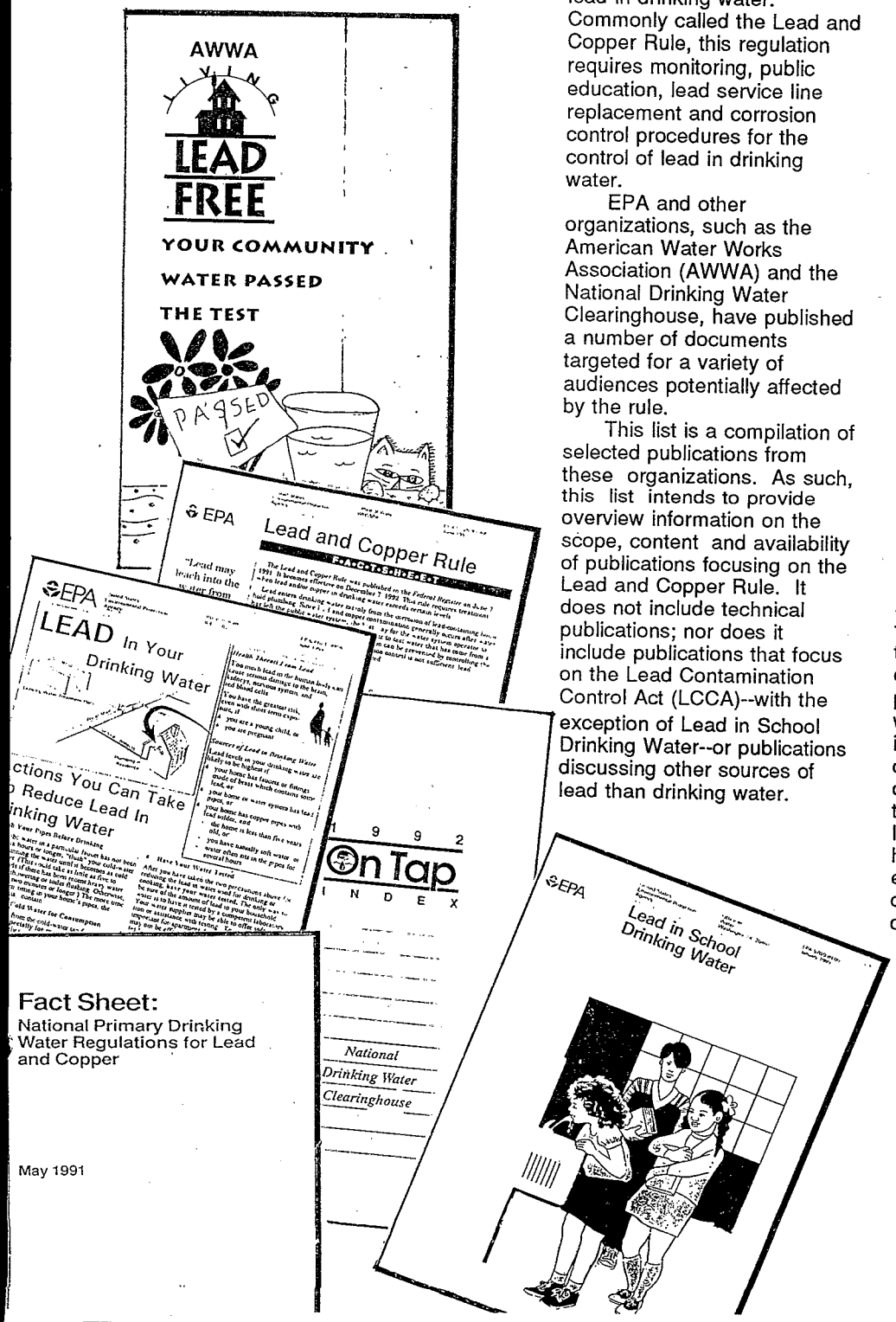
United States Environmental Protection Agency
Office Of Water (4604)
EPA 812-K-93-001
October 1993

EPA

Lead In Drinking Water

An Annotated List Of Publications

Introduction



On June 7 1991, the U.S. Environmental Protection Agency (EPA) published revised national standards aimed at reducing the levels of lead in drinking water. Commonly called the Lead and Copper Rule, this regulation requires monitoring, public education, lead service line replacement and corrosion control procedures for the control of lead in drinking water.

EPA and other organizations, such as the American Water Works Association (AWWA) and the National Drinking Water Clearinghouse, have published a number of documents targeted for a variety of audiences potentially affected by the rule.

This list is a compilation of selected publications from these organizations. As such, this list intends to provide overview information on the scope, content and availability of publications focusing on the Lead and Copper Rule. It does not include technical publications; nor does it include publications that focus on the Lead Contamination Control Act (LCCA)--with the exception of Lead in School Drinking Water--or publications discussing other sources of lead than drinking water.

For information about the Lead Contamination Control Act, contact the EPA Safe Drinking Water Hotline at 1-800-426-4791 or write to the Hotline at USEPA (4604), 401 M Street, SW, Washington DC 20460.

For information on lead contamination coming from other sources, call the National Lead Information Center at 1-800-LEADFYI.

The publications are grouped under general subject headings: For the Public, Overview, Regulations, Monitoring Requirements, Treatment Techniques (Items focusing on corrosion control, public education and lead service line replacement) and Small Systems. Each entry includes the publication title, date of publication, summary information, document numbers (if available), target audience and document availability.

On the next page of this publication, a summary table lists each publication alphabetically. Besides the title of each publication, this table also briefly includes each document's publisher, date of publication, subject heading where publication is listed, intended audience and ordering information. A more detailed explanation of this table is included on the next page. In addition, a description of how to order publications from each represented organization can be found on the next page of this publication.

Ordering Information

EPA publications in this list are available from one of three sources:

The EPA Safe Drinking Water Hotline, by calling 1-800-426-4791. Written requests may be sent to the Office of Water Resource Center (RC4100), U.S. EPA, 401 M Street, S.W., Washington, D. C. 20460. Publications available from the Hotline are free.

The Education Resource Information Center (ERIC), by calling (614) 292-6717. ERIC charges for publications; when ordering documents from ERIC, use the ERIC document number.

The National Technical Information Service (NTIS), by calling 1-800-553-6847 or writing to NTIS, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161. NTIS charges for publications. Use the NTIS document number to order publications from them.

Order publications from AWWA and the National Drinking Water Clearinghouse as follows:

The American Water Works Association (AWWA), by calling 1-800-926-7337 or writing to AWWA, 6666 West Quincy Avenue, Denver, CO 80235. The price for each publication varies. Use the AWWA document number when ordering.

The National Drinking Water Clearinghouse (NDWC), by calling 1-800-624-8301, or writing to NDWC, West Virginia University, P.O. Box 6064, Morgantown, WV 26506-6064. Articles cost $1.00 each if mailed. By facsimile, the charge is $5.00 for the first page and 10 cents for each additional page. Articles may also be downloaded at no cost from the Drinking Water Information Exchange Bulletin Board System. Call 1-800-926-7337 for access information.

To get additional copies of this list, call the EPA Safe Drinking Water Hotline at 1-800-426-4791, or write to the Office of Water Resource Center (RC4100), U.S. EPA, 401 M Street, S.W., Washington, D.C., 20460.

Explanation of the Table

Located on the next page, the table lists the publications annotated in this brochure with certain overview information provided for each document. The table is arranged in six columns: title, publisher, date, subject, audience and ordering information. Titles are listed alphabetically; for each title, an abbreviation of its publisher is provided. Publishers will either be the Environmental Protection Agency (abbreviated to EPA), the American Water Works Association (AWWA) or the National Drinking Water Clearinghouse (NDWC).

The date of publication will be the year the item was published, unless the document is undated or if the publication date varies--i.e., for a multi-volume set of materials. The subject category points users to the section in this brochure which includes the annotation of each publication, and the audience column tells whom the publication is intended to assist.

Audiences will either be the regulated community--which includes water systems, their contractors and government officials; the general public; large, medium or small water systems or all of the above. In the last column, ordering information, the organization which can supply each publication and its publication order number have been provided. Organizations which can provide publications will include AWWA, NDWC, EPA's Safe Drinking Water Hotline (referred to as the Hotline on this table), the National Technical Information Service (NTIS) and the Education Resource Information Center (ERIC). If more than one organization supplies a publication, both have been provided. For information on how to get in touch with these organizations, see the Ordering Information Section.

Table: List of Available Publications

Title	Pub.	Date	Subject	Audience	Ordering Info.
act Sheet: National Primary Drinking Water Regulations for Lead and Copper	EPA	1991	Overview	All	Hotline - 570/F-91-021
ead and Copper: A Working Explanation of the Lead and Copper Rule	AWWA	1991	Overview	Reg. Community	AWWA - No. 70073
ead and Copper Guidance Rule Volume 1: Monitoring	EPA	1992	Monitoring	Reg. Community	AWWA - No. 20282 NTIS - PB92-112101
ead and Copper Guidance Rule Volume 2: Corrosion Control	EPA	1992	Treatment Techniques	Reg. Community	AWWA - No. 20299 NDWC - by Title NTIS - PB93-101533
ead and Copper: How to Comply for Small and Medium Systems	AWWA	1993	Small Systems	Small Systems	AWWA - No. 68030
ead and Copper Monitoring Guidance for Water Systems erving <100 Persons	EPA	1992	Monitoring	Small systems	ERIC - 400D NDWC - by Title
ead and Copper Monitoring Guidance for Water Systems erving 100 to 500 Persons	EPA	1992	Monitoring	Small systems	ERIC - 401D NDWC - by Title
ead and Copper Monitoring Guidance for Water Systems erving 501 to 3,300 Persons	EPA	1992	Monitoring	Small Systems	ERIC - 402D NDWC - by Title
ead and Copper Monitoring Guidance for Water System erving 3,301 to 10,000 Persons	EPA	1992	Monitoring	Medium Systems	ERIC - 403D NDWC - by Title
ead and Copper Monitoring Guidance for Water Systems erving 10,001 to 50,000 Persons	EPA	1992	Monitoring	Medium Systems	ERIC - 404D
ead and Copper Rule: Basic Decision Process for Small Water Systems (Poster)	NDWC	1992	Small Systems	Small Systems	NDWC - by Title
ead and Copper Rule: Definitions and Federal Reporting for ilestones, Violations & SNC's	EPA	1992	Other	Reg. Community	ERIC - 405D NTS - PB93-156131
ead and Copper Rule Fact Sheet	EPA	1991	Overview	All	Hotline - 570/9-91-400
ead Control Strategies	AWWA	1989	Treatment Techniques	Reg. Community	AWWA - No.90559
ead in Drinking Water: Guidance for Conducting a Community-Based ublic Education Program	EPA	1992	Treatment Techniques	Reg. Community	NDWC - by Title NTIS - PB93-101079
ead in Drinking Water (Poster)	EPA	no date	For Public	Public	Hotline - by Title
ead in School Drinking Water	EPA	1989	Other	Schools	Hotline - 570/9-89-001
ead in Your Drinking Water	EPA	1993	For Public	Public	Hotline - 810/F-93-001
ead Service Line Replacement: A Benefit-to-Cost Analysis	AWWA	1990	Treatment Techniques	Reg. Community	AWWA-No.55001
andatory Public Education Package	AWWA	varies	Treatment Techniques	Reg. Community	AWWA - No. 68015
aximum Contaminant Level Goals and National Primary Drinking Water egulations for Lead and Copper; Final Rule (with 2 Correction Notices)	EPA	1991	Regulations	Reg. Community	ERIC - 546D; 547D & 548D
aximum Contaminant Level Goals and National Primary Drinking Water egulations for Lead and Copper; Proposed Rule	EPA	1988	Regulations	Reg. Community	Hotline - 53 FR 31516
onitoring Requirements for the Lead and Copper Rule: ater Systems Serving 50,001 to 100,000 Persons	EPA	1992	Monitoring	Large Systems	ERIC - 422 D
onitoring Requirements for the Lead and Copper Rule: ater Systems Serving> 100,000 Persons	EPA	1992	Monitoring	Large Systems	ERIC - 423 D
rt 1: Questions Small Systems are Asking about the New Lead Regulations	NDWC	1992	Small Systems	Small Systems	NDWC - *On Tap* V1, Issue 1
rt 2: Questions Small Systems are Asking about the New Lead Regulations	NDWC	1992	Small Systems	Small Systems	NDWC - *On Tap* V2, Issue 2
rt 3: Questions Small Systems are Asking about the New Lead Regulations	NDWC	1992	Small Systems	Small Systems	NDWC -*On Tap* V3, Issue 3
cket Guide to Water Sampling - Lead and Copper	AWWA	1992	Monitoring	Reg. Community	AWWA - No. 1870
otecting Your Family from the Dangers of Lead	AWWA	1992	For Public	Public	AWWA - Eng: No. 68001; Spanish: No. 68021
otecting Your Kids from Lead in Drinking Water	NDWC	1993	For Public	Public	NDWC - by Title
ggested Sampling Procedures to Determine Lead in Drinking Water Buildings other than Singe-Family Homes	EPA	1988	Monitoring	Industries	Hotline - 570/B-88-015
hat You Should Know about Lead	AWWA	1993	For Public	Public	AWWA - No: 68031
ur Community Passed the Test	AWWA	1992	For Public	Public	AWWA - Eng: No. 68003; Spanish: No. 68023

For the Public

Lead in Your Drinking Water 1993

Intended for the public, this pamphlet provides an overview of issues surrounding lead in drinking water. These issues include sources of lead contamination in drinking water, health effects of this contaminant, information on how to test for lead and general steps people can take in order to lower lead levels in their drinking water. Available from the EPA Safe Drinking Water Hotline (EPA 810/F-93-001).

Lead in Drinking Water (Poster) undated

This poster reproduces the content of the written materials found in 40 CFR 141.85(a), which water systems must provide to their consumers as part of their public education programs. This information includes health effects, sources of contamination and remediation steps for lead in drinking water. This poster is intended to assist the public, but may also be of use for water systems, consultants and government officials. Available from the EPA Safe Drinking Water Hotline (No EPA number appears on the poster).

Protecting your Kids from Lead in Drinking Water (in Spanish) 1993

This revised version of a New York City Spanish language brochure can be used by any water system to educate their Spanish speaking consumers about childhood lead poisoning, occurrence of lead in drinking water and a variety of precautions people can take to reduce their risk. An English translation accompanies this brochure. Available free from the National Drinking Water Clearinghouse.

Protecting your Family from the Dangers of Lead 1992

This general information booklet is part of AWWA's Living Lead Free Program, a program designed to help water systems conduct public education programs on lead. The brochure discusses the dangers of lead from all sources, including drinking water, and can be used to introduce the public to broad-based issues regarding lead. The brochure is available in Spanish and in English and is intended for the public. Available from AWWA (English Version: No. 68001; Spanish Version: No. 68021).

What You Should Know about Lead 1993

This brochure, sized to be inserted into a customer's utility bill, helps utilities comply with the specific language for educating the public as required by the new Lead and Copper Rule. The insert covers all of the general information that must be communicated to the public when the action level is exceeded; AWWA can also customize it to include the seven community-specific facts that must be included in the education packet. Available from AWWA as part of its Living Lead Free Program. (No. 68031).

Your Community Passed the Test 1992

This brochure is intended to be used as a bill insert for water systems which have not exceeded the lead or copper action level after their initial monitoring requirements under the Lead and Copper Rule. Available in English or in Spanish, this insert lets the public know that the water system completed its tests for lead and copper and did not exceed either action level. Available from AWWA as part of its Living Lead Free Program (English Version: No. 68003; Spanish Version: No. 68023).

Overview

Fact Sheet: National Primary Drinking Water Regulations for Lead and Copper 1991

This 15-page summary of the Lead and Copper Rule summarizes information on health effects, costs, benefits, treatment technique requirements and monitoring schedules for public water systems. It is intended to assist water systems, consultants and government officials. Available from the EPA Safe Drinking Water Hotline (EPA 570-F-91-021).

Lead and Copper: A Working Explanation of the Lead and Copper Rule 1991

This 28-page booklet is intended to assist public water systems to comply with the provisions of the Lead and Copper Rule. The intended audience includes water systems, consultants and government officials. Available from AWWA (No. 70073).

Lead and Copper Rule Factsheet 1991

This two-page factsheet provides a general overview of the Lead and Copper Rule. The factsheet briefly summarizes action levels, monitoring requirements and water treatment steps under this rule. It provides relevant information for water systems, consultants, government officials and the public. Available from the EPA Safe Drinking Water Hotline (EPA 570/9-91-400).

Ordering Information at a Glance

AWWA: 1-800-926-7337
EPA Hotline: 1-800-426-4791
ERIC: (614) 292-6717
NDWC: 1-800-624-8301
NTIS: 1-800-553-6847

Regulations

Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for Lead and Copper: Final Rule 1991

This Federal Register provides the final regulations for lead and copper, including a lengthy preamble with background information further explaining the procedures associated with the Lead and Copper Rule. Intended for use by water systems, consultants and government officials. Available from the EPA Safe Drinking Water Hotline (56 FR 26460).

Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for Lead and Copper, Proposed Rule 1991

This Federal Register includes the Lead and Copper Rule as it was proposed in August 1988. Intended for the regulated community, this proposed rule may also be of interest to lawyers or consultants. Available from the EPA Safe Drinking Water Hotline (53 FR 31516).

Monitoring Requirements

Lead and Copper Guidance Rule Volume 1: Monitoring 1991

This technical guidance manual provides information on the monitoring regulations for small, medium and large public water systems. It includes monitoring schedules for initial, reduced, follow-up and water quality parameter sampling; as well as the timetables for associated requirements—i.e., corrosion control studies. It is intended to assist water systems of all sizes, consultants and government officials. Available from NTIS (PB92-112101) and from AWWA (No. 20282). (No EPA number appears on this manual).

Suggested Sampling Procedures to Determine Lead in Drinking Water in Buildings Other than Single Family Homes 1988

This technical guidance document provides a sampling protocol for the identification of sources of lead in buildings other than single family homes. In addition, this manual discusses possible ways to remediate lead contamination in drinking water. Primarily intended to assist industries, building owners and consultants; this document is NOT intended to be used to determine whether a water system meets federal standards for lead. Available from the EPA Safe Drinking Water Hotline (EPA 570/B-88-013).

For monitoring information tailored to water systems serving a specific population range, see one of the following 1992 publications, which are available fromERIC. The first four publications listed below are also from the National Drinking Water Clearinghouse.

Monitoring By System Size:

Lead and Copper Monitoring Guidance for Water Systems Serving < 100 Persons (400D) (EPA 812/B-92-003).

Lead and Copper Monitoring Guidance for Water Systems Serving 101 to 500 Persons (401D) (EPA 812/B-92-004).

Lead and Copper Monitoring Guidance for Water Systems Serving 501 to 3,300 Persons (402D) (EPA 812/B-92-005).

Lead and Copper Monitoring Guidance for Water Systems Serving 3,301 to 10,000 Persons(403D) (EPA 812/B-92-006).

Lead and Copper Monitoring Guidance for Water Systems Serving 10,001 to 50,000 Persons (404D) (EPA 812/B-92-007).

Monitoring Requirements for Lead and Copper Rule: Water Systems Serving 50,001 to 100,000 Persons (422D) (EPA 812/B-92-008).

Monitoring Requirements for Lead and Copper Rule: Water Systems Serving > 100,000 Persons (423D) (EPA 812/B-92-009).

Pocket Guide to Water Sampling—Lead and Copper 1992

Intended to assist water systems, this 32-page field manual provides information on gathering accurate water samples for analysis under the Lead and Copper Rule. The manual is helpful to water systems, consultants and government officials. Available from AWWA (No. 1870).

Treatment Techniques

CORROSION CONTROL

Lead and Copper Guidance Rule Volume 2: Corrosion Control 1992

Providing an overview of corrosion control regulatory requirements for small, medium and large public water systems, as well as detailing available treatment options; this technical guidance manual assists water systems, consultants and government officials. Available from NTIS (PB93-101533), AWWA (No. 20299) and the National Drinking Water Clearinghouse (EPA 811-B-92-002).

Lead Control Strategies 1989

Summarizing lead control strategies for public water systems, this 384-page handbook includes case studies, monitoring and treatment strategies, and estimated costs. It is intended to assist water systems, consultants and government officials. Available from AWWA (No. 90559).

PUBLIC EDUCATION

Lead in Drinking Water: Guidance for Conducting a Community-Based Public Education Program 1992

This technical manual provides guidance and examples of how public water systems can conduct public education programs on lead in order to meet the requirements of the Lead and Copper Rule. It is intended to guide public water systems, consultants and government officials. Available from NTIS (PB93-101079) and from the National Drinking Water Clearinghouse (EPA 812/B-92-002).

Mandatory Public Education Package date varies

This package of materials is intended to help water systems conduct their public education programs under the Lead and Copper Rule. The package includes a manual detailing the public education requirements under the rule; a booklet summarizing other requirements of this rule and samples of newspaper, television and radio releases, as well as sample bill inserts prescribed by the Lead and Copper Rule. Last, this program includes a brochure with the mandatory language that water systems must furnish to schools, clinics and other facilities that provide services to women and children. Available from AWWA (No. 68015).

SERVICE LINE REPLACEMENT

Lead Service Line Replacement: A Benefit-to-Cost Analysis 1990

This 210-page report focuses on the incidence of lead service lines in the United States, their contribution to lead levels in drinking water, the costs associated with replacing them with "lead-free" lines and the health benefits associated with pipe replacement. It is intended to assist water systems, consultants and government officials. Available from AWWA (No. 55001).

Other

VIOLATIONS

Lead and Copper Rule: Definitions and Federal Reporting for Milestones, Violations and SNC's 1992

This technical guidance handbook provides assistance in reporting lead and copper action level exceedences, water quality parameter levels, optimal corrosion control treatment designation /installation and follow-up monitoring levels. Treatment technique violations, including significant non-compliance violations, are also discussed. This manual is intended to assist water systems, consultants and government officials. Available from NTIS (PB93-156131) and from ERIC (405D) (EPA 812/R-92-004).

Ordering Information at a Glance

AWWA: 1-800-926-7337
EPA Hotline: 1-800-426-4791
ERIC: (614) 292-6717
NDWC: 1-800-624-8301
NTIS: 1-800-553-6847

Small Systems

LCCA

Lead in School Drinking Water 1989

Intended to assist schools, this guidance manual provides information on the health effects of lead for children, ways to pinpoint sources of lead such as drinking water fountains, steps to reduce or eliminate lead from those sources and training methods on sampling and remedial programs for school personnel. Originally published in 1989, this manual is expected to be updated in December 1993. Available from the EPA Safe Drinking Water Hotline (EPA 570/9-89-001).

Lead and Copper: How to Comply for Small and Medium Systems 1993

This kit helps small and medium-sized systems comply with the new requirements of the Lead and Copper Rule. It includes a flowchart of necessary actions; an overview of the rule; a how-to guide on taking, preserving and accurately recording water samples; a corrosion control guide; EPA definitions, worksheets and sample forms for monitoring lead and copper levels; examples of public education programs with sample public service announcements and a sample bill insert for use in notifying customers. Available from AWWA (No. 68030).

Lead and Copper Rule: Basic Decision Process for Small Water Systems (Poster) 1992

This poster models the decision-making processes that small systems will have to go through under the Lead and Copper Rule. These decisions range from determining whether the water system has to comply with this rule to the monitoring, repeat monitoring, corrosion control and public education steps established under the Lead and Copper Rule. This poster is intended to assist small water systems, consultants and government officials. Available from the National Drinking Water Clearinghouse.

Part One: Questions Small Water Systems are Asking about the New Lead Regulations 1992

Appearing in the quarterly newsletter *On Tap* (Vol. 1, Issue 1), this article discusses why EPA believes lead is a serious concern in drinking water and how small systems can begin their initial monitoring required by the rule. This article is intended to assist small water systems, consultants and government officials. It will also be helpful to members of the public who are interested in an overview of the health effects and occurrence of lead in drinking water. Reprints of this article are available from the National Drinking Water Clearinghouse.

Part Two: Questions Small Water Systems are Asking about the New Lead Regulations 1992

This article is the second part of a three-part series appearing in the quarterly newsletter *On Tap* (Vol. 1, Issue 2). Part Two focuses on the corrosion control steps mandated by the Lead and Copper Rule for small systems that exceed the lead action level at the 90th percentile. This includes information on determining the 90th percentile lead level, monitoring for water quality parameters and corrosion control treatment options. This article is intended to assist small water systems, consultants and government officials. Reprints are available from the National Drinking Water Clearinghouse.

Part Three: Questions Small Water Systems are Asking about the New Lead Regulations 1992

Last of a three-part series printed in the quarterly newsletter *On Tap* (Vol. 1, Issue 3), this article examines source water monitoring and lead service line replacement requirements for small systems that have exceeded the lead action level at the 90th percentile under the Lead and Copper Rule. The article also discusses enforcement and cost issues associated with complying with all of the requirements of this regulation. It is intended to assist small water systems, consultants and government officials. Reprints of this article are available from the National Drinking Water Clearinghouse.

EPA

Safe Drinking Water Hotline
(800) 426-4791

U.S. Environmental Protection Agency Drinking Water Programs

For More Information, contact the office that represents your state

EPA Region 1
GW Mngt./Water Supply Branch
John F. Kennedy Federal Building
Boston, MA 02203
(617) 565-3610
Connecticut, Maine, Massachusetts, Rhode Island, New Hampshire, Vermont

EPA Region 2
D/G Water Protection Branch
26 Federal Plaza
New York, NY 10278
(212) 264-1800
New York, New Jersey, Puerto Rico, Virgin Islands

EPA Region 3
D/G Water Protection Branch
841 Chestnut Building
Philadelphia, PA 19107
(215) 597-8227
District of Columbia, Maryland Pennsylvania, Virginia, West Virginia

EPA Region 4
Municipal Facilities Branch
345 Courtland Street, N.E.
Atlanta, GA 30365
(404) 347-2913
Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

EPA Region 5
Safe Drinking Water Branch
77 West Jackson Blvd.
Chicago, IL 60604
(312) 886-6197
Illinois, Indiana, Minnesota, Michigan, Ohio, Wisconsin

EPA Region 6
Water Supply Branch
1445 Ross Avenue
12th Floor, Suite 1200
Dallas, TX 75270
(214) 655-7155
Arkansas, Louisiana, New Mexico, Oklahoma, Texas

EPA Region 7
Drinking Water Branch
726 Minnesota Avenue
Kansas City, KS 66101
(913) 551-7032
Iowa, Kansas, Missouri, Nebraska

EPA Region 8
Drinking Water Branch
999 18th Street, Suite 500
Denver, CO 80202
(303) 293-1413
Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

EPA Region 9
D/G Water Protection Branch
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-2250
Arizona, California, Hawaii, Nevada, American Samoa, Guam

EPA Region 10
Drinking Water Branch
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-6648
Alaska, Idaho, Oregon, Washington