL WASTE PRETREATMENT PROGRAM. DESCRIBED IS A CASE HISTORY OF A METROPOLITAN DISTRICT IN MASSACHUSETTS.
AVAILABILITY: PUBLIC WORKS; V116 N8

IRIS ACCESSION NUMBER: EW012470
PUBLICATION DATE: 85
TITLE: WASTEWATER TREATMENT PLANT TO GENERATE POWER.
PERSONAL AUTHOR: GLADIS, STEPHEN D.
DESCRIPTOR: *COLORADO; *COSTS; *ENERGY; *ELECTRICITY; *HEATING; *INCOME GENERATION; *METHANE; *OPERATIONS (WASTEWATER); *RECYCLING; *RESOURCE RECOVERY; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 124P.
ABSTRACT: METHANE FUELED ENGINE GENERATORS WERE INSTALLED IN A DENVER WASTEWATER TREATMENT PLANT. THE WASTE GAS WILL PRODUCE ELECTRICITY FOR SALE AND HEAT FOR OPERATIONS.
AVAILABILITY: TRAINING AND DEVELOPMENT; V39 N8

IRIS ACCESSION NUMBER: EW012471
PUBLICATION DATE: 85
TITLE: NOTES ARE NOT ENOUGH.
PERSONAL AUTHOR: BAXTER, GERALD D.; BOWERS, JOHN K.
DESCRIPTOR: *COMMUNICATION; *INSTRUCTION; *NONVERBAL COMMUNICATION; *TEACHER BEHAVIOR; *TRAINING
DESCRIPTIVE NOTE: 69-71P.
ABSTRACT: SUGGESTIONS ARE GIVEN FOR CONDUCTING A NEEDS ANALYSIS.
AVAILABILITY: TRAINING AND DEVELOPMENT; V39 N8
TITLE:  PRIVATE CONTRACTS FOR PUBLIC WORK.
PERSONAL AUTHOR:  CARTER, KAREN B.
DESCRIPTOR:  CONTRACT SERVICES;  COSTS;  MANAGEMENT;  MAINTENANCE;  OBJECTIVES;  OPERATIONS (WASTEWATER);  PERSONNEL;  TRENDS;  WASTEWATER TREATMENT
ABSTRACT:  THIS ARTICLE DESCRIBES PRIVATE CONTRACTS FOR PUBLIC WORK, ESPECIALLY WASTEWATER TREATMENT.  INCLUDED IN THE DISCUSSION ARE TRENDS, OBJECTIVES, OBSTACLES, AND VARIATIONS.
AVAILABILITY:  JOURNAL WATER POLLUTION CONTROL FEDERATION;  V57 N7

TITLE:  HOW TO PUT MORE "PUBLIC" INTO PUBLIC WORKS.
PERSONAL AUTHOR:  DECKER, THOMAS E.;  SAIGER, LINDA J.
DESCRIPTOR:  DECISION MAKING;  EDUCATION;  INVOLVEMENT;  MANAGEMENT;  PLANNING;  POLICIES;  PUBLIC PARTICIPATION;  WASTEWATER TREATMENT
ABSTRACT:  THIS ARTICLE DESCRIBES WAYS OF INCREASING PUBLIC INVOLVEMENT IN PUBLIC ACTIVITIES.  EXAMPLES OF SOME ACTIVITIES ARE DESCRIBED.
AVAILABILITY:  JOURNAL WATER POLLUTION CONTROL FEDERATION;  V57 N7

TITLE:  OPERATIONAL DYNAMICS AND CONTROL OF SECONDARY CLARIFIERS.
PERSONAL AUTHOR:  KIMATH, THOMAS M.
DESCRIPTOR:  CLARIFIERS;  MANAGEMENT;  OPERATIONS (WASTEWATER);  PROCESS CONTROLS;  TROUBLESHOOTING;  WASTEWATER TREATMENT
ABSTRACT:  TWO STRATEGIES EFFECTIVE FOR COPING WITH OVERLOADED CLARIFIERS ARE RECYCLE RATE CONTROL AND STEP FEED CONTROL.  THE CONTROL STRATEGIES ARE DISCUSSED.
AVAILABILITY:  JOURNAL WATER POLLUTION CONTROL FEDERATION;  V57 N7

TITLE:  PILOT TESTS OF CHLORINATION FACILITY FOR DISINFECTING SECONDARY EFFLUENT.
PERSONAL AUTHOR:  HUANG, JERRY Y. C.;  AND OTHERS
DESCRIPTOR:  COSTS;  CHLORINATION;  DISINFECTION;  EFFluent (WASTEWATER);  OPERATIONS;  PERFORMANCE EVALUATION;  PILOT STUDIES;  SECONDARY EFFLUENT;  WASTEWATER TREATMENT
ABSTRACT:  IMPROVED MIXING LESSENS CHLORINE RESIDUALS AND SULFUR DIOXIDE REQUIREMENTS FOR DECHLORINATION, BUT THE HIGHER ENERGY COSTS MAY NOT COMPENSATE.
AVAILABILITY:  JOURNAL WATER POLLUTION CONTROL FEDERATION;  V57 N7

TITLE:  FIELD STUDIES OF THE OVERLAND FLOW PROCESS FOR TREATMENT OF RAW AND PRIMARY TREATED MUNICIPAL WASTEWATER.
PERSONAL AUTHOR:  SMITH, ROBERT G.;  SCHROEDER, EDWARD D.
DESCRIPTOR:  FIELD STUDIES;  LAND APPLICATION;  LAND USE;  MODELS;  OPERATIONS (WASTEWATER);  OVERLAND FLOW PROCESS;  PERFORMANCE EVALUATION;  RESEARCH REPORTS;  WASTEWATER TREATMENT
ABSTRACT:  MODEL STUDIES BASED ON SLOPE LENGTH AND APPLICATION RATE LEAD TO PREDICTIONS OF SMALLER LAND REQUIREMENTS THAN CURRENT DESIGN GUIDELINES.
AVAILABILITY:  JOURNAL WATER POLLUTION CONTROL FEDERATION;  V57 N7

TITLE:  RESPONSE OF PHENOL-ACCLIMATED ACTIVATED SLUDGE PROCESS TO QUANTITATIVE SHOCK LOADING.
PERSONAL AUTHOR: ROZICH, A. F.; GAUDY, JR., A. F.
DESCRIPTOR: ACTIVATED SLUDGE PROCESS; MODELS; OPERATIONS (WASTEWATER); PERFORMANCE EVALUATION; PROCESS EVALUATION; SHOCK LOADS; TOXIC SUBSTANCES; WASTEWATER TREATMENT

ABSTRACT: TWO SPECIFIC GROWTH RATES ARE IMPORTANT IN STEADY-STATE TREATMENT OF TOXICS, BUT ARE EVEN MORE CRITICAL FOR SYSTEMS THAT UNDERGO SHOCK LOADINGS. THIS STUDY WAS DESIGNED TO EXAMINE EXPERIMENTALLY THE POSTULATED SENSITIVITY OF A SYSTEM TREATING TOXIC WASTES TO QUANTITATIVE SHOCK LOADS AND TO COMPARE THE RESPONSE OF SUCH A SYSTEM TO THAT OF COMPARABLY OPERATED SYSTEMS TREATING A NONTOXIC WASTE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N7

IRIS ACCESSION NUMBER: EW012488
PUBLICATION DATE: 85
TITLE: CHARACTERIZATION OF THE SIZE DISTRIBUTION OF CONTAMINANTS IN WASTEWATER: TREATMENT AND REUSE IMPLICATIONS.

PERSONAL AUTHOR: LEVINE, AUDREY D.; AND OTHERS
DESCRIPTOR: CONTAMINANTS; DESIGN; FACILITIES; OPERATIONS (WASTEWATER); ORGANIC CONTAMINANTS; PARTICLE SIZE; PERFORMANCE EVALUATION; WASTEWATER TREATMENT

ABSTRACT: INCORPORATING PARTICLE SIZE ANALYSIS INTO THE DESIGN PROCESSES CAN RESULT IN INNOVATIVE TREATMENT FACILITIES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N7

IRIS ACCESSION NUMBER: EW012483
PUBLICATION DATE: 85
TITLE: ON-LINE PARTICLE COUNTING IMPROVES FILTER EFFICIENCY.

PERSONAL AUTHOR: HUTCHINSON, C. WILLIAM
DESCRIPTOR: COMPUTER APPLICATIONS; DRINKING WATER; FILTRATION; INSTRUMENTATION; NEVADA; OPERATIONS (WATER); PARTICLE COUNTING; PROCESS CONTROLS; WATER TREATMENT

ABSTRACT: THE WATER TREATMENT PLANT SUPPLYING LAS VEGAS AND SURROUNDING COMMUNITIES USES AN INNOVATIVE METHOD FOR CONTROLLING THE FILTER PROCESS. SPECIAL INSTRUMENTATION IS TIED INTO THE MAIN DISTRIBUTED PROCESS CONTROL SYSTEM.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N7

IRIS ACCESSION NUMBER: EW012484
PUBLICATION DATE: 85
TITLE: TEXAS BOOMTOWN GETS NEW Gusher.

PERSONAL AUTHOR: BURROWS, ROBERT C.
DESCRIPTOR: CLARIFIERS; DRINKING WATER; EQUIPMENT; OPERATIONS (WATER); WATER TREATMENT

ABSTRACT: AS PART OF A MAJOR EXPANSION, A HIGH-RATE CLARIFIER WAS RETROFITTED TO THE EXISTING WATER TREATMENT
ADVANCED TECHNOLOGY MAKES MOUNTAIN RUN-OFF MORE PALATABLE.

A PACKAGED WATER TREATMENT SYSTEM HANDLES HIGH TURBIDITY LEVELS IN A COLORADO MOUNTAIN COMMUNITY.

WITH PROPER OPERATION AND MAINTENANCE ATTENTION, ANAEROBIC DIGESTION CAN BE APPLIED FAVORABLY TO WASTEWATER TREATMENT.

DENVER'S POTABLE REUSE DEMONSTRATION PLANT WILL HELP DETERMINE THE FEASIBILITY OF DIRECT REUSE. THE PROJECT IS DESCRIBED.

DISCUSSED ARE VARIABLES AFFECTING THE STABILITY OF COLOR FRONTS. SUGGESTIONS ARE PROVIDED FOR EXTENDING THE LIFE OF THE COLOR.
ABSTRACT: PROTECTING THE PUBLIC HEALTH WHILE ENCOURAGING THE USE OF RECLAIMED WATER CHALLENGES CALIFORNIA'S DEPARTMENT OF HEALTH SERVICES. DESCRIBED ARE SOME OF THE POTENTIAL PROBLEMS IN THE USE OF RECLAIMED WATER, REGULATIONS AFFECTING USE, AND TYPES OF USE.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N7

IRIS ACCESSION NUMBER: EW012493
PUBLICATION DATE: 85
TITLE: RECLAIMING DESERT LANDS THROUGH WATER REUSE.
PERSONAL AUTHOR: GOFF, JAMES D.; BUSCH, PAUL L.
DESCRIPTOR: *ARIZONA; *EFFLUENT reuse; *PROJECT DESCRIPTIONS; *RECYCLING; *RESEARCH REPORTS; *WATER REUSE; WATER TREATMENT; *WASTEWATER TREATMENT; *WATER RESOURCES
DESCRIPTIVE NOTE: 84-87P.

ABSTRACT: THE FIRST PHASE OF A PLAN FOR COMPLETE REUSE OF WASTEWATER FROM CHANDLER, ARIZONA, WILL BE OPERATIONAL BY THE END OF 1985. THE PROJECT IS DESCRIBED IN THIS ARTICLE.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N7

IRIS ACCESSION NUMBER: EW012494
PUBLICATION DATE: 85
TITLE: HEALTH EFFECTS OF INDIRECT POTABLE WATER REUSE.
PERSONAL AUTHOR: NELLOR, MARGARET H. AND OTHERS
DESCRIPTOR: *CALIFORNIA; *HEALTH EFFECTS; *PUBLIC HEALTH; *RESEARCH REPORTS; *WATER REUSE; WATER SUPPLY; WATER RESOURCES
DESCRIPTIVE NOTE: 88-96P.

ABSTRACT: A BLEND OF RECLAIMED WATER, IMPORTED RIVER WATER, AND STORMWATER CURRENTLY USED FOR GROUNDWATER REPLENISHMENT WAS FOUND TO HAVE NO MEASURABLE EFFECT ON WATER QUALITY OR ON HUMAN HEALTH.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N7

IRIS ACCESSION NUMBER: EW012495
PUBLICATION DATE: 85
TITLE: BACTERIAL ADHESION AND FOULING OF REVERSE OSMOSIS MEMBRANES.
PERSONAL AUTHOR: RIDGWAY, HARRY F. AND OTHERS
DESCRIPTOR: *BACTERIA; *CALIFORNIA; OPERATIONS (WATER); *RESEARCH REPORTS; *WATER REUSE; WATER TREATMENT; *WASTEWATER TREATMENT; *WATER QUALITY
DESCRIPTIVE NOTE: 97-106P.
ABSTRACT: HYDROPHOBIC INTERACTIONS BETWEEN BACTERIAL CELLS AND CELLULOSE ACETATE SEEM TO BE A FACTOR IN THE FORMATION OF BIOFILM ON RO MEMBRANES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N7

IRIS ACCESSION NUMBER: EW#12496

PUBLICATION DATE: 84

TITLE: THE SELECTION OF CHEMICAL PROTECTION SUITS FOR SPILL EMERGENCIES.

PERSONAL AUTHOR: FINGAS, MERVIN F.; VANCHUK, J. T.

DESCRIPTOR: *CHEMICALS; *CHEMICAL PROTECTION SUITS; *CHEMICAL SPILL RESPONSE; *CHEMICAL SPILLS; *HAZARDOUS MATERIALS; *PROTECTIVE CLOTHING; *RECOMMENDATIONS; *SAFETY; *SPILLS; *SPILL EMERGENCIES; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 54-71P.

ABSTRACT: THIS ARTICLE DETAILS THE TWO IMPORTANT CRITERIA FOR THE SELECTION OF CHEMICAL PROTECTION SUITS: CHEMICAL COMPATIBILITY AND CONFIGURATION. RECOMMENDATIONS FOR CLOTHING MATERIALS ARE GIVEN.

AVAILABILITY: SPILL TECHNOLOGY NEWSLETTER; V9(3-6)

IRIS ACCESSION NUMBER: EW#12497

PUBLICATION DATE: 84

TITLE: IN-SITU BURNING OF UNCONTAINED OIL SLICKS.

PERSONAL AUTHOR: LAPERRIERE, F.

DESCRIPTOR: *CANADA; *BURNING; *OIL SLICKS; *OPEN WATER; *PERFORMANCE EVALUATION; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 72-73P.

ABSTRACT: THIS ARTICLE IS A BRIEF REVIEW OF ENVIRONMENTAL PROTECTION SERVICE WORK IN CANADA RELATED TO IN-SITU COMBUSTION.

AVAILABILITY: SPILL TECHNOLOGY NEWSLETTER; V9(3-6)

IRIS ACCESSION NUMBER: EW#12498

PUBLICATION DATE: 85

TITLE: SPECIAL REPORT ON AIR TOXICS: MEASURING AND MONITORING.

PERSONAL AUTHOR: CHEREMISINOFF, PAUL N.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *AIR POLLUTION CONTROL; *INSTRUMENTS; *MONITORING; *EQUIPMENT; *MONITORING; *EQUIPMENT

DESCRIPTIVE NOTE: 21-29P.

ABSTRACT: THIS ARTICLE DESCRIBES INSTRUMENTS AVAILABLE FOR SAMPLING AND MONITORING EMISSIONS THAT MIGHT AFFECT AIR QUALITY.

AVAILABILITY: POLLUTION ENGINEERING; V17 N6

IRIS ACCESSION NUMBER: EW#12499

PUBLICATION DATE: 85

TITLE: TECHNIQUES FOR AIR POLLUTION ANALYSIS.

PERSONAL AUTHOR: RICH, GERALD

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *AIR POLLUTION CONTROL; *COSTS; *LABORATORY PROCEDURE; *MEASUREMENT; *MONITORING; *SAMPLING; *POLLUTION CONTROL

DESCRIPTIVE NOTE: 43-44P.

ABSTRACT: DESCRIBED AND LISTED ARE MANY OF THE TECHNIQUES AVAILABLE FOR THE MEASUREMENT OF AIR POLLUTANTS. A TABLE IS INCLUDED PROVIDING THE METHODS, USES, SENSITIVITY, ACCURACY, SELECTIVITY, AND COST.

AVAILABILITY: POLLUTION ENGINEERING; V17 N6

IRIS ACCESSION NUMBER: EW#12500

PUBLICATION DATE: 85

TITLE: AIR TOXICS UPDATE.

PERSONAL AUTHOR: HUNT, GARY T.; EGAN, BRUCE A.

DESCRIPTOR: *AIR POLLUTION; *AIR POLLUTION CONTROL; *CHEMICALS; *FEDERAL ROLE; *MODELS; *MONITORING; *REGULATIONS; *STATE ROLE; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 46-52P.

ABSTRACT: THIS ARTICLE PROVIDES AN UPDATE ON THE STATUS OF STATE AND FEDERAL TOXIC AIR POLLUTANT CONTROL PROGRAMS. THE DISCUSSION INCLUDES REGULATIONS, CHEMICAL CATEGORIES, MODELING AND MONITORING.

AVAILABILITY: POLLUTION ENGINEERING; V17 N6
**IRIS ACCESSION NUMBER:** EW#12502  
**PUBLICATION DATE:** 85  
**TITLE:** DISKS, DISKS, DISKS FOR THE LABORATORY PART I.  
**PERSONAL AUTHOR:** DESSY, RAYMOND E.  
**DESCRIPTOR:** *CHEMICAL ANALYSIS;*CHEMISTRY; *COMPUTERS;*COMPUTER APPLICATIONS; *COMPUTER STORAGE DEVICES;*MAGNETIC TAPES; *VIDEODISC RECORDINGS  
**DESCRIPTIVE NOTE:** 692A-7B8AP.  
**ABSTRACT:** EXAMINES THE VOCABULARY AND CHEMISTRY OF MAGNETIC- AND OPTICAL-DISK STORAGE TECHNOLOGIES AS WELL AS THEIR APPLICATIONS TO THE ANALYTICAL LABORATORY. THIS INFORMATION WILL ALLOW CHEMISTS TO SELECT THE PROPER DISK SYSTEMS FOR THEIR LABORATORIES AND TO EVALUATE VENDORS' CLAIMS.  
**AVAILABILITY:** ANALYTICAL CHEMISTRY; V57 N6

**IRIS ACCESSION NUMBER:** EW#12503  
**PUBLICATION DATE:** 85  
**TITLE:** SOFTWARE-DRIVEN INSTRUMENTATION: THE NEW WAVE.  
**PERSONAL AUTHOR:** SALIT, M. L.; PARSONS, M. L.  
**DESCRIPTOR:** *CHEMISTRY;*CHEMICAL ANALYSIS; *COMPUTER APPLICATIONS;*COMPUTER SOFTWARE; *INSTRUMENTATION;*LABORATORY PROCEDURES  
**DESCRIPTIVE NOTE:** 715A-729AP.  
**ABSTRACT:** SOFTWARE-DRIVEN INSTRUMENTATION MAKES MEASUREMENTS THAT DEMAND A COMPUTER AS AN INTEGRAL PART OF EITHER CONTROL, DATA ACQUISITION, OR DATA REDUCTION. THE STRUCTURE OF SUCH INSTRUMENTATION, HARDWARE REQUIREMENTS, AND SOFTWARE REQUIREMENTS ARE DISCUSSED. EXAMPLES OF SOFTWARE-DRIVEN INSTRUMENTATION (SUCH AS A WAVELENGTH- MODULATED CONTINUUM SOURCE MULTIELEMENT ATOMICS ABSORPTION SPECTROMETRY SYSTEM) ARE INCLUDED.  
**AVAILABILITY:** ANALYTICAL CHEMISTRY; V57 N6

**IRIS ACCESSION NUMBER:** EW#12504  
**PUBLICATION DATE:** 85  
**TITLE:** PUMPS HEART OF A TREATMENT PLANT.  
**PERSONAL AUTHOR:** BLACKWELL, LARRY G.; LANGWORTHY, VIRGIL W.  
**DESCRIPTOR:** *EQUIPMENT;*MAINTENANCE; *OPERATIONS (WASTEWATER);*PUMPS; *WASTEWATER TREATMENT  
**DESCRIPTIVE NOTE:** 14-17P.  
**ABSTRACT:** DESCRIBED ARE THE FIVE MAIN TYPES OF PUMPS USED IN WASTEWATER PLANTS. INSPECTION, OVERHAUL, PROTECTION OF PUMPS, AND OTHER ITEMS ARE DISCUSSED.  
**AVAILABILITY:** OPERATIONS FORUM; V2 N6

**IRIS ACCESSION NUMBER:** EW#12505  
**PUBLICATION DATE:** 85  
**TITLE:** PUMP MAINTENANCE DETROIT STYLE.  
**DESCRIPTOR:** *EQUIPMENT;*MAINTENANCE; *OPERATIONS (WASTEWATER);*PUMPS  
**DESCRIPTIVE NOTE:** 18-21P.  
**ABSTRACT:** THIS ARTICLE PROVIDES A STEP-BY-STEP TEAR-DOWN OF A PUMP. PHOTOGRAPHS PROVIDE VIEWS OF EACH STEP.  
**AVAILABILITY:** OPERATIONS FORUM; V2 N6

**IRIS ACCESSION NUMBER:** EW#12506  
**PUBLICATION DATE:** 85  
**TITLE:** SLUDGE COMPOSTING-LEARNING FROM EXPERIENCE.  
**PERSONAL AUTHOR:** YEAMAN, BARBARA; WALKER, JOHN  
**DESCRIPTOR:** *COMMUNITY RELATIONS;*COMPOSTING; DESIGN; *FACILITIES;*OPERATIONS (WASTEWATER); *PUBLIC RELATIONS;*SLUDGE; *SLUDGE COMPOSTING;*WASTEWATER TREATMENT  
**DESCRIPTIVE NOTE:** 22-25P.  
**ABSTRACT:** THIS IS THE THIRD IN A SERIES OF THREE ARTICLES ABOUT THE DESIGN, OPERATION, AND PUBLIC ACCEPTANCE OF WASTEWATER SLUDGE COMPOSTING FACILITIES. THIS ARTICLE CONSIDERS COMMUNITY RELATIONSHIPS AND PROVIDES A SUMMARY OF THE SERIES.  
**AVAILABILITY:** OPERATIONS FORUM; V2 N6

**IRIS ACCESSION NUMBER:** EW#12507  
**PUBLICATION DATE:** 85  
**TITLE:** MICROCOMPUTER SOFTWARE PRACTICE PERFORMANCE ANALYSIS.  
**PERSONAL AUTHOR:** BLACKWELL, LARRY G.; LANGWORTHY, VIRGIL W.  
**DESCRIPTOR:** *COMPUTERS;*COMPUTER APPLICATIONS; *COMPUTER SOFTWARE;*CONTROL SYSTEMS; *MANAGEMENT;*OPERATIONS (WASTEWATER); *REPORTING;*WASTEWATER TREATMENT  
**DESCRIPTIVE NOTE:** 22P.
ABSTRACT: DESCRIBED ARE THE CHARACTERISTICS AND USES OF AN OFF-LINE CONTROL SYSTEM FOR WASTEWATER TREATMENT PLANTS. OPERATORS AND MANAGERS CAN USE THE DATA FOR MODIFICATION IN TREATMENT AS WELL AS FOR PREPARING REPORTS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N6

IRIS ACCESSION NUMBER: EW012508
PUBLICAION DATE: B5

TITLE: COMPUTER SYSTEM HANDLES COMPLEX WATER TREATMENT NEEDS.

DESCRIPTOR: *COMPUTERS; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *CONTROL SYSTEMS; *MANAGEMENT; *MINNESOTA; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 24P.

ABSTRACT: DESCRIBED IS THE COMPUTER OPERATION TO MONITOR AND CONTROL WASTEWATER TREATMENT IN ROCHESTER, MINNESOTA. THE PLANT IS DIVIDED INTO SIX TREATMENT PROCESS AREAS CONTROLLED BY INDIVIDUAL MICROPROCESSORS; THESE COMMUNICATE WITH DUAL HOST COMPUTERS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N6

IRIS ACCESSION NUMBER: EW012509
PUBLICAION DATE: B5

TITLE: COMPUTERIZATION CAN BOOST UTILITY PERFORMANCE.

PERSONAL AUTHOR: SHELL, RICHARD L.; DAMACHI, NICHOLAS A.

DESCRIPTOR: ADMINISTRATION; *COMPUTERS; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *INFORMATION SYSTEMS; CONTROL SYSTEMS; COSTS; MANAGEMENT; ENGINEERING; *OPERATIONS (WATER); REPORTING; *WATER DISTRIBUTION; *WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: 35-38P.

ABSTRACT: MINI- AND MICROCOMPUTERS OFFER TIMELY INFORMATION TO HELP ENHANCE WATER UTILITY MANAGEMENT. DESCRIBED ARE WAYS TO IMPROVE PERFORMANCE USING THESE TOOLS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N6

IRIS ACCESSION NUMBER: EW012510
PUBLICAION DATE: B5

TITLE: PUMPS CRUCIAL TO SUCCESS OF LONG-DISTANCE AQUEDUCTS.

PERSONAL AUTHOR: KARASSIK, IGOR

DESCRIPTOR: *DESIGN; *EQUIPMENT; *OPERATIONS (WATER); *PUMPS; *PUMPING STATIONS; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 35-38P.

ABSTRACT: TAPPING WATER SOURCES IN INCREASINGLY REMOTE AREAS MEANS MORE COMPLEX FACTORS MUST BE CONSIDERED IN SELECTING PUMPING SYSTEMS. DESCRIBED ARE SOME OF THE VARIABLES TO CONSIDER.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N6

IRIS ACCESSION NUMBER: EW012511
PUBLICAION DATE: B5

TITLE: ENUMERATING INJURED COLIFORMS IN DRINKING WATER.

PERSONAL AUTHOR: CHUVALLIER, MARK W.; MCFETERS, GORDON A.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BACTERIA; *BIOLOGICAL INDICATORS; *COLIFORMS; *DRINKING WATER; *HEALTH; *LITERATURE REVIEWS; *RECOMMENDATIONS; *SAMPLING; *STRESSED BACTERIA; WATER QUALITY

DESCRIPTIVE NOTE: 81-87P.

ABSTRACT: IMPLEMENTATION OF A SENSITIVE ENUMERATION TECHNIQUE CAPABLE OF DETECTING INJURED AS WELL AS UNSTRESSED COLIFORMS WOULD LIKELY RESULT IN FEWER OCCURRENCES OF WATERBORNE DISEASE. SOURCES OF INJURY, FACTORS INFLUENCING THE EXTENT OF INJURY, PROBLEMS IN MEASUREMENT, AND HEALTH IMPLICATIONS ARE DISCUSSED. RECOMMENDATIONS FOR FUTURE RESEARCH ARE INCLUDED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N6

IRIS ACCESSION NUMBER: EW012512
PUBLICAION DATE: B5

TITLE: SITING - A PERSISTENT ENVIRONMENTAL ISSUE.

PERSONAL AUTHOR: BROWN, SANFORD M., PH. D.

DESCRIPTOR: *ENVIRONMENTAL ISSUES; *FACILITIES; *INVESTIGATION; *LAND USE; *RECOMMENDATIONS; *REGULATIONS; *SITING

DESCRIPTIVE NOTE: 7-9P.

ABSTRACT: DISCUSSED ARE VARIOUS ASPECTS OF SITING FACILITIES. METHODS TO IMPROVE THE PRACTICE ARE PRESENTED.

AVAILABILITY: JOURNAL OF ENVIRONMENTAL HEALTH; V48 N1
IN GENERAL, SOME CASE STUDIES, AND SOME INNOVATIVE IDEAS FOR INDUSTRIAL PRETREATMENT.

AVAILABILITY: OPERATIONS FORUM; V2 N7

TITLE: COMPUTER MANAGEMENT OF INDUSTRIAL WASTES.

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *DATABASES; *INDUSTRIAL WASTES; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PRETREATMENT; *RECORDKEEPING; *REPORTING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 17-18P.

ABSTRACT: DESCRIBED IS A COMPUTER SOFTWARE PROGRAM FOR DEVELOPING A DATABASE AND TRACKING INDUSTRIAL WASTE PRETREATMENT ACTIVITIES AND PERFORMANCE. THE DATA CAN BE USED FOR MANAGEMENT AND REPORTING.

AVAILABILITY: OPERATIONS FORUM; V2 N7

TITLE: THE PRETREATMENT CHALLENGE.

DESCRIPTOR: *CASE STUDIES; *INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *PRETREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 14-16P.

ABSTRACT: THIS ARTICLE PRESENTS INFORMATION ON PRETREATMENT
AVAILABILITY; GROUND WATER MONITORING REVIEW; V5 N3
IRIS ACCESSION NUMBER: EW012524
PUBLICATION DATE: 85
TITLE: OPERATIONAL RANGES FOR SUCTION LYSIMETERS.
PERSONAL AUTHOR: EVERETT, LORNE G.; MCMILLION, LESLIE G.
DESCRIPTOR: *LYSIMETERS; *GROUNDWATER; *HAZARDOUS WASTES; *OPERATIONS; SUCTION LYSIMETERS; *WATER QUALITY
DESCRIPTIVE NOTE: 51-68P.
ABSTRACT: THIS ARTICLE DESCRIBES THE PHYSICAL OPERATION OF A LYSIMETER, CHARACTERISTICS OF LYSIMETERS, AND SEVERAL QUESTIONS RELATED TO LYSIMETER OPERATION.
AVAILABILITY: GROUND WATER MONITORING REVIEW; V5 N3

IRIS ACCESSION NUMBER: EW012525
PUBLICATION DATE: 85
TITLE: ANALYSIS OF VARIANCES AS DETERMINED FROM REPLICATES VS. SUCCESSIVE SAMPLING.
PERSONAL AUTHOR: MCBEAN, EDWARD A.; ROVERS, FRANK A.
DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANALYSIS OF VARIANCE; *GROUNDWATER; *MONITORING; *STATISTICS; *WATER QUALITY
DESCRIPTIVE NOTE: 61-64P.
ABSTRACT: THE INTENT OF THIS ARTICLE IS TO INDICATE, BY EXAMPLE, THE RELATIVE SOURCES OF VARIANCE AS DETERMINED BY FIELD SITE INVESTIGATION.
AVAILABILITY: GROUND WATER MONITORING REVIEW; V5 N3

IRIS ACCESSION NUMBER: EW012526
PUBLICATION DATE: 85
TITLE: FACTORS REQUIRING RESOLUTION IN INSTALLING VADOSE ZONE MONITORING SYSTEMS.
PERSONAL AUTHOR: ROBBINS, GARY A.; GEMMELL, MICHAEL M.
DESCRIPTOR: *EQUIPMENT; *GROUNDWATER; HAZARDOUS WASTES; *MONITORING; SAMPLING; *VADOSE ZONE; *WATER QUALITY
DESCRIPTIVE NOTE: 75-88P.
ABSTRACT: DESCRIBED ARE VARIABLES RELATED TO THE INSTALLATION OF VADOSE ZONE MONITORING SYSTEMS.

AVAILABILITY; GROUND WATER MONITORING REVIEW; V5 N3
IRIS ACCESSION NUMBER: EW012527
PUBLICATION DATE: 85
TITLE: SOFT WATER, PLUMBING, AND TOXIC METALS.
DESCRIPTOR: *CORROSION; *DRINKING WATER; *METALS; *PLUMBING; *PRECIPITATION; *PIPS; *RESEARCH REPORTS; *TOXIC SUBSTANCES; *WATER SUPPLY; *RURAL AREAS; *SOFT WATER
DESCRIPTIVE NOTE: 2-6P.
ABSTRACT: REPORTED ARE THE RESULTS OF A STUDY CONDUCTED TO ASSESS THE METAL CORROSION PROBLEMS THAT MIGHT BE ASSOCIATED WITH COLLECTION AND USE OF PRECIPITATION FOR DRINKING WATER IN THE TENNESSEE VALLEY AREA.
AVAILABILITY: THE ENVIRONMENTAL PROFESSIONAL; V6 N3 & 4

IRIS ACCESSION NUMBER: EW012528
PUBLICATION DATE: 84
TITLE: MODEL ORDINANCE FOR GROUNDWATER PROTECTION.
DESCRIPTOR: ENFORCEMENT; *GROUNDWATER; *MINNESOTA; *MODELS; *ORDINANCES; *STATE ROLE; *WASTE DISPOSAL; *WATER QUALITY; *WATER POLLUTION CONTROL; *WATER SUPPLY
DESCRIPTIVE NOTE: 331-49P.
ABSTRACT: THIS ARTICLE PRESENTS A MODEL ORDINANCE FOR GROUNDWATER PROTECTION IN MINNESOTA.
AVAILABILITY: THE ENVIRONMENTAL PROFESSIONAL; V6 N3 & 4

IRIS ACCESSION NUMBER: EW012529
PUBLICATION DATE: 85
TITLE: ANTIFREEZE IN SOLAR PANEL CONTAMINATES DRINKING WATER.
DESCRIPTOR: *ANTIFREEZE; *CONTAMINATION; *CROSS CONNECTIONS; *DRINKING WATER; ETHYLENE GLYCOL; HOT WATER; *PUBLIC HEALTH; *SOLAR PANELS; *WATER SUPPLY; *WATER POLLUTION CONTROL
DESCRIPTIVE NOTE: 1, 3, 6P.
ABSTRACT: THIS ARTICLE DISCUSSES PROBLEMS ASSOCIATED WITH THE USE OF ETHYLENE GLYCOL IN SOLAR PANELS FOR HEATING WATER.
AVAILABILITY: BACKFLOW PREVENTION; V2 N6
IRIS ACCESSION NUMBER: EW12538
PUBLICATION DATE: 85
TITLE: RURAL CROSS CONNECTIONS - DANGER!
PERSONAL AUTHOR: JOHNSON, ROB
DESCRIPTOR: *CONTAMINATION; *CROSS CONNECTIONS; *DRINKING WATER; *PUBLIC HEALTH; *RURAL AREAS; *WATER SUPPLY; *WATER POLLUTION CONTROL
DESCRIPTIVE NOTE: 4, 7P.
ABSTRACT: PROBLEMS ASSOCIATED WITH CROSS CONNECTIONS IN RURAL AREAS ARE DISCUSSED.
AVAILABILITY: BACKFLOW PREVENTION; V2 N6

IRIS ACCESSION NUMBER: EW112531
PUBLICATION DATE: 85
TITLE: NEW AND IMPROVED, OR JUST NEW?
PERSONAL AUTHOR: DOSSETT, DENNIS L.; KONCZAK, LEE J.
DESCRIPTOR: *COMPUTER ASSISTED INSTRUCTION; *INSTRUCTION; *RESEARCH REPORTS; *TRAINING
DESCRIPTIVE NOTE: 41-44P.
ABSTRACT: THIS ARTICLE PRESENTS RESEARCH RELATED TO COMPUTER ASSISTED INSTRUCTION FOR TRAINING AND THE RESULTS OF THE RESEARCH.
AVAILABILITY: TRAINING AND DEVELOPMENT; V39 N7

IRIS ACCESSION NUMBER: EW12532
PUBLICATION DATE: 85
TITLE: HAZARDOUS WASTE INCINERATION AT BAYER, AG.
PERSONAL AUTHOR: FUHR, HARTMUT
DESCRIPTOR: *BRINE SOLUTIONS; *FEDERAL REPUBLIC OF GERMANY; GERMANY; *HAZARDOUS WASTES; *INCINERATION; *ORGANIC COMPOUNDS; *PCBS; *WASTE DISPOSAL
DESCRIPTIVE NOTE: 1-5P.
ABSTRACT: THIS PAPER DEALS WITH HAZARDOUS WASTE INCINERATION AT BAYER AG IN GENERAL AND IN MORE DETAIL WITH TWO SELECTED SPECIAL APPLICATIONS: PCB-INCINERATION AND INCINERATION OF BRINE SOLUTIONS CONTAINING ORGANIC COMPOUNDS.
AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2 N1

IRIS ACCESSION NUMBER: EW12533
PUBLICATION DATE: 85
TITLE: OPERATING THE ROTARY KILN INCINERATORS AT KOMMUNEKEMI.
PERSONAL AUTHOR: KRISTENSEN, ARNE
DESCRIPTOR: *DENMARK; *FACILITIES; *INCINERATORS; *OPERATIONS (WASTE DISPOSAL); *ROTARY KILNS; *WASTE DISPOSAL
DESCRIPTIVE NOTE: 7-21P.
ABSTRACT: THIS PAPER DISCUSSES THE OPERATION OF TWO ROTARY KILN INCINERATOR SYSTEMS IN DENMARK. PREPARATION AND CONTROL OF THE WASTE TO ENSURE PROPER KILN OPERATION ARE DESCRIBED. OPERATIONAL EXPERIENCE AND PROBLEMS ARE DISCUSSED AND THE MAIN FACTORS INFLUENCING THE COSTS ARE MENTIONED.
AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2 N1

IRIS ACCESSION NUMBER: EW12534
PUBLICATION DATE: 85
TITLE: LOW PRESSURE REVERSE OSMOSIS MEMBRANES: CONCENTRATION AND TREATMENT OF HAZARDOUS WASTES.
PERSONAL AUTHOR: SILER, JEFFREY L.; BHATTACHARYYA, DISAKAR
DESCRIPTOR: *CHEMICALS; *FILTRATION; *HAZARDOUS WASTES; *INDUSTRIAL WASTES; *MEMBRANES; *OPERATIONS (WASTEWATER); *ORGANIC COMPOUNDS; *REVERSE OSMOSIS; *WASTE DISPOSAL; *WASTE TREATMENT; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 46-66P.
ABSTRACT: THIS PAPER DEALS WITH THE USE OF LOW PRESSURE REVERSE OSMOSIS MEMBRANES FOR THE REMOVAL AND CONCENTRATION OF HAZARDOUS CONSTITUENTS FROM SELECTED INDUSTRIAL WASTES.
AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2 N1

IRIS ACCESSION NUMBER: EW12535
PUBLICATION DATE: 85
TITLE: INTER- AND INTRALABORATORY ASSESSMENT OF SW-846 METHODS MANUAL FOR ANALYSIS OF APPENDIX VIII COMPOUNDS IN GROUNDWATER.
PERSONAL AUTHOR: STANKO, GEORGE H.; FORTINI, PETER C.
DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMICALS; *GROUNDWATER; *LABORATORY PROCEDURES; *USEPA METHODS MANUALS; *PERFORMANCE EVALUATION; *USEPA; *WATER QUALITY
DESCRIPTIVE NOTES: 67-97P.

ABSTRACT: EPA METHODS B24#, B27# (GC/MS), and B33# (HPLC) from SW-846 were evaluated at three prominent laboratories for a select list of 36 compounds that were spiked into a relatively simple groundwater matrix. Results are reported.

AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2

IRIS ACCESSION NUMBER: EW#12536

PUBLICATION DATE: 85

TITLE: DESIGN FOR CONTROL OF VOLATILE CHEMICAL EMISSIONS FROM SURFACE IMPOUNDMENTS.

PERSONAL AUTHOR: THIBO DEAUX, LOUIS J.; AND OTHERS

DESCRIPTOR: *CHEMICALS; *EMISSIONS; *CONTROL METHODS; *IMPOUNDMENTS; *MODELS; *POLLUTION CONTROL; *SURFACE IMPOUNDMENTS; *VOLATILE CHEMICALS; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 99-106P.

ABSTRACT: THE PURPOSE OF THIS PAPER IS TO ILLUSTRATE HOW A PROPER UNDERSTANDING OF THE CHEMODYNAMICS OF INTERPHASE CHEMICAL TRANSPORT COUPLED WITH AN INTERPRETATION OF THE RESULTING MATHEMATICAL MODEL CAN LEAD TO THE SELECTION OF EFFECTIVE VOLATILE CONTROL METHODS FOR SURFACE IMPOUNDMENTS.

AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2

IRIS ACCESSION NUMBER: EW#12537

PUBLICATION DATE: 85

TITLE: DETOXIFICATION PROCESS FOR A FERRIC CHLORIDE ETCHING WASTE.

PERSONAL AUTHOR: OBERKROM, S. L.; MARRERO, T. R.

DESCRIPTOR: *CHEMICALS; *ETCHING SOLUTIONS; *FERRIC CHLORIDE; *DETOXIFICATION; *INDUSTRIAL WASTES; *METALS; *NEUTRALIZATION; *WASTE DISPOSAL; *WASTE TREATMENT

DESCRIPTIVE NOTE: 107-12P.

ABSTRACT: THIS STUDY DEALS WITH THE NEUTRALIZATION AND DETOXIFICATION OF A SPENT FERRIC CHLORIDE ETCHING SOLUTION FROM THE MANUFACTURE OF NICKLE ALLOY HEATING ELEMENTS.

AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2

IRIS ACCESSION NUMBER: EW#12538

PUBLICATION DATE: 85


PERSONAL AUTHOR: BEVERIDGE AND DIAMOND, P. C.

DESCRIPTOR: *FEDERAL REGULATIONS; *HAZARDOUS WASTES; *POLLUTION CONTROL; *RCRA; *REGULATIONS; *SOLID WASTES; *USEPA; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 113-33P.

ABSTRACT: THIS ARTICLE PROVIDES A SECTION-BY-SECTION SUMMARY AND ANALYSIS OF THE AMENDMENTS TO THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA). INCLUDED IS INFORMATION FROM THE JOINT EXPLANATORY STATEMENT OF THE COMMITTEE OF CONFERENCE (THE "CONFERENCE REPORT").

AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2

IRIS ACCESSION NUMBER: EW#12539

PUBLICATION DATE: 85

TITLE: EFFICIENT SEARCH PROCEDURES FOR EXTREME POLLUTANT VALUES.

PERSONAL AUTHOR: CASEY, DON; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *EXTREME POLLUTANT VALUES; *MEASUREMENT; *MONITORING; *SAMPLING; *STATISTICS; *WATER QUALITY

DESCRIPTIVE NOTE: 165-76P.

ABSTRACT: THIS PAPER DEMONSTRATES AN EFFICIENT METHOD TO DETERMINE THE MAXIMUM SAMPLE MEASUREMENT FROM A FINITE SET OF SEQUENTIAL SAMPLES WITHOUT EXPLICITLY TESTING THEM ALL.

AVAILABILITY: ENVIRONMENTAL MONITORING AND ASSESSMENT; V5

IRIS ACCESSION NUMBER: EW#12540

PUBLICATION DATE: 85

TITLE: STATISTICAL DETERMINATION OF THE OPTIMAL SAMPLE SIZE OF SECONDARY EFFLUENT BOD5 AND SS.

PERSONAL AUTHOR: TSAI, ERIC C.

DESCRIPTOR: *ACTIVATED SLUDGE; *ANALYTICAL TECHNIQUES; *BOD; *EFFLUENTS; *MEASUREMENT; *SAMPLING; *STATISTICS; *WATER QUALITY

DESCRIPTIVE NOTE: 177-83P.
ABSTRACT: A statistical technique is presented for determining the optimal sample size required to estimate the true geometric mean with an allowable error at a desired level of confidence.

AVAILABILITY: ENVIRONMENTAL MONITORING AND ASSESSMENT; V5 N2

IRIS ACCESSION NUMBER: EW#12541
PUBLIC LISTING DATE: 85
TITLE: COUNTY RESTORES GROUNDWATER AQUIFER.
PERSONAL AUTHOR: WELTON, RICHARD D.
DESCRIPTOR: *AQUIFER RESTORATION; *CONTAMINATION; *GROUNDWATER; *LANDFILLS; *WATER QUALITY; *WATER SUPPLY; *WATER POLLUTION CONTROL
DESCRIPTIVE NOTE: 58-60P.
ABSTRACT: DESCRIBES TREATMENT MEASURES APPLIED WHEN GROUNDWATER DEGRADATION WAS CAUSED BY A REGIONAL LANDFILL.
AVAILABILITY: PUBLIC WORKS; V116 N7

IRIS ACCESSION NUMBER: EW#12542
PUBLIC LISTING DATE: 85
TITLE: STORMWATER MANAGEMENT EMPHASIZES "SOFT" IMPROVEMENTS.
PERSONAL AUTHOR: ENGOMOEN, MARC
DESCRIPTOR: *COLORADO; *DRAINAGE; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PLANNING; *STORMWATER; *WASTEWATER COLLECTION
DESCRIPTIVE NOTE: 66-67P.
ABSTRACT: DEVELOPMENT OF A STORMWATER MANAGEMENT PROGRAM IN FORT COLLINS, COLORADO, PLACED EMPHASIS ON ESTHETICS AND OPEN SPACE CONSIDERATIONS. THIS ARTICLE DESCRIBES THE PROGRAM AND ITS FEATURES.
AVAILABILITY: PUBLIC WORKS; V116 N7

IRIS ACCESSION NUMBER: EW#2543
PUBLIC LISTING DATE: 85
TITLE: SOLVING ODOR PROBLEMS AT WET WELL PUMPING STATIONS.
DESCRIPTOR: *FLORIDA; *ODOR CONTROL; *ODORS; *OPERATIONS (WASTEWATER); *PUMP STATIONS; *PUMPS; *WASTEWATER COLLECTION
DESCRIPTIVE NOTE: 78P.
ABSTRACT: THE MIAMI DADE WATER AND SEWER AUTHORITY WAS ABLE TO CONTROL ODORS AT MORE THAN 300 PUMP STATIONS. PROCEDURES USED ARE DISCUSSED.
AVAILABILITY: PUBLIC WORKS; V116 N7

IRIS ACCESSION NUMBER: EW#12554
PUBLIC LISTING DATE: 85
TITLE: PREDICTION OF SELECTIVITY FOR ACTIVATED CARBON ADSORPTION OF TRACE ORGANIC (HOMOLOGUE) CONTAMINANTS.
PERSONAL AUTHOR: BELFORT, GEORGES
DESCRIPTOR: *ACTIVATED CARBON; *ADSORPTION; *CHEMICALS; *GASES; *LIQUIDS; *OPERATIONS (WASTEWATER); *ORGANIC COMPOUNDS; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *SOLVOPHOBIC THEORY; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 69P. PRICE: $2.50
ABSTRACT: PREFERENTIAL ADSORPTION OF ORGANIC COMPOUNDS ONTO ACTIVATED CARBON FROM DILUTE AQUEOUS SOLUTIONS WAS STUDIED TO DEVELOP A COMPREHENSIVE THEORETICAL BASIS FOR PREDICTING ADSORPTION OF MULTICOMPONENT SOLUTES. THE INVESTIGATION INCLUDES A COMPARISON OF DIFFERENT CARBONS, THE ADSORPTION BEHAVIOR WITH VARIABLE AQUEOUS SOLUTION PROPERTIES, AND THE DIFFERENCES BETWEEN GAS AND LIQUID PHASE ADSORPTION. THE OVERALL OBJECTIVE WAS TO DEVELOP AND TEST THE COMPREHENSIVE SOLVOPHOBIC THEORY. THE DEVELOPMENT OF PREDICTIVE TECHNIQUES FOR MULTICOMPONENT ADSORPTION BASED ON THE USE OF AN EQUATION OF STATE WERE COMPARED WITH THE IDEAL ADSORBED SOLUTION (IAS) THEORY USING COMPETITIVE EQUILIBRIUM ADSORPTION DATA.
AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW#12555
PUBLIC LISTING DATE: 85
TITLE: INFILTRATION/INFLOW, I/I ANALYSIS AND PROJECT CERTIFICATION.
DESCRIPTOR: *CONSTRUCTION GRANTS FUNDING; *FACILITIES; *INFILTRATION; *INFLOW; *MAINTENANCE; *PLANNING; *PROJECT CERTIFICATION; *SEwers; *SEWER REHABILITATION; *WASTEWATER TREATMENT; *USEPA
DESCRIPTIVE NOTE: 8P. PRICE: $1.88
ABSTRACT: AS PART OF FACILITIES PLANNING FOR MUNICIPAL WASTEWATER TREATMENT FACILITIES, THE GRANTEE MUST DETERMINE WHETHER CONTRIBUTING SEWER SYSTEMS ARE NOT, AND WILL NOT BE, SUBJECT TO EXCESSIVE INFILTRATION OR INFLOW. THIS BROCHURE INFORMS GRANTEES AND FACILITY PLANNERS ON HOW TO DETERMINE WHETHER EXCESSIVE I/I EXISTS, AND HOW TO CERTIFY THAT EXCESSIVE I/I HAS BEEN SUFFICIENTLY REDUCED
MAKING ACTIVITIES- ADMINISTRATIVE, LEGAL, TECHNICAL, AND DECISION AMENDED. PROVIDES FOR CASE-BY-CASE MODIFICATION OF SECONDARY ABSTRACT:


THEIR TREATMENT REQUIREMENTS FOR DISCHARGES INTO MARINE WATERS BY

DESCRIPTIVE NOTE,

*TECHNOLOGY; *WATER QUALITY; *USEPA; *WASTEWATER TREATMENT

TITLE,

IMPLEMENTATION; *DESCRIPTOR:

DESCRIPTORS

PUBLICATION DATE:

IRIS ACCESSION NUMBER:EW012557

AVAILABILITY:

ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 12#B CHAMBERS ROAD, ROOM 31#, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW#12556

PUBLICATION DATE: 85

TITLE: USE OF SEWAGE SLUDGE FOR FOREST-TREE SEEDLING PRODUCTION.

DESCRIPTOR: *AGRICULTURE; *FERTILIZER; *FORESTRY; *LAND APPLICATION; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *RECYCLING; *SEWAGE SLUDGE; *SLUDGE; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 115P. PRICE: $7.98

ABSTRACT: RESEARCH WAS UNDERTAKEN TO DETERMINE THE BENEFICIAL AND HARMFUL EFFECTS OF USING Dewatered, DIGESTED SEWAGE SLUDGE IN: (1) CONTAINERIZED PRODUCTION OF FOREST TREE SEEDLINGS, (2) TREE SEEDLING PRODUCTION IN A CONVENTIONAL OUTDOOR NURSERY, (3) ESTABLISHMENT AND GROWTH OF TRANSPLANTED BARE-ROOT CONIFEROUS SEEDLINGS GROWN IN THE FIELD AS CHRISTMAS TREES, AND (4) FORMATION AND SURVIVAL OF MYCORRHIZAE ON FOREST TREES AND SOYBEANS. TREE SEEDLING PERFORMANCE WAS EVALUATED RELATIVE TO THE ABUNDANCES OF REQUIRED NUTRIENTS IN SLUDGE AS COMPARED WITH CONVENTIONAL FERTILIZATION PRACTICES. TOXICITIES OF VARIOUS ELEMENTS WERE DETERMINED, AS WERE SLUDGE-INDUCED NUTRIENT DEFICIENCIES ASSOCIATED WITH VARIOUS SLUDGE TYPES AND APPLICATION RATES. OPTIMUM LOADING RATES WERE DETERMINED TO MAXIMIZE SEEDLING SURVIVAL AND GROWTH IN THE FIELD AND TO MINIMIZE THE RISKS ASSOCIATED WITH AMMONIA AND HEAVY-METAL TOXICITIES.

AVAILABILITY:

ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 12#B CHAMBERS ROAD, ROOM 31#, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW#12557

PUBLICATION DATE: 84

TITLE: REPORT ON THE IMPLEMENTATION OF SECTION 301(H).

DESCRIPTOR: *ADMINISTRATION; *CLEAN WATER ACT; *COMPLIANCE; *IMPLEMENTATION; *LAWS; *PROGRAM REVIEWS; *SECTION 301(H); *TECHNOLOGY; *WATER QUALITY; *USEPA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 97P. PRICE: $6.82

ABSTRACT: SECTION 301(H) OF THE CLEAN WATER ACT, AS AMENDED, PROVIDES FOR CASE-BY-CASE MODIFICATION OF SECONDARY TREATMENT REQUIREMENTS FOR DISCHARGES INTO MARINE WATERS BY PUBLICLY OWNED TREATMENT WORKS (POTWS) WHICH DEMONSTRATE THEIR COMPLIANCE WITH THE 301(H) CRITERIA. THIS REPORT ON THE IMPLEMENTATION OF SECTION 301(H) SUMMARIZES PROGRAM ACTIVITIES—ADMINISTRATIVE, LEGAL, TECHNICAL, AND DECISION MAKING—CONDUCTED BY EPA TO FULFILL THE INTENT OF SECTION 301(H), FROM 1978 TO MlD 1984.

AVAILABILITY:

ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 12#B CHAMBERS ROAD, ROOM 31#, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW#12558

PUBLICATION DATE: 85

TITLE: TECHNOLOGY ASSESSMENT OF INTERMITTENT SAND FILTERS.

DESCRIPTOR: *APPROPRIATE TECHNOLOGY; *COSTS; *FILTERATION; *FILTERS; *INTERMITTENT SAND FILTERS; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RECOMMENDATIONS; *SAND FILTERS; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 37P. PRICE: $3.22

ABSTRACT: INTERMITTENT SAND FILTRATION OF WASTEWATER IS NOT A NEW TECHNOLOGY. RECENTLY, AS THE NEED FOR LOW COST FACILITIES IN RURAL AREAS HAS GROWN, INTERMITTENT FILTERS HAVE RECEIVED INCREASED USE AGAIN. THIS PUBLICATION CONTAINS INFORMATION ON THE FOLLOWING TOPICS: (1) TECHNOLOGY DESCRIPTION; (2) DEVELOPMENT STATUS; (3) TECHNOLOGY EVALUATION; (4) COMPARISON WITH EQUIVALENT TECHNOLOGY; (5) ASSESSMENT OF NATIONAL IMPACT; AND (6) RECOMMENDATIONS. SELECTED REFERENCES ARE INCLUDED.

AVAILABILITY:

ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 12#B CHAMBERS ROAD, ROOM 31#, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW#12559

PUBLICATION DATE: 84

TITLE: A GUIDE TO INFORMATION SOURCES FOR WATER AND RELATED NATURAL RESOURCES.

PERSONAL AUTHOR: SUZANNE M. CLARK

DESCRIPTOR: BIBLIOGRAPHIES; *DATABASES; DIRECTORIES; *ENVIRONMENT；GUIDES; *INDEXES; *INFORMATION RESOURCES; *NATURAL RESOURCES; *SCIENCEs; *SOCIAL SCIENCES; *VERMONT; WATER; *WATER RESOURCES

DESCRIPTIVE NOTE: 54P. PRICE: $7.88

ABSTRACT: THIS GUIDE WAS DESIGNED TO PRESENT A BROAD SPECTRUM OF INFORMATION SOURCES AVAILABLE FOR WATER AND RELATED NATURAL RESOURCES. PRINTED, COMPUTERIZED, NATIONAL, AND VERMONT STATE INFORMATION RESOURCES HAVE BEEN INCLUDED. ONLY THE PRIMARY INFORMATION SOURCES HAVE BEEN IDENTIFIED. NO ATTEMPT HAS BEEN MADE TO COMPILE A COMPREHENSIVE LIST OF ALL POSSIBLE SOURCES THAT MIGHT BE OF VALUE, BUT MANY REFERRAL SOURCES HAVE BEEN IDENTIFIED TO GUIDE THE RESEARCHER TO SOURCES NOT LISTED. THE GUIDE WAS PREPARED FOR WATER RESOURCESRELATED PROFESSIONALS IN THE STATE OF VERMONT, AND AS SUCH STRESSES RESOURCES AND SERVICES AVAILABLE THROUGH THE BAILEY/HOW LIBRARY, UNIVERSITY OF VERMONT AND THE VERMONT DEPARTMENT OF LIBRARIES.
ABSTRACT: FOR THE REVIEW OF LOCAL PROGRAMS AS WELL AS GENERAL CRITERIA AND PROGRAM DESCRIPTIVE NOTE: "PROGRAM OPERATIONS DESCRIPTOR: PROGRAM SUBMISSION; *PROGRAM SUBMISSION; *NATIONAL PRETREATMENT PROGRAM; *OPERATIONS (WASTEWATER); PROGRAM DEVELOPMENT; *PRETREATMENT PROGRAMS; *PRETREATMENT; *REGULATIONS; USEPA; WASTEWATER TREATMENT"

DESCRIPTOR: DEVELOPMENT; *IMPLEMENTATION; *MANUALS; *WASTEWATER TREATMENT

DESCRIPTION NOTE: 292P. PRICE: $18.52

ABSTRACT: THIS MANUAL PROVIDES GUIDANCE TO THE MUNICIPAL PERSONNEL RESPONSIBLE FOR THE DEVELOPMENT AND IMPLEMENTATION OF A LOCAL PRETREATMENT PROGRAM. IT ALSO PROVIDES RELEVANT INFORMATION TO THE OFFICIAL WHO WILL SUPERVISE THE LOCAL PROGRAM. THE MANUAL HAS TWO PURPOSES: (1) TO HELP PERSONNEL IN DEVELOPING PRETREATMENT PROGRAMS AND IMPLEMENTING PROGRAMS ON AN ONGOING BASIS, AND (2) TO ASSIST PERSONNEL IN PREPARING PROGRAMS FOR SUBMISSION TO OBTAIN APPROVAL. THE INTENT OF THE MANUAL IS TO PROVIDE SUFFICIENT GUIDANCE TO DEVELOP A LOCAL PRETREATMENT PROGRAM. HOWEVER, SOME QUESTIONS MAY REQUIRE ADDITIONAL ASSISTANCE BEYOND THIS MANUAL'S SCOPE. SPECIAL QUESTIONS OR PROBLEMS THAT ARE NOT COMPLETELY ADDRESSED HERE SHOULD BE REFERRED TO A STATE PRETREATMENT OFFICE OR THE APPROPRIATE EPA REGIONAL OFFICE.

IN ADDITION, OTHER DOCUMENTS THAT MAY BE USEFUL WHEN DEVELOPING A PRETREATMENT PROGRAM ARE LISTED.

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

IRIS ACCESSION NUMBER: EW012560

PUBLICATION DATE: 3

TITLE: GUIDANCE MANUAL FOR POTW PRETREATMENT PROGRAM DEVELOPMENT.

DESCRIPTOR: DEVELOPMENT; *IMPLEMENTATION; *MANUALS; *PROGRAM SUBMISSION; *NATIONAL PRETREATMENT PROGRAM; *OPERATIONS (WASTEWATER); PROGRAM DEVELOPMENT; *PRETREATMENT PROGRAMS; *PRETREATMENT; *REGULATIONS; USEPA; WASTEWATER TREATMENT

DESCRIPTOR NOTE: 292P. PRICE: $18.52

ABSTRACT: THIS MANUAL PROVIDES GUIDANCE TO THE MUNICIPAL PERSONNEL RESPONSIBLE FOR THE DEVELOPMENT AND IMPLEMENTATION OF A LOCAL PRETREATMENT PROGRAM. IT ALSO PROVIDES RELEVANT INFORMATION TO THE OFFICIAL WHO WILL SUPERVISE THE LOCAL PROGRAM. THE MANUAL HAS TWO PURPOSES: (1) TO HELP PERSONNEL IN DEVELOPING PRETREATMENT PROGRAMS AND IMPLEMENTING PROGRAMS ON AN ONGOING BASIS, AND (2) TO ASSIST PERSONNEL IN PREPARING PROGRAMS FOR SUBMISSION TO OBTAIN APPROVAL. THE INTENT OF THE MANUAL IS TO PROVIDE SUFFICIENT GUIDANCE TO DEVELOP A LOCAL PRETREATMENT PROGRAM. HOWEVER, SOME QUESTIONS MAY REQUIRE ADDITIONAL ASSISTANCE BEYOND THIS MANUAL'S SCOPE. SPECIAL QUESTIONS OR PROBLEMS THAT ARE NOT COMPLETELY ADDRESSED HERE SHOULD BE REFERRED TO A STATE PRETREATMENT OFFICE OR THE APPROPRIATE EPA REGIONAL OFFICE.

IN ADDITION, OTHER DOCUMENTS THAT MAY BE USEFUL WHEN DEVELOPING A PRETREATMENT PROGRAM ARE LISTED.

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

IRIS ACCESSION NUMBER: EW012561

PUBLICATION DATE: 3

TITLE: PROCEDURES MANUAL FOR REVIEWING A POTW PRETREATMENT PROGRAM SUBMISSION.

DESCRIPTOR: CHECKLISTS; ENFORCEMENT; *GUIDELINES; *MANUALS; *OPERATIONS (WASTEWATER); PERMITS; PROGRAM APPROVAL; *PROGRAM SUBMISSION; *PRETREATMENT; *REGULATIONS; USEPA; WASTEWATER TREATMENT

DESCRIPTOR NOTE: 136P. PRICE: $7.16

ABSTRACT: THIS DOCUMENT HAS BEEN PREPARED TO ASSIST STATES AND EPA REGIONAL OFFICES IN REVIEWING LOCAL PRETREATMENT PROGRAM SUBMISSIONS. IT IS INTENDED TO PROVIDE A FRAMEWORK FOR THE REVIEW OF LOCAL PROGRAMS AS WELL AS GENERAL CRITERIA FOR EVALUATING THESE PROGRAMS. THE DOCUMENT CAN ALSO SERVE AS A STARTING POINT FOR STATES TO ASSESS INDIVIDUALIZED CHECKLISTS FOR REVIEW OF LOCAL PROGRAMS UNDER THEIR JURISDICTION. IF SUCH CHECKLISTS HAVE NOT YET BEEN DEVELOPED, A SUCCESSFUL PRETREATMENT PROGRAM CANNOT BE DEVELOPED WITHOUT ADEQUATE LEGAL AUTHORITY, TECHNICAL INFORMATION, IMPLEMENTATION PROCEDURES, AND RESOURCES. EACH OF THESE ELEMENTS IS ESSENTIAL IN A SUCCESSFUL PROGRAM, AND THE PRETREATMENT PROGRAM SUBMISSION MUST DEMONSTRATE THAT ALL ARE PRESENT IF IT IS TO BE APPROVED. A SEPARATE CHAPTER IN THIS MANUAL IS DEVOTED TO EACH ELEMENT. EACH CHAPTER CONTAINS: (1) A SUMMARY OF PERTINENT REGULATORY REQUIREMENTS; (2) A DISCUSSION OF KEY ITEMS THAT SHOULD NOT BE INCLUDED IN THE SUBMISSION; (3) GENERAL GUIDELINES AND CRITERIA FOR ASSESSING THE ADEQUACY OF THE APPROACHES PROPOSED BY THE POTW; AND (4) A CHECKLIST TO HELP THE REVIEWER IN EVALUATING COMPLETENESS AND ADEQUACY. THE FOCUS OF THE REVIEW IS TO DETERMINE THAT THE PROGRAM NOT ONLY MEETS REGULATORY REQUIREMENTS, BUT ALSO THAT IT WILL FUNCTION WELL ONCE IT IS IMPLEMENTED. A MAJORITY OF THE REGULATORY REQUIREMENTS ASSOCIATED WITH A LOCAL PRETREATMENT PROGRAM ARE ADDRESSED IN THE LEGAL AUTHORITY CHAPTER. OTHER CHAPTERS IDENTIFY ACTIVITIES, STAFF ROLES, AND PROGRAM ITEMS THAT ARE MOST LIKELY TO BE INCLUDED IN A WELL-PLANNED PROGRAM.

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

IRIS ACCESSION NUMBER: EW012562

PUBLICATION DATE: 85

TITLE: DESIGN AND MANAGEMENT OF SUBSURFACE SOIL ABSORPTION SYSTEMS.

DESCRIPTOR: *CONSTRUCTION; *DESIGN; *HYDRAULICS; *MANAGEMENT; *OPERATIONS (WASTEWATER); *RESEARCH REPORTS; *SOILS; *SOIL ABSORPTION SYSTEMS; *SOIL INfiltrATION; WASTEWATER TREATMENT

DESCRIPTOR NOTE: 16P. PRICE: $18.68

ABSTRACT: THIS REPORT PRESENTS THE RESULTS OF CONTINUING RESEARCH REGARDING ONSITE WASTEWATER DISPOSAL BY THE SMALL SCALE WASTE MANAGEMENT PROJECT (SSWMP) AT THE UNIVERSITY OF WISCONSIN-MADISON. REPORTING HERE ARE THE RESULTS OF THE SEPARATE INVESTIGATIONS: (1) A STUDY OF THE EFFECTS OF SOIL ABSORPTION SYSTEM CONSTRUCTION PRACTICES UPON SOIL HYDRAULIC PROPERTIES; AND (2) A FIELD EXAMINATION OF THE EFFECTS OF VARIOUS OPERATIONAL STRATEGIES FOR SOIL ABSORPTION SYSTEMS UPON SOIL INFILTRATION PROPERTIES.

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

IRIS ACCESSION NUMBER: EW012563

PUBLICATION DATE: 85

TITLE: A DISC SYSTEM WITH DRAW (DIRECT READ AFTER WRITE).

PERSONAL AUTHOR: SPANGLER, LARRY S.
DESCRIPTOR: *AUDIOVISUAL AIDS; *DRAW; *INSTRUCTIONAL MATERIALS; *CURRICULUM DEVELOPMENT; *TRAINING; *VIDEODISCS

DESCRIPTIVE NOTE: 33-35P.

ABSTRACT: DESCRIBED IS THE DRAW (DIRECT READ AFTER WRITE) TECHNOLOGY WHICH MAKES IT POSSIBLE TO RECORD A LASERDISC ECONOMICALLY, AND HAS EXTENDED THE USE OF THE VIDEODISC BY MAKING IT A VIDEO PRODUCTION TOOL AS WELL AS A MEDIUM FOR TRAINING, EDUCATION, MARKETING, OR ENTERTAINMENT.

AVAILABILITY: EITV; V17 NO IRIS ACCESSION NUMBER. S6012568

PUBLICATION DATE. 85

TITLE: DOCUMENTING WATER ENVIRONMENTS.

PERSONAL AUTHOR: ADAMS, TOM

DESCRIPTOR: *DOCUMENTATION; *ENVIRONMENT; *ENVIRONMENTAL IMPACT; *ENVIRONMENTAL CHANGE; *PHOTOGRAPHY; *WATER RESOURCES

DESCRIPTIVE NOTE: 24-29P.

ABSTRACT: PHOTOGRAPHY IS A GOOD WAY TO DOCUMENT CHANGES IN THE ENVIRONMENT. THIS ARTICLE PRESENTS ONE APPROACH.

AVAILABILITY: TECHNICAL PHOTOGRAPHY; V17 N9

IRIS ACCESSION NUMBER: EW12569

PUBLICATION DATE: 85

TITLE: WHEN IS REUSE FEASIBLE?

PERSONAL AUTHOR: SCHORR, PAUL L.

DESCRIPTOR: *DECISION MAKING; *ECONOMICS; *MANAGEMENT; *INDUSTRIAL WASTE; *RECLAIMED WATER; *RECYCLING; *RISK ASSESSMENT; *WATER REUSE; *WATER RESOURCES; *WATER SUPPLY; *WATER QUALITY; *WATER TREATMENT; *WASTEWATER TREATMENT; *WATER SUPPLY; *WATER REUSE; *WATER TREATMENT; *WASTEWATER TREATMENT; *WATER SUPPLY; *WATER REUSE; *WATER QUALITY

DESCRIPTIVE NOTE: 12-12P.

ABSTRACT: THIS ARTICLE PRESENTS A SIMPLE TECHNIQUE FOR SCREENING AREAS FOR WATER REUSE OPPORTUNITIES. A BRIEF ECONOMIC ANALYSIS OF A REUSE PROJECT, AND A LIST OF INSTITUTIONAL AND MANAGEMENT OPPORTUNITIES.

AVAILABILITY: WATERWORLD NEWS; VI N5

IRIS ACCESSION NUMBER: EW12571

PUBLICATION DATE: 85

TITLE: RECLAIMING ULTRAPURE RINSE WATERS.

PERSONAL AUTHOR: CARTWRIGHT, PETER S.

DESCRIPTOR: ACTIVATED CARBON; COSTS; DEIONIZATION; *ECONOMICS; FILTRATION; *INDUSTRIAL WASTES; *INDUSTRIAL REUSE; *OPERATIONS (WASTEWATER); *RECLAIMED WATER; REGULATIONS; *WASTEWATER TREATMENT; WATER SUPPLY; *WATER QUALITY; *WATER REUSE; *ULTRAPURE WATER

DESCRIPTIVE NOTE: 14-15P.

ABSTRACT: DESCRIBED IS A SYSTEM FOR PROCESSING WASTEWATER FROM AN ELECTRONICS COMPANY. AS THE COST OF RAW WATER AND WASTE DISCHARGE INCREASES, THE CONCEPT OF RECLAMATION AND MINIMAL DISCHARGE IS LIKELY TO BECOME WIDESPREAD IN THIS AND OTHER INDUSTRIES.

AVAILABILITY: WATERWORLD NEWS; VI N5

IRIS ACCESSION NUMBER: EW12572

PUBLICATION DATE: 85

TITLE: RECYCLE APPROACHES FOR PAPER AND PULP MILLS.

PERSONAL AUTHOR: WYVILL, J. CRAIG; AND OTHERS

DESCRIPTOR: *COSTS; INDUSTRY; *INDUSTRIAL WASTES; *PROCESSING (WASTEWATER); *RISK ASSESSMENT; *WATER REUSE; *WATER TREATMENT; *WASTEWATER TREATMENT; *WATER SUPPLY; *WATER REUSE; *WATER QUALITY

DESCRIPTIVE NOTE: 15-17P.

ABSTRACT: AN EFFECTIVE SYSTEM FOR THE TREATMENT AND REUSE OF INDUSTRIAL LAUNDRY WASTEWATER WHICH INCORPORATES LIME COAGULATION AND SETTLING, HIGH-RATE UTERAFILTRATION, AND FIXED-BED CARBON ADSORPTION, IS DESCRIBED IN THIS ARTICLE. THE OPERATING COST OF THE SYSTEM AND LIMITATIONS OF PREDICTIVE MODELING OF THE VARIABLE LAUNDRY WASTE MIXTURE ARE ALSO DISCUSSED.

AVAILABILITY: WATERWORLD NEWS; VI N5

IRIS ACCESSION NUMBER: EW12573

PUBLICATION DATE: 85

TITLE: COMBINING ULTRAFILTRATION/CARBON ADSORPTION TO TREAT INDUSTRIAL LAUNDRY WASTEWATER.

PERSONAL AUTHOR: VAN GILS, GERALD J.; AND OTHERS

DESCRIPTOR: *CARBON ADSORPTION; *COSTS; *LAUNDRIES; *INDUSTRIAL WASTES; *INDUSTRIAL REUSE; *OPERATIONS (WASTEWATER); *RECYCLING; *RECLAIMED WATER; *ULTRAFILTRATION; *WASTEWATER TREATMENT; WATER SUPPLY; *WATER REUSE; *WATER QUALITY

DESCRIPTIVE NOTE: 15-17P.

ABSTRACT: AN EFFECTIVE SYSTEM FOR THE TREATMENT AND REUSE OF INDUSTRIAL LAUNDRY WASTEWATER WHICH INCORPORATES LIME COAGULATION AND SETTLING, HIGH-RATE UTERAFILTRATION, AND FIXED-BED CARBON ADSORPTION, IS DESCRIBED IN THIS ARTICLE. THE OPERATING COST OF THE SYSTEM AND LIMITATIONS OF PREDICTIVE MODELING OF THE VARIABLE LAUNDRY WASTE MIXTURE ARE ALSO DISCUSSED.

AVAILABILITY: WATERWORLD NEWS; VI N5

IRIS ACCESSION NUMBER: EW12574

PUBLICATION DATE: 85

TITLE: RECLAIMING ULTRAPURE RINSE WATERS.

PERSONAL AUTHOR: CARTWRIGHT, PETER S.

DESCRIPTOR: ACTIVATED CARBON; COSTS; DEIONIZATION; *ECONOMICS; FILTRATION; *INDUSTRIAL WASTES; *INDUSTRIAL REUSE; *OPERATIONS (WASTEWATER); *RECLAIMED WATER; REGULATIONS; *WASTEWATER TREATMENT; WATER SUPPLY; *WATER QUALITY; *WATER REUSE; *ULTRAPURE WATER

DESCRIPTIVE NOTE: 14-15P.

ABSTRACT: DESCRIBED IS A SYSTEM FOR PROCESSING WASTEWATER FROM AN ELECTRONICS COMPANY. AS THE COST OF RAW WATER AND WASTE DISCHARGE INCREASES, THE CONCEPT OF RECLAMATION AND MINIMAL DISCHARGE IS LIKELY TO BECOME WIDESPREAD IN THIS AND OTHER INDUSTRIES.

AVAILABILITY: WATERWORLD NEWS; VI N5

IRIS ACCESSION NUMBER: EW12571

PUBLICATION DATE: 85

TITLE: COMBINING ULTRAFILTRATION/CARBON ADSORPTION TO TREAT INDUSTRIAL LAUNDRY WASTEWATER.

PERSONAL AUTHOR: VAN GILS, GERALD J.; AND OTHERS

DESCRIPTOR: *CARBON ADSORPTION; *COSTS; *LAUNDRIES; *INDUSTRIAL WASTES; *INDUSTRIAL REUSE; *OPERATIONS (WASTEWATER); *RECYCLING; *RECLAIMED WATER; *ULTRAFILTRATION; *WASTEWATER TREATMENT; WATER SUPPLY; *WATER REUSE; *WATER QUALITY

DESCRIPTIVE NOTE: 15-17P.

ABSTRACT: AN EFFECTIVE SYSTEM FOR THE TREATMENT AND REUSE OF INDUSTRIAL LAUNDRY WASTEWATER WHICH INCORPORATES LIME COAGULATION AND SETTLING, HIGH-RATE UTERAFILTRATION, AND FIXED-BED CARBON ADSORPTION, IS DESCRIBED IN THIS ARTICLE. THE OPERATING COST OF THE SYSTEM AND LIMITATIONS OF PREDICTIVE MODELING OF THE VARIABLE LAUNDRY WASTE MIXTURE ARE ALSO DISCUSSED.

AVAILABILITY: WATERWORLD NEWS; VI N5

IRIS ACCESSION NUMBER: EW12572

PUBLICATION DATE: 85

TITLE: RECYCLE APPROACHES FOR PAPER AND PULP MILLS.

PERSONAL AUTHOR: WYVILL, J. CRAIG; AND OTHERS

DESCRIPTOR: *COSTS; INDUSTRY; *INDUSTRIAL WASTES;
ABSTRACT: THERE ARE SOME RECYCLE SCHEMES THAT DO HAVE BROAD TECHNICAL POTENTIAL AND GENERAL ECONOMIC ATTRACTIVENESS, YET FOR ONE REASON OR ANOTHER ARE NOT WIDELY EMPLOYED BY THE INDUSTRY. DESCRIBED ARE FOUR SUCH RECYCLE SCHEMES THAT COULD HAVE A SUBSTANTIAL IMPACT ON FUTURE WATER DEMAND IF THEY WERE BROADLY USED.

IRIS ACCESSION NUMBER: EW12573

PUBLICATION DATE: 85

TITLE: REUSE POTENTIAL OF COAL SLURRY WASTEWATER.

PERSONAL AUTHOR: MOORE, JAMES W.

DESCRIPTOR: *AGRICULTURE; *COAL SLURRY WASTEWATER; *ELECTRIC POWER PLANTS; INDUSTRY; INDUSTRIAL WASTES; *INDUSTRIAL REUSE; *RECYCLING; *RECLAIMED WATER; *UTILITIES; WATER RESOURCES; WATER SUPPLY; WATER REUSE; *WATER QUALITY

DESCRIPTIVE NOTE: 21-22P.

ABSTRACT: DESCRIBED ARE POTENTIAL USES OF RECLAIMED WATER FROM COAL SLURRY PIPELINES.

AVAILABILITY: WATERWORLD NEWS; VI N5

IRIS ACCESSION NUMBER: EW12574

PUBLICATION DATE: 85

TITLE: FILTER PRESS TRAPS GIARDIA CYSTS.

PERSONAL AUTHOR: HOLLINGSWORTH, JOHN E. I AND OTHERS

DESCRIPTOR: *DRINKING WATER; *FILTRATION; *GIARDIA; *OPERATIONS (WATER); *OREGON; *REGULATIONS; *RURAL AREAS; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 23P.

ABSTRACT: DESCRIBED IS A FILTER PRESS FOR FILTERING DRINKING WATER IN STATE PARKS TO REMOVE GIARDIA CYSTS.

AVAILABILITY: WATERWORLD NEWS; VI N5

IRIS ACCESSION NUMBER: EW12575

PUBLICATION DATE: 85

TITLE: DISKS FOR THE LABORATORY, PART II.

DESCRIPTOR: *AUDIOVISUAL AIDS; *CHEMISTRY; *CHEMICAL ANALYSES; *COMPUTER STORAGE DEVICES; *COMPUTER APPLICATIONS; *MAGNETIC TAPES; *VIDEODISC RECORDINGS

DESCRIPTIVE NOTE: 885-818AP.

ABSTRACT: PART I PRESENTED THE CHEMISTRY, PHYSICS, AND ENGINEERING TECHNOLOGY ASSOCIATED WITH MAGNETIC AND OPTIMAL DISKS. THIS PART EXPLORES THE SUBJECTS OF ARCHIVING, SECURITY, VALIDATION AND CERTIFICATION, AND PROTECTION. QUESTIONS AND ISSUES ARE RAISED IN EACH OF THESE AREAS WHICH BOTH USERS AND VENDORS SHOULD BE AWARE.

AVAILABILITY: ANALYTICAL CHEMISTRY, V57 N7

IRIS ACCESSION NUMBER: EW12576

PUBLICATION DATE: 85

TITLE: SCIENTIFIC WORD PROCESSORS PROLIFERATE.

DESCRIPTOR: *CHEMISTRY; *COMPUTER SOFTWARE; *COMPUTER APPLICATIONS; *SCIENCES; *WORD PROCESSING

DESCRIPTIVE NOTE: 888A-892AP.

ABSTRACT: BRIEFLY DESCRIBED ARE MOST OF THE CURRENTLY AVAILABLE SCIENTIFIC WORD PROCESSING SOFTWARE PACKAGES. UNLESS NOTED, THESE PRODUCTS (INCLUDING MOLECULAR PRESENTATION GRAPHICS, PROOFWRITER, SPELLBINDER SCIENTIFIC, VOLKSWRITER SCIENTIFIC, AND WORDMARC) RUN ON THE IBM PC FAMILY OF MICROCOMPUTERS.

AVAILABILITY: ANALYTICAL CHEMISTRY, V57 N8

IRIS ACCESSION NUMBER: EW12577

PUBLICATION DATE: 85

TITLE: DRINKING WASTEWATER.

PERSONAL AUTHOR: NYDES. BURT

DESCRIPTOR: *DRINKING WATER; *EFFLUENT; *RECYCLING; *WASTEWATER TREATMENT; *WATER CONSERVATION; *WATER SUPPLY; *WATER RESOURCES; *WATER USE; *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 52-60P.

ABSTRACT: IN THE FUTURE, DRINKING PROCESSED WASTEWATER MAY BE COMMON, BUT FOR NOW, THE REUS, OF TREATED EFFLUENT IS GENERALLY LIMITED TO OTHER APPLICATIONS. SEVERAL PROJECTS FOR RECYCLING WASTEWATER ARE DESCRIBED. VARIOUS APPLICATIONS...
ABSTRACT: Described is a biomonitoring pond used in Independence, Mo. The city contracts with industry to treat their industrial wastes and uses the biomonitoring pond as evidence that effluent from the plant complies with regulations.

AVAILABILITY: POLLUTION ENGINEERING; V17 N7

IRIS ACCESSION NUMBER: EW#12561
PUBLICATION DATE: 85
TITLE: THE INNOVATIVE TECHNOLOGY OF SEQUENCING BATCH REACTORS.
PERSONAL AUTHOR: MANDT, MICHAEL G.
DESCRIPTOR: *ACTIVATED SLUDGE; *BATCH REACTORS; *FACILITIES; *EQUIPMENT; *OPERATION; (WASTEWATER); *PROCESS CONTROL; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 26-28P.
ABSTRACT: Described is the sequencing of batch reactors used in the activated sludge process.

AVAILABILITY: POLLUTION ENGINEERING; V17 N7

IRIS ACCESSION NUMBER: EW#12562
PUBLICATION DATE: 85
TITLE: SPECIAL REPORT: VOLATILE ORGANIC COMPOUNDS.
PERSONAL AUTHOR: CHEREMISINOFF, PAUL N.
DESCRIPTOR: *AIR POLLUTION CONTROL; *CARBON ADSORPTION; *INDUSTRIAL WASTES; *SOLVENTS; *SOLVENT RECOVERY
DESCRIPTIVE NOTE: 29-38P.
ABSTRACT: Described are procedures for removing solvents from air emissions. Companies providing equipment and supplies for solvent recovery systems are listed.

AVAILABILITY: POLLUTION ENGINEERING; V17 N3

IRIS ACCESSION NUMBER: EW#12563
PUBLICATION DATE: 85
TITLE: ION CHROMATOGRAPH PROVIDES RAPID ANALYSIS OF AIR AND WATER.
PERSONAL AUTHOR: PUEVICH, PHIL
DESCRIPTOR: *AIR POLLUTION; *ANALYTICAL TECHNIQUES; *CHROMATOGRAPHY; *ION CHROMATOGRAPHY; *LABORATORY
DESCRIPTIVE NOTE: 24-25P.
PROCEDURES: *WATER POLLUTION
DESCRIPTIVE NOTE: 53-55P.

ABSTRACT: DESCRIBED ARE THE PRINCIPLES OF ION
CHROMATOGRAPHY.

AVAILABILITY: POLLUTION ENGINEERING; V17 N3

IRIS ACCESSION NUMBER: EW#12584
PUBLICATION DATE: B5
TITLE: ERT'S HASTE.

DESCRIPTOR: *CHEMICAL SPILLS; *CHEMICALS; *COMPUTER
APPLICATIONS; *COMPUTER SOFTWARE; *HAZARD ASSESSMENT
SYSTEM FOR TOXIC EMISSIONS; *EMERGENCY RESPONSE; *TOXIC
SUBSTANCES

DESCRIPTIVE NOTE: 56-62P.

ABSTRACT: DESCRIBED IS THE HAZARD ASSESSMENT
SYSTEM FOR TOXIC EMISSIONS (HASTE). HASTE IS A
COMPUTER-BASED EMERGENCY RESPONSE SYSTEM USED TO
ANALYZE THE RISK POSED BY THE
RELEASE OF TOXIC CHEMICALS.

AVAILABILITY: POLLUTION ENGINEERING; V17 N8

IRIS ACCESSION NUMBER: EW#12585
PUBLICATION DATE: B5
TITLE: EMERGENCY RESPONSE AND SPILL CONTROL.

DESCRIPTOR: *AIR POLLUTION CONTROL; *CHEMICALS; *CLEANUP;
*EMERGENCY RESPONSE; *HAZARDOUS MATERIALS; *INFORMATION
SYSTEMS; *LAND POLLUTION CONTROL; *PLANNING; *SPILL CONTROL;
*TOXIC SUBSTANCES; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 39-43P.

ABSTRACT: DESCRIBED ARE EMERGENCY RESPONSE AND SPILL
CONTROL OF CHEMICALS.

AVAILABILITY: POLLUTION ENGINEERING; V17 N8

IRIS ACCESSION NUMBER: EW#12586
PUBLICATION DATE: B5
TITLE: DANBURY CONTROLS HAZARDOUS MATERIALS AT THEIR
SOURCE.

PERSONAL AUTHOR: KOZUCHOWSKI, JACK S.

DESCRIPTOR: CONNECTICUT; CHEMICALS; EMERGENCY RESPONSE;
*HAZARDOUS MATERIALS; LEGISLATION; PLANNING; *REGULATIONS;

*REGULATORY PROGRAMS; SAFETY
DESCRIPTIVE NOTE: 47-48P.

ABSTRACT: DESCRIBED IS ONE CITIES REGULATORY PROGRAM AIMED
AT CONTROLLING HAZARDOUS MATERIALS AT LOCATIONS IN THE CITY
WHERE THEY ARE STORED, MIXED, USED, AND PRODUCED.

AVAILABILITY: POLLUTION ENGINEERING; V17 N8

IRIS ACCESSION NUMBER: EW#12587
PUBLICATION DATE: B5
TITLE: TOXIC MATERIALS RISK ASSESSMENT: A PRACTICAL GUIDE.

PERSONAL AUTHOR: CAMOUGIS, GEORGE

DESCRIPTOR: *CONTAMINANTS; *ENVIRONMENT; *HAZARD
DETERMINATION; *HAZARDOUS MATERIALS; *LEGISLATION; *PUBLIC
HEALTH; *REGULATIONS; *RISK ASSESSMENT; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 58-57P.

ABSTRACT: THIS ARTICLE PROVIDES A PRACTICAL GUIDE TO TOXIC
MATERIALS RISK ASSESSMENT. INCLUDED ARE A LISTING OF KEY
FEDERAL LAWS, SOURCES OF TOXIC CONTAMINANTS IN THE
ENVIRONMENT, AND A SUMMARY OF EXAMPLES OF EXPOSURES AND
ROUTES OF ENTRY OF TOXIC MATERIALS.

AVAILABILITY: POLLUTION ENGINEERING; V17 N8

IRIS ACCESSION NUMBER: EW#12588
PUBLICATION DATE: B5
TITLE: CLARIFICATION OF HAZARDOUS MATERIALS MANAGERS;
QUALITY CONTROL OF PROFESSIONAL PERSONNEL.

PERSONAL AUTHOR: MCCAMBRIDGE, JOHN J.

DESCRIPTOR: *CERTIFICATION; *HAZARDOUS MATERIALS;
*MANAGEMENT; *PERSONNEL; *TRAINING; *TRAINING PROGRAMS

DESCRIPTIVE NOTE: 28-29P.

ABSTRACT: DISCUSSED IS THE NEED FOR CERTIFICATION OF
HAZARDOUS MATERIALS MANAGERS AND THE CERTIFIED HAZARDOUS
MATERIALS MANAGER PROGRAM DEVELOPED BY THE INSTITUTE OF
HAZARDOUS MATERIALS MANAGEMENT.

AVAILABILITY: POLLUTION ENGINEERING, V17 N5

IRIS ACCESSION NUMBER: EW#12589
PUBLICATION DATE: B5
TITLE: WASTEWATER TREATMENT IN THE KANSAS CITY METROPOLITAN
AREA.

PERSONAL AUTHOR: WELLER, LLOYD W.; AND OTHERS

DESCRIPTOR: *EQUIPMENT; *FACILITIES; KANSAS; MISSOURI; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PROGRAM DESCRIPTIONS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 902-11P.

ABSTRACT: DESCRIBED ARE WASTEWATER TREATMENT OPERATIONS IN THE KANSAS CITY METROPOLITAN AREA.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION, V57 N9

IRIS ACCESSION NUMBER: EW#12592

TITLE: LAKE MANAGEMENT.

PERSONAL AUTHOR: MEDINE, ALLEN J.; LAMARRA, VINCENT A.

DESCRIPTOR: *ACID PRECIPITATION; *BIBLIOGRAPHIES; *LAKES; *LITERATURE REVIEWS; *MANAGEMENT; *MODELS; *NUTRIENTS; *RESEARCH; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 965-72P.

ABSTRACT: THIS LITERATURE REVIEW IS CONCERNED WITH THE FATE AND EFFECTS OF POLLUTANTS IN LAKES AND LAKE MANAGEMENT. SECTIONS ARE INCLUDED ON NUTRIENTS, ECO SYSTEM MODELING, LABORATORY STUDIES, LAKE MANAGEMENT, AND ACID PRECIPITATION. AN EXTENSIVE BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N9

IRIS ACCESSION NUMBER: EW#12593

TITLE: COMPETING USES FOR LIMITED WATER.

PERSONAL AUTHOR: CAMPBELL, GREGG A.

DESCRIPTOR: *COLORADO; *COSTS; *ECONOMICS; *LEGISLATION; *NATURAL RESOURCES; *NEEDS ASSESSMENT; *REGULATIONS; *WATER DEMAND; *WATER RESOURCES; *WATER SUPPLY; *WATER QUALITY

DESCRIPTIVE NOTE: 34-39P.

ABSTRACT: DEVELOPING WATER RESOURCES IN COLORADO REQUIRES CAREFUL BALANCING OF LAW, INTERSTATE COMPACTS, AND ECONOMIC BENEFITS. DESCRIBED ARE SOME OF THESE PROBLEMS.

AVAILABILITY: AWWA JOURNAL, V77 N9

IRIS ACCESSION NUMBER: EW#12594

TITLE: WATER RIGHTS IN AN AGE OF ANXIETY.

PERSONAL AUTHOR: CHANG, WILLIAMSON B. C.

DESCRIPTOR: *HAWAII; *LEGISLATION; *PLANNING; *POLICIES; *RIPARIAN RIGHTS; *WATER RIGHTS; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 40-43P.

ABSTRACT: RIPARIAN RIGHTS IN HAWAII ARE UNDERGOING GRADUAL CHANGE AS COURTS DEAL WITH CONTEMPORARY REALITIES. THE ARTICLE SHOWS HOW THE LAW GROWS AND CHANGES AS SOCIETY
CHANGES.
AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW#12595
PUBLICATION DATE: 85
TITLE: WATER RESOURCE PLANNING FOR MAXIMUM BENEFIT.
PERSONAL AUTHOR: MILLER, WILLIAM H.
DESCRIPTOR: LEGISLATION; LITIGATION; MANAGEMENT; MULTIPLE USE; NATURAL RESOURCES; PLANNING; POLICIES; PUBLIC WATER SUPPLIES; SURFACE WATERS; WATER QUALITY; WATER RESOURCES; WATER SUPPLY
DESCRIPTIVE NOTE: 44-47P.
ABSTRACT: WATER UTILITIES MUST PARTICIPATE IN OVERALL WATER RESOURCE PLANNING DECISIONS OR FACE UNPOTABLE PUBLIC USES OF SURFACE SUPPLIES. SOME OF THE PROBLEMS ARE CONSIDERED.

AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW#12596
PUBLICATION DATE: 85
TITLE: MEETING STREAMFLOW REQUIREMENTS.
PERSONAL AUTHOR: TRELEASE, FRANK J.
DESCRIPTOR: FLOW PROTECTION; LEGISLATION; MANAGEMENT; PLANNING; POLICIES; STREAM PROTECTION; STREAMFLOW REQUIREMENTS; WATER RIGHTS; WATER USE; WATER SUPPLY; WATER RESOURCES; WATER QUALITY
DESCRIPTIVE NOTE: 48-52P.
ABSTRACT: SEVERAL METHODS OF MEETING IN-STREAMFLOW REQUIREMENTS CAN BE DEVISED WITHOUT DETRIMENT TO MUNICIPAL SUPPLIES. SOME OF THESE METHODS ARE DESCRIBED.

AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW#12597
PUBLICATION DATE: 85
TITLE: WATER: ALLOCATING A SCARCE RESOURCE.
PERSONAL AUTHOR: CAMPBELL, THOMAS C.
DESCRIPTOR: LEGISLATION; MANAGEMENT; NATURAL RESOURCES; PLANNING; POLICIES; RIPARIAN DOCTRINE; WATER RIGHTS; WATER RESOURCES; WATER SUPPLY
DESCRIPTIVE NOTE: 53-56P.
ABSTRACT: THE AUTHOR ADDRESSES SHORTCOMINGS OF THE RIPARIAN DOCTRINE OF WATER RIGHTS AS WELL AS THE PRIOR APPROPRIATION DOCTRINE IN VIEW OF THE INCREASING PRESSURE ON WATER SUPPLIES. TO SOLVE THE PROBLEM OF SHORTAGES THAT WILL INEVITABLY OCCUR, MARKET PRICING, IN LIEU OF COSTLY WATER DEVELOPMENT PROJECTS, IS ADVOCATED AS A MEANS OF ALLOCATING WATER SUPPLIES FOR PRIORITY USES.

AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW#12598
PUBLICATION DATE: 85
TITLE: 226RA AND 228RA IN WATER SUPPLIES.
PERSONAL AUTHOR: LUCAS, HENRY F.
DESCRIPTOR: GROUNDWATER; RADIATION; RADIUM; SURVEYS; WATER QUALITY; WATER SUPPLY
DESCRIPTIVE NOTE: 57-67P.
ABSTRACT: THIS SURVEY DETAILS THE RADIUM CONCENTRATIONS FOUND IN GROUNDWATER SUPPLIES IN FIVE STATES.

AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW#12599
PUBLICATION DATE: 85
TITLE: MODERN TECHNIQUES IN WELL DESIGN.
PERSONAL AUTHOR: WILLIAMS, DENNIS E.
DESCRIPTOR: DESIGN; GROUNDWATER; WATER SUPPLY; WELLS
DESCRIPTIVE NOTE: 68-74P.
ABSTRACT: A NEW METHOD OF DESIGNING EFFICIENT WELLS AND DETERMINING THE EFFICIENCY OF AN EXISTING WELL IS PRESENTED.

AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW#12600
PUBLICATION DATE: 85
TITLE: COMMITTEE REPORT: CURRENT PRACTICE IN BACTERIOLOGICAL SAMPLING.
DESCRIPTOR: ANALYTICAL TECHNIQUES; BACTERIA; CONTAMINATION; DISINFECTION; MICROBIOLOGY; MONITORING; SAMPLING; SURVEYS; WATER DISTRIBUTION SYSTEMS; WATER SUPPLY; WATER QUALITY
DESCRIPTIVE NOTE: 75-81P.
ABSTRACT: AN EFFECTIVE SAMPLING PROGRAM CAN MEASURE THE RELIABILITY OF PROTECTION OF THE ENTIRE DISTRIBUTION SYSTEM AGAINST MICROBIOLOGICAL CONTAMINATION. A RECENT SURVEY INDICATES THERE IS GREAT VARIABILITY AMONG SAMPLING PROGRAMS FOR MICROBIOLOGICAL CONTAMINATION.

AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EWS12601
PUBLICATION DATE: 85
TITLE: MANAGEMENT AUDITS: A TOOL FOR WATER UTILITIES.
PERSONAL AUTHOR: CONLEY, JOHN P.
DESCRIPTOR: *AUDITS; *MANAGEMENT AUDITS; *WATER RATES; *WATER UTILITIES

DESCRIPTIVE NOTE: 34-37P.
ABSTRACT: GREATER EFFICIENCY AND HIGHER MORALE CAN RESULT FROM OBJECTIVE EVALUATIONS OF MANAGEMENT PRACTICES. THIS ARTICLE EXPLAINS WHAT A MANAGEMENT AUDIT IS AND WHAT BENEFITS IT CAN PROVIDE.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EWS12602
PUBLICATION DATE: 85
TITLE: CORPS OF ENGINEERS DEVELOPS WATER SUPPLY TOOLS.
PERSONAL AUTHOR: WALKER, THOMAS M.
DESCRIPTOR: *CORPS OF ENGINEERS; DESIGN; COST ESTIMATING; CORROSION CONTROL; INFORMATION SOURCES; MAINTENANCE; PIPE SELECTION; REFERENCES; *WATER CONSERVATION; *WATER SUPPLY; *WATER DISTRIBUTION

DESCRIPTIVE NOTE: 38-43P.
ABSTRACT: MANY DOCUMENTS THAT COULD AID ENGINEERS AND PLANNERS OF WATER SYSTEMS ARE AVAILABLE FROM THE CORPS OF ENGINEERS. A LIST OF REPORTS AND MANUALS APPLICABLE TO THE DRINKING WATER INDUSTRY IS INCLUDED.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EWS12603
PUBLICATION DATE: 85
TITLE: CONTROLLING ALGAE IN WATER SUPPLY IMPOUNDMENTS.
PERSONAL AUTHOR: RAMAN, RAMAN K.
DESCRIPTOR: *ALGAE; *BIOLOGICAL CONTROL; *CHEMICAL CONTROL; *PHYSICAL CONTROL; *WATER SUPPLY; *WATER QUALITY

DESCRIPTIVE NOTE: 41-42P.
ABSTRACT: A SLOW-RELEASE, SINGLE-POINT METHOD OF APPLYING ALGICIDES, ALONG WITH LAKE DESTRATIFICATION, IS REPORTED TO BE EFFECTIVE AND ECONOMICAL FOR CONTROLLING BLUE-GREEN ALGAE.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EWS12604
PUBLICATION DATE: 85
TITLE: A TREATMENT PLANT OPERATOR ASSESSES OZONATION.
PERSONAL AUTHOR: LEPAGE, WILFRED L.
DESCRIPTOR: *MICHIGAN; *OPERATIONS (WATER); *ODORS; *OZONE; *OZONATION; *TASTE; *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 44-46P.
ABSTRACT: OZONE USED AS AN OXIDANT HAS PROVED TO BE THE MOST EFFECTIVE METHOD FOUND TO CONTROL TASTE AND ODORS IN A LAKE ERIE WATER SUPPLY.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EWS12605
PUBLICATION DATE: 85
TITLE: PREPURCHASING OZONE EQUIPMENT.
PERSONAL AUTHOR: MONK, ROBERT D. G.; AND OTHERS
DESCRIPTOR: *CONTRACTS; *EQUIPMENT; *OZONATION; *PURCHASING; *SPECIFICATIONS; *WATER TREATMENT

DESCRIPTIVE NOTE: 49-54P.
ABSTRACT: TRADITIONAL BIDDING PROCEDURES WERE DISCARDED IN FAVOR OF AN UNUSUAL APPROACH FOR THE PURCHASE OF OZONATION EQUIPMENT TO BE INSTALLED AT THE LOS ANGELES AQUEDUCT FILTRATION PLANT.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EWS12606
PUBLICATION DATE: 85
TITLE: FACTORS CONTROLLING THE REMOVAL OF ORGANIC
POLLUTANTS IN OZONE REACTORS.
PERSONAL AUTHOR: GUROL, MIRAT D.

DESCRIPTOR: *MODELS; *ORGANIC POLLUTANTS; *OZONE REACTORS; *WASTEWATER TREATMENT; *WATER TREATMENT; *WATER QUALITY

ABSTRACT: IT WILL SOON BE POSSIBLE TO USE A MODEL TO EVALUATE VARIOUS OPERATIONAL ALTERNATIVES FOR OPTIMUM PERFORMANCE OF OZONE REACTORS FOR REMOVING ORGANIC POLLUTANTS. THE MODEL DEVELOPED IS DESCRIBED.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW#12607

PUBLICATION DATE: 85
TITLE: USING OZONE AND ULTRASOUND TO REDUCE RO MEMBRANE FOULING.
PERSONAL AUTHOR: LOZIER, JAYES C.; SIERKA, RAYMOND A.

DESCRIPTOR: *HUMIC AIDS; *MAINTENANCE; *MEMBRANE FOULING; *OPERATIONS (WATER); *OZONE; *OZONATION; *REVERSE OSMOSIS; *PERFORMANCE EVALUATION; *ULTRASOUND; *WATER TREATMENT

ABSTRACT: OZONATION WITHOUT ULTRASOUND WAS FOUND TO BE THE MOST EFFECTIVE METHOD STUDIED FOR REDUCING THE MEMBRANE FOULING POTENTIAL OF HUMIC ACIDS.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW#12608

PUBLICATION DATE: 85
TITLE: OZONE--GAC FOLLOWING CONVENTIONAL U.S. DRINKING WATER TREATMENT.
PERSONAL AUTHOR: MALONEY, STEPHEN W.; AND OTHERS

DESCRIPTOR: *ACTIVATED CARBON; *GRANULAR ACTIVATED CARBON; *OPERATIONS (WATER); *OZONE; *ORGANIC COMPOUNDS; *PERFORMANCE EVALUATION; *WATER QUALITY; *WATER TREATMENT

ABSTRACT: STUDIES SHOWED THAT CONVENTIONAL TREATMENT WITHOUT PRECHLORINATION FOLLOWED BY OZONE--GAC WAS THE MOST EFFECTIVE PROCESS FOR REMOVING DISSOLVED ORGANIC CARBON FROM A DELAWARE RIVER SOURCE WATER.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW#12609

PUBLICATION DATE: 85
TITLE: EFFECTS OF OZONE AND STORAGE TEMPERATURE ON GIARDIA CYSTS.
PERSONAL AUTHOR: WICKRAMANAYAKE, G. B.; AND OTHERS

DESCRIPTOR: *GIARDIA; *OPERATIONS (WATER); *OZONE; *PERFORMANCE EVALUATION; *RESEARCH; *TEMPERATURE; *WATER TREATMENT; *WATER QUALITY

ABSTRACT: EXPERIMENTAL RESULTS INDICATE THAT GIARDIA MURIS COULD BE USED AS A MODEL IN STUDIES INVESTIGATING INACTIVATION OF GIARDIA LAMBLIA THROUGH OZONE AND CHLORINE DISINFECTION.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW#12610

PUBLICATION DATE: 85
TITLE: REMOVING FULVIC ACID BY LIME SOFTENING.
PERSONAL AUTHOR: LIAO, MARCIA YUNMEN; RANDTKE, STEPHEN J.

DESCRIPTOR: *FULVIC ACID; *GROUNDWATER; *LIME SOFTENING; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *RESEARCH; *WATER TREATMENT; *WATER QUALITY

ABSTRACT: STUDIES INDICATE THAT LIME SOFTENING IS EFFECTIVE IN REMOVING A SIGNIFICANT FRACTION OF A FULVIC ACID EXTRACTED FROM GROUNDWATER.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW#12611

PUBLICATION DATE: 85
TITLE: PROBLEMS WITH RAPID INFILTRATION--A POST MORTEM ANALYSIS.
PERSONAL AUTHOR: EEO, S. C.; AND OTHERS

DESCRIPTOR: *COSTS; *CASE STUDIES; *DESIGN; *FACILITIES; *MANAGEMENT; *PERFORMANCE EVALUATION; *RAPID INFILTRATION; *WATER TREATMENT

ABSTRACT: MOST OPERATIONAL PROBLEMS WITH RAPID INFILTRATION SYSTEMS STEM FROM INADEQUATE FIELD INVESTIGATIONS AND INTERPRETATION OF DATA AT THE DESIGN STAGE. THIS ARTICLE
PRESENTS CASE STUDIES OF SEVERAL SYSTEMS.

Avenue: Journal W.CF; V57 N8

IRIS ACCESSION NUMBER: EW#12612
PUBLICATION DATE: 85

TITLE: THE RELATIONSHIP BETWEEN SVI AND ACTIVATED SLUDGE SETTLING CHARACTERISTICS.

PERSONAL AUTHOR: DAIGGER, G. T.; ROPER, R. E.

DESCRIPTOR: ACTIVATED SLUDGE CLARIFIERS; DESIGN; FACILITIES; PILOT PLANT; OPERATIONS (WASTEWATER); PERFORMANCE EVALUATION; SLUDGE; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 859-66P.

ABSTRACT: CORRELATING SETTLING TEST DATA WITH THE SLUDGE VOLUME INDEX ALLOWS SETTLING FLUX TO BE EASILY APPLIED TO PLANT DESIGN AND OPERATIONS. EXPERIENCES WITH A PILOT PLANT ARE DESCRIBED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N8

IRIS ACCESSION NUMBER: EW#12613
PUBLICATION DATE: 85

TITLE: TECHNOLOGY EVALUATION OF SEQUENCING BATCH REACTORS.

PERSONAL AUTHOR: ARORA, MADAN L.; AND OTHERS

DESCRIPTOR: BATCH REACTORS; DESIGN; FACILITIES; OPERATIONS (WASTEWATER); PERFORMANCE EVALUATION; SEQUENCING BATCH REACTORS; TECHNOLOGY; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 867-75P.

ABSTRACT: A LACK OF WIDELY ACCEPTED DESIGN STANDARDS IS THE MAJOR OBSTACLE TO BRINGING SEQUENCING BATCH REACTOR (SBR) TECHNOLOGY FROM THE RESEARCH STAGE TO BROADER PRACTICAL APPLICATION. THIS ARTICLE REPORTS ON THE PERFORMANCE EVALUATION OF SBR'S AT SEVERAL PLANTS IN THE U.S.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N8

IRIS ACCESSION NUMBER: EW#12614
PUBLICATION DATE: 85

TITLE: MONITORING AERATED LAGOON PERFORMANCE.

PERSONAL AUTHOR: EISCHEN, GEORG W.; KEENAN, JOHN D.

DESCRIPTOR: AERATED LAGOONS; FACILITIES; LAGOONS; MONITORING; OPERATIONS (WASTEWATER); PERFORMANCE EVALUATION; RESEARCH; SAMPLING; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 876-89P.

ABSTRACT: A LIMITING FREQUENCY OF EXPOSURE OF SOLIDS TO CHLORINE EXISTS, BELOW WHICH CHLORINATION WILL NOT PREVENT SLUDGE BULKING. A MODEL THAT PREDICTS A LIMITING FREQUENCY IS REPORTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N8

IRIS ACCESSION NUMBER: EW#12615
PUBLICATION DATE: 85

TITLE: CHEMISTRY, MICROBIOLOGY, AND MODELING OF CHLORINATION FOR ACTIVATED SLUDGE BULKING CONTROL.

PERSONAL AUTHOR: NEETHLING, J. B.; AND OTHERS

DESCRIPTOR: ACTIVATED SLUDGE; ACTIVATED SLUDGE BULKING; CHEMISTRY; CHLORINATION; MICROBIOLOGY; MODELS; OPERATIONS (WASTEWATER); PROCESS CONTROLS; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 882-89P.

ABSTRACT: A LIMITING FREQUENCY OF EXPOSURE OF SOLIDS TO CHLORINE EXISTS, BELOW WHICH CHLORINATION WILL NOT PREVENT SLUDGE BULKING. A MODEL THAT PREDICTS A LIMITING FREQUENCY IS REPORTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N8

IRIS ACCESSION NUMBER: EW#12616
PUBLICATION DATE: 85

TITLE: USING ATP TO DETERMINE THE CHLORINE RESISTANCE OF FILAMENTOUS BACTERIA ASSOCIATED WITH ACTIVATED SLUDGE BULKING.

PERSONAL AUTHOR: NEETHLING, J. B.; AND OTHERS

DESCRIPTOR: ACTIVATED SLUDGE; ACTIVATED SLUDGE BULKING; ADENOSINE TRIPHOSPHATE; CHLORINATION; OPERATIONS (WASTEWATER); PERFORMANCE EVALUATION; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 890-94P.

ABSTRACT: DIFFERENCES BETWEEN PLATE COUNTING AND ATP MEASUREMENT MAY EXPLAIN THE REGROWTH PHENOMENON ASSOCIATED WITH CHLORINATION/DECHLORINATION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION;
SELECTING POLYMERIC FLOCCULANTS FOR WATER TREATMENT

**Abstract:** This article describes how flocculants work and how they are chosen for water treatment.

**Availability:** Public Works; V116 N9

REGULATING SMALL QUANTITY HAZARDOUS WASTE GENERATORS

**Personel Author:** Robinson, Janet E.; Conn, W. David

**Abstract:** New federal regulations will mean more involvement by local governments. This article presents some reason why local government should be more involved and some suggested actions.

**Availability:** Public Works; V116 N9

STATION EMPLOYS GIANT SUBMERSIBLE PROPELLER PUMPS

**Personal Author:** Jones, Charles M.

**Abstract:** Described are pumps used by a Pennsylvania community to relieve periodic flooding.

**Availability:** Public Works; V116 N9

PORTLAND'S COMPOSTER--ITS SUCCESSFUL INITIAL OPERATION

**Personal Author:** Lang, John; Dixon, James

**Abstract:** Described is a composting facility in Portland, Oregon, that saved nearly $500,000 annually in wastewater sludge disposal costs.

**Availability:** Public Works; V116 N9

ECONOMICAL AND EFFECTIVE MEASURES FOR LAKE PROTECTION AND MANAGEMENT

**Personal Author:** Singh, Krishan P.; Sefton, Donna F.

**Abstract:** Field-tested techniques for lake protection and management are described. Guidelines for assigning value for general recreation benefit are included.
AVAILABILITY: PUBLIC WORKS; V116 N9

IRIS ACCESSION NUMBER: EW#12623
PUBLICATION DATE: 85
TITLE: A SLUDGE DISPOSAL PROGRAM SAMPLER.
PERSONAL AUTHOR: KIRCHER, JAMES R.
DESCRIPTOR: *LAND APPLICATION; *SLUDGE; *SLUDGE DISPOSAL; *WASTE DISPOSAL; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 55-57P.
ABSTRACT: READERS OF THIS JOURNAL REPORT ON THEIR LANDSPREADING PROGRAMS.

AVAILABILITY: PUBLIC WORKS; V116 N10

IRIS ACCESSION NUMBER: EW#12624
PUBLICATION DATE: 85
TITLE: DESIGN OF AN ENCLOSED COMPOSTING REACTOR.
PERSONAL AUTHOR: RUSSELL, DAVID L.
DESCRIPTOR: *COMPOSTING; *COMPOSTING REACTORS; *EQUIPMENT; *SEWAGE SLUDGE; *SLUDGE; *WASTE DISPOSAL
DESCRIPTIVE NOTE: 59-63P.
ABSTRACT: DESCRIBED IS A MODULAR COMPOSTING REACTOR OF UNDER 18 CU. YD. CAPACITY THAT MEETS THE NEEDS OF A SMALL COMMUNITY.

AVAILABILITY: PUBLIC WORKS; V116 N10

IRIS ACCESSION NUMBER: EW#12625
PUBLICATION DATE: 85
TITLE: COMPUTERIZATION OF SEWER MAINTENANCE SCHEDULING PART 2--PRELIMINARY RESULTS.
PERSONAL AUTHOR: SCAFF, JAMES R.
DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER PROGRAMS; *COSTS; *MAINTENANCE; *PROGRAM EVALUATION; *SEWERS; *WASTEWATER COLLECTION
DESCRIPTIVE NOTE: 64-66P.
ABSTRACT: THE EXPERIENCE OF THREE DISTRICTS USING A SYSTEM OF COMPUTER PROGRAMS FOR SEWER MAINTENANCE OPERATIONS IS DISCUSSED.

AVAILABILITY: PUBLIC WORKS; V116 N10

IRIS ACCESSION NUMBER: EW#12626
PUBLICATION DATE: 85
TITLE: STUDY SHOWS HOW TO CUT CHEMICAL AND SLUDGE HAULING COSTS.
PERSONAL AUTHOR: BOTTS, J. MICHAEL
DESCRIPTOR: *CHEMICAL CONDITIONING; *COSTS; *OPERATIONS (WASTEWATER); *POLYMERS; *SLUDGE; *SLUDGE CONDITIONING; *SLUDGE HANDLING; *WASTE DISPOSAL; WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 66-67P.
ABSTRACT: DESCRIBED IS A POLYMER FEEDING SYSTEM FOR WASTEWATER TREATMENT THAT REDUCES COSTS.

AVAILABILITY: PUBLIC WORKS; V116 N10

IRIS ACCESSION NUMBER: EW#12627
PUBLICATION DATE: 85
TITLE: NEW METHOD OF FILTRATION MONITORING.
PERSONAL AUTHOR: MONK, ROBERT D. G.; GAGNON, A. PETER
DESCRIPTOR: *FILTRATION; *HYDRAULICS; *MONITORING; *OPERATIONS (WATER); *WATER TREATMENT
DESCRIPTIVE NOTE: 68-72P.
ABSTRACT: DESCRIBED IS A NEW METHOD FOR MONITORING HYDRAULIC HEAD LOSSES.

AVAILABILITY: PUBLIC WORKS; V116 N10

IRIS ACCESSION NUMBER: EW#12628
PUBLICATION DATE: 85
TITLE: IN DEFENSE OF PACKAGE PLANTS.
PERSONAL AUTHOR: DORAN, VINCENT J.
DESCRIPTOR: *MAINTENANCE; *MANAGEMENT; *PACKAGE PLANTS; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 4-5P.
ABSTRACT: THE AUTHOR PRESENTS A DISCUSSION OF PACKAGE PLANTS AND ATTEMPTS TO RESPOND TO AN ARTICLE IN THE MAY 1985 FORUM ON PACKAGE PLANTS.

AVAILABILITY: OPERATIONS FORUM; V2 N9
IRIS ACCESSION NUMBER: EWS12629
PUBLICATION DATE: 85
TITLE: BURTON'S MANHOLE PREPARATION.
PERSONAL AUTHOR: LOOMIS, ROGER
DESCRIPTOR: *MAINTENANCE; *MANHOLES; *SAFETY; *WASTEWATER COLLECTION
DESCRIPTIVE NOTE: 15P.
ABSTRACT: DESCRIBED IS WHAT ONE VILLAGE DID TO MAKE THEIR MANHOLE PROCEDURES SAFE.
AVAILABILITY: OPERATIONS FORUM; V2 N9

IRIS ACCESSION NUMBER: EWS12630
PUBLICATION DATE: 85
TITLE: SODIUM HYPOCHLORITE HAZARDS.
PERSONAL AUTHOR: FISICHELLI, ANDREW P.
DESCRIPTOR: *ACCIDENT PREVENTION; *CHLORINE; *SAFETY; *SODIUM HYPOCHLORITE
DESCRIPTIVE NOTE: 16P.
ABSTRACT: DESCRIBED ARE SOME OF THE POTENTIAL PROBLEMS THAT CAN OCCUR FROM THE HANDLING OF CHLORINE AND COMPOUNDS CONTAINING CHLORINE.
AVAILABILITY: OPERATIONS FORUM; V2 N9

IRIS ACCESSION NUMBER: EWS12631
PUBLICATION DATE: 85
TITLE: CONFINED SPACE SENSE.
PERSONAL AUTHOR: DORSEY, DONALD
DESCRIPTOR: *ACCIDENT PREVENTION; *MAINTENANCE; *OPERATIONS (WASTEWATER); *SAFETY; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 17-18P.
ABSTRACT: SAFETY PROCS. EHS RELATED TO WORKING IN CONFINED SPACES ARE CONSIDERED. SEFUL RULES FOR SAFETY ARE LISTED.
AVAILABILITY: OPERATIONS FORUM; V2 N9

IRIS ACCESSION NUMBER: EWS12632
PUBLICATION DATE: 85
TITLE: DESIGNING FOR SAFETY.
DESCRIPTOR: *ACCIDENT PREVENTION; *DESIGN; *EQUIPMENT; *FACILITIES; *OPERATIONS (WASTEWATER); *SAFETY; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 19P.
ABSTRACT: SAFETY SHOULD BE CONSIDERED WHEN DESIGNING FACILITIES. THREE EXAMPLES ARE ILLUSTRATED.
AVAILABILITY: OPERATIONS FORUM; V2 N9

IRIS ACCESSION NUMBER: EWS12633
PUBLICATION DATE: 85
TITLE: PAINTING YOUR EQUIPMENT TO LAST.
PERSONAL AUTHOR: LENHART, CHARLES F.
DESCRIPTOR: *COSTS; *EQUIPMENT; *MAINTENANCE; *PAINTING
DESCRIPTIVE NOTE: 11-13P.
ABSTRACT: THIS ARTICLE PROVIDES TIPS ON PAINTING TO PROTECT A TREATMENT SYSTEM.
AVAILABILITY: OPERATIONS FORUM; V2 N9

IRIS ACCESSION NUMBER: EWS12634
PUBLICATION DATE: 85
TITLE: FIVE EASY COATINGS.
PERSONAL AUTHOR: KYRK, RANDY; ZABOLSKI, BILL
DESCRIPTOR: *COATINGS; *MAINTENANCE; *PAINTS; *PERFORMANCE EVALUATION
DESCRIPTIVE NOTE: 14-16P.
ABSTRACT: THIS ARTICLE DESCRIBES FIVE TYPES OF COATINGS (ALKYDS, WATER REDUCIBLES, EPOXIES, VINYL'S, AND POLYURETHANES). THE PROPERTIES OF EACH ARE DISCUSSED AND SOME ADVANTAGES AND DISADVANTAGES ARE CONSIDERED.
AVAILABILITY: OPERATIONS FORUM; V2 N9
**STENCILS STAND OUT.**

**PERSONAL AUTHOR:** KLAUSEGGER, R. B.

**DESCRIPTOR:** *ACCIDENT PREVENTION; *EQUIPMENT IDENTIFICATION; *SAFETY; *STENCILS

**ABSTRACT:** THIS ARTICLE BRIEFLY DESCRIBES THE USE OF STENCILS FOR SAFETY AND CLARIFYING OPERATIONS.

**AVAILABILITY:** OPERATIONS FORUM; V2 N8

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**WASTEWATER COMPUTERS: AN UPDATE (O&M SOFTWARE).**

**PERSONAL AUTHOR:** RAPPE, GERALD C.; SCHWOYER, WILLIAM L.

**DESCRIPTOR:** *OXIDATION SLUDGE DESTRUCTION; *SLUDGE; WASTE DISPOSAL; *TECHNOLOGY; *WASTE DISPOSAL; *WASTEWATER TREATMENT

**ABSTRACT:** A NOVEL MUNICIPAL SLUDGE DESTRUCTION PROCESS CAN ALSO TREAT TOXIC CONTAMINATED INDUSTRIAL SLUDGES. THE OPERATION IN LONGMONT, COLORADO IS DESCRIBED.

**AVAILABILITY:** WATER ENGINEERING AND MANAGEMENT; V132 N1#
ABSTRACT: ALTERNATE ROUTING OF RELIEF SEWERS CAN BE EVALUATED USING COMPUTER-BASED MODELING TECHNIQUES. SAVINGS CAN BE MADE BY MORE EFFECTIVE USE OF EXISTING SEWERS RATHER THAN CONSTRUCTING NEW SEWERS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N1#

IRIS ACCESSION NUMBER: EW012641
PUBLICATION DATE: 85
TITLE: MAKING EFFECTIVE USE OF EXISTING COLLECTION CAPACITY.
PERSONAL AUTHOR: NELSON, RICHARD E.; NOGAJ, RICHARD J.
DESCRIPTOR: COSTS; COMPUTER APPLICATIONS; COMPUTER SOFTWARE; ECONOMICS; MODELS; MANAGEMENT; PLANNING; SEWERS; WASTEWATER COLLECTION; WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 38-40P.

ABSTRACT: ALTERNATE ROUTING OF RELIEF SEWERS CAN BE EVALUATED USING COMPUTER-BASED MODELING TECHNIQUES. SAVINGS CAN BE MADE BY MORE EFFECTIVE USE OF EXISTING SEWERS RATHER THAN CONSTRUCTING NEW SEWERS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N1#

IRIS ACCESSION NUMBER: EW012642
PUBLICATION DATE: 85
TITLE: SAGGING SEWERS: A SERIOUS PROBLEM GETTING WORSE.
PERSONAL AUTHOR: CHATTERJEE, SAMAR; DECARLO, FRANK
DESCRIPTOR: CONSTRUCTION; DESIGN; MAINTENANCE; RESEARCH NEEDS; SEWERS; WASTEWATER COLLECTION
DESCRIPTIVE NOTE: 42-44P.

ABSTRACT: THIS PHENOMENON, THOUGHT TO BE INSIGNIFICANT, MAY BE A DEVASTATING SEWER SYSTEM PROBLEM. THE AUTHORS DISCUSS THE PROBLEM, THE NEED FOR BETTER CONSTRUCTION, AND THE NEED FOR FURTHER RESEARCH.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N1#

IRIS ACCESSION NUMBER: EW012643
PUBLICATION DATE: 85
TITLE: ENERGY AND PROFIT: PRODUCTS OF COGENERATION.
PERSONAL AUTHOR: MOKE, HAROLD C.
DESCRIPTOR: COSTS; ECONOMICS; ENERGY; COGENERATION; MANAGEMENT; OPERATIONS (WASTEWATER); SLUDGE DRYING; RESOURCE RECOVERY; SLUDGE; WASTE DISPOSAL; WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 46-48P.

ABSTRACT: APPLYING THIS CONCEPT CAN RESULT IN THE SALE OF ELECTRIC POWER AND HEAT PRODUCTION FOR IN-PLANT POWER NEEDS. APPLICATIONS TO WASTEWATER TREATMENT OPERATIONS ARE DISCUSSED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N1#

IRIS ACCESSION NUMBER: EW012644
PUBLICATION DATE: 85
TITLE: WHICH TYPE BUBBLE AERATION FOR WISCONSIN PLANT: COARSE OR FINE?
PERSONAL AUTHOR: CAVAGNARO, PETER; SUN, JYH-WEI
DESCRIPTOR: ALTERNATIVE TECHNOLOGY; AERATION; BUBBLE AERATION; COSTS; LIQUID WASTES; MAINTENANCE; OPERATIONS (WASTEWATER); PERFORMANCE EVALUATION; WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 14-16P.

ABSTRACT: THIS ARTICLE PRESENTS INFORMATION ON THE USE OF FINE OR COARSE BUBBLE AERATION FOR THE TREATMENT OF LIQUID WASTES.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N8

IRIS ACCESSION NUMBER: EW012645
PUBLICATION DATE: 85
TITLE: SOFTWARE FOR MAINTENANCE MANAGEMENT.
PERSONAL AUTHOR: BLACKWELL, LARRY G.; LANGWORTHY, VIRGIL W.
DESCRIPTOR: COMPUTER APPLICATIONS; COMPUTER SOFTWARE; MAINTENANCE; MANAGEMENT; UTILITIES; WATER TREATMENT; WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 22P.

ABSTRACT: DESCRIBED ARE ITEMS THAT SHOULD BE INCLUDED IN A COMPUTER SOFTWARE PROGRAM FOR MAINTENANCE MANAGEMENT.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N8

IRIS ACCESSION NUMBER: EW012646
PUBLICATION DATE: 85
TITLE: MODEL YOUR WAY TO ENERGY SAVINGS.
PERSONAL AUTHOR: RUSHBROOK, EDWARD L., JR.
DESCRIPTOR: COSTS; ENERGY AUDITS; ENERGY CONSERVATION; MANAGEMENT; OPERATIONS (WASTEWATER); WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 46-48P.
DESCRIPTIVE NOTE: 32-34P.
ABSTRACT: DESCRIBED IS A METHOD FOR ANALYZING ENERGY CONSUMPTION THAT CAN HELP A PLANT OPERATE ON LESS ENERGY AND SAVE COSTS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N8

IRIS ACCESSION NUMBER: EW12647

PUBLICATION DATE: 85

TITLE: ACCURATE REAGENT FEED HELPS CONTROL SLUDGE CONVERSION PROCESS.

DESCRIPTOR: *CHEMICAL FIXATION; *MICROPROCESSORS; *CHEMFIX; *NATURITE; *PROCESS CONTROL; *RESOURCE RECOVERY; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT; *WASHINGTON D.C.

DESCRIPTIVE NOTE: 36-37P.
ABSTRACT: MICROPROCESSOR-BASED MATERIAL FEEDING DEVICES ALONG WITH A PATENTED CHEMICAL FIXATION PROCESS, CONVERT SLUDGE TO A USABLE PRODUCT.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N8

IRIS ACCESSION NUMBER: EW12648

PUBLICATION DATE: 85

TITLE: CHINESE SHOW HOW DAF CAN REDUCE MLSS.

PERSONAL AUTHOR: ZHANG, YUQING

DESCRIPTOR: *CLARIFICATION; *DISSOLVED AIR ROTATION; *CHINA; *INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT; *WOOLEN MILLS

DESCRIPTIVE NOTE: 38-42P.
ABSTRACT: A VISITING SCHOLAR DESCRIBES A SUCCESSFUL APPLICATION OF DISSOLVED AIR FLOTATION TO CLARIFICATION OF MIXED-LIQUOR SUSPENDED SOLIDS IN A CHINESE WOOLEN MILL.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N8

IRIS ACCESSION NUMBER: EW12649

PUBLICATION DATE: 85


DESCRIPTOR: *ACTIVATED SLUDGE; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *DOMESTIC WASTES; *INDUSTRIAL WASTES; *OPERATIONAL WASTES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 55P. PRICE CODE: PC N#1/MF N#1
ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE ACTIVATED SLUDGE PROCESS IN TREATING INDUSTRIAL AND DOMESTIC WASTE. APPARATUS DESIGN, PARAMETERS FOR EFFECTIVENESS, AND ORGANISMS UTILIZED IN THE VARIOUS PROCESSES ARE AMONG THE TOPICS DISCUSSED. PERFORMANCE EVALUATIONS AND APPLICATIONS OF TREATMENT PROCESSES FOR THE PURIFICATION AND REMOVAL OF UNWANTED SUBSTANCES FROM SEWAGE AND WASTEWATER ARE INCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 187 CITATIONS, 36 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW12650

PUBLICATION DATE: 85


DESCRIPTOR: *AERIAL PHOTOGRAPHY; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *COASTAL EROSION; *MONITORING; *OCEANOGRAPHY; *SHORELINES; *WATER POLLUTION

DESCRIPTIVE NOTE: 193P. PRICE CODE: PC N#1/MF N#1
ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE APPLICATIONS OF AERIAL PHOTOGRAPHY IN THE STUDY OF COASTAL SHORELINE PROBLEMS SUCH AS EROSION AND POLLUTION. TOPICS INCLUDE OCEAN WAVE DIRECTION AND MEASUREMENT, OIL POLLUTION DETECTION AND DIRECTION FORECASTING, SHORELINE CHANGE MEASUREMENTS, COASTAL MAPPING AND COASTAL TOPOGRAPHIC FEATURES. (THIS UPDATED BIBLIOGRAPHY CONTAINS 381 CITATIONS, 184 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW12651

PUBLICATION DATE: 85

TITLE: ANIMAL WASTE POLLUTION, TREATMENT, AND REGULATIONS. 1977-JUNE 1985 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE)

DESCRIPTOR: *ANIMAL WASTE POLLUTION; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *FARM WASTES; *INDUSTRIAL WASTES; *POLLUTION CONTROL; *REGULATIONS; *RESEARCH; *WASTE DISPOSAL; *WASTE TREATMENT; *WATER POLLUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 316P. PRICE CODE: PC N#1/MF N#1
ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING FARM WASTEWATER TREATMENT, UTILIZATIONS, AND REGULATIONS.
FARM WATER QUALITY MANAGEMENT, FEEDLOT POLLUTION CONTROL, REGULATIONS ON FEEDLOT OPERATIONS, AND FARM WASTEWATER UTILIZATION EFFECTS ARE CONSIDERED. FARM NONPOINT POLLUTION SOURCES AND CONTROL, EFFECTS OF PASTURE RUNOFF, PESTICIDES, AND LIVESTOCK WASTES ON WATER QUALITY, AND RESEARCH ON THE BIOLOGICAL TREATMENT OF WASTEWATER ARE CONSIDERED. THIS UPDATED BIBLIOGRAPHY CONTAINS 314 CITATIONS, 11 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW#12654
PUBLICATION DATE: 85
DESCRIPTOR: *ANOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *METALLIC LEACHING; *MICROWAVES; *METAL RECOVERY
DESCRIPTIVE NOTE: 265P. PRICE CODE: PC N81/MF N81
ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING BACTERIAL STRAINS UTILIZED IN METAL LEACHING FROM EFFLUENTS, AND THEIR ROLE IN METAL RECOVERY PROCESSES. FACTORS AFFECTING BACTERIAL GROWTH SUCH AS TEMPERATURE, pH, AND OXYGEN CONSUMPTION ARE CONSIDERED. THE ISOLATION OF BACTERIA SUITABLE FOR THESE PROCESSES IS CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 265 CITATIONS, 73 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW#12655
PUBLICATION DATE: 85
TITLE: BIOLOGICAL EFFECTS OF MICROWAVE RADIATION, 1975-JAN 1984 (CITATIONS FROM THE INSPEC: INFORMATION SERVICES FOR THE PHYSICS AND ENG
DESCRIPTOR: *ANOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *MICROWAVES; *BIOLOGICAL EFFECTS; *HEALTH EFFECTS
DESCRIPTIVE NOTE: 256P. PRICE CODE: PC N81/MF N81
ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE SHORT AND LONG TERM EFFECTS OF MICROWAVE RADIATION. THE PHYSIOLOGICAL EFFECTS OF THERMAL STRESS ARE CONSIDERED. EXPERIMENTAL DATA, INCLUDING METHODOLOGY AND EVALUATION, ARE ALSO CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 383 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW#12652
PUBLICATION DATE: 85
DESCRIPTOR: *ANION EXCHANGE; *ANION EXCHANGE RESINS; *ANOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *FORMULATION; *STRUCTURE; *WATER TREATMENT
DESCRIPTIVE NOTE: 86P. PRICE CODE: PC N81/MF N81
ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE FORMULATION AND SYNTHESIS OF ANION EXCHANGE RESINS BASED ON SUCH RESINS AS AMIDES, POLYETHYLENES, AND STYRENES. OSMOTIC PROPERTIES, EXCHANGE KINETICS BEHAVIOR, SORPTION PROPERTIES, STRUCTURE STUDIES, AND TEMPERATURE RELATED PERFORMANCE EFFECTS ON ANION EXCHANGE RESINS ARE CONSIDERED. ANION EXCHANGE CHROMATOGRAPHY OF METALS AND LIQUIDS, AND APPLICATIONS IN WATER PURIFICATION AND POLLUTION CONTROL ARE INCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 181 CITATIONS, 29 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW#12653
PUBLICATION DATE: 85
DESCRIPTOR: ANALYTICAL TECHNIQUES; *ANOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; AQUATIC POPULATION DYNAMICS; *ECOLOGY; MODELING; *WATER POLLUTION
DESCRIPTIVE NOTE: 296P. PRICE CODE: PC N81/MF N81
ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING AQUATIC POPULATION DYNAMICS. TOPICS INCLUDE PREDATORY-PREY RELATIONSHIPS, POPULATION ECOLOGY, LABORATORY CULTURE, WATER POLLUTION EFFECTS, SEASONAL VARIATION, AND NUTRIENTS BIOASSAY. TROPIC DYNAMICS, FOOD CHAINS, SPECIES DIVERSITY, BOTTOM SEDIMENTS, NUTRIENT CYCLING, MORTALITY EFFECTS, LIFE HISTORY STUDIES, MODELING, AND ANALYTICAL TECHNIQUES ARE DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 282 CITATIONS, 107 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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


ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE SHORT AND LONG TERM EFFECTS OF MICROWAVE RADIATION. THE PHYSIOLOGICAL EFFECTS OF THERMAL STRESS ARE CONSIDERED. EXPERIMENTAL DATA, INCLUDING METHODOLOGY AND EVALUATION, ARE ALSO CONSIDERED. THIS UPDATED BIBLIOGRAPHY CONTAINS 74 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: EW012656

PUBLICATION DATE: 85

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING AIR AND WATER POLLUTION BY CADMIUM. TOPICS INCLUDE DETECTION, MONITORING, AND ANALYSIS OF CADMIUM IN THE ENVIRONMENT. ALSO INCLUDED ARE TOPICS ON SOURCES, CONTROL TECHNIQUES, EMISSIONS, TRANSPORT PROPERTIES, TOXICITY, AND EFFECTS STUDIES, FOR PLANTS, ANIMALS, AND HUMANS. THIS UPDATED BIBLIOGRAPHY CONTAINS 259 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: EW012656

PUBLICATION DATE: 85

ABSTRACT: THE COMPUTERIZED COMPLEX EFFLUENT TOXICITY INFORMATION SYSTEM (CETIS) DATA BASE INCLUDES DATA EXTRACTED FROM AQUATIC BIOASSAY REPRINTS AS WELL AS FACILITY AND RECEIVING-WATER INFORMATION. DATA REFERENCES ARE OBTAINED FROM BOTH PUBLISHED PAPERS AND FROM UNPUBLISHED RESULTS OF TESTS CONDUCTED BY STATE OR REGIONAL ENVIRONMENTAL OFFICES. PROCEDURES FOR EXTRACTING AND RECORDING DATA BASED ON THE CETIS DATA ELEMENT GUIDELINES ARE DISCUSSED IN DETAIL.

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

IRIS ACCESSION NUMBER: EW012656

PUBLICATION DATE: 84

ABSTRACT: A NEW LOOK AT SLUDGE CONDITIONING IS PRESENTED. ADVANTAGES AND DISADVANTAGES OF ORGANIC POLYMERS AND INORGANIC CHEMICALS ARE DISCUSSED. SPECIAL EMPHASIS IS PLACED ON PROCEDURES FOR CHEMICAL PREPARATION, SLUDGE PREPARATION, SLUDGE TESTING, CHEMICAL DOSAGE DETERMINATION,
AND COST ESTIMATION. THIS IS A USEFUL MANUAL ON CHEMICAL SLUDGE CONDITIONING.

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

IRIS ACCESSION NUMBER: EW812661
PUBLICATION DATE: 84
TITLE: CONCEPTS IN MARINE POLLUTION MEASUREMENTS.
PERSONAL AUTHOR: WHITE, H. H.
DESCRIPTORS: *ANALYTICAL TECHNIQUES; *LABORATORY PROCEDURES; *MARINE POLLUTION; *MEASUREMENTS; *MONITORING; *OCEANOGRAPHY; *WATER QUALITY
DESCRIPTIVE NOTE: 744P. PRICE CODE: PC A99/MF E83
ABSTRACT: CONCEPTS IN MARINE POLLUTION MEASUREMENTS EXAMINES A RANGE OF TECHNIQUES FOR MEASURING MARINE POLLUTION AND ITS EFFECTS ON THE ENVIRONMENT. THE FOURTY-THREE PAPERS HAVE BEEN GROUPED UNDER THE FOLLOWING CATEGORIES: TOXICITY TESTS; LABORATORY MICROSCOPES; COMMUNITY PARAMETERS AND MEASURES OF COMMUNITY IMPACT; BIOACCUMULATION TESTS; CHEMICAL MARKERS AND EFFECTS CRITERIA; ANOMALIES IN FIELD SPECIMENS; MESOCOSMS AND FIELD SYSTEMS; FIELD MONITORING PROGRAMS; SUMMARY AND SYNTHESIS.
AVAILABILITY: EO INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW812662
PUBLICATION DATE: 85
TITLE: CONTROL OF MICROORGANISMS OF PUBLIC HEALTH CONCERN IN WATER.
PERSONAL AUTHOR: GELDERICH, E. E.
DESCRIPTORS: *MICROORGANISMS; *PUBLIC HEALTH; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL; *WATER QUALITY
DESCRIPTIVE NOTE: 22P. PRICE CODE: PC A82/MF A81
ABSTRACT: MICROORGANISMS OF PUBLIC HEALTH CONCERN IN WATER CAN BE CONTROLLED BY TREATMENT PROCESS TECHNOLOGY CURRENTLY AVAILABLE. WHERE OUTBREAKS HAVE OCCURRED, THE CAUSE HAS BEEN A DEMONSTRATED FAILURE IN WASTEWATER OR WATER SUPPLY TREATMENT OR DISTRIBUTION PROTECTION. WHILE NATURAL SELF-PURIFICATION IN RECEIVING WATERS CAN BE AN IMPORTANT BUFFER BETWEEN WASTE EFFILIENT DISCHARGES AND WATER SUPPLY INTAKES, THE FRAGILE NATURE OF THE ASSOCIATED PHENOMENA CANNOT BE A SUBSTITUTION FOR ADEQUATE WASTE TREATMENT. ESSENTIAL TO MAXIMUM PUBLIC HEALTH SAFEGUARDS IS THE USE OF A MULTIPLE BARRIER CONCEPT THAT RELIES ON

ESTABLISHNING PROTECTIVE SYSTEMS BETWEEN THE WATER USER AND SOURCES OF POTENTIAL CONTAMINATION.

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

IRIS ACCESSION NUMBER: EW812663
PUBLICATION DATE: 84
TITLE: CORPORATE USE OF INFORMATION REGARDING NATURAL RESOURCES AND ENVIRONMENTAL QUALITY.
PERSONAL AUTHOR: TRAIN, R. E.
DESCRIPTORS: *CORPORATIONS; *ENVIRONMENTAL QUALITY; *INFORMATION SOURCES; *INFORMATION USE; *INFORMATION NEEDS; *NATURAL RESOURCES; *SURVEYS
DESCRIPTIVE NOTE: 97P. PRICE CODE: PC A05/MF A01
ABSTRACT: THIS REPORT PRESENTS FINDINGS AND RECOMMENDATIONS FROM A ONE-YEAR STUDY OF THE CORPORATE USE OF INFORMATION REGARDING NATURAL RESOURCES AND ENVIRONMENTAL QUALITY. PERSONAL INTERVIEWS WERE CONDUCTED WITH 229 INFORMATION USERS AT 45 OF AMERICA'S LARGEST CORPORATIONS. TRADE ASSOCIATIONS AND PRIVATE INFORMATION COMPANIES. IN ADDITION, 110 INFORMATION USERS PARTICIPATED IN A WRITTEN SURVEY. OUR PRINCIPAL FINDINGS ARE: (1) US CORPORATIONS URGENTLY NEED MORE INTERNATIONAL DATA; (2) US CORPORATIONS FEEL THAT THE GOVERNMENT'S NATURAL RESOURCE FORECASTS ARE NOT CREDIBLE; (3) US CORPORATIONS NEED UPGRADED AND EXPANDED DATA ON ENVIRONMENTAL QUALITY; (4) US CORPORATIONS BELIEVE THAT GOVERNMENT INFORMATION IS NOT TIMELY; (5) INFORMATION ON NATURAL RESOURCES AND ENVIRONMENTAL QUALITY IS VITAL TO THE SUCCESS OF US CORPORATIONS; (6) US CORPORATIONS DEPEND ON A LARGE BODY OF THIS INFORMATION IN MAKING DECISIONS REGARDING CAPACITY, SITING, MARKETING, PRODUCTION, AND STRATEGIC PLANNING AMONG OTHERS; AND (7) THE US GOVERNMENT IS THE PRINCIPAL SOURCE OF INFORMATION ON NATURAL RESOURCES AND ENVIRONMENTAL QUALITY. (EPA CITATION 18.011186)

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

IRIS ACCESSION NUMBER: EW812664
PUBLICATION DATE: 84
TITLE: COST-EFFECTIVE DESIGN AND OPERATION OF URBAN STORMWATER CONTROL SYSTEMS; DECISION-SUPPORT SOFTWARE.
PERSONAL AUTHOR: LABADIE, J. W.; AND OTHERS
DESCRIPTORS: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *DESIGN; *PLANNING; *OPERATIONS (WASTEWATER); *SEWERS; *STORMWATER; *STORMWATER CONTROL SYSTEMS; *URBAN AREAS
DESCRIPTIVE NOTE: 287P. PRICE CODE: PC A18/MF A01. ORDER NO.: PB85-203941/WEP
ABSTRACT: Although the microcomputer revolution has made powerful computer hardware available at low cost, there is still a severe lag in the availability of computer software that can aid urban water managers in finding cost-effective solutions to complex design and operational problems in stormwater and combined sewer control. A stormwater control package (SWCP) is presented with user manual for introducing automation into stormwater control systems. The package contains state-of-the-art technology in storm inflow forecasting, fully dynamic hydraulic routing, and dynamic programming optimization. It is designed for "simulated" real-time experimentation on application of automation to storm and combined sewer control for achieving improved performance. In addition, it is believed that application of the planning level can potentially save large amounts of capital in sizing of facilities through optimum regulation in real-time of storage and conveyance of stormwater. Comprehensive experience with the north shore outfalls and channel outfalls consolidation projects of the clean water program of San Francisco is presented. In addition to operational software, an optimal sewer design package called CSUDP/sewer is presented with user manual which also employs dynamic programming. As a screening tool, program CSUDP/sewer can find least-cost vertical layouts and sizings of storm drainage systems. Preliminary experience with an optimal horizontal layout procedure which combines nonlinear programming, network flow theory, and heuristic search is also presented, but more testing with large networks is needed for this algorithm.

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

IRIS ACCESSION NUMBER: EW12665

PUBLICATION DATE: 85

TITLE: DESIGN OF A STATEWIDE GROUNDWATER MONITORING NETWORK FOR ILLINOIS.

PERSONAL AUTHOR: O'HEARN, M.; AND SCHOCK, S. C.

DESCRIPTION: ★CONTAMINATION; ★GROUNDWATER; ★ILLINOIS; ★MONITORING; ★MONITORING NETWORKS; ★WATER RESOURCES

DESCRIPTIVE NOTE: 84P. PRICE CODE: PC .50/MF A1. ORDER NO.: PB85-152821/WEP

ABSTRACT: This report documents the design of a groundwater monitoring network for principal aquifers in Illinois. The objective of this network is to identify and assess existing groundwater resource problems in Illinois' highest yielding aquifers and to monitor base line data in unaffected areas to detect future groundwater problems. The proposal network is based upon the monitoring of 138 public water supply wells and incorporates a three tier prioritization system to determine which major aquifers should be monitored for organic and inorganic contaminants.

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

IRIS ACCESSION NUMBER: EW12667

PUBLICATION DATE: 85

TITLE: DETECTION AND IDENTIFICATION OF "GIARDIA" CYSTS USING IMMUNOFLOURESCENCE AND PHASE CONTRAST MICROSCOPY.

PERSONAL AUTHOR: SAUCH, J. A.

DESCRIPTION: ★ANALYTICAL TECHNIQUES; DETECTION; GIARDIA; ★GIARDIA CYSTS; ★IDENTIFICATION; ★IMMUNOFLOURESCENCE; ★LABORATORY PROCEDURES; ★PHASE CONTRAST MICROSCOPY; ★WATER QUALITY


ABSTRACT: Detection and identification of giardia cysts in water samples has been improved by the development of an immunoflorescent method that specifically stains giardia cysts bright green and allows their easy detection against a black background. The report discusses aspects of the method — reagents and instrumentation — that must be considered and optimized by anyone wanting to adopt this technique for the detection of giardia cysts.
ABSTRACT: A method was developed for the determination of four neutral nitrogen-containing compounds (fenarimol, mgk 254, mgk 326, and pronamide) in wastewaters. The method development program consisted of a literature review, determination of extraction efficiency for each compound from water into methylene chloride; development of a deactivated silica gel cleanup procedure; and determination of suitable high performance liquid chromatographic (hplc) analysis conditions.

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

IRIS ACCESSION NUMBER: EW012669

PUBLICATION DATE: 85

TITLE: DETERMINATION OF NATURAL NITROGEN-CONTAINING PESTICIDES IN INDUSTRIAL AND MUNICIPAL WASTEWATERS - FENARIMOL, MGK 254, MGK 326, AND PRONAMIDE

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

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *FENARIMOL; *INDUSTRIAL EFFLUENTS; *LABORATORY PROCEDURES; *MUNICIPAL EFFLUENTS; *PRONAMIDE; *WASTEWATER

DESCRIPTIVE NOTE: 66P. PRICE CODE: PC A04/MF A01. ORDER NO.: PB85-199157/WEP

ABSTRACT: A method was developed for the determination of four neutral nitrogen-containing compounds (fenarimol, mgk 254, mgk 326, and pronamide) in wastewaters. The method development program consisted of a literature review, determination of extraction efficiency for each compound from water into methylene chloride; development of a deactivated silica gel cleanup procedure; and determination of suitable gas chromatographic analysis conditions. The final method was applied to wastewater from a manufacturer of fenarimol and a manufacturer of pronamide in order to determine the precision of accuracy of the method.

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

IRIS ACCESSION NUMBER: EW012668

PUBLICATION DATE: 85

TITLE: DETERMINATION OF MBTS AND TCMFB IN INDUSTRIAL AND MUNICIPAL WASTEWATER.

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

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *MBTS; *LABORATORY PROCEDURES; *INDUSTRIAL EFFLUENTS; *MUNICIPAL EFFLUENTS; *TCMFB; *WASTEWATER

DESCRIPTIVE NOTE: 45P. PRICE CODE: PC A03/MF A01. ORDER NO.: PB85-189025/WEP

ABSTRACT: A method was developed for the determination of MBTS and TCMFB in wastewaters. The method development program consisted of a literature review; determination of extraction efficiency for each compound from water into methylene chloride; development of a deactivated silica gel cleanup procedure; and determination of suitable high performance liquid chromatographic (hplc) analysis conditions.

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

IRIS ACCESSION NUMBER: EW012678

PUBLICATION DATE: 84

TITLE: DEVELOPMENT OF A GENERAL PLANNING METHODOLOGY FOR STORM WATER MANAGEMENT IN URBAN WATERSHEDS.

PERSONAL AUTHOR: ORMSBEE, L. E.; AND OTHERS

DESCRIPTOR: *ILLINOIS; *MANAGEMENT; *PLANNING; *STORMWATER; *SURFACE RUNOFF; *URBAN AREAS


ABSTRACT: A new methodology is developed for use in the planning of dual purpose detention basins in urban watersheds. The methodology employs continuous simulation, statistical analysis, and a general design heuristic to obtain an integrated system of detention basins. Both water quantity and water quality constraints may be considered. Several different approaches were considered in the development of the design heuristic. The developed methodology uses a dynamic program to obtain a feasible starting point for a nonlinear search algorithm. The nonlinear search algorithm employs the complex method of the general planning methodology was applied to an actual watershed in Glen Ellyn, Illinois, and to a synthetic watershed that was constructed from average geomorphic data for the state of Indiana.

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

IRIS ACCESSION NUMBER: EW012671

PUBLICATION DATE: 85


DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES: *ECOLOGY; *ENVIRONMENTAL IMPACT; *PESTICIDES; *WATER POLLUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 288P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-864494/WEP

ABSTRACT: This bibliography contains citations concerning the occurrence, distribution, and biological effects of pesticides in the aquatic environment. The effects of specific substances on specific species. Transport mechanisms, degradation studies, and aquatic ecosystem response investigations are among the topics included. Marine and freshwater environments are considered. (This updated bibliography contains 386 citations, 68 of which are new entries to the previous edition.)
PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW#12673

PUBLICATION DATE: 84


DESCRIPTOR: *AIR POLLUTION CONTROL; *HAZARDOUS WASTE; *WASTELOAD ALLOCATION; *WATER QUALITY MODELING; DESCRIPTIVE NOTE: A BROAD SUMMARY OF THE RESEARCH BEING DONE, WHERE THAT RESEARCH IS BEING DONE, WHO TO CONTACT FOR MORE INFORMATION ABOUT THE PROGRAM, AND BOTH THE APPROPRIATE TOTAL FUNDING FOR THAT AREA AND THE PERCENTAGE OF TOTAL FUNDING WHICH IS RESERVED BY EPA FOR INHOUSE RESEARCH. FUNDING NOT RESERVED FOR IN-HOUSE RESEARCH IS SPENT THROUGH EXTRAMURAL CONTRACTS, GRANTS, AND COOPERATIVE AGREEMENTS.

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

IRIS ACCESSION NUMBER: EW#12674

PUBLICATION DATE: 85

TITLE: EPA-SUPPORTED (ENVIRONMENTAL PROTECTION AGENCY SUPPORTED) WASTELOAD ALLOCATION MODELS.

PERSONAL AUTHOR: BARNWELL, T. O.; BOYNTON, D. K.

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *MODELING; *MODELS; *TRAINING; *USEPA; *WASTELOAD ALLOCATION; *WATER QUALITY

DESCRIPTIVE NOTE: 13P. PRICE CODE: PC A#1/MF A#1. ORDER NO.: PB85-189782/WEP


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

IRIS ACCESSION NUMBER: EW#12675

PUBLICATION DATE: 85


DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES: BIBLIOGRAPHIES: ECOLOGY; ENVIRONMENTAL EFFECTS; *EUTROPHICATION; MATHEMATICAL MODELING; MONITORING; *WATER POLLUTION CONTROL; *WATER QUALITY MODELS; *WASTELOAD ALLOCATION

DESCRIPTIVE NOTE: 121P. PRICE CODE: PC A#1/MF A#1. ORDER NO.: PB85-857985/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING EUTROPHICATION ANALYSIS, ASSESSMENT, EFFECTS, CONTROL, AND SURVEILLANCE OF INLAND AND COASTAL WATERS. EUTROPHICATION CAUSES, TREATMENT, PREDICTIONS, AND ECONOMICS ARE ALSO DISCUSSED. APPLICATIONS OF ECOLOGICAL DYNAMICS AND MATHEMATICAL MODELS FOR EUTROPHICATION CONTROL OF WATERS ARE CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 161 CITATIONS, 21 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW#12676

PUBLICATION DATE: 85

TITLE: FEDERAL REGISTER, PART 2. OFFICE OF SCIENCE AND TECHNOLOGY POLICY. CHEMICAL CARCINOGENS: A REVIEW OF THE SCIENCE AND ITS ASSOCIATES

DESCRIPTOR: *CARCINOGENS; *CHEMICALS; *FEDERAL REGISTER; *GUIDELINES; *RISK ASSESSMENT

DESCRIPTIVE NOTE: 89P. PRICE CODE: PC A#1/MF A#1. ORDER NO.: PB85-232031/WEP

ABSTRACT: THE OFFICE OF SCIENCE AND TECHNOLOGY POLICY HAS PREPARED THE DOCUMENT TO BE USED AS A FRAMEWORK FOR REGULATORY AGENCIES IN ASSESSING CANCER RISKS FROM CHEMICALS. THE DOCUMENT DOES NOT ATTEMPT TO FORMULATE POLICY OR DEVELOP STANDARDIZED METHODS OF RISK ASSESSMENT. IT TRIES TO DEFINE PRINCIPLES, BASED UPON CURRENT SCIENTIFIC INFORMATION, TO SERVE AS GUIDELINES IN CERTAIN MATTERS WHEN CONSIDERING CARCINOGENS. THE PRESENT DOCUMENT IS THE CUMULATION OF DRAFTS EXTENSIVELY REVIEWED BY GOVERNMENTAL AND NON-GOVERNMENTAL SCIENTISTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161
ABSTRACT: SLOW SAND FILTRATION RESEARCH WAS CONDUCTED AT COLORADO STATE UNIVERSITY IN TWO PHASES, USING 1-FOOT DIAMETER FILTERS. PHASE I RESULTS SHOWED REMOVAL OF GIARDIA CYSTS EXCEEDED 97.9 PERCENT FOR THE THREE HYDRAULIC LOADING RATES USED. THE MOST IMPORTANT OPERATING CONDITION WAS THE DEVELOPMENT OF A BIOPOPULATION WITHIN THE SAND BED. REMOVAL OF TOTAL COLIFORM BACTERIA RELATED WELL TO THE DEVELOPMENT OF THE BIOPOPULATION WITHIN THE SAND BED SHOWING 98 PERCENT REMOVAL FOR A NEW SAND BED OPERATED AT 0.48 M/HR FILTRATION RATE, AND 99.9 PERCENT REMOVAL FOR A MATURE SAND BED AND ESTABLISHED SCHUTZDECHE OPERATED AT 0.84 M/HR. IN PHASE II REMOVALS OF TOTAL COLIFORM BACTERIA RANGED FROM 68 PERCENT FOR THE FILTER MAINTAINED WITH NO BIOLOGICAL ACTIVITY (E.G., CHLORINATED BETWEEN TESTS), TO 99.9 PERCENT FOR THE FILTER HAVING NUTRIENTS ADDED. REMOVAL FOR THE CONTROL FILTER REMOVAL AVERAGED 97 PERCENT.

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

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING RESEARCH AND EXPERIMENTATION OF ENVIRONMENT EFFECTS OF FISHERIES, FISH HATCHERIES, AND MARINE WILDLIFE SERVICES. PRIMARY EMPHASIS IS ON FISH AND SHELLFISH, WITH SOME CITATIONS PERTAINING TO BENTHIC INVERTEBRATES. EFFECTS OF WEATHER, TEMPERATURE, AQUATIC TOXINS, CONSTRUCTION, EUTROPHICATION, NUTRIENTS, WATER LEVELS, WATER CHEMISTRY, AND SOME POLLUTANTS AS OIL SPILLS, HEAVY METALS, CHEMICAL WASTES AND HERBICIDES ARE DISCUSSED. TOLERANCES BY FISH TO THESE ENVIRONMENTAL CHANGES TO THEIR HABITAT, REPRODUCTIVE CYCLES, AND ATTEMPTS TO REHABILITATE THE AQUATIC HABITATS ARE CONSIDERED. (THIS BIBLIOGRAPHY CONTAINS 315 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

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

IRIS ACCESSION NUMBER: EW812692

PUBLICATION DATE: 84

TITLE: INTERORGANIZATIONAL RELATIONS AND DECISION MAKING AMONG SURFACE WATER QUALITY MANAGEMENT PLANNING AGENCIES.

PERSONAL AUTHOR: POTTER, H. R.; AND SCHWEER, H. M.

DESCRIPTOR: *DECISION MAKING; FEDERAL GOVERNMENT; INDUSTRY; LOCAL GOVERNMENT; *MANAGEMENT; *ORGANIZATIONS; *PLANNING; *PROGRAM EVALUATION; *RESEARCH REPORTS; *SURVEYS; STATE GOVERNMENT; *WATER QUALITY; VOLUNTEER ORGANIZATIONS

DESCRIPTIVE NOTE: 78P. PRICE CODE: PC AB4/MF AB1. ORDER NO.: PB85-161420/WEP

ABSTRACT: THIS IS A STUDY OF MANDATED INTERORGANIZATIONAL RELATIONS (IOR). THIS IS IN CONTRAST TO MOST IOR STUDIES THAT HAVE ASSUMED VOLUNTARY RELATIONS AMONG ORGANIZATIONS. SPECIFICALLY THE FOCUS IS ON ORGANIZATIONS INVOLVED IN A FEDERALLY MANDATED WATER QUALITY MANAGEMENT PLANNING PROGRAM. DATA ARE FROM INTERVIEWS WITH 39 PERSONS IN 33 ORGANIZATIONS IN THREE LOCIS: (A) A DESIGNATED PLANNING AREA, (B) A NON-DESIGNATED PLANNING AREA AND (C) PERSONS IN POSITIONS WITH STATE WIDE RESPONSIBILITIES. THE GFE TEST INVOLVEMENT WAS IN THE DESIGNATED AREA, AMONG STATE AND FEDERAL ORGANIZATIONS, AND AMONG AGRICULTURAL AND ENVIRONMENTAL VOLUNTARY ORGANIZATIONS. THERE WAS LITTLE INVOLVEMENT BY LOCAL GOVERNMENT AND INDUSTRY. LENGTH OF TIME NEEDED FOR IMPLEMENTATION, CONTINUITY AND SOURCES OF FUNDS, AND LOCAL SUPPORT ARE THREE MAJOR FACTORS THAT STAND OUT AS IMPORTANT TO MODIFY IN FED.-STATE-LOCAL RELATIONS IN FUTURE PROGRAMS.

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

IRIS ACCESSION NUMBER: EW812699

PUBLICATION DATE: 85

TITLE: METHODOLOGY FOR RANKING THE DEGREE OF HAZARD ASSOCIATED WITH EXPOSURE TO CARCINOGENS AND OTHER TOXIC CHEMICALS.

PERSONAL AUTHOR: ANDERSON, E. L.; AND OTHERS

DESCRIPTOR: *CARCINOGENS; *CHEMICALS; *HAZARDOUS MATERIALS; *RISK ASSESSMENT; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 75P. PRICE CODE: PC AB4/MF AB1. ORDER NO.: PB85-167986/WEP

ABSTRACT: A HAZARD INDEX IS AN OVERALL INDICATOR OF THE POTENTIAL HARM OF A HAZARDOUS SUBSTANCE TO HUMANS AND THE ENVIRONMENT. THIS PAPER DESCRIBES THE USE OF A CARCINOGENICITY INDEX AND A SYSTEMIC (CHRONIC) TOXICITY INDEX IN SETTING REPORTABLE QUANTITIES UNDER SECTION 111(14) OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) OF 1980. THE THREE TYPES OF EVIDENCE USED TO EVALUATE A SUBSTANCE'S CARCINOGENIC HAZARD ARE (1) EPIDEMIOLOGICAL, (2) EXPERIMENTAL AND (3) SUPPORTIVE EVIDENCE FROM SHORT-TERM TESTS, METABOLISM AND PHARMACOKINETICS AND STRUCTURE-ACTIVITY CORRELATIONS. ABOUT 200 POTENTIAL CARCINOGENS AND 2000 CHEMICALS ASSOCIATED WITH OTHER DISEASES HAVE BEEN EVALUATED AND ASSIGNED A HAZARD RANKING.

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

IRIS ACCESSION NUMBER: EW812788

PUBLICATION DATE: 85

TITLE: METHODS FOR MEASURING THE ACUTE TOXICITY OF EFFLUENTS TO FRESHWATER AND MARINE ORGANISMS.

PERSONAL AUTHOR: PELTIER, W. H.; AND WEBER, C. I.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *EFFLUENTS; *FIELD TECHNIQUES; *GUIDELINES; *LABORATORY PROCEDURES; *MARINE BIOLOGY; *TOXIC SUBSTANCES; *TOXICITY TESTS
ABSTRACT: THIS MANUAl DESCRIBES METHODS FOR MEASURING THE ACUTE TOXICITY OF EFFLUENTS TO FRESHWATER AND MARINE MACROINVERTEBRATES AND FISH. THE METHODS INCLUDE A PRELIMINARY RANGE-FINDING TEST, A SCREENING TEST, AND MULTI-CONCENTRATION (DEFINITIVE) STATIC AND FLOW-THROUGH TOXICITY TESTS. ALSO INCLUDED ARE GUIDELINES ON LABORATORY SAFETY, QUALITY ASSURANCE, FACILITIES AND EQUIPMENT, EFFLUENT SAMPLING AND HOLDING, DI LUTION WATER, TEST SPECIES SELECTION AND HANDLING, DATA INTERPRETATION AND UTILIZATION, REPORT PREPARATION, TEST ORGANISM CULTURING, DI LUTOR AND MOBILE BIOASSAY LABORATORY DESIGN AND CALIBRATION, AND EQUIPMENT CHECKS. LISTS AND COMPUTER PROGRAMS FOR CALCULATING THE LC50 AND CONFIDENCE INTERVALS.

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

IRIS ACCESSION NUMBER: EW011502
PUBLICATION DATE: 85
TITLE: MODELING REMEDIAL ACTIONS AT UNCONTROLLED HAZARDOUS WASTE SITES.
PERSONAL AUTHOR: BOUTWELL, S.H.; AND OTHERS
DESCRIPTOR: *GUIDELINES; *HAZARDOUS WASTES; *MODELS; *REM EDIAL ACTIONS; *SITE EVALUATION; *WASTE CONTROL; *WATER POLLUTION CONTROL
ABSTRACT: THE DOCUMENT PROVIDES GUIDANCE ON THE SELECTION AND USE OF MODELS FOR THE PURPOSE OF EVALUATING THE EFFECTIVENESS OF REMEDIAL ACTIONS AT UNCONTROLLED HAZARDOUS WASTE SITES. IT CONSISTS OF FOUR SECTIONS, EACH COVERING A SPECIFIC FACET ON MODELING REMEDIAL ACTIONS, INCLUDING SELECTION OF MODELS, AND THE USE OF SIMPLIFIED, ANALYTICAL, AND NUMERICAL MODELS FOR THE EVALUATION OF SUBSURFACE WASTE CONTROL, AND SURFACE WATER REMEDIAL ACTIONS. THIS DOCUMENT PROVIDES A COMPREHENSIVE SET OF GUIDEINES TO REGULATORY OFFICIALS FOR THE INCORPORATION OF MODELS INTO THE REMEDIAL ACTION PLANNING PROCESS AT FEDERAL AND STATE SUPER FUND SITES.

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

IRIS ACCESSION NUMBER: EW011503
PUBLICATION DATE: 84
TITLE: MOUNTAIN COMMUNITIES WASTEWATER MANAGEMENT ALTERNATIVES REPORT. VOLUME 1. SUMMARY DOCUMENT.
DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *COSTS; *ECONOMICS; *ENGINEERING TECHNIQUES; *FUNDING SOURCES; *MANAGEMENT; *MOUNTAIN AREAS; *RURAL AREAS; *TECHNOLOGY; *WASTEWATER TREATMENT
ABSTRACT: THIS ALTERNATIVES REPORT DESCRIBES METHODS FOR MEASURING THE ACUTE TOXICITY OF EFFLUENTS TO FRESHWATER AND MARINE MACROINVERTEBRATES AND FISH. THE METHODS INCLUDE A PRELIMINARY RANGFINDING TEST, A SCREENING TEST, AND MULTI-CONCENTRATION (DEFINITIVE) STATIC AND FLOW-THROUGH TOXICITY TESTS. ALSO INCLUDED ARE GUIDELINES ON LABORATORY SAFETY, QUALITY ASSURANCE, FACILITIES AND EQUIPMENT, EFFLUENT SAMPLING AND HOLDING, DI LUTION WATER, TEST SPECIES SELECTION AND HANDLING, DATA INTERPRETATION AND UTILIZATION, REPORT PREPARATION, TEST ORGANISM CULTURING, DI LUTOR AND MOBILE BIOASSAY LABORATORY DESIGN AND CALIBRATION, AND EQUIPMENT CHECKS. LISTS AND COMPUTER PROGRAMS FOR CALCULATING THE LC50 AND CONFIDENCE INTERVALS.

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

IRIS ACCESSION NUMBER: EW011504
PUBLICATION DATE: 84
TITLE: MOUNTAIN COMMUNITIES WASTEWATER MANAGEMENT ALTERNATIVES REPORT. VOLUME 2. TECHNICAL ENGINEERING ALTERNATIVES.
DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *ENGINEERING TECHNIQUES; *MANAGEMENT; *MOUNTAIN AREAS; *RURAL AREAS; *TECHNOLOGY; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 160P. PRICE CODE: PC A06/MF A01. ORDER NO.: PB85-169019/WEP
ABSTRACT: THIS VOLUME CONTAINS CHAPTER 3--TECHNICAL ENGINEERING ALTERNATIVES. CHAPTER THREE DESCRIBES APPLICABLE TECHNICAL APPROACHES TO WASTEWATER MANAGEMENT IN SMALL MOUNTAINOUS COMMUNITIES. THE CHAP TER INCLUDES SYSTEM TYPE (ON-SITE, CLUSTER, SMALL COMMUNITY AND CENTRALIZED). TABULAR SUMMARIES--FACT SHEETS--OF EACH SYSTEM ARE ALSO INCLUDED.

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

IRIS ACCESSION NUMBER: EW011505
PUBLICATION DATE: 84
TITLE: MOUNTAIN COMMUNITIES WASTEWATER MANAGEMENT ALTERNATIVES REPORT. VOLUME 3. INSTITUTIONAL MANAGEMENT ALTERNATIVES.
DESCRIPTOR: *MANAGEMENT; *MOUNTAIN AREAS; *RURAL AREAS; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 119P. PRICE CODE: PC A06/MF A01. ORDER NO.: PB85-169027/WEP
ABSTRACT: Volume III of the Alternatives Development Report is comprised of Chapter 4, "Institutional Management Alternatives." This chapter develops and describes institutional management systems which may be implemented to meet the wastewater treatment and disposal needs of mountain communities. Fact sheets describing the key components of each system are also included. This chapter includes a discussion of the various functions which must be carried out by a management agency and techniques or methods which can be employed to successfully accomplish these functions.

Availability: National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161

IRIS Accession Number: EW#12706
Publication Date: 84


Descriptor: *Costs; *Economics; *Funding Sources; *Management; *Mountain Areas; *Rural Areas; *Wastewater Treatment

Descriptive Note: 287P. Price Code: PC A10/MF A01. Order No.: PB85-169835/WEP

Abstract: This is the final volume of the Mountain Communities Wastewater Management Assessment's Alternatives Development Report. This volume contains Chapter 5 which identifies federal, state, local and private funding sources available to mountain communities and presents a fact sheet summarizing key characteristics of each applicable financial technique. Financing considerations for innovative and alternative systems are discussed, and a method for selecting the most appropriate financing technique in a given situation is presented.

Availability: National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161

IRIS Accession Number: EW#12707
Publication Date: 85

Title: National Small Quantity Hazardous Waste Generator Survey.

Personal Author: Ruder, E.; and others

Descriptor: *Hazardous Materials; *Hazardous Wastes; *Hazardous Waste Generators; *Hazardous Waste Sources; *Industry; *Management; *Industrial Wastes; *Surveys; *Waste Disposal

Descriptive Note: 178P. Price Code: PC A08/MF A01. Order No.: PB85-184438/WEP

Abstract: This report summarizes the results of a two-year nationwide survey of small quantity generators of hazardous waste (i.e., establishments that produce less than 1,106 kilograms of hazardous waste per calendar month). The report includes general information on: the number and types of small quantity generators; the types and quantities of waste they generate; and the ways in which the wastes are handled. The report also contains waste characterization and management profiles of 22 principal industries containing small quantity generators.

Availability: National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161

IRIS Accession Number: EW#12708
Publication Date: 84


Personal Author: Haglund, K.; and Norrmaa, J.

Descriptor: *Agricultural Wastes; *Environmental Effects; *Fertilization; *Industrial Wastes; *Nitrogen; *Purification Processes; *Research; *Sweden; *Wastewater; *Wastewater Treatment

Descriptive Note: 118P. Price Code: PC A06/MF A01. Order No.: DE85751457/WEP

Abstract: The Nitrogen Cycle, particularly nitrification and denitrification, is described. The emission of nitrogen in Sweden emanates from industry, municipal waste water, fertilization of forests and farming grounds. Nitrogen from air is distributed via precipitation. Eutrophication and health hazards are discussed. Purification processes, such as chlorination, ion exchange, ammonia elimination and reverse osmosis as well as biological processes for minor nitrogen contents in wastewater are described. Comparative evaluations of various methods are made. Recommendations of preventive measures are discussed. (EPA Citation 18:24328)

Availability: National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161

IRIS Accession Number: EW#12709
Publication Date: 84

Title: Nuclear Waste Management and the Use of the Sea.

Descriptor: *Legislation; *Management; *Oceans; *Oceanography; *Nuclear Wastes; *Radioactive Wastes; *Policies; *Waste Disposal; *World Problems

Descriptive Note: 186P. Price Code: PC A06/MF A01. Order No.: PB85-282976/WEP

Abstract: This chapter develops and describes institutional management systems which may be implemented to meet the wastewater treatment and disposal needs of mountain communities. Fact sheets describing the key components of each system are also included. This chapter includes a discussion of the various functions which must be carried out by a management agency and techniques or methods which can be employed to successfully accomplish these functions.
ABSTRACT: This report reviews the current situation on nuclear waste disposal policies in the United States and elsewhere and relates these policies to implications for the environment and human health. The authors expect to gain several specific management advantages. Advantages they believe should result from use of these procedures are described.

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

IRIS ACCESSION NUMBER: EW#12731

PUBLICATION DATE: 84

TITLE: SAFETY IN THE USE OF ASBESTOS: AN ILO (INTERNATIONAL LABOUR OFFICE) CODE OF PRACTICE.

DESCRIPTOR: *ASBESTOS; *GUIDELINES; *HEALTH; *MONITORING; *SAFETY

PRICE: PC810.00

ABSTRACT: In recent years there has been a growing awareness that exposure to asbestos dust can have harmful effects on the health of workers. This report deals with the code which general guidance is given in the first part of the code are monitoring at the workplace. Preventive measures, the protection of workers, and the health of workers. This report includes sections on mining and milling, asbestos cement, textiles, friction materials and the removal of asbestos-containing materials.

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

IRIS ACCESSION NUMBER: EW#12732

PUBLICATION DATE: 84

TITLE: RISK ASSESSMENT AND MANAGEMENT: FRAMEWORK FOR DECISION MAKING.

DESCRIPTOR: *DECISION MAKING; *ASSESSMENT; *ENVIRONMENTAL IMPACT; *MANAGEMENT; *RESEARCH NEEDS; *SALTWATER; *WASTE DISPOSAL; *WATERWATER TREATMENT; *WETLANDS

PRICE: PC510.00

ABSTRACT: Saltwater wetlands have the potential for use as municipal and seafood processing wastewater-discharge sites. However, the potential also exists for adversely impacting these important natural resources. The saltwater wetlands wastewater management environmental assessment is designed to explore the feasibility of using saltwater wetlands for municipal and seafood processing wastewater
ABSTRACT: A study was conducted to determine how slow sand filter effluent quality is affected by scraping and to quantify the labor required to operate and maintain a slow sand filter. The data were obtained by monitoring scraping and other maintenance operations at six slow sand filtration plants in central New York. The time required for filtration quality to improve after filter scraping varied from their weekly. At the slow sand filtration plants visited, in four of ten maintenance operations some quality deterioration occurred. The nature of the particulate matter in raw water apparently has an important effect on filtrate quality, and a pilot plant study should always be conducted before a slow sand filtration plant is constructed. Continuous monitoring of the turbidity of each filter effluent may be needed to determine if filter maintenance operations have a detrimental effect on treated water quality.

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

IRIS ACCESSION NUMBER: EW012742
PUBLICATION DATE: 85

TITLE: SUMMARY OF WATERBORNE ILLNESS TRANSMITTED THROUGH CONTAMINATED GROUNDWATER.

PERSONAL AUTHOR: CRAUN, G. F.

DESCRIPTOR: *CONTAMINATION; *DRINKING WATER; *DISEASES; *GROUNDWATER; *HEALTH; *PUBLIC HEALTH; *WATER SUPPLY; *WATER QUALITY

DESCRIPTIVE NOTE: 31P. PRICE CODE: PC A83/MF A81. ORDER NO.: PB85-176857/WEP

ABSTRACT: The use of contaminated, untreated or inadequately treated groundwater was responsible for 51 percent of all waterborne outbreaks and 44 percent of all waterborne illness reported in the United States during the period 1971-82. Contaminated, untreated or inadequately disinfected groundwater caused 56 percent of the waterborne outbreaks and 66 percent of the waterborne illness which occurred in noncommunity and individual water systems but only 32 percent of the outbreaks and 31 percent of illness in community water systems. Illnesses most frequently transmitted through groundwater included acute gastroenteritis of undetermined etiology, chemical poisonings, hepatitis A, spargelosis, and viral gastroenteritis. Waterborne outbreaks in water systems using untreated well water were caused primarily by the overflow of sewage into wells or cesspools, chemical contamination, and surface run-off contamination. An increase in the number of outbreaks resulting from the use of untreated well contaminated groundwater was noted during the summer months.

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

IRIS ACCESSION NUMBER: EW012736
PUBLICATION DATE: 85

TITLE: SLOW SAND FILTER MAINTENANCE COSTS AND EFFECTS ON WATER QUALITY.

PERSONAL AUTHOR: LETTERMAN, R. D.; CULLEN, T. R.

DESCRIPTOR: *COSTS; *FILTERS; *FILTRATION; *MAINTENANCE; *OPERATIONS (WATER); *SAND FILTERS; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 125P. PRICE CODE: PC A86/MF A81. ORDER NO.: PB85-199669/WEP

ABSTRACT: This handbook is designed primarily for use by fish and wildlife service personnel in the review of NPDES Section 402 permits. It includes a strategy for reviewing permits with the clean water act, environmental protection agency regulations, and the scientific literature of the water pollution control field. Water quality criteria are presented in summary tables for quick reference. Criteria are offered for selecting priority permits for review by the fish and wildlife service. Sources of information and technical assistance are listed and an annotated bibliography is included along with directories of state and EPA offices. Case studies of fish and wildlife service participation in NPDES permit decisions are presented.

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

IRIS ACCESSION NUMBER: EW012733
PUBLICATION DATE: 84

TITLE: SECTION 402 HANDBOOK: GUIDELINES FOR SCREENING NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS.

PERSONAL AUTHOR: FAIT, H. D.

DESCRIPTOR: *CASE STUDIES; *GUIDELINES; *HANDBOOKS; *NPDES; *PERMITS; *PERMIT REVIEW; *WATER POLLUTION CONTROL


ABSTRACT: This handbook is designed primarily for use by fish and wildlife service field office personnel in the review of NPDES Section 402 permits. It includes a strategy for reviewing permits with the Clean Water Act, Environmental Protection Agency regulations, and the scientific literature of the water pollution control field. Water quality criteria are presented in summary tables for quick reference, criteria are offered for selecting priority permits for review by the fish and wildlife service. Sources of information and technical assistance are listed and an annotated bibliography is included along with directories of state and EPA offices. Case studies of fish and wildlife service participation in NPDES permit decisions are presented.

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

IRIS ACCESSION NUMBER: EW012742
PUBLICATION DATE: 85

TITLE: SUMMARY OF WATERBORNE ILLNESS TRANSMITTED THROUGH CONTAMINATED GROUNDWATER.

PERSONAL AUTHOR: CRAUN, G. F.

DESCRIPTOR: *CONTAMINATION; *DRINKING WATER; *DISEASES; *GROUNDWATER; *HEALTH; *PUBLIC HEALTH; *WATER SUPPLY; *WATER QUALITY

DESCRIPTIVE NOTE: 31P. PRICE CODE: PC A83/MF A81. ORDER NO.: PB85-176857/WEP

ABSTRACT: The use of contaminated, untreated or inadequately treated groundwater was responsible for 51 percent of all waterborne outbreaks and 44 percent of all waterborne illness reported in the United States during the period 1971-82. Contaminated, untreated or inadequately disinfected groundwater caused 56 percent of the waterborne outbreaks and 66 percent of the waterborne illness which occurred in noncommunity and individual water systems but only 32 percent of the outbreaks and 31 percent of illness in community water systems. Illnesses most frequently transmitted through groundwater included acute gastroenteritis of undetermined etiology, chemical poisonings, hepatitis A, spargelosis, and viral gastroenteritis. Waterborne outbreaks in water systems using untreated well water were caused primarily by the overflow of sewage into wells or cesspools, chemical contamination, and surface run-off contamination. An increase in the number of outbreaks resulting from the use of untreated well contaminated groundwater was noted during the summer months.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161
ABSTRACT: THE EVIDENCE LINKING CARDIOVASCULAR DISEASE RISK AND WATER QUALITY PARAMETERS WAS WEIGHED AND ANALYZED TO IDENTIFY MAJOR GAPS IN UNDERSTANDING REASONS FOR THE REGIONAL DIFFERENCES IN CARDIOVASCULAR DISEASE MORTALITY IN THE UNITED STATES. EPIDEMIOLOGIC STUDIES EVALUATING OCCUPATIONAL AND PUBLIC HEALTH EXPOSURE TO NITRATES, CARBON MONOXIDE, CARBON DISULFIDE, FIBROGENIC DUSTS, HEAVY METALS AND TRACE ELEMENTS, CHLORIDES, AND HYDRO- AND FLUOROCARBONS WERE ANALYZED. INTAKE OF CHOLESTEROL, CALCIUM, AND MAGNESIUM FROM FOOD ITEMS, COOKING WATER ENHANCEMENT, AND DRINKING WATER WERE ALSO APPRAISED. BASED ON THE CURRENT STATE OF KNOWLEDGE, IT IS OUR JUDGMENT THAT THE DRINKING WATER CHARACTERISTICS OF HIGHEST PRIORITY FROM THE STANDPOINT OF CARDIOVASCULAR DISEASE RISKS ARE CALCIUM/MAGNESIUM CONTENT AND CHLORINE TREATMENT. THE POTENTIAL IMPORTANCE OF CADMIUM, LEAD, NITRATE(S), AND CHLORIDE/SODIUM CONCENTRATIONS ALSO NEED TO BE CONSIDERED. WE PRESENT WORKING HYPOTHESES TO EVALUATE THE ROLE(S) OF THESE PARAMETERS AND A DISCUSSION OF VARIABLES THAT SHOULD BE CONSIDERED IN ANY STUDY DESIGN ADDRESSING THE ASSOCIATION BETWEEN CARDIOVASCULAR DISEASE RISK AND WATER QUALITY AS IMPORTANT VARIABLES AND BIOLOGICAL ENDPOINT EVENTS (MORTALITY, INCIDENCE, CLINICAL DETERMINATION), POPULATIONAL CHARACTERISTICS, DRINKING WATER PARAMETERS, AND DIETARY INTAKE ESTIMATES. 267 REFERENCES, 6 FIGURES, 17 TABLES. (ERA CITATION IF:848812)

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

ABSTRACT: ONE OF THE LARGER STUMBLING BLOCKS TO COMPREHENSIVE WATER MANAGEMENT IS THE LACK OF PUBLIC UNDERSTANDING OF THE MULTITUDE OF VARIABLES THAT OPERATE AT THE SAME TIME WITHIN THE HYDROLOGIC CYCLE. WITH MORE PUBLIC UNDERSTANDING, THERE IS GREATER PUBLIC SUPPORT FOR VARIOUS WATER PROJECTS. DR. JOHN R. AMEND, MONTANA STATE UNIVERSITY, DEVELOPED A WATER MANAGEMENT SIMULATOR WHICH COULD HANDLE A LARGE NUMBER OF VARIABLES SIMULTANEOUSLY OF NATURAL SURFACE AND GROUNDWATER FLOW PLUS A NUMBER OF WATER-USE VARIABLES ON AN ACCELERATED TIME SEQUENCE. THE PURPOSE OF THIS INFORMATION TRANSFER PROJECT WAS TO DEMONSTRATE THE USE OF THE WATER MANAGEMENT SIMULATOR AND TO BEGIN TO DEVELOP EXPERIENCES OF PEOPLE FROM GOVERNMENT AGENCIES AND ACADEMIA TO EXPLAIN ITS OPERATION TO LOCAL PROFESSIONAL AND CIVIC GROUPS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161
UNCERTAINTIES; (5) DE MINIMIS QUANTITY; AND (6) LEGAL AND REGULATORY ISSUES. SEPARATE ABSTRACTS HAVE BEEN PREPARED FOR INDIVIDUAL PAPERS. (ERA CITATION 18:B14789)

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* indicates a journal or a conference proceedings publication.
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*MONITORING NETWORKS

*MOTIVATION

*MOUNTAIN AREAS

*MULTIPLE USE

*MUNICIPAL EFFLUENTS

*NATIONAL PRETREATMENT PROGRAM

*NATURAL RESOURCES

*NATURITE

*NEEDS ANALYSIS

*NEEDS ASSESSMENT

*NEUTRALIZATION

*NEVADA

*NEW JERSEY

*NITROGEN

*NONVERBAL COMMUNICATION

*NPDES

*NUCLEAR WASTES

*NUTRIENTS

*NUTRITION

*OBJECTIVES

*OCCUPATIONAL SAFETY

*OCEANOGRAPHY

*OCEANS

*ODOR CONTROL

*ODORS

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*PRETREATMENT
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*PRIVATIZATION
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*PROCESS CONTROLS
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*PROGRAM DESCRIPTIONS
PROGRAM DEVELOPMENT
*PROGRAM EVALUATION
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*TECHNOLOGY ASSESSMENT

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*TEMPERATURE EFFECTS

*TESTING

*THERMAL CONDITIONING

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