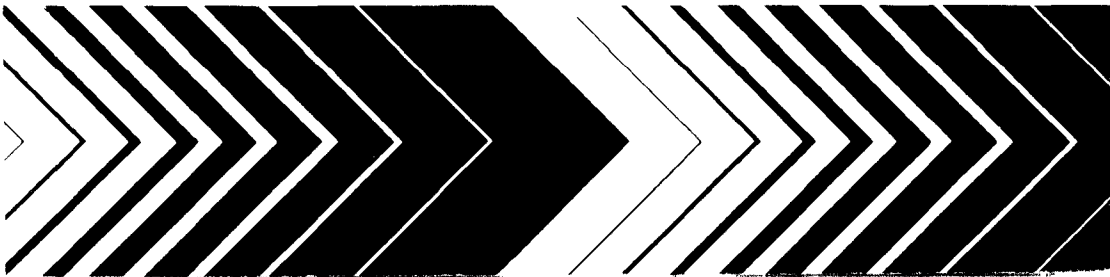




# ORD Information Tools



OL S # 22223

The Office of Research and Development (ORD) publishes a number of reports to document the results of our activities. You are undoubtedly familiar with many of these products (e.g., project reports, project summaries, journal articles, handbooks, design manuals, etc.). This publication has been developed to notify Agency staff of a particular class of information tools which are currently under development or which have recently been completed.

We commonly refer to these materials as "How To" documents. "How To" documents are just what the name implies, publications which will assist a knowledgeable environmental pollution control professional in completing a specific task. For example, they may provide methods measuring environmental parameters, proven design techniques for environmental pollution control facilities, guidance on testing pollution control equipment, or evaluations of different options for cleanup of specific types of pollutants.

Publications listed in this document will be available from our Center for Environmental Research Information while the supply lasts. You may either call FTS 684-7562 or write to the address below to obtain copies.

ORD Publications  
U.S. Environmental Protection Agency  
226 West St. Clair  
Cincinnati, OH 45268

U.S. Environmental Protection Agency  
Region 5, Library  
77 West Jackson Blvd., 12th Floor  
Chicago, IL 60604-3590

## RESEARCH AND DEVELOPMENT .....AIR

**Publication Title:** Supplement to EPA/600/4-84/041:  
Compendium of Methods for the Determination  
of Toxic Organic Compounds in Ambient Air

● ***What need does this publication fill?***

Provides sampling and analysis procedures for a variety of toxic organic compounds in a standardized format.

● ***Who will find this publication useful?***

Regional, state and local environmental protection personnel who are faced with the need to determine ambient air monitoring quality for regulatory or information gathering purposes.

● ***When will the publication be available?***

April 1987 (addition of 4 new methods: Phosgene;  
N-Nitrosodimethylamines; Cresols/Phenols; Dioxins)

**Publication Type:** Handbook

**Project Officer:** Larry J. Purdue

**Laboratory:** Environmental Monitoring Systems  
Laboratory  
Research Triangle Park, NC 27711

## RESEARCH AND DEVELOPMENT .....AIR

**Publication Title:** Quality Assurance Handbook for Air Pollution Measurement Systems:  
Vol. II—Ambient Air Methods  
(EPA/600/4-77/027a)  
Vol. III—Stationary Source Methods  
(EPA/600/4-77/027b)

● ***What need does this publication fill?***

Provides detailed guidance on application and quality assurance for EPA reference methods.

● ***Who will find this publication useful?***

Regulatory staff and companies involved with air monitoring

● ***When will the publication be available?***

Volumes II—Section 2.10 (PM<sub>10</sub> by dichot sampler)  
October 1987  
Section 2.11 (PM<sub>10</sub> by high volume sampler)  
October 1987

Vol. III—Section 3.0.7 (CEMS Audit Calculations)  
May 1987  
Section 3.0.9 (CEMS Good Operation Practices)  
May 1987  
Section 3.0.10 (CEMS OC Plan)  
May 1987  
Section 3.14I (EPA/ Method 7A Guidelines)  
May 1987  
Section 3.15 (EPA Method 7D Guidelines)  
May 1987  
Section 3.16 (EPA Method 18 Guidelines)  
October 1987

**Publication Type:** Handbook

**Project Officer:** Darryl J. von Lehmden

**Laboratory:** Environmental Monitoring Systems  
Laboratory  
Research Triangle Park, NC 27711

## RESEARCH AND DEVELOPMENT .....AIR

**Publication Title:** Radon Reduction Methods—A Homeowner's Guide (Second Edition)

● ***What need does this publication fill?***

This is a follow-up to the first brochure. It will incorporate our latest information on the effectiveness of radon mitigation approaches.

● ***Who will find this publication useful?***

Homeowners with a radon problem

● ***When will the publication be available?***

July 1987

**Publication Type:** Booklet

**Project Officer:** Michael Osborne

**Laboratory:** Air and Energy Engineering  
Research Laboratory  
Research Triangle Park, NC 27711

## RESEARCH AND DEVELOPMENT .....AIR

**Publication Title:** Radon Reduction Techniques for Detached Houses—Technical Guidance (Second Edition)

● ***What need does this publication fill?***

This manual will provide the latest detailed information on installing radon reduction techniques.

● ***Who will find this publication useful?***

Radon mitigation contractors and homeowners with do-it-yourself skills.

● ***When will the publication be available?***

July 1987

**Publication Type:** Handbook

**Project Officer:** Bruce Henschel

**Laboratory:** Air and Energy Engineering  
Research Laboratory  
Research Triangle Park, NC 27711

## RESEARCH AND DEVELOPMENT .....AIR

**Publication Title:** Interim Protocols for Selected Diagnostic Measurements for Use in Residential Radon Problem Assessments and the Selection of Appropriate Mitigation

● ***What need does this publication fill?***

It will define those house evaluation measurements which are useful diagnostics for problem assessment and selection of mitigation. Standardization of measurement procedures is provided.

● ***Who will find this publication useful?***

Radon diagnosticians, federal, state and local government regulators.

● ***When will the publication be available?***

October 1987

**Publication Type:** Handbook

**Project Officer:** David C. Sanchez

**Laboratory:** Air and Energy Engineering Research  
Laboratory  
Research Triangle Park, NC 27711

## RESEARCH AND DEVELOPMENT .....AIR

**Publication Title:** Prevention Reference Manual: User's Guide  
Overview of Controlling Accidental Releases of  
Air Toxics

● ***What need does this publication fill?***

This manual is intended to provide an overview of accidental releases; to indicate what might be done to identify, prevent or mitigate against accidental release.

● ***Who will find this publication useful?***

Regional Offices, States and local regulatory authorities, and industry.

● ***When will the publication be available?***

August 1987

**Publication Type:** Handbook

**Project Officer:** T. Kelly Janes

**Laboratory:** Air and Energy Engineering  
Research Laboratory  
Research Triangle Park, NC 27711



## RESEARCH AND DEVELOPMENT .....AIR

**Publication Title:** Prevention Reference Manual: Control Technology  
Volume 1: Prevention & Protection Measures for Controlling Accidental Releases of Air Toxics

● ***What need does this publication fill?***

This manual will provide information on accidental release control technologies that are available; how they can effect the releases; and relative costs of their application.

● ***Who will find this publication useful?***

Regional Offices, States and local regulatory authorities, and industry.

● ***When will the publication be available?***

August 1987

**Publication Type:** Handbook

**Project Officer:** T. Kelly Janes

**Laboratory:** Air and Energy Engineering  
Research Laboratory  
Research Triangle Park, NC 27711

## RESEARCH AND DEVELOPMENT .....AIR

**Publication Title:** Prevention Reference Manual:Chemical Specific  
Volume a: Control of Accidental Releases of  
Hydrogen Fluoride

● ***What need does this publication fill?***

This manual will include the known chemical and physical characteristics of the chemical, facility description, process hazards, and hazard prevention, control, and mitigation.

● ***Who will find this publication useful?***

Regional Offices, States and local regulatory authorities, and industry.

● ***When will the publication be available?***

August 1987

**Publication Type:** Handbook

**Project Officer:** T. Kelly Janes

**Laboratory:** Air and Energy Engineering  
Research Laboratory  
Research Triangle Park, NC 27711

## RESEARCH AND DEVELOPMENT .....AIR

**Publication Title:** Prevention Reference Manual: Chemical Specific  
Volume b: Control of Accidental Releases of  
Chlorine

● ***What need does this publication fill?***

This manual will include the known chemical and physical characteristics of the chemical, facility description, process hazards, and hazard prevention, control, and mitigation.

● ***Who will find this publication useful?***

Regional Offices, States and local regulatory authorities, and industry.

● ***When will the publication be available?***

August 1987

**Publication Type:** Handbook

**Project Officer:** T. Kelly Janes

**Laboratory:** Air and Energy Engineering  
Research Laboratory  
Research Triangle Park, NC 27711

## RESEARCH AND DEVELOPMENT .....AIR

**Publication Title:** Prevention Reference Manual: Chemical Specific  
Volume d: Control of Accidental Releases of  
Ammonia

● ***What need does this publication fill?***

This manual will include the known chemical and physical characteristics of the chemical, facility description, process hazards, and hazard prevention, control, and mitigation.

● ***Who will find this publication useful?***

Regional Offices, States and local regulatory authorities, and industry.

● ***When will the publication be available?***

August 1987

**Publication Type:** Handbook

**Project Officer:** T. Kelly Janes

**Laboratory:** Air and Energy Engineering  
Research Laboratory  
Research Triangle Park, NC 27711

## RESEARCH AND DEVELOPMENT .....AIR

**Publication Title:** Criteria and Health Assessment Documents

● **What need does this publication fill?**

Criteria documents are the primary source of information used by EPA decision makers in setting or revising the National Ambient Air Quality Criteria Standards. These documents are evaluations of the available scientific literature on the health and welfare effects of criteria pollutants. Criteria documents are mandated by the Clean Air Act and are revised at 5-year intervals, as directed by the Act.

Health assessment documents are comprehensive evaluations of health data, including carcinogenicity, mutagenicity, and other effects due to exposure to particular chemicals or compounds. These documents serve as the scientific data base for establishing relationships between ambient air concentrations and potential health risks and are used to determine the possible listing of hazardous air pollutants under Sections 111 and 112 of the Clean Air Act.

● **Who will find this publication useful?**

EPA scientists and regulators; the regulated communities; federal, state, and local governments; environmental health agencies; the scientific community; and, environmental groups

● **When will the publication be available?**

—Addendum to the Air Quality Criteria Document for Particulate Matter and Sulfur Oxide—April 1987

—Health Assessment Document for Dibenzofurans—Mid-1987

—Health Assessment Document for Acetaldehyde, public comment draft—April 1987

—Summary Review of the Health Effects Associated with Exposure to Propylene Oxide: Health Issue Assessment—Summer 1987

**Publication Type:** Assessment Reports

**Project Officer:** Lester D. Grant

**Laboratory:** Office of Health and  
Environmental Assessment  
Environmental Criteria and  
Assessment Office  
Research Triangle Park, NC 27711

## RESEARCH AND DEVELOPMENT .....HAZ WASTE

**Publication Title:** Soil Gas Sensing for Detection and Mapping of Volatile Organics (Formerly titled: Available Methods for Detecting Underground Storage Tank Leaks)

● ***What need does this publication fill?***

Describes the transport and fate of organics in the soil and ground water and the factors that affect the mapping of the contamination with soil-gas techniques in the subsurface. Various mapping methods are described and two case histories are included to illustrate the strengths and weaknesses of the increasingly popular methodology.

● ***Who will find this publication useful?***

Anyone responsible for detection of leaks and cleanup of underground storage tanks

● ***When will the publication be available?***

July 1987

**Publication Type:** Handbook

**Project Officer:** J. Van Ee

**Laboratory:** Environmental Monitoring Systems  
Laboratory  
P.O. Box 15027  
Las Vegas, NV 89114

## RESEARCH AND DEVELOPMENT .....HAZ WASTE

**Publication Title:** Leaking Underground Storage Tanks: Remediation with Emphasis on In-Situ Bioremediation

● ***What need does this publication fill?***

In-situ bioremediation is potentially a very cost-effective remediation technology for leaking underground storage tanks, but it is a relatively new science; current information is scattered throughout numerous technical journals, and much of this information is not in a format conducive to management decisions.

● ***Who will find this publication useful?***

Officials in EPA's Office of Underground Storage Tanks.

● ***When will the publication be available?***

Currently available

**Publication Type:** Project Report

**Project Officer:** Marion R. Scalf

**Laboratory:** Robert S. Kerr Environmental  
Research Laboratory  
P.O. Box 1198  
Ada, OK 74820

## RESEARCH AND DEVELOPMENT ..... HAZ WASTE

**Publication Title:** Response to Releases from Underground Storage Tanks at Gasoline Stations

● ***What need does this publication fill?***

Provides guidance on initial response and clean-up of underground storage tank leaks.

● ***Who will find this publication useful?***

Fire Marshalls/ Civil Defense Coordinators; Owner/Operators of privately-owned treatment works

● ***When will the publication be available?***

December 1987

**Publication Type:** Capsule Report

**Project Officer:** Robert Hilger

**Laboratory:** Hazardous Waste Engineering  
Research Laboratory  
26 West St. Clair  
Cincinnati, OH 45268



## RESEARCH AND DEVELOPMENT ..... HAZ WASTE

**Publication Title:** Technical Manual: Geotechnical Analysis for Review of Dike Safety (GARDS)

● ***What need does this publication fill?***

Assists RCRA permit reviewers and permit applicants with evaluation of dikes at hazardous waste facilities.

● ***Who will find this publication useful?***

RCRA permit writers

● ***When will the publication be available?***

Currently available

**Publication Type:** User's Guide

**Project Officer:** Douglas Ammon

**Laboratory:** Hazardous Waste Engineering  
Research Laboratory  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT ..... HAZ WASTE

***Publication Title:*** A Handbook on Leachate Treatment

● ***What need does this publication fill?***

Consolidates the technology on leachate treatment into a single reference report.

● ***Who will find this publication useful?***

Design Engineers

● ***When will the publication be available?***

April 1987

***Publication Type:*** Handbook

***Project Officer:*** Edward J. Opatken

***Laboratory:*** Hazardous Waste Engineering  
Research Laboratory  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....HAZ WASTE

**Publication Title:** TRD—Hazardous Waste Solvents

● ***What need does this publication fill?***

Provides hard data on treatment options for one of the largest hazardous waste streams. Support for pending landfill publications. Support for landfill prohibition regulations. This report is one of a series of 5 such reports. Each of the reports will be entitled Technical Resource Document (TRD) for a different waste stream. This report and the TRD for solvents are available now. Two more, corrosives and halogenated organics, will be available by February. The fifth, metals, will be available in September 1987.

● ***Who will find this publication useful?***

State and Federal Hazardous Wastes RCRA Agencies and industries with dioxin wastes

● ***When will the publication be available?***

Currently available

**Publication Type:** Technical Resource Document

**Project Officer:** Harry Freeman

**Laboratory:** Hazardous Waste Engineering  
Research Laboratory  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....HAZ WASTE

**Publication Title:** TRD—DIOXINS

● ***What need does this publication fill?***

Provides hard data on all known treatment and disposal options for dioxin wastes. Support for landfill prohibition regulations. This report is one of a series of 5 such reports. Each of the reports will be entitled Technical Resource Document (TRD) for a different waste stream. This report and the TRD for solvents are available now. Two more, corrosives and halogenated organics, will be available by February. The fifth, metals, will be available in September 1987.

● ***Who will find this publication useful?***

State and Federal Regulatory Agencies and industries with dioxin wastes

● ***When will the publication be available?***

Currently available

**Publication Type:** Technical Resource Document

**Project Officer:** Harry Freeman

**Laboratory:** Hazardous Waste Engineering  
Research Laboratory  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....HAZ WASTE

**Publication Title:** Revised Protocol for Bioassessment of Hazardous Waste

● ***What need does this publication fill?***

The protocol is a step-by-step methodology for the use of specific aquatic and terrestrial test organisms to define hazard potential at chemical waste sites and to advise potential users how the bioassay information might be used to assist with clean-up/remedial action decisions.

● ***Who will find this publication useful?***

Regulatory personnel

● ***When will the publication be available?***

July 1987

**Publication Type:** Journal Article

**Project Officer:** William Miller

**Laboratory:** Environmental Research  
Laboratory  
200 S.W. 35th Street  
Corvallis, OR 97333

## RESEARCH AND DEVELOPMENT .....HAZ WASTE

**Publication Title:** Risk Assessments

● ***What need does this publication fill?***

These documents are evaluations of information relevant to adverse health effects associated with a given chemical or class of chemicals. They support listings of hazardous constituents of waste streams under Section 3001 of the Resource Conservation and Recovery Act (RCRA), and provide health-related limits for emergency actions under Section 101 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Quantitative estimates are presented provided sufficient data are available. For systemic toxicants, these include Reference Doses (RfDs) for chronic exposures (the amount of a chemical to which humans can be exposed on a daily basis over an extended period of time without suffering adverse health effects). For suspected carcinogens, a carcinogenic potency factor or  $q^1*$  is provided. These potency estimates are derived for both oral and inhalation exposures where possible. In addition, unit risk estimates for air and drinking water are presented based on inhalation and oral data, respectively. Reportable Quantities (RQs) based on both chronic toxicity and carcinogenicity are derived. The RQ is used to determine the quantity of a hazardous substance for which notification is required in the event of a release as specified under CERCLA.

● ***Who will find this publication useful?***

EPA scientists and regulators; the regulated communities; federal, state, and local governments; environmental health agencies; the scientific community; and, environmental groups

● ***When will the publication be available?***

Various times throughout the year.

These documents become part of the RCRA and CERCLA docket files; are in the Hazardous Substance Collection in the EPA Library; and, after the EPA regulatory decision has been made, are available from the National Technical Information Service.

**Publication Type:** Assessment Reports:

**Project Officer:** Jerry F. Stara

**Laboratory:** Office of Health and  
Environmental Assessment  
Environmental Criteria and  
Assessment Office  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....INTERDISP

**Publication Title:** Integrated Risk Information System

● ***What need does this publication fill?***

IRIS is a computer housed, electronically communicated (i.e., E-Mail) catalog of Agency risk assessment and risk management information for chemical substances. This system is designed especially for federal, state, and local environmental health agencies as a source of USEPA information. The development of IRIS, in part, is a response to repeated requests for Agency risk assessment information to deal with various environmental issues such as Superfund site evaluations or emergency spills. IRIS ensures the consistency and quality of the Agency's response. In addition, the presentation of information contained in IRIS is instructive to the risk assessment and management process.

● ***Who will find this publication useful?***

Federal, state, and local environmental health agencies, regulators and regulated communities, scientific community

● ***When will the publication be available?***

April 1987

**Publication Type:** User's Manual

**Project Officer:** Peter W. Preuss

**Laboratory:** Office of Health and  
Environmental Assessment  
401 M Street SW  
Washington, DC 20460

## RESEARCH AND DEVELOPMENT .....INTERDISP

***Publication Title:*** Risk Assessment Guidelines

● ***What need does this publication fill?***

Guidelines study the range of assumptions, models and data to provide the scientific basis for evaluating risk and assuring scientific credibility, consistency, and uniformity in assessments used to support regulatory decisions.

● ***Who will find this publication useful?***

EPA scientists and regulators, scientific community, federal agencies, state and local government, regulated communities, environmental groups

● ***When will the publication be available?***

Currently available

***Publication Type:*** Assessment Report

***Project Officer:*** Peter Preuss

***Laboratory:*** Office of Health and  
Environmental Assessment  
401 M Street SW  
Washington, DC 20460



## RESEARCH AND DEVELOPMENT .....INTERDISP

**Publication Title:** Proliferative Hepatocellular Lesions of the Rat: Review and Future Use in Risk Assessment (short title: Neoplastic Nodules)

● ***What need does this publication fill?***

Forum documents provide an EPA consensus on the resolution of significant risk assessment issues. The documents are used in developing Agency risk assessments and help ensure the quality and consistency of these assessments.

The neoplastic nodules report will have application to all EPA cancer risk assessments involving bioassays where these lesions appear.

● ***Who will find this publication useful?***

EPA scientists and regulators, regulated communities, scientific community, federal agencies, state and local government

● ***When will the publication be available?***

Currently available

**Publication Type:** Research Report

**Project Officer:** Dorothy Patton

**Laboratory:** Risk Assessment Forum  
Office of Health and  
Environmental Assessment  
401 M Street SW  
Washington, DC 20460

## RESEARCH AND DEVELOPMENT .....INTERDISP

**Publication Title:** Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and Dibenzofurans (CDDs and CDFs)

● ***What need does this publication fill?***

Recognizing the public and toxicological concern generated by CDDs and CDFs and the significant gaps in our ability to evaluate the human health potential of these compounds by existing procedures, the Risk Assessment Forum is recommending an interim method to aid in the assessment of the human health risks posed by mixtures of CDDs and CDFs until the data gaps are filled. This document describes the recommended interim procedures for generating the toxicity equivalency factors (TEF) of complex mixtures of CDDs and CDFs.

● ***Who will find this publication useful?***

EPA scientists and regulators, regulated communities, scientific community, federal agencies, state and local government

● ***When will the publication be available?***

April 1987

**Publication Type:** Assessment Report

**Project Officer:** Dorothy Patton

**Laboratory:** Risk Assessment Forum  
Office of Health and  
Environmental Assessment  
401 M Street SW  
Washington, DC 20460

## RESEARCH AND DEVELOPMENT .....INTERDISP

**Publication Title:** Special Report on Arsenic and Certain Human Health Effects

● ***What need does this publication fill?***

Forum documents provide an EPA consensus on the resolution of significant risk assessment issues. The documents are used in developing Agency risk assessments and help ensure the quality and consistency of these assessments.

The Forum report on certain human health effects of ingested arsenic provides the scientific bases for an Agency-wide position on issues relating to the assessment of potential risk resulting from oral exposure to arsenic.

● ***Who will find this publication useful?***

EPA scientists and regulators, regulated communities, scientific community, federal agencies, state and local government

● ***When will the publication be available?***

Mid-1987

**Publication Type:** Assessment Report

**Project Officer:** Dorothy Patton

**Laboratory:** Risk Assessment Forum  
Office of Health and  
Environmental Assessment  
401 M Street SW  
Washington, DC 20460

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Manual for the Certification of Laboratories Analyzing Drinking Water—Criteria and Procedures/Quality Assurance

● ***What need does this publication fill?***

Provides laboratory certification criteria for laboratories required to monitor drinking waters under the National Primary Drinking Water Regulation.

● ***Who will find this publication useful?***

Laboratory staff responsible for testing drinking water

● ***When will the publication be available?***

December 1987

**Publication Type:** Handbook

**Project Officers:** T. Clark, J. Lichtenberg, and P. Berger

**Laboratory:** Environmental Monitoring and Support  
Laboratory  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water

● ***What need does this publication fill?***

Provides analytical methods to meet the requirements of measuring organic chemical maximum contaminant levels and chemicals required for monitoring.

● ***Who will find this publication useful?***

Regulatory and commercial laboratory staff responsible for carrying out the analytical monitoring requirements of the Safe Drinking Water Regulations

● ***When will the publication be available?***

December 1987

**Publication Type:** Handbook

**Project Officer:** James E. Longbottom

**Laboratory:** Environmental Monitoring and Support  
Laboratory  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Bacteriological Characteristics of Point-of-Use Water Treatment

● ***What need does this publication fill?***

There is a general lack of information available concerning the bacteriological problems and characteristics of these devices. This publication *would not* address chemical removals, etc., of such devices.

● ***Who will find this publication useful?***

Drinking water suppliers

● ***When will the publication be available?***

October 1987

**Publication Type:** Project Report

**Project Officer:** Donald J. Reasoner

**Laboratory:** Water Engineering Research  
Laboratory  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Lead Solder Aging Study

● ***What need does this publication fill?***

New Safe Drinking Water Act prohibits lead solder. This publication will provide information on lead and alternate solders.

● ***Who will find this publication useful?***

Drinking water suppliers

● ***When will the publication be available?***

December 1987

**Publication Type:** Research Report

**Project Officer:** Marvin Gardels

**Laboratory:** Water Engineering Research  
Laboratory  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Methods for Removal of Radium from Drinking Water

● ***What need does this publication fill?***

Provides a summary of technology that is available for removing radium from drinking water. This will enable communities to comply with the Drinking Water Maximum Contaminants Level.

● ***Who will find this publication useful?***

Drinking water suppliers

● ***When will the publication be available?***

May 1987

**Publication Type:** Journal Article

**Project Officer:** Richard Lauch

**Laboratory:** Water Engineering Research  
Laboratory  
26 West St. Clair  
Cincinnati, OH 45268



## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Retrofitting POTW's for Phosphorus Removal in the Chesapeake Bay Drainage Area

● ***What need does this publication fill?***

Utilizes extensive experience gained in phosphorus removal in other parts of the country to address the specific process selection, design, and O&M needs of the Chesapeake Bay Drainage Area (MD, PA & VA) in implementing a comprehensive program of phosphorus control. Utility of this report will not be limited to these three states, however.

● ***Who will find this publication useful?***

Design engineers

● ***When will the publication be available?***

August 1987

**Publication Type:** Technology Transfer Handbook

**Project Officer:** Richard Brenner

**Laboratory:** Water Engineering Research  
Laboratory  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Phosphorus Control in Wastewater

● ***What need does this publication fill?***

Provides information necessary to meet phosphorus limits on municipal wastewater discharges.

● ***Who will find this publication useful?***

Federal/State/Local government engineers

● ***When will the publication be available?***

July 1987

**Publication Type:** Design Manual

**Project Officer:** Denis Lussier

**Laboratory:** Center for Environmental  
Research Information  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Nitrogen Control in Wastewater Treatment Plants

● ***What need does this publication fill?***

Provides information necessary to meet nitrogen limits in municipal wastewater discharges.

● ***Who will find this publication useful?***

Federal/State/Local government engineers

● ***When will the publication be available?***

July 1987

**Publication Type:** Design Manual

**Project Officer:** Denis Lussier

**Laboratory:** Center for Environmental  
Research Information  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Technology Transfer Process Design Manual—  
Dewatering Municipal Wastewater Sludges

● ***What need does this publication fill?***

Increasing costs of sludge treatment, increased quantities of difficult-to-handle biological sludges, and new sludge-disposal regulations, all point to the need for more cost-effective dewatering processes and ones that can produce a drier product.

● ***Who will find this publication useful?***

Federal, state and local government managers, engineers and scientists interested in sludge management

● ***When will the publication be available?***

September 1987

**Publication Type:** Design Manual

**Project Officer:** Jim Smith

**Laboratory:** Center for Environmental  
Research Information  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Field Manual for Sampling Water and Wastewater

● ***What need does this publication fill?***

Provides sample collection practices for field operations and personnel responsible for sample collection.

● ***Who will find this publication useful?***

Anyone monitoring pollutants in water or wastewater

● ***When will the publication be available?***

December 1987

**Publication Type:** Handbook

**Project Officer:** Joe Roesler

**Laboratory:** Environmental Monitoring and Support  
Laboratory  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** The Use of Models in Ground Water Protection Programs

● ***What need does this publication fill?***

Ground-water models are used in issuing and evaluating permits for waste disposal activities, licensing of pesticides and other environmental chemicals, and evaluating remediation alternatives at Superfund and other contaminated sites. There are very few professionals trained in the use of ground-water models but there are many environmental managers that must make decisions concerning and/or based on ground-water models. This publication outlines the basic aspects of ground-water models so that management can communicate with modelers concerning the underlying assumptions, appropriateness, and limitations of specific models.

● ***Who will find this publication useful?***

Environmental managers at the Federal and State level who are not professional ground-water modelers but must make management decisions based on model predictions

● ***When will the publication be available?***

Currently available

**Publication Type:** Technology Transfer Report

**Project Officer:** Marion R. Scalf

**Laboratory:** Robert S. Kerr Environmental  
Research Laboratory  
P.O. Box 1198  
Ada, OK 74820

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Ground Water Handbook

● ***What need does this publication fill?***

Provides basic to intermediate technical information on groundwater, subsurface contaminant behavior, modeling, and other topics related to groundwater pollution control.

● ***Who will find this publication useful?***

Federal, State, and Local government regulators

● ***When will the publication be available?***

April 1987

**Publication Type:** Handbook

**Project Officer:** Carol Grove

**Laboratory:** Center for Environmental  
Research Information  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Watershed Analysis Simulation Program  
(WASP4)

● ***What need does this publication fill?***

Waste allocation model for chemical pollutants.

● ***Who will find this publication useful?***

Office of Water; state and local water pollution regulatory officials

● ***When will the publication be available?***

December 1987

**Publication Type:** User's Manual

**Project Officer:** Bob Ambrose

**Laboratory:** Environmental Research  
Laboratory  
College Station Road  
Athens, GA 30613



## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Biomonitoring to Achieve Control of Toxic Effluents

● ***What need does this publication fill?***

This publication provides National Pollutant Discharge Elimination System (NPDES) program managers, NPDES permit writers, and water quality specialists with an example of the use of toxicity testing to address identified toxic water quality problems. It describes the water quality-based toxicity control procedures that researchers used to address a serious water quality problem on the Cuyahoga River in Northeastern Ohio.

● ***Who will find this publication useful?***

Regional and State water quality regulatory personnel

● ***When will the publication be available?***

August 1987

**Publication Type:** Handbook

**Project Officer:** Orville Macomber

**Laboratory:** Center for Environmental  
Research Information  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Methods Manual Containing Short-Term Chronic Toxicity Tests for Effluents and Surface Water for Use with Organisms

● ***What need does this publication fill?***

Provides effluent and surface water toxicity tests for the Water Quality Based Approach to Discharge Permit Limits.

● ***Who will find this publication useful?***

NPDES Discharge Permit Holders, wastewater regulatory community, and consultants

● ***When will the publication be available?***

December 1987

**Publication Type:** Handbooks

**Project Officer:** William B. Horning

**Laboratory:** Environmental Monitoring and Support  
Laboratory  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Final Report on Hazardous Assessment Methodologies for the 106-Mile Site

● ***What need does this publication fill?***

Provides a risk assessment-based approach for ocean waste disposal off the Continental Shelf.

● ***Who will find this publication useful?***

Office of Marine and Estuarine Protection

● ***When will the publication be available?***

December 1987

**Publication Type:** Project Report

**Project Officer:** John F. Paul

**Laboratory:** Environmental Research  
Laboratory  
South Ferry Road  
Narragansett, RI 02882

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Methodology Documents

● ***What need does this publication fill?***

The methodology for pathogens in sludge provides a scientific basis for assessing human health risk from microorganisms to humans via ingestion and inhalation. Fate and transport models are utilized for bacteria, viruses, protozoa, helminths, and fungi.

The other methodology documents provide a novel approach to be used in assessments of chemical hazards in the utilization or disposal of wastes.

● ***Who will find this publication useful?***

EPA scientists and regulators; the regulated communities; federal, state, and local governments; environmental health agencies; the scientific community; and, environmental groups

● ***When will the publication be available?***

September 1987

**Publication Type:** Methods Documents:

- Multimedia Risk Assessment Methodologies for Pathogens in Sludge
- Four Risk Assessment Methodologies for Landfilling, Incineration, Land Application, and Ocean Disposal of Municipal Wastewater Sludge

**Project Officer:** Jerry F. Stara

**Laboratory:** Office of Health and  
Environmental Assessment  
Environmental Criteria and  
Assessment Office  
26 West St. Clair  
Cincinnati, OH 45268

## RESEARCH AND DEVELOPMENT .....WATER

**Publication Title:** Criteria Documents and Health Advisories

● ***What need does this publication fill?***

These documents are assessments of the health effects of exposure to contaminants in drinking water. They specifically evaluate the relevant scientific data describing the physical and chemical properties, the pharmacokinetics, the health effects in animals and humans, and the mechanisms of toxicity. These assessments enable the program office to establish a Recommended Maximum Contaminant Level (RMCL) or health goal, representing a level designated to preclude the risk of an adverse effect on human health.

● ***Who will find this publication useful?***

EPA scientists and regulators; the regulated communities; federal, state, and local governments; environmental health agencies; the scientific community; and, environmental groups

● ***When will the publication be available?***

Documents are completed at various times throughout the year.

These documents become part of the Drinking Water docket file and are submitted to the National Technical Information Service for availability to the public when the regulatory decision is proposed.

**Publication Type:** Criteria Documents and Assessment Reports

**Project Officer:** Jerry F. Stara

**Laboratory:** Office of Health and  
Environmental Assessment  
Environmental Criteria and  
Assessment Office  
26 West St. Clair  
Cincinnati, OH 45268