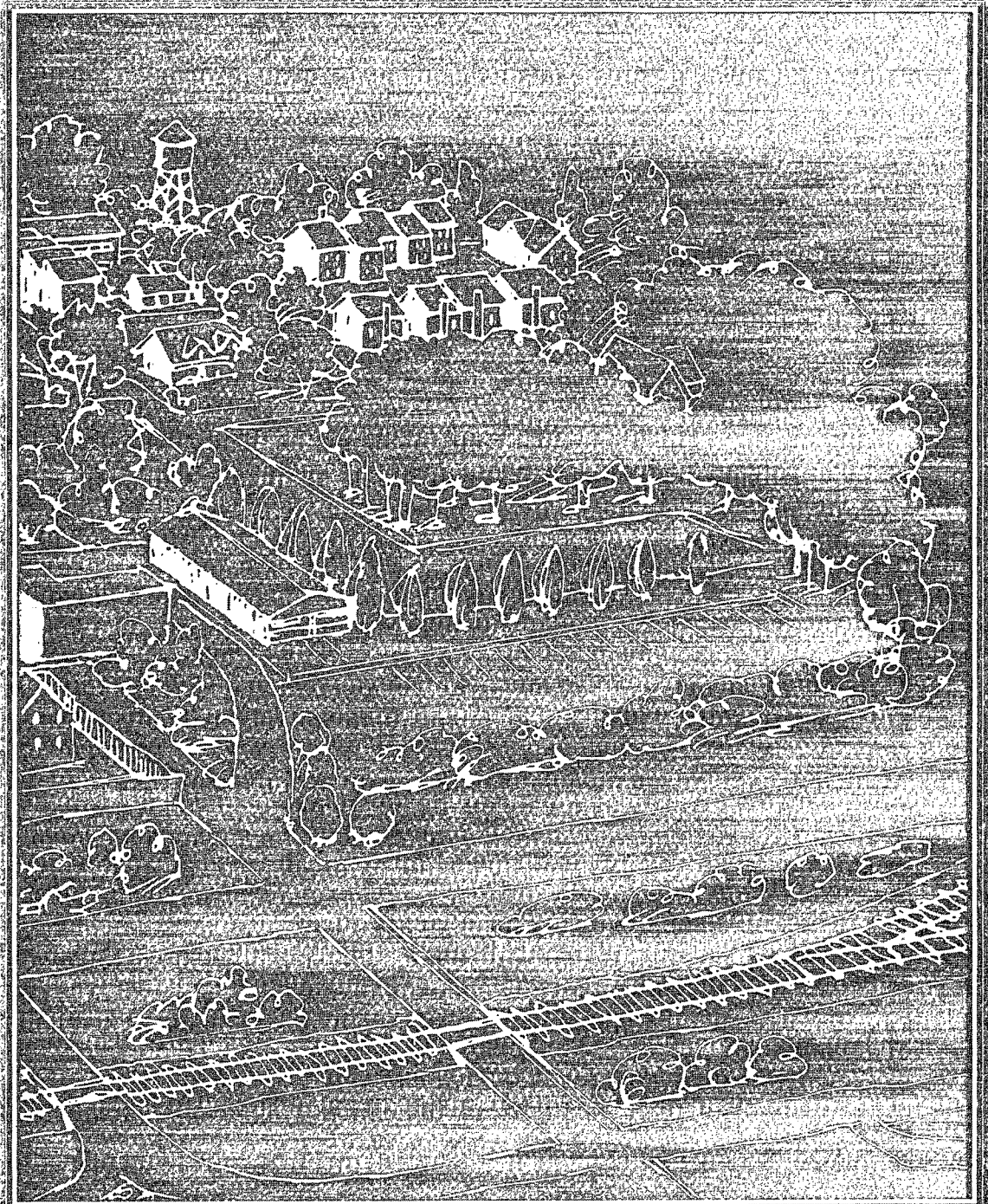




A Guide To Federal Environmental Requirements For Small Governments



This Guide is one of a series of U.S. Environmental Protection Agency publications designed to make information about federal environmental regulations and programs more accessible and understandable to local government officials in small communities. We plan to update it periodically, and welcome suggestions—based on your experience—as to which requirements should be included, excluded or explained more fully in future editions. We also welcome your comments on the clarity and usefulness of the information describing each regulation. Included in the Guide is a reader response sheet on how this publication can best meet your needs.

This first Headquarters-produced edition of the Guide is modeled after a booklet published in 1990 by the EPA Region 8 Office. Other regional guides have been published by Regions 4, 5, 7 and 10.



Recycled/Recyclable

Printed with Soy/Canola Ink on paper that contains at least 50% recycled fiber

ISBN 0-16-036295-4



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A Guide To Federal Environmental Requirements For Small Governments

Compiled by the

U.S. Environmental Protection Agency
Office of Regional Operations and State/Local
Relations

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September 1993



Administrator's Preface

Over the past several years I have been impressed with the dedication of small town officials who are struggling to protect their community's environment and the health of their citizens in the face of sometimes overwhelming odds. Small communities are where the buck stops. For the most part, small governments are responsible for a lot of the practical matters of everyday life -- matters like where the garbage goes, what happens when we flush the toilet, how we heat and light our homes, and what comes out of the faucet in the kitchen sink. Small governments serving under 10,000 people own the great majority of America's landfills, power plants, waste water systems, and drinking water systems.

My experience has taught me that community leaders often know the most effective ways to get environmental results and that they are spirited in their efforts because they have a large personal stake in the outcome. At the same time, they feel overwhelmed by the breadth, complexity and cost of existing environmental needs, mandates and expectations.

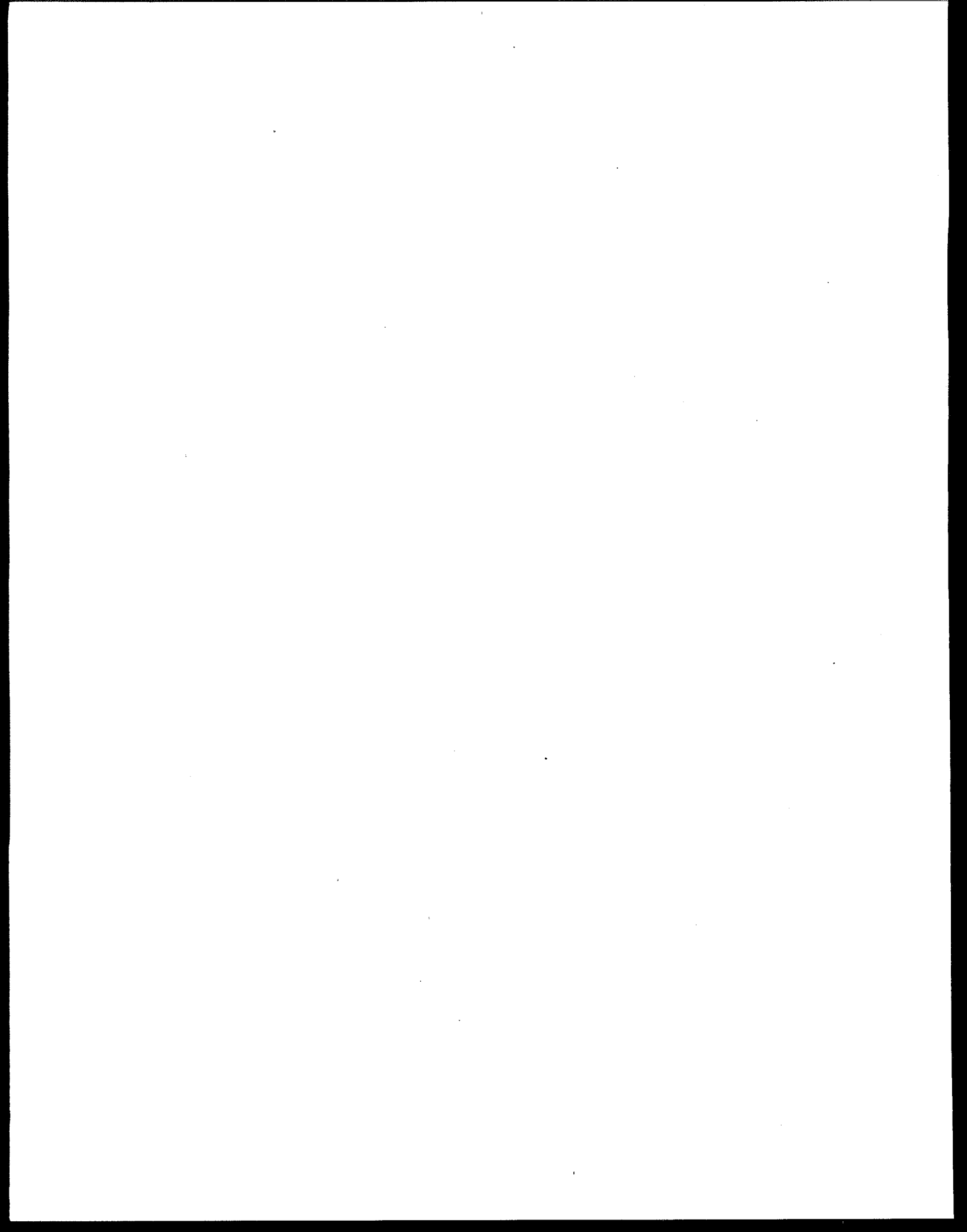
We all know that environmental law -- and therefore environmental regulation -- is growing more and more complicated. It's even complicated to find out what the rules are. Local officials have pointed out that the right information has been very difficult to find, and then when they do find it, it's very confusing. As a result, one of the first things EPA needs to do is let everyone know just what they are responsible for in a way that they can understand. The Guide you are holding in your hand is our first step in that direction, and we hope to update it on an annual basis to reflect your needs.

We'd like to hear from you about your reactions to this publication and how you think we can improve it, and the last page has been designed so that you can tear it off and send it in with your comments. In the meantime, the final section of the Guide contains telephone numbers of state and EPA offices where there are people who will help and answer your questions. Thank you for all you are doing to help make America's communities cleaner and safer places to live. We look forward to working closely with you to accomplish our common goals.



Carol Browner
Administrator

September, 1993



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Introduction

This *Guide to Federal Environmental Requirements for Small Governments* is a reference handbook from the U.S. Environmental Protection Agency to help local officials become familiar with requirements that may apply to their jurisdictions. We have tried to explain a number of these often complex federal regulations in a simple, straightforward manner so you will find the information useful as you analyze and address environmental problems in your community. The information will, of course, also be useful to larger local governments. The guide is based on EPA requirements as they existed in 1992. If they change, the text will be modified in future editions.

We recognize that in addressing "small governments" we are talking to officials of communities of many sizes and shapes. They may be tiny unincorporated hamlets or small cities and villages that get most of their services from county governments or special districts. They may be in resort areas with large seasonal population increases requiring sophisticated water, sewer and waste treatment services. They may be adjacent to locations where major interstate highways or transportation systems come together, or close to remote but fairly large industrial complexes that pose potential environmental threats.

In addition, levels of environmental services they provide may differ. Many small communities have major responsibilities for environmental infrastructure such as landfills, public power plants, sewerage and water systems. On the other hand, some communities provide only a limited range of services and depend on county or special district governments to provide the rest.

If your community is one that depends on counties or special districts, this publication will help you understand what those entities should be doing. Small government officials need to be familiar with the requirements which counties or special districts must meet in order to be effective advocates for their residents. *We also invite you to pay special attention to the section on pollution prevention, which is everybody's job.*

This Guide is not a legal document in the sense that the simplified language it uses may differ from the wording of the actual regulations. In any legal proceeding the specific language of the regulation is binding. Nor does the Guide cover every EPA regulation affecting local governments, although it does include most of the major requirements affecting your jurisdiction or the jurisdiction that provides the services described by the various laws. Many of the laws and regula-

tions described in the Guide are actually implemented and enforced by state governments or Tribal governments. Where appropriate, various sections of the Guide indicate that such may be the case and that you should seek further information from state or Tribal sources.

If you have questions about any federal environmental requirement not included in this first edition of the Guide, consult your EPA Regional Office (Their phone numbers are listed in the Resource Section.)

How to Use the Guide

The Guide is divided into sections on water, waste, toxics, air, voluntary programs and phone contacts. There is a detailed table of contents on the preceding page. But to make it easier for you to find information about regulations that apply to your community, we offer this guidance:

If your government

- Owns or operates a municipal water supply system or gets its drinking water through a contract with a private supplier, see pages 6 to 25.
- Operates or contracts for public landfill and/or hazardous waste disposal, see pages 32 to 36.
- Owns or operates any underground storage tanks, see pages 37 to 43. (This section also covers the potential involvement of your fire department when tanks owned by others leak).
- Faces potential problems from spills or other releases of toxic chemicals manufactured or stored in your community, or transported through it by rail, truck or river barge, see pages 44 to 46. (If you are not already participating in your county's federally-required Local Emergency Planning Committee, this section will tell you why you should be).
- Collects or disposes of wastewater and uses or disposes of sewage sludge, see pages 26 to 29.
- Operates or is responsible for elementary and secondary schools which may have asbestos-containing materials in their buildings, see page 47.
- Own or operates landfills, airports, junkyards, construction sites or other facilities that discharge into your storm water drain system, see page 30.

EPA's Small Community Program

Background

The U.S. Environmental Protection Agency recognizes that small communities have problems in complying with environmental regulations. As a result, the Agency carries on a special small community effort involving its headquarters and regional offices. The aim of this program is to help the Agency better understand the unique nature of the nation's small communities, and to help local officials in small governments participate more fully with EPA as regulations and policies affecting them are developed.

There are special small community contacts in each EPA regional office and in each program office at headquarters in Washington, DC. There is also a special Small Community Coordinator in the Administrator's Office of Regional Operations, and State/Local Relations. A list of EPA small community contacts is provided on the following page.

Actions Your Community Should Be Taking

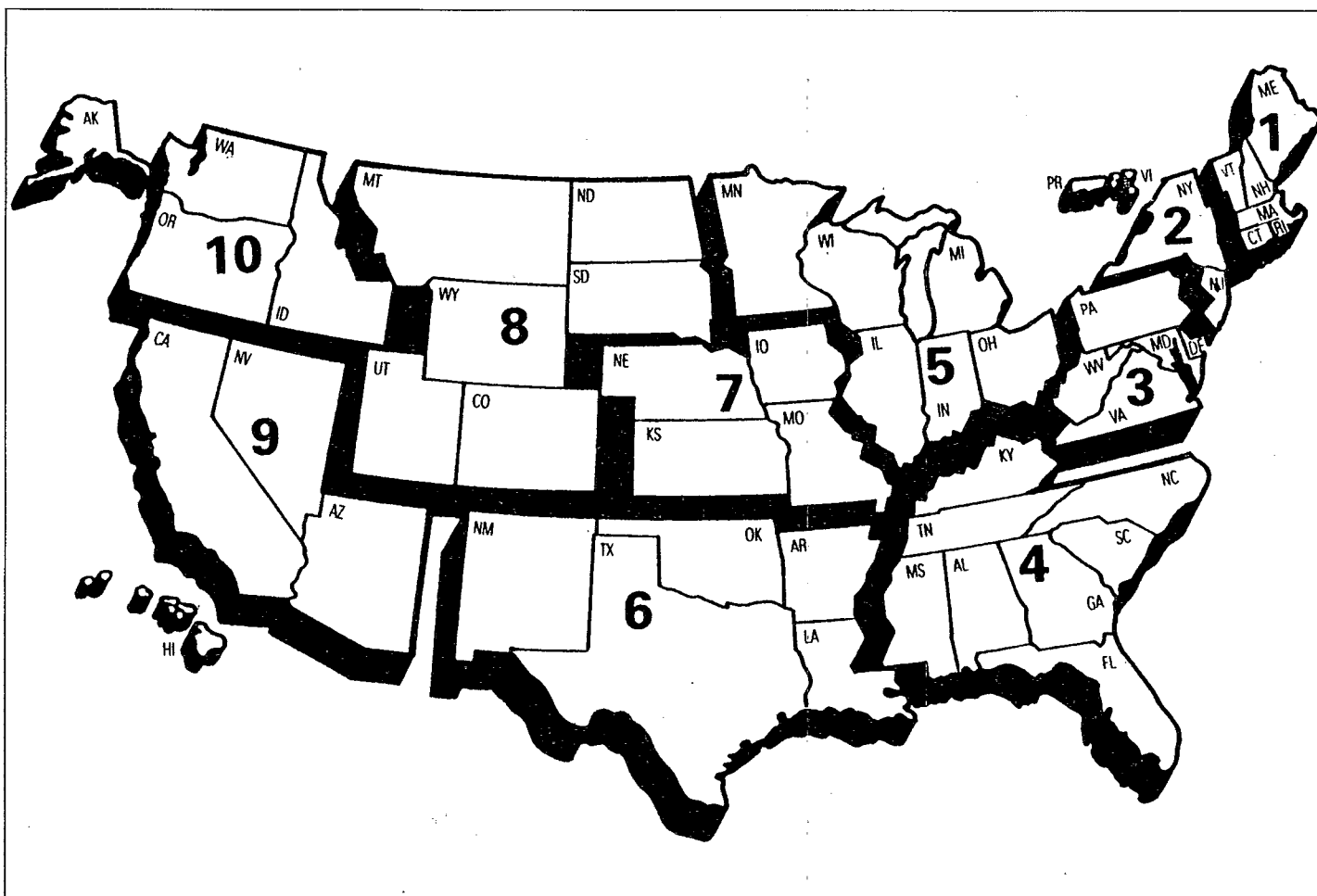
You should become familiar with the person in your EPA regional office who is your small community contact. They can help you get in touch with technical, financial and educational assistance that is available to help you. In addition, many EPA regional offices are beginning to establish networks and

roundtables for officials from state and local governments, EPA staff, and other interested parties who are interested in exploring new ways of working cooperatively to solve environmental problems. If you are interested in helping to support these efforts, please let us know.

A Small Community Coordinator function has been established at the headquarters office in Washington, DC, to provide a focal point inside the Agency for small community issues, and to act as an advocate on their behalf. The Small Community Coordinator works with national associations, other federal agencies, EPA regional offices, EPA headquarters staff and other interested parties. The main focus of the office is to help coordinate policies and identify and develop processes that will result in realistic, cost-effective ways for small communities to protect their environment and the health of their citizens.

Additional Information

For a list of regional and headquarters small community contacts, and a map showing EPA regional offices, please see page 3 and 4.



Region

4 – Alabama
 10 – Alaska
 9 – Arizona
 6 – Arkansas
 9 – California
 8 – Colorado
 1 – Connecticut
 3 – Delaware
 3 – District of Columbia
 4 – Florida
 4 – Georgia
 9 – Hawaii
 10 – Idaho
 5 – Illinois

Region

5 – Indiana
 7 – Iowa
 7 – Kansas
 4 – Kentucky
 6 – Louisiana
 1 – Maine
 3 – Maryland
 1 – Massachusetts
 5 – Michigan
 5 – Minnesota
 4 – Mississippi
 7 – Missouri
 8 – Montana

Region

7 – Nebraska
 9 – Nevada
 1 – New Hampshire
 2 – New Jersey
 6 – New Mexico
 2 – New York
 4 – North Carolina
 8 – North Dakota
 5 – Ohio
 6 – Oklahoma
 10 – Oregon
 3 – Pennsylvania
 1 – Rhode Island
 4 – South Carolina

Region

8 – South Dakota
 4 – Tennessee
 6 – Texas
 8 – Utah
 1 – Vermont
 3 – Virginia
 10 – Washington
 3 – West Virginia
 5 – Wisconsin
 8 – Wyoming
 9 – American Samoa
 9 – Guam
 2 – Puerto Rico
 2 – Virgin Islands

Regional Small Community Contacts

Region 1

U.S. EPA

John F. Kennedy Federal Building
Room 2203

Boston, MA 02203

Contacts: Rudy Brown or, Doug Gutro
Phone #: 617-565-3412

Region 2

U.S. EPA

Jacob K. Javits Federal Building
26 Federal Plaza

New York, NY 10278

Contact: Berry Shore
Phone #: 212-264-7834

Region 3

U.S. EPA

841 Chestnut Building
Philadelphia, PA 19107

Contact: Dan Ryan
Phone #: 215-597-9072

Region 4

U.S. EPA

345 Courtland Street, N.E.
Atlanta, GA 30365

Contact: Tom Nessmith
Phone #: 404-347-7109

Region 5

U.S. EPA

77 West Jackson Boulevard
Chicago, IL 60604-3507

Contact: Phillippa Cannon
Phone #: 312-353-6218

Region 6

U.S. EPA

1445 Ross Avenue, 12th Floor
Suite 1200

Dallas, TX 75202-2733

Contact: Gladean Butler
Phone #: 214-655-2203

Region 7

U.S. EPA

726 Minnesota Avenue
Kansas City, KS 66101

Contact: Janet Lambert
Phone #: 913-551-7768

Region 8

U.S. EPA

999 18th Street, Suite 500
Denver, CO 80202-2405

Contact: Charles Gomez
Phone #: 303-294-1119

Region 9

U.S. EPA

75 Hawthorne Street
San Francisco, CA 94105

Contact: Lou Jefferson
Phone #: 415-744-1568

Region 10

U.S. EPA

1200 Sixth Avenue
Seattle, WA 98101

Contact: Floyd E. Winsett
Phone #: 206-553-1138

Center for

Environmental Research Information

26 Martin Luther King Drive
Cincinnati, OH 45268

Contact: Jim Kreissl
Phone #: 513-569-7611

Headquarters Small Community Contacts

Ann Cole - Small Community Coordinator
Office of Regional Operations and State/Local Relations
401 M Street, S.W., Washington, DC 20460
202-260-3953

Air

Air and Radiation

Tina Parker 202-260-6584

Enforcement

Becky Barclay 202-260-7116

Environmental Finance

Vera Hannigan 202-260-6685

George Ames 202-260-8227

General Counsel

Carl Garvey 202- 260-7984

Pesticides and Toxics

General

Sherry Sterling 202-260-2890

Policy, Planning and Evaluation

Policy Analysis

Brett Snyder 202-260-5610

Regulatory Flexibility Act

Paul Lapsley 202-260-5480

Research and Development

State and Local

Lawrence Martin 202-260-7667

Cincinnati Office

Jim Kreissl 513-569-7611

Solid Waste and

Emergency Response

Municipal Solid Waste

Tim Jones 202-260-7920

General

Ellen Brown 202-260-4617

Water

Small System Coordinator

Peter Shanaghan 202-260-5813

Municipal Wastewater Support

General

Sylvia Bell 202-260-7255

Technology

Charles Vanderlyn 202-260-7277

Ground and Drinking Water

Roger Barnes 202-260-4194

MANDATED REQUIREMENTS

Drinking Water

Coliform Monitoring

Background

Bacteria from sewage and animal wastes have presented the most frequent and immediate health risks to public water supplies over the years. The presence of coliform bacteria, specifically fecal and *E. coli* bacteria, is the best and most easily tested indication of whether potentially harmful bacteria may be in the water.

Does The Coliform Monitoring Rule Apply To My Community?

Yes, all community public water systems as well as non-community water systems (public water system that does not serve a residential population) must submit samples for coliform bacteria testing on a regular monthly basis. Failure to submit samples, meet the maximum contaminant level (MCL) and report non-compliance are all violations of the rule.

Timetable

Your community has been required to test for coliform bacteria since 1975. The 1986 amendments to the Safe Drinking Water Act resulted in the publication of new rules that change some of the procedures for testing, change the maximum contaminant level, and require certain public notification rules related to coliform monitoring. These rules were published in final form on June 29, 1989, and became effective December 31, 1990. This rule has been implemented for all water systems.

Maximum Contaminant Levels (MCL)

The maximum contaminant level is based on the presence or absence of total coliforms in a sample (the old maximum contaminant level was based on an estimate of coliform density). A very small water system may have one coliform-positive sample per month and still remain in compliance with the regulation.

Monitoring Requirements

You are required to submit at least one routine sample per month for your system depending on its size. Carefully follow procedures for sampling provided by your testing laboratory or the state agency. First round (or "routine" samples) are to be taken from taps used primarily for providing drinking water. Samples are to be from different customer taps from month to month, for example, from kitchen or bathroom sink taps. Your state will work with you to establish a "sample-siting plan" for your community that lists where samples should be taken each month.

If the sample tests positive for total coliforms, you must collect four repeat samples within 24 hours of the time you were notified of the result. These repeat samples must be collected within five service connections (or five household taps) of the

original sample with at least one being at the original location, at least one upstream and at least one downstream. If total coliforms are detected in any repeat sample, your water system is in violation of the maximum contaminant level and you must notify the state agency no later than the end of the next business day that you learned of the violation.

If fecal coliforms or *E. coli* are identified in a sample in a month that the water system violates the maximum contaminant level, it becomes an "acute" violation and you must notify the state agency the same day you receive the results. This is an acute violation because the presence of fecal coliform or *E. coli* in a sample is evidence of sewage contamination which presents an urgent health problem. The month following a violation of the total coliform maximum contaminant level you must collect five routine samples. The state agency may require more than one routine sample per month.

A sanitary survey of your system is required at least every five years and is usually done by the state agency. This survey is an on-site review of the water source, facilities, equipment, operation, and maintenance of a public water supply system designed to evaluate their ability for producing and distributing safe drinking water. The initial survey must be completed by June 29, 1994. After the sanitary survey is reviewed, the state has the authority to change the monitoring frequency for the public water supply system which could reduce the number of samples that need to be taken on a routine basis. Without the sanitary survey, you would have to collect five routine samples every month.

Actions Your Community Should Be Taking

Submit one routine sample per month for your system. Carefully follow the sampling procedures noted under Monitoring Requirements.

If your system does not test positive for total coliforms

- Continue to submit regular samples and review results.
- Maintain a good operation and maintenance program for your water system including regular line flushing at fire hydrants and on dead ends.

If your system has a positive coliform sample result

- Immediately take and process your repeat samples.
- Carefully review your sample taking procedures to be sure you are not accidentally contaminating the samples.
- Call your state agency and ask for help to locate any possible sources of contamination.
- Follow the state agency's direction in issuing public notices and any state emergency measures that may be required.
- Correct any problems causing contamination immediately. Contact one of the resource agencies listed in the back of this book if you need technical support or help in financing arrangements.

Additional Information

The rule for coliform monitoring is primarily contained in Title 40 Code of Federal Regulations Parts 141.21 & 141.63, and public notice rules are in Title 40 Code of Federal Regulations Part 141.32.

EPA and your state agency have several information sheets and pamphlets on sampling and testing for coliform bacteria. Contact your state agency for more information.

You may also contact the EPA Safe Drinking Water Hotline at 1-800-426-4791.

(See Resource Section for drinking water contacts)

Drinking Water

Disinfection and Disinfection By-Products

Background

Disinfectants (such as chlorine) are the primary defense against diseases caused by microbiological contaminants in public water systems. More than 90 percent of surface water supply systems disinfect their water while less than half of the ground water supplies are disinfected. Although disinfection is the single most important treatment technique in use in public water supplies, the disinfectants themselves can react with organic materials in water supplies to form disinfection by-products which may prove to contaminate the water with compounds that increase cancer risk.

Do The Disinfection And Disinfection By-Products Regulations Apply To My Community?

Yes, all community and non-transient, non-community public water systems (public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year i.e. schools, business with their own system) will be required to disinfect their water, with allowance for variances if the water comes from sources that are determined not to be at risk from microbiological contamination. Monitoring for disinfection by-products will be limited to systems vulnerable to their development, as determined by the state.

Timetable

Surface water supplies are now covered by final rules on filtration and disinfection that were published on June 29, 1989. These rules require disinfection of all surface water supplies and become effective over the next three years as determined by state schedules. Rules for general disinfection of all drinking water supplies are expected to be proposed in 1993 and will include maximum contaminant levels for a number of disinfectants and disinfection by-products. At present, four disinfection by-products (trihalomethanes) are regulated, but *only in community water supplies serving populations of 10,000 or greater*. The proposed rules are under development and their scope may include smaller systems.

Maximum Contaminant Levels (MCLs)

Proposed MCLs have not yet been circulated. The maximum contaminant level for total trihalomethanes is 0.1 milligrams per liter.

Actions Your Community Should Be Taking

- If your water supply is surface water, contact your state agency to determine your schedule for compliance with the filtration and disinfection rules.
- If your water supply is ground water and you are now adding a disinfectant, start regular disinfectant residual tests (weekly or

monthly) at some consumer taps to determine how much disinfection is available at the "end-of-the-line" in your system. This will help you plan for modifications in your disinfection process to meet any new standards that are required.

• If your water supply is ground water and you are not adding a disinfectant now, the following steps may help in your planning:

- Check your coliform bacteria tests over the past three or four years. A history with some positive coliform tests are likely to require you to disinfect.
- If you have no positive coliform tests, keep it that way by following a proper sampling procedure and through good maintenance and operation of your water supply and distribution systems. You may be able to ask for an exemption to the new disinfection rule.
- Look at and price different equipment for disinfection. For most very small systems, chlorination provided through gas, liquid solutions or granular compound is the method used. Costs vary and may not be out of reach for your community. Your state agency, engineer or an equipment supply firm can help you with this information.
- Visit neighboring communities that are disinfecting and see how they do it and what it costs.
- Start public information/education efforts to help your customers understand the reasons and advantages of protecting your water supply from contamination through disinfection. Your state or federal agency drinking water contact listed in the back of this book may be able to help you with this.

Additional Information

The rules for Disinfectants and Disinfection By-Products are in Title 40 Code of Federal Regulations Part 141.72.

"Protecting Our Drinking Water From Microbes," EPA, available by calling the EPA Safe Drinking Water Hotline: 1-800-426-4791.

Your state agency has materials available that describe the proper installation and use of disinfection equipment in small systems.

(See Resource Section for drinking water contacts)

Drinking Water

Inorganic Chemicals

Background

Inorganic Chemicals (IOCs) are elements or compounds found in water supplies. They may be found naturally occurring in the geology, or they may be caused by mining, industry or agricultural activities. It is common to have trace amounts of many inorganic chemicals in water supplies.

These chemicals can be dangerous in larger amounts, and can cause a variety of damaging effects to the liver, kidney, nervous system, circulatory system, blood, gastrointestinal system, bones or skin, depending upon the chemicals and level of exposure. Some inorganic chemicals are more damaging to infants and pregnant women. As a result, EPA has established safety levels for each of them (called "Maximum Contaminant Levels" or "MCLs"), and has issued regulations for public water systems.

Do The Inorganic Chemical Regulations Apply To My Community?

Yes, all community public water supply systems and non-transient, non-community water systems must monitor for regulated inorganic chemicals in their water supplies. Sampling for inorganic chemicals is required every three years from each sampling point for groundwater supplies and every year from each sampling point for surface water supplies under present rules.

At present there are 17 regulated inorganic chemicals (including fluoride, arsenic and cyanide). They are listed at the end of this section. Asbestos and fluoride are included in this category but, because their rules are somewhat different, separate sections for them have been included in this booklet.

Public water systems must take inorganic chemicals samples based on a nine-year cycle called a "compliance cycle," and three 3-year periods called "compliance periods." All public water systems and non-transient, non-community water systems with groundwater sources must sample annually for nitrate. Systems with surface water sources must sample quarterly. All public water supplies, including transient water supplies, must sample for nitrite at the interval designated by the state.

For example, a groundwater-based public water system would have to test for inorganic chemicals sometime in the first compliance period (January 1, 1993 - December 31, 1995). This regulation allows public water systems to get waivers for monitoring (except for nitrate and nitrite, which cannot be waived). A waiver either eliminates or reduces monitoring. A public water system with a waiver for inorganic chemicals would only need to sample once each compliance cycle or once every nine years beginning January 1, 1993. It is the public water system's responsibility to ask the state for a waiver prior to January, 1993. It is the state's responsibility to grant the waiver.

New regulations (called "Phase V") became final in July 1992 and became effective in January 1993 for large systems with greater than 150 service connections. The regulations require small public water supply systems (those with less than 150 hookups) to begin monitoring between 1996 and 1998. They allow a public water system to apply for a waiver after three monitoring rounds if the new inorganic chemicals are not detected. Again, a waiver for inorganic chemicals would reduce sampling to once every nine years.

MCLs

A separate page follows that lists the maximum contaminant levels for inorganic chemicals.

Actions Your Community Should Be Taking

- Continue sampling yearly or every three years for currently regulated inorganic chemicals.
- Make sure newly regulated inorganic chemicals are tested as the new maximum contaminant levels become effective.

If you exceed any of the MCLs

- Monitor quarterly beginning in the first quarter after a violation.
- Notify the state agency and complete Public Notices as required.
- Work with the state agency and/or an engineer to determine the best way to reduce the level of the contaminant in your water supply. Consider a variety of options. In addition to a new treatment process, you may need to consider improving your present treatment process, mixing your contaminated supply with another supply that does not exceed the maximum contaminant level or obtaining a new source of water.
- Request an exemption from the state agency to allow the community to continue to use the water supply while solutions to the maximum contaminant level violations are being explored, and any needed financing is being planned.
- Contact resource agencies listed in the back of this booklet for help in planning and finding financing for your system improvements.

Additional Information

The rules for inorganic chemicals are contained in Title 40 Code of Federal Regulations Parts 141.11, 141.23, 141.62.

Your state agency can provide some additional information on any of the individual inorganic chemicals.

EPA Safe Drinking Water Hotline: 1-800-426-4791.

See separate pages of this booklet for information on Asbestos, Fluoride, Lead, and Copper.

(See Resource Section for drinking water contacts)

Maximum Contaminant Levels (MCL) for Inorganic Chemicals

Phase II

Contaminants	MCL
Arsenic	0.05 mg/l
Asbestos	7 million fibers/l
Barium	2 mg/l
Cadmium	0.005 mg/l
Chromium	0.1 mg/l
Fluoride	4 mg/l
Lead	—
Mercury	0.002 mg/l
Nitrate (As N)	10 mg/l
Nitrite (As N)	1 mg/l
Total (nitrate+nitrite)	10 mg/l
Selenium	0.05 mg/l

Phase V

Antimony	0.006 mg/l
Beryllium	0.004 mg/l
Cyanide	0.2 mg/l
Nickel	0.1 mg/l
Thallium	0.002 mg/l

mg/l = milligrams per liter

fibers/l = number of fibers per liter

Drinking Water

Non-Volatile Synthetic Organic Chemicals (SOCs)

Background

Synthetic organic chemicals (SOCs) are man-made compounds that are used for a variety of industrial and agricultural purposes. Adverse health effects from exposure to synthetic organic chemicals include damage to the nervous system and kidneys, and cancer risks. Synthetic organic chemicals are divided into two groups for monitoring purposes, volatile synthetic organic chemicals (VOCs) and non-volatile synthetic organic chemicals (which include other industrial chemicals like pesticides and polychlorinated biphenyls). This section discusses the synthetic organic chemicals that are non-volatile, in this case, pesticides and polychlorinated biphenyls (PCB). Volatile organic chemicals are discussed in a separate section. Also see the section on disinfection by-products.

Does This Apply To My Community?

Yes. All community and non-transient, non-community public water systems are required to test for pesticides and PCBs unless they are granted a waiver by the state.

Maximum Contaminant Levels

See the table at the end of this section for a listing of the non-volatile synthetic organic chemical maximum contaminant levels.

Actions Your Community Should Be Taking

- Cooperate with your state agency to determine the vulnerability of your water supply to synthetic organic chemicals. If it is determined that you are non-vulnerable (pesticides and PCBs are not around to get in your supply), you will not have to sample for synthetic organic chemicals during that compliance period.
- If your system is vulnerable, cooperate with your state agency to get the first round of samples taken. Some states are doing this for very small systems. Vulnerable systems must sample quarterly beginning in the first compliance period (January 1993-December 1995) of the first compliance cycle (January 1993-December 2001). If pesticides and PCBs are not detected, repeat sampling is as follows: two quarterly samples every three years beginning in the second compliance period (January 1996-December 1998) for systems serving more than 3,300 people; or, one quarterly sample every three years also beginning in the second compliance period for systems serving less than 3,300 people.
- It is the responsibility of the public water supply system to perform the vulnerability assessment for synthetic organic chemicals. It is then mailed to the state with a request for a waiver. If the waiver is granted, no monitoring is required for that compliance period. The public water supply system must be granted a waiver before the year that testing is required.

Every compliance period thereafter, the vulnerability assessment must be updated and a new waiver granted.

If your tests indicate levels of pesticides and PCBs higher than the maximum contaminant level (averaged over the year), you are in violation. You should:

- Continue quarterly sampling (at times of highest vulnerability, i.e., after fertilizer application and a rain).
- Notify the state agency and complete public notices as required.
- Request an exemption from the state agency to allow the community to continue to use the water supply while solutions to the violation are being explored and any needed financing is being planned.
- Work with the state agency and/or your engineer to determine how pesticides and PCBs are getting into your water supply. If possible, eliminate the source of contamination.
- If you must treat your water supply to remove the pesticides and PCBs, work with your engineer to choose the best available technology for treatment. Filtering through granular activated carbon is suggested for most synthetic organic chemicals. Packed tower aeration and polymer addition practices are used for some.
- Changing water sources may be the most economical solution in situations where alternate sources are available.

Additional Information

A separate page is included that lists the maximum contaminant levels for synthetic organic chemicals.

The rules for synthetic organic chemicals are contained in Title 40 Code of Federal Regulations Parts 141.12, 141.24, 141.61.

"Pesticides in Drinking Water Wells," EPA. (Agricultural Extension Service offices also have useful pamphlets on pesticides).

EPA Safe Drinking Water Hotline: 1-800-426-4791.

(See Resource Section for drinking water contacts)

**Maximum Contaminant Levels for
Non-Volatile Synthetic Organic Chemicals (SOCs)**

Contaminant	MCL
Alachlor	0.002 mg/l
Atrazine	0.003 mg/l
Carbofuran	0.04 mg/l
Chlordane	0.002 mg/l
2,4-D	0.07 mg/l
Heptachlor	0.0004 mg
Heptachlor Epoxide	0.0002 mg/l
Lindane	0.0002 mg/l
Methoxychlor	0.04 mg/l
PCBs	0.0005 mg/l
Pentachlorophenol	0.001 mg/l
Toxaphene	0.003 mg/l
2,4,5-TP (SILVEX)	0.05 mg/l
Acrylamide	Treatment Technique*
Epichlorohydrin	Treatment Technique*
Endrin	0.002 mg/l
Dalapon	0.2 mg/l
Diquat	0.02 mg/l
Endothall	0.1 mg/l
Glyphosate	0.7 mg/l
Di (Ethylhexyl) Adipate	0.4 mg/l
2,3,7,8-TCDD (Dioxin)	3 x 10 ⁻⁸ mg/l
Hexachlorocyclopentadiene	0.05 mg/
Oxamyl (Vydate)	0.2 mg/l
Simazine	0.004 mg/l
Styrene	Treatment Technique*
PAHs [Benzo(a)pyrene]	0.0002 mg/l
Hexachlorobenzene	0.001 mg/l
Di(ethylhexyl) Phthalate	0.005 mg/l
Picloram	0.5 mg/l
Dinoseb	0.007 mg/l

* A treatment technique is established instead of a maximum contaminant level.

Drinking Water

Volatile Organic Chemicals

Background

Volatile Synthetic Organic Chemicals (VOCs) are man-made compounds used for a variety of industrial and manufacturing purposes. Among the most common Volatile Organic Chemicals are those chemicals used as solvents, degreasers, fumigants, and dry cleaning chemicals. Volatile organic chemicals have various effects on the liver, kidneys, nervous system and some may pose a cancer risk to humans.

Do The Volatile Organic Chemicals Regulations Apply To My Community?

Yes, at present, there are 21 regulated volatile organic chemicals (see list on following page) that must be monitored by small water systems (defined as less than 150 service connections).

Your community water system must monitor for regulated volatile organic chemicals in their water supply. If these chemicals are not detected, your system must monitor again beginning in 1993. If volatile organic chemicals are detected, monitoring must be done quarterly.

Timetable

A special timetable has been developed for these regulations, and it is divided into "compliance periods." Initial monitoring begins in the 1993-1995 compliance period for all community water systems and non-transient, non-community water systems. During this time, one sample will have to be taken every three months for one year. Your state will designate either 1993, 1994, or 1995 as the year when your system will be required to take samples. If no volatile organic chemicals are detected in your system during the initial period of sampling, states can decrease your sampling frequency beginning in the second compliance period (1996-1998).

Repeat monitoring

- If you have a groundwater system, you must take at least one sample each year at each sampling point.
- If you have a surface water system, you must sample annually.

If certain trigger levels are exceeded, systems may have to increase monitoring frequency. After three years of sampling with no detection, sampling at that point may be further reduced to one sample every three years.

Previously collected data

States may allow sampling data collected between January 1, 1988, and December 31, 1992, to satisfy initial quarterly sampling requirements. If your system did not detect any volatile organic chemicals, you must begin annual sampling in 1993.

Waivers

Although you must meet initial sampling requirements, you may apply for a waiver from repeat sampling requirements. There are different kinds of waivers depending on whether a contaminant has been found in your water supply area, or whether your system is vulnerable to contamination. For more information, please contact your state or the EPA Safe Drinking Water Hotline listed at the end of this section.

Adding new contaminants to the list

EPA is required by law to add new contaminants to the list to be regulated on a regular schedule, so additional volatile organic chemicals may be added to the list from year to year. This should not represent much of a change for the very small system because all testing for volatile organic chemicals is done from the same water sample, so there would be little additional cost.

Congress has determined that new contaminants to be monitored will be added to the list in "phases." The newest phase (Phase V) will include three new volatile organic chemicals. Small systems will not be required to begin monitoring for these contaminants until the 1996-1998 compliance period.

Maximum contaminant levels

A list of maximum contaminant levels for volatile organic chemicals can be found at the end of this section.

Actions Your Community Should Be Taking

- Complete initial sampling in the year designated by your state.
- Apply for a waiver using data from your initial sampling, or use previously collected data, if applicable.
- Conduct a "vulnerability assessment" if your system plans to apply for a waiver based on the susceptibility of your system to contamination from volatile organic chemicals.
- Let your customers know through a newsletter or poster when you find out that your water is free of volatile organic chemical contamination.

If your tests indicate levels of a volatile organic chemical higher than the maximum contaminant level (average over the year) at any sampling point, you are in violation. You should:

- Begin quarterly sampling at that sampling point in the next calendar quarter.
- Continue sampling quarterly until the state determines that levels are reliably and consistently below the maximum contaminant level (MCL).
- Take at least four consecutive quarterly samples at sampling points where levels exceed the maximum contaminant level.
- Notify the state agency and complete public notices as required.

- Request an exemption from the state agency to allow the community to continue to use the water supply while solutions to the violation are being explored and any needed financing is being planned.

- Work with the state agency and/or an engineer to determine how volatile organic chemicals are getting into your water supply. If possible, eliminate the source of contamination.

- If you must treat your water supply to remove volatile organic chemicals, work with an engineer or technical consultant to choose the best available technology for treatment. Filtering through Granular Activated Carbon and Packed Tower Aeration are common treatments for the removal of most volatile organic chemicals.

- Consider changing the source of your water supply as one option. This may be the most economical solution when available.

Additional Information

The rules for volatile organic chemicals are contained in Title 40 Code of Federal Regulations Parts 141.24, 141.61, and 141.62.

Your state agency will be able to provide additional fact sheets on volatile organic chemicals.

EPA Safe Drinking Water Hotline: 1-800-426-4791.

(See Resource Section for drinking water contacts)

Regulated Volatile Organic Chemicals Currently In Effect

Contaminant MCL: Final

Phase I

Trichloroethylene	0.005 mg/l
Carbon Tetrachloride	0.005 mg/l
Vinyl Chloride	0.002 mg/l
1,2-Dichloroethane	0.005 mg/l
Benzene	0.005 mg/l
Para-dichlorobenzene	0.075 mg/l
1,1-Dichloroethylene	0.007mg/l
1,1,1-Trichloroethane	0.20mg/l

Phase II

cis-1,2-Dichloroethylene	0.07mg/l
trans-1,2-Dichloroethylene	0.1 mg/l
1,2-Dichloropropane	0.005 mg/l
Ethylbenzene	0.7 mg/l
Chlorobenzene	0.1 mg/l
o-Dichlorobenzene	0.6 mg/l
Styrene	0.1 mg/l
Tetrachloroethylene	0.005 mg/l
Toluene	1.0 mg/l
Xylenes (total)	10 mg/l

Phase V

Dichloromethane	0.005 mg/l
1,1,2-Trichloroethane	0.005 mg/l
1,2,4-Trichlorobenzene	0.009mg/l

mg/l = milligrams per liter

Unregulated Contaminants

List 1: Monitoring Required for All Systems

Bromobenzene
Bromodichloromethane
Bromoform
Bromomethane
Chlorodibromomethane
Chloroethane
o-Chlorotoluene
p-Chlorotoluene
Dibromomethane
m-Dichlorobenzene
Dichloromethane
1,1-Dichloroethane
1,1-Dichloropropane
1,3-Dichloropropane
1,3-Dichloropropene
2,2-Dichloropropane
1,1,2-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
1,2,3-Trichloropropane

List 2: Monitoring Required for "Vulnerable" Systems

Ethylene dibromide (EDB)
1,2-Dibromo-3-Chloropropane (DBCP)

List 3: Monitoring Required at the State's Discretion

Bromochloromethane
n-Butylbenzene
Dichlorodifluoromethane
Fluorotrichloromethane
Hexachlorobutadiene
Isopropylbenzene
p-Isopropyltoluene
Napthalene
n-Propylbenzene
sec-Butylbenzene
tert-Butylbenzene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene*
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene

*To be regulated in Phase V

Drinking Water

Surface Water Treatment

Background

The Surface Water Treatment Rule requires water treatment in lieu of water testing because it regulates bacteria and other microbes which are difficult to detect and pose immediate health risks. Under this rule, disinfection and filtration are required for surface water systems and for groundwater systems under the direct influence of surface water. These systems must install filtration if the microbiological, turbidity and other standards in this rule are not met. All surface water systems must disinfect.

Does The Surface Water Treatment Rule Apply To My Community?

Yes, it applies to all public water supply systems (community and non-community) using a surface water source (i.e., water open to the atmosphere and subject to surface runoff) or a groundwater source under the direct influence of surface water. The state defines whether ground water is under the direct influence of surface water.

Timetable

Compliance timetables under the Surface Water Treatment Rule are as follows

Surface water systems currently using filtration and disinfection

1. A new turbidity standard (0.5 ntu) and new disinfection requirements take effect July 1, 1993.
2. New filtration criteria, disinfection criteria and monitoring and reporting requirements must be met beginning July 1, 1993.

Surface water systems currently using disinfection only

1. Public water systems were required to begin new monitoring and reporting requirements for unfiltered systems starting December 30, 1991, and to meet the new monitoring and reporting requirements by January 1, 1992.
2. States had to determine before December 30, 1991, which systems are required to filter.
3. If filtration is required, it was required to be installed before June 29, 1993, or 18 months after it fails to meet the avoidance criteria.
4. If the state determined before December 30, 1991, that an unfiltered system must filter, the system was required to comply with the existing interim turbidity standard until June 29, 1993, or until filtration is installed, whichever is later.

Actions Your Community Should Be Taking

Surface water systems currently using no treatment

- Surface water systems must disinfect.
- If required by the state, surface water sources must be filtered by the dates in number 4 under Timetable.

Systems using a groundwater source

1. For each system using a groundwater source, the state must determine whether that source is under the direct influence of surface water.
2. If the state determines that a public water system is under the influence of surface water:
 - The system must begin sampling for the avoidance criteria within 6 months.
 - The system must begin meeting the avoidance criteria 18 months after the determination.
 - Failure to meet the avoidance criteria after 18 months may result in that public water system having to install filters.
 - In some states, if a public water system is deemed to be "ground water under the influence of surface water," filters must be installed.

Check with your state concerning its policy regarding using the avoidance criteria to avoid installing filtration.

In General

- Public water supply must be operated by personnel that meet qualifications specified by the state or EPA. The water purveyor is required to monitor the water system, by sampling and testing the water, for compliance to the maximum contaminant levels listed for the public water system category (community, non-community, etc.).
- Treatment must remove or inactivate at least 99.9% of *Giardia lamblia* cysts and 99.99% of viruses. All systems must disinfect, and might be required to filter if certain water quality and site-specific criteria are not met. Criteria must be met for determining if treatment (turbidity removal, disinfection) is adequate for filtered systems.
- Systems using surface water must send in reports to the state documenting compliance with treatment and monitoring requirements.
- The EPA and the public water system customers must be informed of violations following the public notification requirements specified in the regulations. See the Public Notification section of this book for assistance.

Additional Information

EPA Safe Drinking Water Hotline: 1-800-426-4791.

The rules for surface water treatment are contained in Title 40 Code of Federal Regulations Part 141.71(b).

EPA's "Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water," PB-89-207-047, available from the National Technical Information Service at 800-553-6847.

Contact your state drinking water agency for additional information regarding certain reporting requirements.

(See Resource Section for drinking water contacts)

Drinking Water

Fluorides

Background

Fluorides are compounds that contain the element fluorine. They occur naturally in many water sources and are added in the treatment process by many public water systems. Fluorides in small amounts are helpful. (Amounts between 1.0 and 1.5 milligrams per liter have beneficial effects in reducing tooth decay). However, amounts greater than 2.0 parts per million can have harmful effects, ranging from discoloration or pitting of teeth to bone and skeletal damage depending on the level. Because of these negative effects, EPA has established safety levels (called "Maximum Contaminant Levels" or "MCLs") for fluoride, and has issued fluoride regulations for public water systems.

Does The Fluoride Regulation Apply To My Community?

Yes, all community public water systems must test for fluoride at every entry point to the distribution system after treatment. Tests must be made every three years for ground water, and/or every year for surface water.

Maximum Contaminant Levels

The maximum contaminant level for fluoride is 4.0 milligrams per liter.

Actions Your Community Should Be Taking

If your tests indicate fluoride levels between 2.0 and 4.0 milligrams per liter, you should check with your state agency and/or an engineer to see if any changes in operations can be made to lower the fluoride level. This is not a maximum contaminant level violation, and immediate correction is not required, but planning should be undertaken to reduce levels below 2.0 milligrams per liter. Some of the options listed below may be necessary, and the state agency may require more frequent sampling to monitor the fluoride level. In addition, you are required to give public notice, including language about mandatory health effects, if your water has fluoride levels between 2.0 and 4.0 milligrams per liter.

If your tests indicate fluoride levels above 4.0 milligrams per liter, you are in violation of the maximum contaminant level, and you should

- Monitor quarterly beginning the first quarter after the violation.
- Contact your state agency. They will assist you to form the contents of a public notice you are required to give your customers. (See Public Notification section.)
- Work with your state agency and/or an engineer to plan for a change in your water supply and/or treatment system to lower the fluoride levels.

- Seek help through other resource agencies for help in finding financial resources, if needed, to make water system changes.

- Reduce monitoring to normal frequency if the system is reliably and consistently below the maximum contaminant level, as determined by the state. Notify the public periodically, as required.

Solutions to fluoride violations for very small water systems usually involve finding and using a new water source, or mixing existing sources to reduce the fluoride level. Removing fluoride through treatment can be cost-prohibitive for very small systems.

Additional Information

The rule for fluoride is contained in Title 40 Code of Federal Regulations Parts 141.11, 141.23, 141.62, 143.3.

"Removal of Excess Fluoride in Drinking Water," "Fluoridation Engineering Manual," PB82237090/LL, \$12.50, available from the National Technical Information Service at 1-800-553-6847.

EPA Safe Drinking Water Hotline: 1-800-426-4791.

Your local dentist or state dental association will have information available on the beneficial effects of correct amounts of fluoride in your drinking water.

(See Resource Section for drinking water contacts)

Drinking Water

Lead Material Ban

Background

Lead was used in the past in the manufacture of water supply pipe, for joints in other pipe materials, as solder for joining copper pipe, and in the manufacture of water supply fixtures. Lead has been identified as a cause of nervous system damage and kidney effects, and it can be highly toxic to infants and the developing fetus of pregnant women. Lead in plumbing materials may be leached into the drinking water by corrosive water.

Does The Lead Material Ban Apply To My Community?

Yes. The use of solder and flux containing more than 0.2 percent lead and the use of pipes containing more than 8.0 percent lead is banned for installation of new plumbing in customers' facilities that are connected to the public water supply. The law applies only to plumbing which distributes drinking water. It does not require the removal of existing lead pipes or solder. Check with your state for additional information.

Maximum Contaminant Levels (MCLs)

There is no maximum contaminant level involved in the Lead Material Ban. See the section on Lead and Copper for additional information. As discussed above, lead solder and flux cannot contain more than 0.2 percent lead while pipes cannot contain more than 8.0 percent lead.

Actions Your Community Should Have Completed

- A plumbing materials inventory, in cooperation with your state agency, of the materials in your distribution system and in those residences and commercial buildings where samples will be collected.
- A set of tests (under the instructions of your state agency) to identify the corrosion related factors in your water supply.
- A notice about the lead ban and the information on corrosiveness for the information of your customers should have been published by June 19, 1988. In some states, a state-wide notice was published.
- You should have considered adopting an ordinance or rule prohibiting the use of lead materials in any new plumbing that is connected to your water system. In some cases, a state-wide plumbing code has met this requirement. If your community has adopted one of the national plumbing codes, or is part of a jurisdiction that has adopted a code, these codes have all been amended to include the lead material ban.

Actions Your Community Should Now Be Taking

- Inform customers involved in new construction or the replacement of plumbing that the lead materials ban is in effect for your water system. Requiring a simple permit and inspection of new plumbing is one way some communities carry out this information requirement.
- Make information available to your customers on the actions they can take to reduce lead levels in the water they consume in their own homes.
- If your water supply is very corrosive, contact your state agency and/or your community's engineer to plan for ways you can reduce the corrosive impact of your water on any lead in customers' plumbing.
- If you have lead pipe or fixtures in your distribution system, consider replacement with non-lead materials. Leaded joints in old cast iron or other pipe is not considered to leach significant amounts of lead into the water. Replacement is not required by the Lead Material Ban but may be required for systems that continue to exceed the lead or copper action levels under the Lead and Copper Rule.

Additional Information

The statute for the Lead Material Ban is contained in the Safe Drinking Water Act, Sections 1417(a)(1) & (2), Title 42 United States Code Section 1417 (a)(1) and (2).

"Lead and Your Drinking Water," and "Lead Ban" (EPA 520/9-89-BBB), EPA, available from the EPA Safe Drinking Water Hotline.

EPA Safe Drinking Water Hotline: 1-800-426-4791.

(See Resource Section for drinking water contacts)

Drinking Water

Lead and Copper

Background

The Lead and Copper Rule became effective on December 7, 1992. This rule requires treatment when lead and/or copper in drinking water exceeds certain levels.

Lead enters drinking water mainly from the corrosion of household plumbing that contains lead. Since lead and copper contamination generally occurs after water has left the public water system, the best way for the water system operator to find out if customer water is contaminated is to test water that has come from a household faucet. This type of contamination can be prevented by controlling the corrosiveness of the water supply. If corrosion control is not sufficient, lead-containing materials under the control of the water system (e.g., lead service lines) may have to be replaced. Water systems are not required to replace customers' pipes which contain lead.

Actions Your Community Should Be Taking

Water systems should try to supply water that is free of lead and has no more than 1.3 milligrams per liter of copper. This is a non-enforceable health goal.

When the concentrations reach an action level of 0.015 milligrams per liter for lead and 1.3 milligrams per liter for copper in more than ten percent of the total number of required samples, the water system is required to carry out the water treatment requirements of the rule. These enforceable treatment requirements are described in the Water Treatment Requirements Section below.

Monitoring Requirements

Lead/copper monitoring at high risk homes

Water systems must complete a "materials evaluation" of their distribution system and/or review other information to target homes that are at high risk of lead/copper (Pb/Cu) contamination. Monitoring is to be conducted at the tap in these homes, with the number of tap-sampling sites based on the population served. One sample is required at each site.

Additional monitoring for other water quality parameters

Monitoring for other parameters affecting water corrosivity is required to optimize treatment and determine compliance with state lead/copper standards. The system must perform monitoring under the following conditions: smaller systems serving less than 50,000 persons, if either action level is exceeded in more than 10 percent of their tap samples. Two types of sampling sites are specified for this purpose.

- Tap samples within the distribution system, with the number of sites based on population served (sites may be same as for coliform sampling). Two tap water samples are required from each site.
- One sample at each entry point to the distribution system.

Timetable

Initially, small and medium systems must collect drinking water from home taps every six months and analyze them for lead and copper. Samples for other factors must be taken from taps every six months and from each entry point into the distribution system. If the system meets the action levels for lead and copper for two consecutive monitoring periods, it may reduce the number of samples, and reduce the sampling frequency to once per year. If the system continues to meet these levels for three years, the sampling frequency will be further reduced. However, if the system exceeds either action level, it must monitor for the Water Quality Parameters in the same six-month period it tested for lead and copper, including two samples from each tap and two samples from each entry point into the distribution system.

Water Treatment Requirements

Four types of action are required to remedy high lead/copper levels. Once a system finds that more than 10 percent of all tap monitoring results exceed one of the action levels, the system must begin to carry out the first three actions.

1. *Corrosion control treatment.* All systems must monitor for Water Quality Parameters as described above and recommend a corrosion control treatment to the state. Depending on its size, systems may be required to conduct corrosion control studies to support the corrosion control strategy. Upon the approval of the state, treatment is to be installed and demonstrated to be effective according to criteria set by the state. Treatment options are pH and alkalinity adjustment, calcium adjustment, and silica or phosphate-based corrosion inhibition.

2. *Source water treatment.* Systems must first monitor their source water for the presence of lead/copper, and, if necessary, recommend a treatment to the state. Treatment options include ion exchange, lime softening, reverse osmosis and coagulation/filtration. Once the state approves a treatment option, systems will have two years to install it and one more year to conduct follow-up monitoring. If treatment is not required, or if the treated water does not exceed the maximum lead/copper levels permitted by the state, source water monitoring will be synchronized with the system's other monitoring schedules.

3. *Public education.* Public education materials developed along EPA guidelines are designed to inform customers about the health effects of lead and explain what they can do at home to reduce their exposure. The system must begin delivering the materials within 60 days of the lead action level exceedance. The materials include public service announcements to be submitted every six months to television and radio stations, along with other pamphlets to be delivered directly to customers, newspapers, hospitals, etc., for as long as the system exceeds the lead action level.

If a system continues to exceed the lead action level after installing optimal corrosion control and/or source water treatment, a fourth action must be taken:

4. *Lead service line replacement.* Lead service lines that contribute more than 0.015 milligrams of lead per liter to tap water must be replaced. A system must replace seven percent of its lead lines each year and must replace all lines within 15 years, but the state is required to impose a shorter replacement schedule, if that is feasible.

Additional Information

Call the EPA Safe Drinking Water Hotline: 800-426-4791.

Call the National Drinking Water Clearinghouse: 800-624-8301.

Call the American Water Works Association Hotline: 800-366-0107.

(See Resource Section for drinking water contacts)

Drinking Water

Radionuclides

Background

Radionuclides are radioactive particles that occur naturally in areas of uranium and radium deposits and in waste from man made nuclear reactive processes. Radionuclides, even in very small concentrations, pose a cancer risk.

Does The Radionuclides Regulation Apply To My Community?

Yes, radionuclides have been regulated since 1976. Maximum contaminant levels (MCLs) are currently set for four types. All community public water systems must test for radionuclides every four years.

Timetable (New rule is scheduled for October 1993)

Proposed regulations were published in June 1991 that added maximum contaminant levels for two additional radionuclides (Radon and Uranium). EPA proposes to regulate Radium 226 and Radium 228 as separate contaminants (currently, they are combined) and to raise the maximum contaminant level. EPA also proposes to set a low level for Radon because it is easily removed by aeration. Final new rules may be published in late 1993. Systems will begin to monitor under the new radionuclides rules in 1996. Until then, continue to monitor under the old rules.

Maximum Contaminant Levels

The following are current maximum contaminant levels for radionuclides and the levels that are proposed. The units of measure are peculiar to radioactivity and represent very small quantities.

	Current MCL	Proposed MCL
Gross Alpha Particle Activity	15 pCi/l	15 pCi/l
Beta Particle & Photon Activity	4mrem ede*/yr.	4 mrem ede/yr.
Combined Radium 226 & 228	5 pCi/l	-
Radium 226	-	20 pCi/l
Radium 228	-	20 pCi/l
Uranium	-	20 ug/l

ede = effective dose equivalent

pCi/l = picocuries per liter

mrem = milli rem

ug/l = milligrams per liter

Actions Your Community Should Be Taking

Submit samples as required for routine testing. The monitoring process requires one sample every three months for one year (four samples in total). Unless test results indicate radionuclide values above or near the maximum contaminant level, the test is

repeated only every four years. Mark your calendar a few months prior to the four year time limit to remind yourself to test.

NOTE: A new final rule is scheduled to be published in October, 1993. This may change some of the monitoring requirements and the basis upon which compliance is determined beginning in the January, 1996, compliance period.

Compliance with the MCL is based on an average of the four quarterly samples.

If your tests indicate levels of radionuclides higher than the maximum contaminant level, you should:

- Ask the state agency if you should resample to confirm the test results. The state may also require you to continue quarterly sampling until the maximum contaminant level is met.
- Follow your state agency's instructions regarding when and what type of public notice you need to give.
- Request an exemption from the state agency to allow the community to continue to use the water supply while solutions to the maximum contaminant level violation are being explored and any needed financing is being planned.
- Start working with your state agency and/or engineer to consider options to eliminate the radionuclides from your system. In nearly all very small community water systems, finding a different source of water supply is the most economical solution to a radionuclide problem. Radon can be removed with aeration or granular activated charcoal. Any treatment may produce radioactive wastes that will be difficult to dispose of.
- Remember that exposure to radionuclides at levels found in water is a risk over long term exposure. It is not an acute risk for short periods of time. Don't panic. Work out a reasonable and affordable solution to your drinking water supply.

Additional Information

The rule for radionuclides is contained in Title 40 Code of Federal Regulations Parts 141.16, 141.23, 141.62.

"A Study of Possible Economical Ways of Removing Radium From Drinking Water" is available from EPA by calling the Safe Drinking Water Hotline at: 1-800-426-4791.

(See Resource Section for drinking water contacts)

Drinking Water

Asbestos

Background

Although asbestos is a mineral fiber that occurs naturally, it can be extremely dangerous. Inhaled asbestos fibers have been associated with increased risk of cancer in humans, and asbestos fibers ingested through drinking water are suspected as a cancer causing agent. Over the past years, asbestos has been used in the manufacture of a number of products used in the construction industry, and it occurs naturally in some water supplies. Asbestos may also enter the water in the distribution system as a result of corrosive action on asbestos cement water pipes.

Do The Asbestos Regulations Apply To My Community?

Yes, if your community provides drinking water or it is provided by a non-transient, non-community public water supply (e.g. school, business), the asbestos regulations apply to you. If your state agency has a waiver program, an assessment may be performed on your system to see if you have an asbestos problem. A water utility or its consultant can usually perform this assessment and submit the results to the state. If asbestos is not likely to occur in your water source, and/or you do not have asbestos cement pipe, your system may be granted a waiver and you will not have to monitor for asbestos. If your system does have asbestos cement pipe but your water is non-corrosive, you may also be eligible for a waiver. Without a waiver you will have to monitor for asbestos once every nine years.

Maximum Contaminant Levels

The maximum contaminant level for asbestos is 7 million fibers/liter (longer than 10 micrometers). You will know whether your system has contaminant levels this high by sampling your water and having it tested.

Timetable

In order to find out whether your system is vulnerable, and for details on sampling procedures, contact your state agency. If your public water system is vulnerable for asbestos in the water, you will have to take one sample within the first compliance period of each nine-year compliance cycle. The first compliance period is between January 1, 1993 and December 31, 1995.

Actions Your Community Should Be Taking

- Cooperate with the state by performing initial monitoring, applying for a waiver, and/or performing a vulnerability assessment. If your system is suspected of having asbestos in the source water only, test at the entry point to the distribution system. If your distribution system contains asbestos cement water pipes, samples should be taken at the tap. If your system is vulnerable from both the source water and the pipes, then test at the tap served by asbestos cement pipe and under conditions where asbestos contamination is likely to occur.

If your tests indicate levels of asbestos higher than the maximum contaminant level, you are in violation of the maximum contaminant level standards. You should

- Test quarterly, beginning in the next quarter.
- Notify the state agency and complete Public Notices as required.
- Work with the state agency and/or an engineer to determine if asbestos is in your source water and/or is being leached from your asbestos cement pipe. Plan a corrective action program.
- If asbestos is in your water source, it may be removed with a special process (coagulation/filtration or direct and diatomite filtration). Corrosion control is used to reduce leaching of fibers from asbestos cement pipe.

Other important considerations

If there is asbestos cement pipe in your system, you may need to provide for corrosion control. More importantly, you may need to plan for repairing asbestos cement pipe in the future, because maintenance workers who come into contact with it may be at risk. Inhaling the dust (fibers) from cutting the pipe is particularly hazardous. The Occupational Safety and Health Administration of the Department of Labor has published rules concerning occupational exposure to asbestos. If you work with asbestos cement pipe in your community, contact your State Department of Labor for information on these rules.

Additional Information

EPA Safe Drinking Water Hotline 1-800-426-4791.

The rules for Asbestos are contained in title 40 Code of Federal Regulations Part 141.23(b), 141.62(b)(2).

The rules of the Occupational Safety and Health Administration on Occupations Exposure to Asbestos are contained in Title 29 Code of Federal Regulations Parts 1910 and 1926.

Your state agency may be able to provide additional fact sheets on asbestos.

(See Resource Section for drinking water contacts)

Drinking Water

Public Notification

Background

The Safe Drinking Water Act requires that public drinking water systems notify their customers when drinking water standards are violated. The purpose of public notification is to inform consumers of any potential adverse health effects, and to tell them what steps they can take to minimize the impact. It should also educate the consumer about the responsibility of the public water system to assure the delivery of safe drinking water.

Do The Public Notification Rules Apply To My Community?

Yes, the Safe Drinking Water Act requires owners (or operators) of all public drinking water systems to notify the persons they serve, if certain violations of the National Primary Drinking Water regulations or certain other specified events occur.

Timetable

Public notification rules are now in effect for all contaminants that your community is required to monitor. As new contaminants are regulated and monitoring is required in your community, you are also required to give public notification when violations occur. This information describes the federal public notification rules. Your state may add requirements for your area.

Types Of Violations Requiring Public Notification

There are six violations or events that require public notification.

Tier 1

1. Failure to comply with an applicable maximum contaminant level (MCL).
2. Failure to comply with a prescribed treatment technique.
3. Failure to comply with the requirements of any treatment or monitoring schedule that has been set under a variance or exemption.

Tier 2

4. Failure to perform water quality monitoring (testing) as required by the regulations.
5. Failure to comply with testing procedures as prescribed by a National Primary Drinking Water Regulation.
6. Issuance of a variance or an exemption.

Notification Procedures

The method, timing and frequency of notifying the public varies based on the "level" of the violation and the availability of the public communication media. There are two "levels" of violation.

Tier 1 violations are subdivided into "acute" and "non-acute" violations. "Acute" risks are those that involve an immediate risk to human health. These are violations specified by the state agency and presently must include violations of the maximum contaminant level for nitrate and/or nitrite, violations of the maximum contaminant level for total coliforms when fecal coliforms or *E. coli* are present, and occurrences of a waterborne disease outbreak in an unfiltered surface water system.

Tier 2 violations are less serious and have simpler notification requirements. They include numbers 4, 5, and 6 listed under Types of Violations Requiring Public Notification, namely: failure to comply with monitoring requirements; failure to comply with testing procedures; and, operating under a variance or exemption.

Actions Your Community Should Be Taking

If you are informed of test results that indicate you are in violation of a maximum contaminant level or another violation, immediately contact your state agency and notify them of the violation and ask their direction in proceeding with public notification. (Note: the state agency may declare a sample invalid or require a check sample before confirming a violation and, thereby, ask you to delay public notification.)

Methods Of Notification For Communities With A Newspaper

In communities with a daily (or weekly, only if daily not available) newspaper of general circulation (received by most households) in the community, the owner or operator of the system must:

Tier 1 violations

1. Provide notice within 14 days of the violation through the newspaper, AND
2. Provide notice by direct mail or hand delivery within 45 days of the violation. Repeat this notice every three months as long as the violation continues, AND
3. For ACUTE VIOLATIONS ONLY - Deliver notice to the principal television and radio station(s) serving the area within 72 hours following the violation. Acute violations include violations posing acute risks to human health including violations of the maximum contaminant level for total coliform when fecal coliform or *E. coli* bacteria are present; MCL violations for nitrate and nitrite; and, waterborne disease outbreaks.

Tier 2 violations

1. Provide notice within three months of the violation through the newspaper, AND
2. Provide notice by mail or hand delivery within three months of the initial notice. Repeat this notice every three months as long as the violation continues.

Methods Of Notification For Communities Without A Newspaper

Tier 1 violations

1. For ACUTE VIOLATIONS ONLY - Provide notice by hand delivery or by posting within 72 hours of the violation, AND
2. For non-acute violations - Provide notice by hand delivery or by posting within 14 days of the violation, AND
3. Repeat the notice by hand delivery every three months or by continuous posting for the duration of the violation.

Tier 2 violations

1. Provide notice by hand delivery or by posting within three months of the violation.
2. Repeat the notice by hand delivery every three months or by continuous posting for the duration of the violation.

Information That Must Be Included In The Public Notice

1. Must provide a clear and readily understandable explanation of the violation.
2. Must include information about any potential adverse health effects, including use of mandatory public health language, found in Title 40 Code of Federal Regulations Part 41.32(e).
3. Must contain information about the population at risk.
4. Must contain information about the steps being taken to correct the problem.
5. Must contain information about the necessity of seeking alternative water supplies, if any.
6. Must include any preventive measures that should be taken until the violation is corrected.
7. Must be clear and conspicuous.
8. Must not contain unduly technical language.
9. Must not contain unduly small print.
10. Must not create problems that frustrate the purpose of the public notification.
11. Must include a phone number of the owner, operator, or someone to contact at the public water system as a source of additional information.

12. Where appropriate, notices must be multi-lingual.

Notice Contents

This is a checkoff list to make sure your notice is properly prepared. When all appropriate items have been checked, your notice should meet the requirements established for General Public Notification.

Make sure that the notice provides a clear and readily understandable explanation of the following points

- The violation.
- The potential adverse health effects (mandatory health effects language).
- The population affected.
- The steps the system is taking to correct the violation.
- The necessity of seeking alternative water supplies (if any).
- The preventive measures the consumer should take until the violation is corrected.

Make sure the notice

- Is clear and conspicuous in design.
- Contains non-technical language.
- Uses print that is easily read.
- Content creates no problems that would frustrate the purpose of public notification.
- Contains the telephone number of the owner, operator, or designee of the public water system as a source of additional information.
- Contains multi-lingual information, where appropriate.

Additional Information

EPA Safe Drinking Water Hotline: 1-800-426-4791.

The rules for Public Notification are contained in Title 40 Code of Federal Regulations Parts 141, 142, and 143.

"General Public Notification for Public Water Systems," EPA, available by calling the EPA Safe Drinking Water Hotline at: 1-800-426-4791.

(See Resource Section for drinking water contacts)

Drinking Water

Regulatory Development Schedule

Background

An important part of planning is knowing the specific regulations that will affect your particular community and its public water system(s), and further, knowing *when* these regulations will be in effect and enforced *in your community*. Following is a list of drinking water regulations and their effective dates.

Rule	Status	Effective
Fluoride	Final	10/87
Lead Ban	Final	06/86
Phase I Volatile Organics	Final	01/89
Public Notification	Final	04/89
Surface Water Treatment Rule	Final	12/90
Total Coliform Rule	Final	12/90
Phase II Inorganic Chemicals and Synthetic Organic Chemicals	Final	07/92
Lead/Copper	Final	01/92
Phase V Inorganic Chemicals and Synthetic Organic Chemicals	Final	01/94
Radionuclides (Phase III)	To Be Final	1993
Disinfection/Disinfection By-Products	To Be Proposed	1993

- Some effective dates are phased-in by system size.
- EPA rules are generally effective 18 months after being finalized.
- For additional information call the EPA Safe Drinking Water Hotline: 1-800-426-4791.

Wastewater

Pretreatment Requirements

Background

"Pretreatment" refers to measures industry takes to prevent toxic pollutants from sources other than domestic wastewater from entering the wastewater system. Pretreatment is the treatment of a waste before it is discharged into the sanitary sewer. A pretreatment program includes ordinances, education, permits, inspections, monitoring and enforcement.

Pretreatment requirements control pollutants which are incompatible or will interfere with the treatment process, or that will pass through the treatment plant and cause problems in the receiving stream or lake. In addition, pretreatment requirements will improve opportunities to recycle and reclaim domestic and industrial wastewaters and sludges.

Do The Pretreatment Requirements Apply To My Community?

If the community has non-domestic users (for example, food processing plants or metal finishers) discharging pollutants that could pass through your treatment plant untreated or interfere with operations, you may have to implement a pretreatment program to satisfy its National Pollution Discharge Elimination Permit (NPDES) requirements. See the National Pollution Discharge Elimination System section in this book for more information on this topic.

Your current NPDES permit may contain requirements for you to regulate non-domestic discharges into your collection system. These pretreatment requirements are designed to ensure that you protect your treatment plant, receiving stream, and municipal sludge quality.

If The Rule Applies To My Community, What Should I Do?

If you are required to establish a pretreatment program, you will need to establish local ordinances and other procedures to carry out the pretreatment requirements, as well as identify personnel responsible for ensuring the program is administered and enforced.

You must develop pollutant-specific limitations for local publicly-owned wastewater treatment works to protect human health and safety, receiving water quality, sludge quality and the operation of the treatment works.

If your community wants to establish a local pretreatment program, even though it is not required to do so through your National Pollution Discharge Elimination System permit, contact your state agency or EPA for assistance.

If you suspect a problem is caused by a non-domestic wastewater contributor, notify your treatment works operator, county sanitarian, department of state government responsible for wastewater discharge permits and the U.S. Environmental Protection Agency.

Additional Information

General Pretreatment Regulations, Title 40 Code of Federal Regulations Part 403.

Industry-Specific Pretreatment Standards, Title 40 Code of Federal Regulations Parts 405-471.

Environmental Regulations and Technology—The National Pretreatment Program EPA/625/10-86/005 (see pages 111-112).

Your state agency or U.S. EPA will be able to provide additional details.

(See Resource Section for wastewater contacts)

Wastewater

Secondary Treatment Of Municipal Wastewater

Background

Secondary treatment is a technology-based standard and is the minimum treatment requirement for most publicly-owned wastewater treatment plants. Secondary treatment means: treatment beyond the settling of solids, removal of 85% of the conventional pollutants (materials which deplete oxygen from the water: biochemical oxygen demand and suspended solids), and to achieve acidity control (pH).

Does The Secondary Treatment Regulation Apply To My Community?

Yes, all treatment facilities that discharge to waters of the United States must comply. Beneficial uses of the receiving waters may necessitate that higher quality effluent be discharged. In this instance, some communities elect technologies with no discharge (such as seepage lagoons) due to the higher cost of advanced treatment.

The control limit is generally expressed as: "not to exceed" 30 milligrams per liter (mg/l) of biochemical oxygen demand and 30 mg/l suspended solids over a 30-day average (45 mg/l over a 7-day average); and, acidity control of not below 6 or above 9. (Note: averages must be in consecutive days) At a minimum, the treatment process must be a stabilization pond.

Actions Your Community Should Be Taking

If your wastewater treatment plant discharges to waters of the United States (such as streams, lakes, wetlands, etc.), it is required to have a National Pollutant Discharge Elimination System (NPDES) permit. For information on where to obtain a permit, contact your county sanitarian or your regional or state agency responsible for water quality. States may have slightly different names for their permit programs. The permit will specify effluent (liquid that comes out of a treatment plant after completion of the treatment process) limitations and monitoring requirements.

Like other violations of the Clean Water Act, if your treatment works cannot meet the effluent limitations specified in the permit, you may be subject to an enforcement action. In addition, it may be necessary to upgrade the treatment facility, review operational improvements, and/or improve the sewer collection system to correct excess inflow/infiltration problems.

Additional Information

Secondary Treatment Regulations, Title 40 Code of Federal Regulations Part 133.

"Needs Survey Report to Congress," EPA, November 1991.

"Overview of Selected EPA Regulations and Guidance Affecting POTW Management," EPA, September, 1989.

(See Resource Section for wastewater contacts)

Wastewater

Sewage Sludge Use And Disposal

Background

Sewage sludge is a by-product of the municipal wastewater treatment process. Federal regulations ensure that sewage sludge is handled properly and is of sufficient quality either for use as a (1) soil conditioner or fertilizer or (2) for disposal in a landfill, other surface disposal site or incinerator. For example, many small towns use it as a fertilizer for parks, golf courses, etc. Monitoring, recordkeeping, and reporting are required under the sludge regulation.

Do The Sewage Sludge Regulations Apply To My Community?

Yes, if the wastewater treatment system includes any form of central wastewater treatment or mechanical plant, including a lagoon, which produces a sludge that is either periodically removed or remains on-site for more than two years.

Timetable

Final regulations for the use and disposal of sewage sludge became effective March 29, 1993. If you can meet the requirements of the sewage sludge regulation without construction of new pollution control facilities, you must do this by February 1994. However, if construction is required, you will have until February 19, 1995 to comply.

Permits will be issued over time to certain facilities involved in the generation, treatment and disposal of sewage sludge. Farmers, homeowners and other land appliers who do not treat the sewage sludge are generally not required to apply for permits. Other facilities with National Pollutant Discharge Elimination System (NPDES) permits must apply at the time of their next permit renewal. Finally, other facilities without NPDES permits must submit limited data by February 19, 1994, and full permit applications when requested.

For specific permitting information, contact the Water Division in your U. S. EPA Regional Office (see Resource Section at the back of this book).

Actions Your Community Should Be Taking

Be aware of restrictions covering: proper use of the sewage sludge if land applied (both agricultural and non-agricultural); distribution for land application; and, disposal restrictions (landfilling, incineration, and surface disposal). Contaminated sludge or poor disposal practices can pose a threat to public health and the environment and are subject to enforcement action.

Additional Information

Sewage Sludge Program Regulations are contained in Title 40 Code of Federal Regulations Parts 122, 123, and 501. Technical regulations for sewage sludge use and disposal are set out in Title 40 Code of Federal Regulations Parts 258 and 503.

EPA's Municipal Sludge Management Policy, June 12, 1984.

Interagency Policy on Beneficial Use of Municipal Sewage Sludge on Federal Lands, July 18, 1991.

"Environmental Regulations and Technologies-Control of Pathogens in Municipal Wastewater Sludge," September 1989.

"Suggested Guidelines for the Disposal of Drinking Water Treatment Wastes Containing Naturally Occurring Radionuclides," U.S. Environmental Protection Agency, Office of Drinking Water, July 1990.

"Guide to Soil Suitability and Site Selection for Beneficial Use of Sewage Sludge," Manual 8, Oregon State University Extension Services/U.S. EPA (Less than five copies are FREE of charge.)

Further information may be obtained by contacting the Water Division in your U.S. EPA Regional Office.

(See Resource Section for wastewater contacts)

Wastewater

National Pollutant Discharge Elimination System (NPDES)

Background

Public Law 92-500 amended the Federal Water Pollution Control Act in 1972 (later amended and renamed the Clean Water Act). It established a national objective to restore and maintain the chemical, physical and biological integrity of the nation's waters. Public Law 92-500 also prohibited the discharge of pollutants from point sources (any single identifiable source of pollution e.g. a pipe, ditch, ship, etc.) to waters of the United States except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit.

The U.S. EPA or approved state environmental control agencies have responsibility for administering these permits. They are issued to operators discharging any pollutant (including wastewater effluent or discharge) from point sources, including municipal sewage treatment plants, to surface waters (for example, streams, lakes, wetlands, etc.) Permits contain both technology-based and water quality-based effluent limitations.

Specific terms and conditions of a permit vary from facility to facility, but each authorized state administers the program to meet minimum EPA standards. Permit requirements within a given state may also vary because of different hydrological conditions, uses of the receiving water and other local factors at the discharge site.

Actions Your Community Should Be Taking

Maximize community awareness and education concerning wastewater collection and disposal, available wastewater treatment alternatives and funding sources. Numerous technical and administrative resources are available at little or no cost to the community. Information, technical and training assistance is available to small communities through the National Small Flows Clearinghouse and the National Environmental Training Center for Small Communities. (See Additional Information at the end of this section.) Your state agency may be able to provide additional information.

Historically, state and federal wastewater regulations have encouraged metropolitan models to be used as a design guide for rural community systems. This has significantly advanced industry technology, but, according to the 1978 Controller General Report to Congress, millions (billions by 1990) of state and federal dollars have been spent unnecessarily in rural America on wastewater treatment. Thus, Congress implemented phase-out funding for the EPA Wastewater Construction Grant Program, beginning October 1, 1990.

Reduced levels of funding for wastewater collection and disposal means rural communities and their technical consultants must identify appropriate technology resources to substantially reduce capital project costs and operating expenses, if wastewater collection and disposal is to be affordable and effective in rural America.

Communities should be aware that penalties of up to \$25,000 per day per violation can be assessed for violation of the Clean Water Act. The Clean Water Act also allows for citizens to independently enforce its requirements in federal court by filing notice of intent to sue with the EPA Administrator 60 days prior to filing a complaint.

Additional Information

Federal Water Pollution Control Act of 1972 (Title 33 United States Code Section 1251) as amended.

EPA Administered Permit Programs: The National Pollutant Discharge Elimination System, Title 40 Code of Federal Regulations Parts 122, 123, 124 and 125.

Small Wastewater Systems - Alternative Systems for Small Communities and Rural Areas, EPA National Small Flows Clearinghouse, 1-800-624-8301.

"It's Your Choice - A Guidebook for Local Officials on Small Community Wastewater Management Options," EPA National Small Flows Clearinghouse, 1-800-624-8301.

"Self-Help Handbook," Jane Schautz, Rensselaerville, NY 12142, 518-797-3783.

"Community Managed Septic Systems - A Viable Alternative to Sewage Treatment Plants," Controller General Report to the Congress of the United States, CED 78-168, 11/3/78.

"Design Manual - Constructed Wetlands and Aquatic Plant Systems for Municipal Wastewater Treatment," Center for Environmental Research Information, Cincinnati, OH 45268, EPA/625/1-88/022.

(See Resource Section for wastewater contacts)

Wastewater

Storm Water

Background

Storm water runoff flows over parking lots and other areas, collects in street gutters and storm drains, and can eventually flow to water bodies with little or no treatment. Dumping used motor oil, unused paint, pesticides and other household chemicals on the ground or in the street can severely impact nearby surface water.

As part of the Clean Water Act Amendments of 1987, Congress acted to directly address the environmental impact of storm water by adding section 402(p) which required the establishment of a comprehensive two-phased approach to control storm water discharges. In response, EPA issued permit application regulations for Phase I storm water discharges on November 16, 1990. The regulation established the scope of the Phase I storm water program as: discharges associated with industrial activity; and, discharges from large (serving a population over 250,000) and medium (serving a population over 100,000) municipal separate storm water systems. The regulation established a two-part permit application procedure for large and medium municipal separate storm water systems. This required among other things municipal applicants to propose storm water best management programs (BMPs) and to effectively prohibit non-storm water discharges to municipal separate storm water systems.

The Phase I regulation addresses storm water discharges associated with 11 categories of industrial facilities. The regulation provided three different options for industrial storm water discharges to seek coverage under the program, including individual, group and general permit applications. Since November, 1990, there has been a great deal of activity as EPA and states have worked with the regulated community to implement the program.

Phase II of the storm water program will regulate all storm water discharges not addressed under Phase I. EPA is required to issue these regulations for Phase II not later than October 1, 1993, with implementation to begin on October 1, 1994.

Actions Your Community Should Be Taking

Find out if the landfill, airport, power plant, construction activity, or other facilities owned or operated by your community need permits. The state or EPA contacts will be able to assist you in determining which facilities need permits and how to apply for them. Questions concerning coverage of the storm water program should be addressed to the EPA Storm Water Hotline (see Additional Information at the end of this section).

Develop an information and education program for community residents to increase awareness of the relation between the storm sewer system and local lakes, streams, rivers, estuaries or other water bodies.

You should also consider establishing local ordinances controlling the improper disposal or discharge of pollutants to the municipal storm water drain system.

Finally, educate citizens so they can play a role in improving the quality of the streams and lakes in your area.

Classes of facilities that may discharge storm water associated with industrial activity include:

- Hazardous waste treatment, storage or disposal facilities.
- Landfills, land application sites and open dumps that receive industrial wastes.
- Recycling facilities, including metal scrap yards, battery reclaimers, salvage yards and automobile junkyards (classified as SIC codes 5015 and 5093 only).
- Steam electric power generating facilities (including coal handling sites).
- Transportation facilities classified as SIC Codes 40, 41, 42, 44, and 45 (including vehicle maintenance, equipment cleaning and airport deicing areas).

Additional Information

(See Resource Section for water contacts)

EPA Storm Water Hotline: 703-821-4823.

Water And Wetlands Protection

Background

The United States has lost over half its original wetlands. These areas provide important habitats, flood and storm protection and water quality benefits. It is extremely important to protect, restore and maintain the chemical, physical and biological integrity of our waters and wetlands to ensure that we do not lose the benefits these resources provide. Congress has recognized this, and has passed a number of laws to protect U. S. waters and wetlands. U.S. waters include lakes, streams, rivers, wetlands, and coastal waters. Wetlands include saturated or flooded areas where there is a prevalence of aquatic or hydrophytic plants (those that grow in, or are adapted to, water; or that require a very wet environment). Many of these plants can be found in swamps, marshes, bogs and other similar areas.

Because of the Congressional mandate to protect waters and wetlands, many activities that affect these areas could require a regulatory review before the activity begins. Water and wetlands protection regulations have been developed by a number of different Federal agencies, including EPA, the U. S. Army Corps of Engineers, the National Oceanic and Atmospheric Administration, the U. S. Fish and Wildlife Service and the Soil Conservation Service in the U. S. Department of Agriculture.

Many state agencies also have water and wetlands protection regulations, including State Departments of Environmental Quality, Health, Conservation, Transportation and Agriculture.

It is extremely important that local officials become familiar with these regulations, because violation of these and related environmental protection laws can cause environmental damage, flooding of nearby areas as well as involve penalties, including fines, requirements to restore the area, and/or imprisonment for intentional violations. Information on EPA's Water regulations is contained in the Additional Information section.

Many local governments may wish to assist their citizens, especially those seeking local construction permits or zoning approval, to determine whether, in addition to local approval, state or federal authorization is required.

Actions Your Community Should Be Taking

Check before you act! The three federal agencies most frequently involved are:

- U.S. Department of Defense, Army Corps of Engineers
- U.S. Department of Interior, Fish and Wildlife Service
- U.S. Environmental Protection Agency

Contact each of these agencies before you start any activities that might affect the chemical, physical, or biological health of any U.S. waters or wetlands.

Additional Information

EPA has provided grants to local governments interested in identifying and assisting in the protection of wetlands. For further information please contact the Wetlands Protection Hotline at 1-800-832-7828. Hours: 9:00 a.m. to 5:30 p.m., eastern time, Monday through Friday, except for holidays.

Water and Wetlands Protection Laws

Clean Water Act (Title 33 United States Code Sections 1251-1376).

National Environmental Policy Act of 1969 [Title 42 United States Code Section 4321-4370(c)].

Fish and Wildlife Coordination Act of 1934, amended 1946, 1958, 1977 (Title 16 United States Code Sections 661-667e).

Rivers and Harbors Act of 1899, Section 10 (Hazardous Waste).

Marine Protection, Research and Sanctuaries Act of 1972, as amended (Title 33 United States Code Sections 1401-1445).

Coastal Zone Management Reauthorization Act of 1990 (Title 16, United States Code Sections 1451-1464).

Endangered Species Act of 1973 (Title 16 United States Code Sections 1531-1544).

Marine Plastics Pollution Research and Control Act of 1987 (Title 33 United States Code Sections 1901-1912).

Executive Order 11990, May 25, 1977, pages 26961-26965.

Section 404 (b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (Title 40 Code of Federal Regulations Part 230).

Shore Protection Act

Ocean Dumping Ban Act

(See Resource Section for wetlands contacts)

Hazardous Waste Disposal

Background

Many waste materials can be dangerous to human health and the environment if they are not properly treated, stored, transported, disposed of or otherwise managed. "Hazardous" wastes, as defined by the Resource Conservation and Recovery Act, can pose fire hazards, are highly reactive, corrosive or explosive and/or can result in exposure to toxic chemicals resulting in sickness or injury.

In 1976, Congress enacted a law to make sure that hazardous waste is properly managed from the time it is created to the time it is disposed of, or destroyed. This law is called the "Resource Conservation and Recovery Act (RCRA)," and it establishes a set of rules for dealing with hazardous and non-hazardous wastes. These rules (called RCRA requirements) define which hazardous wastes are subject to regulation. They also identify responsibilities for anyone who generates, transports, stores, treats, disposes of or otherwise manages them.

Hazardous wastes can be generated through many activities, including those of governments, businesses, schools, hospitals, maintenance facilities and airports. People that generate hazardous wastes are called "hazardous waste generators." Households also generate hazardous waste, but, at this time, waste generated by individual households is not subject to RCRA waste requirements.

Categories of hazardous waste generators

- **Large Quantity Generator** - Facilities that generate more than 1,000 kilograms (five 55 gallon drums) per month of any hazardous waste or more than one kilogram of any "acute" hazardous waste. (A kilogram is approximately 2.2 pounds). Large Quantity Generators are subject to all RCRA requirements.

- **Small Quantity Generator** - A small quantity generator is anyone who generates less than 1000 kilograms (five 55 gallon drums) per month of hazardous waste. There are two types of small quantity generators: those that generate between 100-1000 kilograms per month of hazardous waste (100 kilograms is approximately one half of a 55-gallon drum); and, conditionally exempt small quantity generators that generate under 100 kilograms per month. Small Quantity Generators may generally accumulate their hazardous waste on-site for up to 180 days, and may not accumulate more than 6,000 kilograms on-site at any one time. Small Quantity Generators that store waste on-site must also comply with some technical requirements, although they are not as stringent as those for large quantity generators.

Conditionally Exempt Small Quantity Generator - Facilities that generate no more than 100 kilograms a month of any hazardous waste are conditionally exempt from the RCRA regulations. *Conditionally exempt small quantity generators must still:* (1) identify the waste to determine if it is hazardous, and (2) treat or dispose of the waste in either a recycling facility

or permitted hazardous waste facility, and 3) not accumulate more than 1000 kilograms of hazardous waste at any given time.

NOTE: some states regulate all generators of hazardous waste (i.e., there is no "exempt" category) and some states classify generators by waste type, rather than by volume.

Does The RCRA Program Apply To My Community?

Yes. You need to know how to identify hazardous waste, and how to treat or dispose of it. In addition, some types of hazardous waste may be generated by your municipal facility operations themselves.

Because hazardous waste includes things like solvents, corrosives and materials containing heavy metals like chrome, cadmium, and lead, vehicle maintenance shops often generate hazardous waste that may be subject to RCRA requirements. Any discarded material must be evaluated to determine if it has been listed by EPA as hazardous waste, and whether it can cause explosions, fires, corrosive destruction of materials, chemical reactions and/or can result in exposure to toxic chemicals resulting in sickness or injury.

In addition to used materials which might be considered hazardous waste, you must also be careful with your management of products that you wish to discard. Leftover pesticides from grounds-keeping operations, old paint thinner, etc., must be fully evaluated before you determine what you are going to do with it. EPA has identified several hundred chemical products which, if disposed of, would also be considered "listed hazardous waste."

Another area of possible concern for your community would be the operation of a trash collection system and/or a landfill. Normally, because household wastes are currently exempt from the hazardous waste regulation, your landfill would be regulated under a program referred to as the "Subtitle D Municipal Solid Waste Landfill Criteria." This is intended to insure proper management of the municipal landfill. However, *the addition of commercial waste materials collected and/or co-disposed with the household materials might necessitate that the entire facility be treated as a hazardous waste facility.* Check with your state or the RCRA hotline listed below for more information.

Timetable

Different timetables and responsibilities apply to the different activities. As long as you comply with certain requirements, generators may accumulate waste on-site for up to 90 days without triggering a requirement to obtain a storage permit. Small quantity generators (100-1000 kilograms/month) have up to 180 days. If you accumulate waste for periods beyond 90 or 180 days, you will have to secure a permit authorizing the treatment, storage or disposal of hazardous waste, which is a very expensive and lengthy process. (Note: Small quantity generators get 270 days if they have to transport hazardous

waste beyond 200 miles. Also, case by case extensions are available for small quantity generators.)

Actions Your Community Should Be Taking

- Become familiar with the kinds of waste materials that are subject to hazardous waste regulation.
- Once you determine that you are involved with the handling or creating of hazardous waste you must notify EPA and/or the state hazardous waste office and receive an "EPA RCRA identification number."
- Make sure you are handling hazardous materials properly and are meeting RCRA requirements.
- Identify ways to reduce or recycle chemicals that are generating waste. Find non-toxic substitute products for hazardous chemicals.
- Buy the right amount of chemicals you need. Try to find someone to use unwanted, unused chemicals rather than throwing them away.
- Become familiar with any industrial facilities in or near your community. Understand how they are managing their hazardous waste.

Additional Information

The RCRA regulations are published at Title 40 Code of Federal Regulations, Part 260 through Part 272. Part 261 defines what materials are hazardous waste and therefore subject to the RCRA requirements.

Many states have been authorized by EPA to apply and enforce the federal RCRA hazardous waste requirements. You may wish to contact your state environmental agency to get more information on how your state offices are involved.

EPA has also established a toll free RCRA Hotline to answer questions regarding the applicability or interpretation of the RCRA regulations. The RCRA Hotline number is: 1-800-424-9346 or 703-412-9810.

(See Resource Section for hazardous waste contacts)

Municipal Solid Waste Disposal

Background

It's not news that many communities in America are faced with a garbage disposal problem. In 1990, we generated over 195 million tons of municipal solid waste, and the annual volume is expected to be more than 220 million tons by 2000. At the same time, fewer landfills are operating, partly because few people want to live near a landfill.

To protect communities located near landfills and to make our waste disposal system work better, federal, state and local governments have adopted a new approach to waste management involving a mix of three waste management techniques:

- Decreasing the amount of waste that must be disposed of.
- Increasing incentives for recycling.
- Improving the design and management of incinerators and landfills so that they will have increased capacity and be able to operate more safely.

The challenge is to make landfills safe in order to protect our communities and our environment—and the municipal solid waste disposal regulations greatly reduce the possibility that landfills will become sources of pollution. They describe measures that must be taken to guard against groundwater contamination, and they describe the kinds of areas where landfills may not be built.

Do These Regulations Apply To My Community?

If your government owns or operates a landfill, these regulations apply. States and local governments are responsible for implementing and enforcing minimum national standards. States are required by the federal government to make sure that landfill owners and operators meet these federal requirements. As a result, states may have to develop new permitting procedures or change existing ones. (States may also set higher standards and have additional requirements if they desire.)

On the other hand, states that have EPA-approved permitting programs have a lot of flexibility in implementing the federal regulations. EPA added this flexibility so that states could take local conditions and needs into account, and make the costs of municipal solid waste management more affordable. In fact, certain small landfills may be exempt from some of these regulations.

Exemptions For Small Landfills

EPA had promulgated regulations which allowed exemptions from some of the more costly requirements (groundwater monitoring, corrective action and design) for small landfills if they met certain conditions. The federal appeals court in the District of Columbia, however, did away with that part of the exemption dealing with groundwater monitoring. You should check with your state agency (see Resource Section at back of book) to see whether the exemptions for corrective action and design have been allowed in your state. To qualify, a community's landfill must receive less than 20 tons of waste per day

(averaged yearly), show no evidence of groundwater contamination, receive less than 25 inches of rainfall per year and have no other practical waste disposal alternative. Extremely remote communities that have no ready access to other disposal sites for extended periods of time (three months of surface transportation interruption) also are eligible for an exemption.

Who Is Covered?

Landfills that stopped accepting waste before October 9, 1991, do not need to comply with these regulations. The regulations apply to owners and operators of all municipal solid waste landfills that received waste on or after October 9, 1993. Landfills that stopped accepting waste between October 9, 1991, and October 9, 1993, need only comply with the requirements for final cover (see section on "Closure and Post-Closure Care" that follows).

The regulations apply to landfills that accept household waste including garbage, trash and sanitary waste in septic tanks from "households." (These include single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas.) They do not apply to landfills, surface impoundments, waste piles, land application units or units accepting only industrial nonhazardous waste (for example, construction or demolition landfills).

Certain small landfills may be eligible for exemption from the regulations governing design and corrective action (see Exemptions for Small Landfills).

Timetable

Any municipal solid waste landfill unit that accepts waste after October 9, 1993, must comply with the landfill regulations. The current schedule for complying is as follows:

- Location restrictions, operating criteria, design criteria (new and lateral expansion units only) and closure/post-closure care requirements are effective on October 9, 1993.
- Groundwater monitoring and corrective action requirements are effective October 9, 1994 - October 9, 1996, depending on a unit's proximity to a drinking water intake, or in accordance with an approved state's schedule.
- Financial assurance requirements are effective April 9, 1994.

As of July, 1993, the U. S. Environmental Protection Agency (EPA) was planning to propose an extension to the above effective dates for certain small landfills. Further, EPA was planning to propose a delay of the effective date of the financial assurance requirements for all landfills. Publication of the final changes is expected in mid-September, 1993.

Actions Your Community Should be Taking

The following is a brief explanation of the regulations. Requirements may vary in states with approved permit programs. For more details regarding federal requirements, contact your state agency responsible for permitting municipal solid waste landfills. Local officials should be aware that citizens have the

right to sue landfill owners and operators who are not in compliance with the federal regulations in federal court.

Location Standards

Airport Safety

Because landfills attract birds that can interfere with aircraft operation, owners and operators of sites near airports must show that birds are not a danger to aircraft. This restriction applies to new, existing and laterally-expanding landfills.

Floodplains

Landfills cannot be located in areas that are prone to flooding unless the owner and operator can prove the landfill is designed to withstand flooding and prevent the waste from washing out. This restriction applies to new, existing and laterally-expanding landfills.

Wetlands

Since wetlands are important ecological resources, new landfills and laterally-expanding landfills cannot be built in wetlands unless the owner/operator can demonstrate: (1) that it will not pollute the area; and, (2) that no alternative site is available among other requirements. This applies only to owners/operators in approved states. Owners/operators should contact the approved state program to determine exactly what the demonstration must show. The opportunity to make a demonstration is not available if your state does not have an approved program.

Fault Areas and Seismic Zones

In order to prevent damage to municipal solid waste landfills, new and laterally-expanding landfills cannot be built in areas prone to earthquakes or other kinds of earth movement unless a demonstration can be made to an approved state that the unit has been designed to withstand the effects of faults and seismic impact.

Unstable Areas

Landfills cannot be located in areas that are subject to landslides, mudslides or sinkholes unless a demonstration is made to show that the landfill unit integrity will not be disrupted. This restriction applies to new, existing and laterally expanding landfills.

Operating Criteria

Keeping Out Hazardous Waste

EPA and the states have developed regulations specifically covering the disposal of hazardous wastes in special landfills. Owners and operators of municipal landfills must develop programs to keep these regulated hazardous wastes out of their units.

Cover Materials and Disease-Vector Control

In general, each day's waste must be covered with soil to prevent the spread of disease by rats, flies, mosquitoes and other animals that are naturally attracted to landfills.

Controlling Explosive Gases

Methane gas, which occurs naturally at landfills, must be routinely monitored. If emission levels in the landfill are over a certain limit, the proper authorities must be notified and a plan must be developed and put in place to solve the problem.

Restricting Access

Owners and operators must restrict access to their landfills to prevent illegal dumping and other unauthorized intrusions.

Controlling Storm Water and Protecting Surface Water

So that no pollutants are swept into lakes, rivers or streams, landfills must be built with ditches and berms to keep storm water from flooding their active areas, and to collect and control storm water run-off.

Restricting Liquids

Landfills cannot accept bulk or non-containerized liquid waste, such as from tank trucks or in 55-gallon drums. This helps reduce both the amount of liquid leaching from the landfill and the concentrations of materials contained in that liquid.

Controlling Air Emissions

Landfills must be operated so they do not violate state and federal clean air laws and regulations. This means, among other things, that the open burning of waste is prohibited at landfills.

Design Criteria

The federal regulations require that new and expanding landfills be designed to protect ground water by making sure that contaminant levels remain below federal limits for safe drinking water. In states with EPA-approved permitting programs, landfill owners and operators may have flexibility to design units to suit local circumstances, providing the state program director approves the design. This flexibility means, for example, that the use of a liner and the nature and thickness of the liner system may vary from state to state, and perhaps from site to site.

In states without EPA-approved programs, owners and operators must either build their landfills according to an EPA design, or seek waivers. The EPA design has specific requirements for liners and collection systems for liquid leaching from the landfill. For example, liners must be "composite," that is, a synthetic material over a two-foot layer of clay. This forms a barrier that prevents liquid that leaches out of the landfill from escaping from the landfill into ground water. The design also requires collection systems that allow such liquids to be captured and treated.

Groundwater Monitoring And Corrective Action

Generally, landfills must install monitoring systems to detect groundwater contamination. Sampling and analysis must be

conducted twice a year. States with EPA-approved programs have the flexibility to adapt rules to suit their own particular circumstances. For example, they may specify different frequencies for sampling ground water for contaminants, or change the deadline for complying with the federal ground-water monitoring requirements.

If the ground water becomes contaminated, owners and operators in approved states must clean it up to levels specified by the state director. In states without EPA-approved programs, the federal regulations specify that contaminants must be reduced below the federal limits for safe drinking water.

Closure And Post-Closure Care

When a landfill stops accepting waste, it must be closed in a way that will prevent problems later. Its final cover must be designed to keep liquid away from the buried waste. After closure, the owner and operator must continue to maintain the final cover, continue groundwater monitoring to ensure that the unit is not leaking and perform other maintenance activities, all for 30 years. (States with approved programs may vary this period based on local conditions.)

Financial Assurance

To ensure that monies are available to correct possible environmental problems, landfill owners and operators are required to show that they have the financial means to cover expenses for site closure, post-closure maintenance and cleanups. The regulations spell out ways to meet this requirement, including (but not limited to) surety bonds, insurance and letters of credit.

Additional Information

For more information about specific requirements for solid waste landfills in your area, contact your state official. The RCRA Hotline maintains current lists of all state solid and hazardous waste management officials. While these information centers are the best place to start collecting information, it may still be useful to ask these contacts if some other source may be able to give you additional help.

RCRA Hotline:

Provides information about RCRA regulations and policies, and takes documents requests.

Hours: 8:30 a.m. to 7:30 p.m., EST
Monday-Friday

Telephone: 1-800-424-9346

TDD (hearing impaired): 1-800-553-7672

Washington metro area: 703-920-9810, TDD: 703-486-3323

RCRA Information Center (Docket):

Maintains and tracks policy and guidance documents; provides nontechnical assistance and written reference services; and, develops and disseminates public information materials.

Hours: 9:00 a.m. to 4:00 p.m., EST
Monday-Friday

Telephone: 202-260-9327

Address: RCRA Information Center
U.S. Environmental Protection Agency
401 M Street SW (OS-305)
Washington, DC 20460

Solid Waste Assistance Program (SWAP):

Collects and distributes information on all aspects of municipal solid waste management.

Hours: 8:30 a.m. to 5:00 p.m., EST
Monday-Friday

Telephone: Toll-free: 1-800-677-9424

Address: SWAP
P.O. Box 7219
Silver Spring, MD 20907

National Response Center:

Use this hotline *to report oil and chemical spills or any environmental incident.*

Hours: 24 hours a day, 365 days a year.

Telephone: 1-800-424-2675

Washington metro area: 202-426-2675

(See Resource Section for solid waste contacts)

Underground Storage Tank Technical Requirements

Background

The U.S. Environmental Protection Agency has written regulations for many of the nation's underground storage tank systems. This section briefly describes the new technical requirements for these systems, which include tanks and piping. The regulations contain detailed performance standards and operating requirements. The use of different methods and technologies is often conditional (e.g. based on specific tank conditions). Properly managed, underground storage tank systems (USTs) will not threaten our health or our environment. In small communities such tanks may be in service stations, agricultural/supply stores, etc.

Several million underground storage tank systems in the United States contain petroleum or hazardous substances. Tens of thousands of these USTs, including their piping, are currently leaking. Many more are expected to leak in the future. Leaking USTs can cause fires or explosions that threaten human safety, and they can contaminate nearby ground water. Because many of us depend on ground water for the water we drink, federal legislation seeks to safeguard our nation's groundwater resources.

Do These Regulations Apply To My Community?

If your government has one or more storage tanks that have at least 10 percent of their volume underground, (including underground piping connected to the tank) and that store either petroleum or certain hazardous substances, these regulations apply. Generally, many of the requirements for petroleum and hazardous substance USTs are very similar. The additional requirements for tanks storing hazardous substances are discussed in the section, "For Hazardous Substance USTs Only."

Some kinds of tanks are not covered by these regulations. These include:

- Farm and residential tanks holding 1,100 gallons or less of motor fuel used for noncommercial purposes.
- Tanks storing heating oil used on the premises where it is stored.
- Tanks on or above the floor of underground areas, such as basements or tunnels.
- Septic tanks and systems for collecting storm water and wastewater.
- Flow-through process tanks.
- Tanks holding 110 gallons or less.
- Emergency spill and overfill tanks.

Other storage areas, such as surface impoundments and pits, are also excluded. Some tanks, such as field-constructed tanks, have been deferred from most of the regulations.

Actions Your Community Should Be Taking

For new tanks that store either petroleum or hazardous substances (those for which installation began after December 22, 1988):

- You must certify that the tank and piping are installed properly according to industry codes.
- You must equip the tank and piping with devices that prevent spills and overflows. Also, you must follow correct tank filling practices.
- You must protect the tank and piping from corrosion.
- You must employ a method of leak detection for both the tank and piping.

For existing tanks (those for which installation began on or before December 22, 1988) that store either petroleum or hazardous substances, you must immediately start tank filling procedures that will prevent spills and overfills. In addition, you must meet requirements for leak detection, corrosion protection and spill/overflow prevention. The chart, "What Do You Have To Do?" displays requirements for new and existing tanks and piping. (see page 38) The deadlines for meeting the requirements for corrosion protection, leak detection and spill/overflow prevention vary and are displayed in the chart, "When Do You Have To Act?" (see page 39) Although some regulatory deadlines are several years away, you should make improvements as soon as possible to reduce the chance that you will be liable for damages caused by releases from substandard USTs. The schedule makes sure that the older tanks, which are more likely to leak, have leak detection first.

Tank Leak Detection Testing Alternatives

You must check your tanks at least once a month to determine if they are leaking. You must use one (or a combination) of the following monthly monitoring methods described below:

- Automatic tank gauging.
- Monitoring for vapors in the soil.
- Interstitial (between the walls) monitoring.
- Monitoring for liquids on the ground water.
- Other approved methods.

There are some exceptions to the monthly monitoring requirement described below.

- *Tanks up to 1000 gallons:* You may use manual gauging as the sole method of leak detection. This method involves keeping the tank undisturbed for at least 36 hours, during which time you measure the tank's contents each week, twice at the beginning and twice at the end of the test period in the manner required by the regulations.
- *Tanks between 1001 and 2,000 gallons:* You may use the manual gauging method (which involves weekly testing), but only in combination with tank tightness testing at least every five years or annually, depending upon whether the tank has

What Do You Have To Do? Minimum Requirements

Leak Detection	
New Tanks 2 Choices	<ul style="list-style-type: none"> • Monthly monitoring* • Monthly inventory control and tank tightness testing every 5 years (You can only use this choice for 10 years after installation.)**
Existing Tanks 3 Choices	<ul style="list-style-type: none"> • Monthly monitoring* • Monthly inventory control and annual tank tightness testing (This choice can only be used until December 1998) • Monthly inventory control and tank tightness testing every 5 years (This choice can only be used for 10 years after adding corrosion protection and spill/overfill prevention or until December 1998, whichever date is later.)**
New & Existing Pressurized Piping Choice of one from each set	<div> <ul style="list-style-type: none"> • Automatic flow restrictor • Automatic shutoff device • Continuous alarm system </div> AND <div> <ul style="list-style-type: none"> • Annual line testing • Monthly monitoring* (except automatic tank gauging) </div>
New & Existing Suction Piping 3 Choices	<ul style="list-style-type: none"> • Monthly monitoring* (except automatic tank gauging) • Line testing every 3 years • No requirements (if the system meets the requirements in the regulations)
Corrosion Protection	
New Tanks 3 Choices	<ul style="list-style-type: none"> • Coated and cathodically protected steel • Fiberglass • Steel tank clad with fiberglass
Existing Tanks 4 Choices	<ul style="list-style-type: none"> • Same options as for new tanks • Add cathodic protection system • Interior lining • Interior lining and cathodic protection
New Piping 2 Choices	<ul style="list-style-type: none"> • Coated and cathodically protected steel • Fiberglass
Existing Piping 2 Choices	<ul style="list-style-type: none"> • Same options as for new piping • Cathodically protected steel
Spill/Overfill Prevention	
All Tanks	<ul style="list-style-type: none"> • Catchment basins AND automatic shutoff devices or overfill alarms or ball float valves.

* Automatic tank gauging, vapor monitoring, interstitial monitoring, groundwater monitoring and other approved methods

** Very small tanks may also be able to use manual tank gauging

When Do You Have To Act *Important Deadlines*

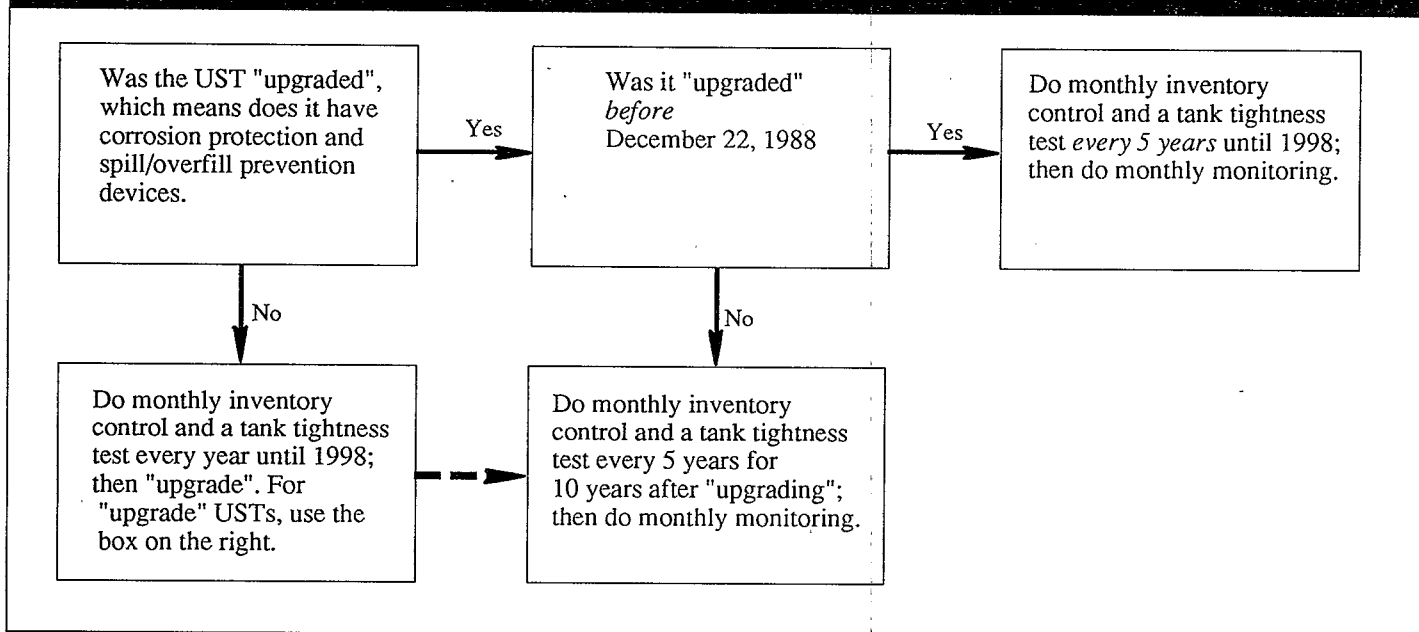
Type Of Tank And Piping	Leak Detection	Corrosion Protection	Spill/Overfill Prevention
New tanks and piping*	At installation	At installation	At installation
Existing tanks** Installed	By no later than:		
Before 1965 or unknown	December 22, 1989	} December 22, 1998	} December 22, 1998
1965-1969	December 22, 1990		
1970-1974	December 22, 1991		
1975-1979	December 22, 1992		
1980-December 22, 1988	December 22, 1993		
Existing Piping**			
Pressurized	December 22, 1990	December 22, 1998	Does not apply
Suction	Same as existing tanks	December 22, 1998	Does not apply

* New tanks and piping are those installed after December 22, 1988

** Existing tanks and piping are those installed before December 22, 1988

If you Choose Tank Tightness Testing At Existing USTs...

If you don't use monthly monitoring at existing USTs, you must use a combination of periodic tank tightness tests and monthly inventory control. This combined method can only be used for a few years, as the chart below displays



been upgraded or meets new tank standards. This combined method can only be used during the first ten years following tank installation or upgrade or until December 22, 1998, whichever is later (for upgraded/new tanks).

- **Tanks that do not meet the new tank upgrading standards:** You can combine monthly inventory control with annual tank tightness testing. Please note, however, that this method is allowed only until December 1998.

- **Tanks that meet new tank performance standards or that have been upgraded:** You can combine monthly inventory control with tank tightness testing every 5 years. This choice, however, can only be used for 10 years after adding corrosion protection or internally lining the tank (or until December 1998, whichever is later). After this time, you must use one of the monthly monitoring methods listed above.

You have a leak detection advantage if your UST has been "upgraded" with corrosion protection and devices to prevent spills and overfills. For 10 years after "upgrading," you can use a leak detection method that will be less costly and easier to apply than most other leak detection methods.

Piping Leak Detection Alternatives

You have two basic choices of leak detection for piping depending upon the type of piping you use.

- **Pressurized Piping:** By December 1990, existing pressurized piping must have met the following leak detection requirements for new pressurized piping. The piping must have devices to automatically shut off or restrict flow, or have an alarm that indicates a leak. You must either conduct an annual tightness test of the piping or use one of the following appropriate monthly methods noted above for tanks: vapor monitoring, groundwater monitoring, interstitial (between the walls) monitoring or other approved monthly methods.

- **Suction piping:** Existing suction piping must meet the following requirements for new suction piping at the same time the tank meets the above leak detection schedule. The most commonly used suction piping requires either monthly monitoring (using one of the four monthly methods noted above for use on pressurized piping) or tightness testing of the piping every three years.

Another kind of suction piping is safer and does not require leak detection. This safer method has two main characteristics. If your piping meets the following characteristics and it can be readily determined that it does so, leak detection may not be required:

- Below-grade piping is sloped so that the piping's contents will drain back into the storage tank if the suction is released.
- Only one check valve is included in each suction line and is located directly below the suction pump.

No matter which leak detection methods you use for tanks and piping, they must be working by the deadlines described in the chart on page 39.

Leaks and spills from hazardous substance and petroleum USTs

Your response to confirmed leaks and spills (including overfills) comes in two stages: short-term and long-term.

NOTE: owners/operators must confirm all suspected releases.

Short-Term Actions

- Take immediate action to stop and contain the leak or spill.
 - Tell the regulatory authority within 24 hours that there is a leak or spill. However, petroleum spills and overfills of less than 25 gallons that can be cleaned up within 24 hours or other period designated by the implementing agency, do not have to be reported if you immediately contain and clean up these releases. In some circumstances you must begin corrective action.
 - Make sure the leak or spill poses no immediate hazard to human health and safety by identifying and mitigating explosions, vapors and fire hazards. Your fire department should be able to help or advise you with this task. You must also make sure you handle contaminated soil properly so that it poses no hazard (for example, from vapors or direct contact).
 - Find out how far the tank contents have moved and prevent further migration of the leaked petroleum (such as product floating on the water table).
 - Report your progress and any information you have collected to the regulatory authority no later than 20 days, or within another reasonable time period determined by the implementing agency, after you have confirmed a leak or spill.
 - Investigate to determine if the leak has damaged or might damage the environment. You must report to the regulatory authority what you have learned from a full investigation of your site within 45 days of confirming a leak or spill. At the same time, you must also submit a report explaining how you plan to remove the leaked substance, if you have found contaminated ground water. Additional site studies may be required if certain conditions exist.
- Some leaks and spills will require additional, long-term attention to correct the problem.

Long-Term Actions

Based on the information you have provided, the regulatory authority, often your state, will decide if you must take further action at your site. You may need to take two more actions:

- Develop and submit a Corrective Action Plan that shows how you will meet requirements established for your site by the regulatory authority.
- Make sure you meet the requirements approved by the regulatory authority for your site.

Closing USTs

You can close your UST permanently or temporarily. Be sure to contact your state UST program for more details on how to properly close your tank and under what conditions.

Reporting And Recordkeeping

In general, you will only need to report to the regulatory authority at the beginning and end of your UST system's operating life:

- When you install a UST, you have to fill out a notification form available from your state. (You should have already used this form to identify your existing USTs. If you haven't done that yet, be sure you do so now.)
- You must report suspected releases to the regulatory authority.
- You must report confirmed releases to your regulatory authority. You must also report follow-up actions you plan or have taken to correct the damage caused by your UST.
- You must notify the regulatory authority 30 days before you permanently close your UST.

You need to check with your regulatory authority about the particular reporting requirements in your area, including any additional or more stringent requirements than those noted above.

For Hazardous Substance USTs Only

NOTE: The following section applies only to USTs that store hazardous substances.

Substances included in these regulations

Several hundred substances are designated as "hazardous" under federal regulations. If your underground storage tank stores any of these hazardous substances, it is subject to the regulations. (For information on what hazardous substances are designated as "hazardous," please contact the RCRA/CERCLA hotline at 1-800-424-9346, or call 202-382-3000.)

Requirements for new hazardous substance USTs

New UST systems are those that are installed after December, 1988. They must meet the same requirements as new petroleum USTs concerning correct installation, corrosion protection, spill and overfill prevention, corrective action, and closure. However, they must *also* have secondary containment and interstitial monitoring as described below.

Secondary Containment

All new hazardous substance underground storage tanks must have secondary containment. A single-walled tank is the first or "primary" containment. Using only primary containment, a leak can escape into the environment. But by enclosing the tank within a second wall, leaks can be contained and detected quickly before harming the environment. There are several ways to construct secondary containment. These include:

- Placing one tank inside another tank or one pipe inside another pipe (making them double-walled systems).
- Placing the underground storage tank system inside a concrete vault.

- Lining the excavation zone around the underground storage tank system with a liner that cannot be penetrated by the chemical.
- Placing an internally fitted flexible liner inside a UST.

Interstitial Monitoring

The hazardous substance underground storage tank must have a leak detection system that can indicate the presence of a leak in the confined space between the first and the second wall. Several devices are available to monitor this confined or "interstitial" space. The regulations describe these various methods and the requirements for proper use.

Variances

You can apply for an exception, called a variance, from the requirement for secondary containment and interstitial monitoring. Getting a variance will require a lot of work. You will have to convince your regulatory authority that your alternative leak detection method will work effectively by providing detailed studies of your site, proposed leak detection method and available methods for corrective action. Also, some states may not allow variances.

"Existing" hazardous substance USTs

Hazardous substance underground storage tanks installed before December 1988 are defined as "existing" tanks. If you have an existing hazardous substance underground storage tank, by December 1998, you must:

- Use tank filling procedures and devices that prevent spills and overfills.
- Protect the tank from corrosion.

By December, 1998, you must improve your hazardous substance underground storage tanks installed before December, 1988. Although the regulatory deadline is in 1998, you should make these improvements as soon as you can to reduce the chance that you will be liable for damages caused by your sub-standard tank.

Leak detection

Leak detection requirements are the same as for existing underground petroleum storage tanks, and are also being phased in for existing hazardous substance underground storage tanks, depending on their age:

If the tank was installed. . .	It must have had leak detection by December of. . .
before 1965 or unknown	1989
1965-1969	1990
1970-1974	1991
1975-1979	1992
1980-December 1988	1993

This schedule makes sure that the older tanks, which are

more likely to leak, have leak detection first. (Also see chart at top of page 39)

Pressurized piping

There was a special deadline for pressurized piping in December, 1990. By December, 1990, existing pressurized piping must have met the requirements for new pressurized piping described for petroleum underground storage tanks on page 40.

Choosing leak detection methods for existing hazardous substance USTs

You can meet the leak detection requirements in one of the following ways:

- After December, 1998, your UST must meet the same requirements for secondary containment and interstitial monitoring that apply to new hazardous substance USTs.
- After December, 1988, a variance can be granted if you meet the same requirements described above for getting a variance for a new hazardous substance UST.
- Until December, 1998, you can use any of the leak detection methods, other than interstitial (between the walls) monitoring, that are described above for existing petroleum underground storage tanks — but only if the method you choose can effectively detect releases of the hazardous substance stored in the UST. (Variances are not required in these cases before December 1998).
- After December, 1998, you must either use secondary containment and interstitial monitoring, or get a variance.

NOTE: No matter which leak detection methods you use for tanks and piping, they must be working by the deadlines described above. If not, you must close your UST or replace it with a new UST.

Additional Resources

Check with your state UST program for additional information and state-specific requirements.

Getting Out from Under; Underground Storage Tank Alternatives for Small Towns. Available from National Association of Towns and Townships (NATaT), 1522 K Street, N.W., Washington, DC, 20005, phone number: 202-737-5200. Guidebook cost: NATaT members - \$7.95, non-members - \$14.95. Training module, including guidebook, video, and facilitator's guide purchase cost for members: \$39.95, rental cost: \$19.95; nonmembers purchase cost: \$69.95, rental cost: \$39.95.

Dollars and Sense; A Summary of the Financial Responsibility Regulations for Underground Storage Tank Systems. Available from the U.S. EPA National Center for Environmental Publications & Information, P.O. Box 42419, Cincinnati, OH 45242-2419, publication #: 26B. Phone number: 513-891-6561 (December 1988). Free.

Musts for USTs; A Summary of the Regulations for Underground Storage Tank Systems. Available from the Superintendent of Documents, U.S. Printing Office, P.O. Box 37194, Pittsburgh, PA, 15250-7954. Stock number: 055-000-002941. Phone number: 202-783-3238. (July 1990).

Leak Lookout; Using External Leak Detectors to Prevent Petroleum Contamination from Underground Storage Tanks. Available from the National Center for Environmental Publications & Information, P.O. Box 42419, Cincinnati, OH, 45242-2419, publication #: EPA 530-UST-88-006. (August 1988). Free.

Oh No! Petroleum Leaks and Spills: What Do You Do? Available from the National Center for Environmental Publications & Information, P.O. Box 42419, Cincinnati, OH, 45242-2419, publication #: EPA 530-UST-88-004. (December 1988). Free.

Staight Talk on Tanks; A Summary of Leak Detection Methods for Petroleum Underground Storage Tank Systems. Available from the National Center for Environmental Publications & Information, P.O. Box 42419, Cincinnati, OH, 45242-2419, publication #: EPA 530-UST-90012. (August 1990). Free.

Survey of Vendors of External Petroleum Leak Monitoring Devices for Use with USTs. Available from the National Center for Environmental Publications & Information, P.O. Box 42419, Cincinnati, OH, 45242-2419, publication #: EPA 510K-92-815. Free.

See Title 40 Code of Federal Regulations Part 280, and Federal Register, February 18, 1993, Page 9025.

(See Resource Section for UST contacts)

Underground Storage Tank (UST) Financial Responsibility Requirements

Background

Undetected leaks and accidental spills can lead to very expensive cleanup and liability costs. Federal and state regulations now require that UST owners and/or operators demonstrate their financial ability to take corrective action and to compensate third parties for bodily injury and property damage.

If your government cannot meet the financial responsibility requirements, you are required to shut down your tanks. See the section on Underground Storage Tank Technical Requirements for tank closure requirements.

Do These Regulations Apply To My Community?

The federal UST regulations establish separate compliance requirements and schedules for different sizes and classifications of owners and operators. Most small communities will have to show responsibility for \$500,000 per occurrence, and \$1 million aggregate.

The following chart explains these categories:

Volume of Liquid Going Through Facility	Per-Occurrence Coverage	Aggregate Coverage
10,000 gallons or less monthly	\$500,000	\$1million if you have 100 or fewer tanks
More than 10,000 gallons monthly	\$1 million	\$2 million if you have more than 100 tanks

In other words, the dividing line between \$500,000 and \$1 million in per occurrence coverage is 10,000 gallons moving through your facility monthly. Aggregate coverage is determined by the number of tanks you own or operate.

Actions Your Community Should Be Taking

Federal regulations list a number of ways to establish your ability to pay the required minimum amount for cleanup costs and liability claims. These mechanisms include self insurance tests related to a local government's net worth, bond rating and other financial indicators that establish the ability to pay. Many of the options are based on the principle that most municipalities can cover the required costs without purchasing insurance.

EPA's list of allowable mechanisms to demonstrate financial capability includes the following self insurance mechanisms for local governments:

- Bond rating test
- Work sheet test
- Fund balance test
- Intergovernmental guarantee

You can also use private insurance, letter of credit, surety bond or state assurance fund. Local governments are most likely to rely on one of the four self-insurance mechanisms or state assurance funds. Be sure to check with your state to see if you are already covered under a state UST fund.

The compliance date for local governments for this regulation is February 18, 1994.

Additional Resources

(See Resource Section for UST contacts)

Emergency Planning And Community Right-To-Know

Background

These regulations have two purposes: to encourage and support emergency planning for responding to chemical accidents; and, to provide local governments and the public with timely and comprehensive information about possible chemical hazards in communities.

The law, called "SARA Title III," or the "Emergency Planning and Community Right-to-Know Act," (EPCRA) requires governors to establish State Emergency Response Commissions (SERCs). Each SERC shall divide its state into local emergency planning districts and appoint a Local Emergency Planning Committee (LEPC) for each district.

Do These Regulations Apply To My Community?

Yes, the Emergency Planning and Community Right-to-Know Act (EPCRA) applies to all communities. Hazardous substances are not only found at large chemical plants. They are also routinely used in many small operations. These chemicals are not necessarily hazardous in normal practice, but may be of concern if stored or used improperly, or during an emergency situation such as a fire.

Examples of facilities subject to EPCRA include dry cleaners, paint stores, gardening and supply stores, and your local government, if it stores hazardous chemicals for road work or other purposes. For purposes of assisting the Local Emergency Planning Committee to prepare an emergency response plan, each facility in your community, where certain EPA listed chemicals are present above threshold quantities, must report to the State Emergency Response Commission and the Local Emergency Planning Committee. Facilities that have threshold quantities of certain chemicals subject to the Occupational Safety and Health Act (OSHA) must submit inventory information to the appropriate Local Emergency Planning Committee, the State Emergency Response Commission and the local fire department.

If a chemical accident occurs at a facility that produces, uses or stores any of the EPA listed chemicals or the chemicals subject to OSHA, the facility must immediately notify the State Emergency Response Commission and the Local Emergency Planning Committee.

Because the fire department (which is represented on the Local Emergency Planning Committee and receives chemical inventory information) is often the first to respond to a chemical emergency, it must be involved in every aspect of emergency planning and community-right-to-know. Having access to this information will help a fire department know which chemicals to expect at a chemical emergency scene, as well as chemical quantities and locations.

The law provides stiff penalties for facilities that do not comply, and it allows citizens to file lawsuits to force them to obey the law.

Actions Your Community Should Be Taking

As a local official, you should find out who is on your Local Emergency Planning Committee. While your community may not have its own Local Emergency Planning Committee, it will be part of one. The members must consist of representatives of all of the following groups: elected state and local officials, law enforcement, civil defense, firefighting, first aid, health, media, community groups and industry. Because the Local Emergency Planning Committee represents the community, its members should be familiar with the factors that affect public safety, the environment and the economy of its districts. Make sure your community's needs are represented by participating fully in your local Committee.

Using the information received to analyze the hazards, your Local Emergency Planning Committee has developed an emergency response plan that lays out potential local hazards, response capabilities and procedures to follow in an emergency. The Local Emergency Planning Committee must exercise, review and update this plan annually, and inform the public of these activities.

It is important that you become familiar with the Emergency Planning and Community Right-to-Know Act so that you will know how you can better assess and manage the risks present in your community. The more each of us learns about, understands, and participates in managing chemical hazards, the safer our communities will be for everyone.

Additional Information

The EPCRA/SARA Title III hotline provides regulatory, policy and technical assistance to federal agencies, state and local governments, the public and regulatory community in response to questions related to EPCRA.

Telephone: 800-535-0202 National
703-920-9877 Virginia

Hours: 8:30 a.m. - 7:30 p.m. eastern time
Monday - Friday

Reimbursement To Local Governments For Emergency Response To Hazardous Substance Releases

Background

On October 17, 1986, the President signed into law the Superfund Amendments and Reauthorization Act of 1986 (SARA). Section 123 of the law authorizes EPA to reimburse local governments for up to \$25,000 for their expenses in carrying out temporary emergency measures in response to hazardous substance releases. The final regulation for reimbursing local governments became effective on October 14, 1992.

The intent of the reimbursement program is to alleviate extraordinary financial burdens on local governments resulting from the temporary emergency measures they have taken in responding to hazardous substance releases. Such measures may include activities like erecting security fencing to limit access, costs of responding to fires and explosions not otherwise provided for in the applicant's operating budget, and other actions that require immediate response at the local level. EPA will distribute the reimbursement money to those applicants who demonstrate the greatest financial burden.

Does This Program Apply To My Community?

Any general purpose unit of local government that has expenses resulting from performing temporary emergency measures in response to releases of hazardous substances or pollutants or contaminants may apply for reimbursement. Reimbursement is available only to local governments (e.g., a county, parish, city, municipality, township, or federally recognized Indian tribe). States are not eligible for reimbursement for temporary emergency measures, and no state may request reimbursement on its own behalf or on the behalf of political subdivisions within the state.

Only one request for reimbursement will be accepted for each hazardous substance release or threat requiring immediate response at the local level. When more than one local agency has participated in such a response, those agencies must determine which single agency or jurisdiction will submit the request on behalf of them all. Since funds for this program are limited, EPA may not be able to reimburse local governments for all responses that may qualify.

Timetable

Reimbursement requests must be received by EPA within one year of the date of completion of the response for which reimbursement is being requested. If, however, a cost recovery action is pending, EPA may waive this deadline. EPA recommends that applications be submitted as soon as possible after completion of the response, since response information and reconstruction of records becomes more difficult as time progresses.

What Costs Are Reimbursable?

All costs for which a local government is seeking reimbursement must be consistent with the Comprehensive Environmental Response Compensation and Liability Act, the National Oil and Hazardous Substances Pollution Contingency Plan, and federal cost principles outlined by the Office of Management and Budget. In general, EPA will consider reimbursement for costs of such items as: disposable materials and supplies used during a specific response; rental or leasing of equipment used for a specific response; special technical services and laboratory costs; and, services and supplies purchased for a specific evacuation. Reimbursement, however, must not take the place of the money the local government would normally provide for emergency response. All reimbursement applications must be accompanied by cost documentation such as invoices, sales receipts or leasing agreements. This documentation, supporting your attempts to recover cost, is essential. No reimbursements will be made unless the request includes evidence of efforts to recover costs from parties responsible for the release.

How Will Reimbursement Requests Be Evaluated?

EPA has developed a formula for determining financial burden that is based on the ratio of eligible response costs to an applicant's per capita income adjusted for population. EPA also may consider other relevant financial information provided by a local government, so if you think that your government has special circumstances, please be sure to let EPA know in your application.

After receiving completed applications from local governments, EPA will screen each application for compliance with basic reimbursement criteria and filing procedures. Requests for reimbursement must demonstrate that responses comply with federal law, the National Oil and Hazardous Substances Pollution Contingency Plan and, where applicable, the local comprehensive emergency response plan completed under the Emergency Planning and Community Right-to-Know Act of 1986. If you do not know whether you meet these criteria, call the hotline or the Local Governments Reimbursement Program Project Officer, listed under the "Additional Information" section below.

Each application will be evaluated on its own merit and in comparison to the financial burden demonstrated by other requests. EPA will ensure that costs for which reimbursement is being sought are allowable and do not supplant local funds normally provided for emergency response. Further guidance on evaluation of reimbursement questions can be found in section 310.60 of the final regulation in the Code of Federal Regulations (Title 40 Code of Federal Regulations Part 310.60). For further information, see the "Additional Information" section below.

Based on the financial burden ranking for each request and the funds available for reimbursement, a request may be reimbursed, denied or held over for reconsideration. A request may be reconsidered during a subsequent review period if it represents a significant financial burden but scores lower than other requests during a particular review period.

How Much Can Be Reimbursed?

Reimbursement is limited by law to \$25,000 per single response. The law specifies that no more than 0.1 percent of the total amount appropriated to the fund be used for local government reimbursement.

Actions Your Community Should Be Taking

If you think that you qualify for a reimbursement, you can get an application package by contacting the RCRA Superfund Hotline at EPA Headquarters. The toll-free telephone number for the hotline is 1-800-424-9346. The application package contains detailed, line-by-line instructions for completing the application.

Additional Information

For general information on the Comprehensive Environmental Response Compensation and Liability Act, and reimbursement application packages, contact:

RCRA Superfund Hotline
1-800-424-9346 (toll free)

For specific information on the Local Governments Reimbursement Program, contact:

Local Governments Reimbursement Program
Project Officer
Emergency Response Division (5202G)
U.S. EPA
401 M Street, SW.
Washington, DC 20460

Toxics

Asbestos In Schools

Background

Because asbestos has been determined to be toxic, Congress instructed EPA to develop regulations about asbestos hazards in schools. The law governing this activity is the Asbestos Hazard Emergency Response Act, under which EPA provides a model program to officially certify people who conduct inspections for asbestos, develop management plans, and perform the work needed to clean up asbestos problems.

Do These Regulations Apply To My Community?

Yes, if your government operates a school, these regulations apply. Congress required all public and private elementary and secondary schools to conduct inspections for asbestos-containing building materials, develop asbestos management plans and implement response actions in a timely fashion.

Actions Your Community Should Be Taking

Specifically, each local public school system or private school must do the following:

- Designate and train a person to oversee asbestos-related activities.
- Inspect every school building for both friable and nonfriable asbestos-containing materials.
- Prepare a management plan for managing asbestos and controlling exposure in each school, and submit that plan to the appropriate state agency. A management plan includes maintenance, repair, encapsulation e.g. spraying, enclosure and removal, if absolutely necessary. The plan should include a time frame for implementation of recommended actions.
- Use only properly authorized people to conduct inspections and develop the asbestos management plan. Authorized personnel must also conduct the required reinspections every three years.
- Provide custodial staff and short-term workers with information about the location of any asbestos-containing materials. Post warning labels as required.
- Provide custodial and maintenance staff with two hours of awareness training and an additional 14 hours of training for employees whose duties may cause them to disturb asbestos. This additional training must include proper work practices and the use of protective equipment when disturbing asbestos-containing materials.
- Notify parents, teachers and other school employees about the asbestos inspection and the availability of the asbestos management plan for review.
- Use properly authorized individuals to design and conduct asbestos-abatement actions that are necessary and

appropriate to protect health and the environment. These actions must be documented in the management plan.

- Keep records of all asbestos-related activities in the plan and make them available for public review.
- Inform employees and building occupants or their legal guardians annually regarding the management plan availability and the related ongoing activities.

According to federal law, May 9, 1989 was the deadline by which asbestos management plans should have been submitted to state agencies. Each local public school district or private school is required to update and maintain management plans to reflect activities with ongoing operations and maintenance, periodic surveillance, inspection, reinspection and response action activities.

What Help Is Available?

EPA has established several programs to assist schools in assessing and managing their asbestos-related problems. Through its headquarters office in Washington, DC, and EPA regional offices, the Agency provides direct technical assistance for local officials, school officials, other employees and parents to better understand asbestos programs, and to help schools comply with federal asbestos regulations.

Under the Asbestos School Hazard Abatement program, EPA can provide financial aid to schools in the form of an interest-free loan, grant, or a combination of both.

Additional Information

For more information on EPA requirements for asbestos in schools, please call 202-554-1404. Hours: 8:30 a.m. to 5:00 p.m., eastern time, Monday-Friday.

Toxics

Lead

Background

Lead is a highly toxic substance that can cause a number of health problems, particularly in children and fetuses. Humans can be exposed to lead through contact with lead-based paint, soil, dust and drinking water. Before it was known how harmful lead can be, it was used in paint, gasoline, water pipes and many other products.

Old lead-based paint is the most significant source of lead exposure in the United States today, and it has been banned since 1978. Improper paint removal, such as dry scraping, sanding or openflame burning can cause harmful exposures to workers, as well as occupants of dwellings.

Airborne lead enters the body when an individual breathes or swallows lead dust. Until recently, the most important airborne source of lead was automobile exhaust. High concentrations of airborne lead particles in homes can also result from lead dust from outdoor sources, contaminated soil tracked inside, and use of lead in certain activities such as electronics repair and stained glass-making.

Health Effects Of Exposure To Lead

Lead affects practically all systems of the body. High levels of lead can cause convulsions, coma, and even death. Lower levels of lead can cause adverse effects on the central nervous system, kidneys and can have other effects.

Lead is particularly harmful to the developing brain and nervous systems of children, infants and fetuses. They are more vulnerable to lead exposure than adults, because they have more hand-to-mouth activity and they absorb more lead. Effects can include delays in physical and mental development, lower IQ levels, shortened attention spans and increased behavioral problems. Children should be tested for lead; to find out where, call your doctor or local health clinic.

Actions Your Community Should Be Taking

- **Schools:** Keep areas in schools and other areas where children play as dust-free and clean as possible. Floors, window ledges and chewable surfaces should be cleaned with a solution of powdered automatic dishwasher detergent in warm water. (Dishwasher detergents are recommended because of their high-phosphate content.) Most multi-purpose cleaners will not remove lead in ordinary dust. Make sure that children wash their hands before meals and nap-time.

- **Homes and public buildings:** Reduce the risk from lead-based paint. Most homes and other buildings built before 1960 contain heavily leaded paint. Some built as recently as 1978 may also contain lead paint. This paint could be on window frames, walls, the outside of homes or other surfaces. Do not burn painted wood, as it may contain lead.

- **Paint in good condition:** Leave lead-based paint undisturbed if it is in good condition — do not sand or burn it off. Lead paint in good condition is usually not a problem except in places where painted surfaces rub against each other and create dust (example: opening a window).

- **Correcting lead paint problems:** Hire people with special training in correcting lead paint problems to remove lead-based paint. Until all work is finished and cleanup is done, all occupants—especially children and pregnant women—should leave the building.

- **Testing homes for lead-based paint:** Consult your state or county health or housing department for suggestions on private laboratories or public agencies that may be able to help test homes for lead in paint. Home test kits cannot detect small amounts of lead under some conditions.

- **Construction work, demolition or painting, working with batteries or radiators, or other tasks which involve lead:** these can unknowingly create lead dust which can be brought into buildings. In addition, soil very close to walls may be contaminated from lead paint on the outside of buildings.

- **Roads or highways:** Soil by roads or highways may be contaminated from years of exhaust fumes from cars and trucks that use leaded gas. Your town public works employees should be aware of this and, if possible, they should change clothes before they go home.

- **Drinking water:** Most well and city water does not usually contain lead. Water usually picks up lead inside homes, from plumbing that is made with lead materials. The only way to know if there is lead in drinking water is to have it tested.

- **Testing requirements for public water systems:** Public water systems are required to take a certain number of tap water samples to test for lead in water. Please refer to the "Lead Material Ban" section of this publication for more information.

Additional Information

For more information on health effects, send for the Center for Disease Control's publication, "Preventing Lead Poisoning in Young Children," (October 1991). Telephone: Lead Poisoning Prevention Branch, 404-488-7330.

For more information on lead-based paint abatement, contact the Department of Housing and Urban Development for the following two documents: 1) "Comprehensive and Workable Plan for the Abatement of Lead Based Paint in Privately Owned Housing: Report to Congress," (December 7, 1990), and 2) "Lead-Based Paint: Interim Guidelines for Hazard Identification and Abatement in Public and Indian Housing," (September, 1990). Telephone: 1-800-245-2691.

Hotlines:

National Lead Information Center:	1-800-LEADFYI
Safe Drinking Water Hotline:	1-800-426-4791

Toxics

PCBs

Background

The abbreviation "PCB" refers to polychlorinated biphenyls - a group of man-made chemicals containing 209 individual compounds with varying toxicity. Because of their insulating and nonflammable properties, PCBs have been used widely as coolants and lubricants in transformers, capacitors and other electrical equipment on utility poles or in buildings. They are also present in fluorescent light ballasts and heat transfer systems, in hydraulic fluids, lubricating oils, wood preservatives, paints, printing inks, cutting oils, fire retardants, plasticizers, adhesives and other products. The manufacture of PCBs stopped in the United States in October 1977, because of evidence that PCBs accumulate in the environment and may cause health hazards for humans.

PCBs are particularly dangerous when they are burned. In addition, they can be released into the environment from:

- Poorly maintained toxic waste sites that contain PCBs.
- Illegal or improper dumping of PCB wastes, such as transformer fluids.
- Leaks or fugitive emissions from electrical transformers containing PCBs.
- Disposal of PCB-containing consumer products into municipal landfills rather than into landfills designed to hold hazardous materials.

Consumer products that may contain PCBs include:

- Old fluorescent lighting fixtures.
- Electrical devices or appliances containing PCB capacitors made before PCB use was stopped.

Occupational exposure to PCBs can occur during

- Repair or maintenance of PCB transformers.
- Accidents or spills involving PCB transformers.
- Disposal of PCB materials.
- Contact at hazardous waste sites.

Do These Regulations Apply To My Community?

Yes, if your local government uses, marks or disposes of PCB-containing equipment or substances, these regulations apply to you. Local governments should be particularly sensitive to PCB risks of equipment or supplies for road work, vehicle maintenance, air conditioning, heating and the operation of electric utilities. The use, storage, labelling and disposal of PCBs are strictly regulated because they can be so dangerous.

Actions Your Community Should Be Taking

PCB wastes at concentrations of 50 ppm (parts-per-million) and above are regulated for disposal. Regulated PCB waste must be disposed of in either a chemical waste landfill, by incineration or by an alternate approved technology. In addition local officials should be aware of:

- Disposal requirements.
- Technical requirements for incinerators and landfills.
- Approved alternate technologies.
- Storage requirements (PCBs going into storage for disposal must be disposed of within one year).
- Labelling requirements.
- Reporting and recordkeeping requirements.

In an Emergency

FOR RELEASES OF 1 OR MORE POUNDS OF PCBs (e.g., SPILLS AND FIRES) CALL YOUR FIRE DEPARTMENT IMMEDIATELY, AND CONTACT THE NATIONAL RESPONSE CENTER AT 1-800-424-8802.

FIRST AID POISON INFORMATION

Eye Contact

Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting upper and lower lids.

Skin Contact

Quickly remove contaminated clothing. Immediately wash contaminated skin with large amounts of soap and water.

FIRE HAZARDS

- PCBs may burn, but they do not readily ignite.
- Use dry chemical, CO₂, water spray, or foam extinguishers.
- POISONOUS GASES ARE PRODUCED IN FIRE.
- If employees are expected to fight fires, they must be trained and equipped properly.
- All buildings in which there are PCBs should be posted so firemen will be aware of their presence.

SPILLS AND EMERGENCIES

If PCBs are spilled or leaked, take the following steps:

- It may be necessary to contain and dispose of PCBs as a HAZARDOUS WASTE.
- Restrict persons not wearing protective equipment from area of spill or leak until clean-up is complete.
- Ventilate the area of spill or leak.
- Absorb liquids in vermiculite, dry sand, earth, or a similar material and deposit in a sealed container.

- Collect powdered material in the most convenient and safe manner and deposit in a sealed container.
- Contact your state environmental program or EPA regional office for specific recommendations.

HANDLING AND STORAGE

- Prior to working with PCBs, you should be trained in its proper handling and storage.
- Store in tightly closed containers in a cool, well-ventilated area away from STRONG OXIDERS (Such as CHLORINE, BROMINE, and FLUORINE).
- PCBs should be handled only in an established, controlled, regulated area.

PHYSICAL DATA

- Flash Point: 383 degrees Fahrenheit.
- Water solubility: slightly soluble.

Additional Information

For additional information contact the Toxic Substances Control Act Assistance Service at :

Telephone: 202-554-1404
202-554-0551 (TDD)
202-554-5603 (on-line service modem)

Hours: 8:30 a.m. - 5:00 p.m. eastern time
Monday - Friday

Synonyms and Trade Names Used for PCBs

Aroclor	Chlorinated Diphenyl
Elemex	Nonflammable Liquid
Aroclor B	Chlorinated Diphenylene
Eucarel	Phenoclor
ALC	Chlorinol
Fenclor	Polychlorobiphenyl
Apirolol	Chloro biphenyl
Hyvol	Pydraul
Asbestol	Chloro 1,1, biphenyl
Inclor	Pyralene
ASK	Clophen
Inerteen	Pyranol
Askarel*	Clorextol
Kaneclor	Pyroclor
Adkarel	Clorinol
Kennechlor	Saf-T-Kuhl
Capacitor 21	Clorphen
Magvar	Sanotherm FR
Chemco	Diaclor
MCS 1489	Santovac 1 and 2
Chlorextol	Dk
No-Flamol	Therminol
Chlorinated Biphenyl	Dykanol
Nepolin	Chlorinated Biphenyls
EEC-18	

* Askarel is also the generic term used for nonflammable insulating liquid in transformers and capacitors.

Clean Air Act Amendments

Background

Air pollution has many sources. Some sources are obvious, like industrial smokestacks, chemical plants, automobiles, trucks and houses. Others are not obvious, like gasoline stations, dry cleaners, outboard motors, lawn, garden, farm, and construction equipment engines, certain paints and various household products.

Air pollution, while often invisible, can create smog and acid rain, cause cancer or other serious health effects, diminish the protective ozone layer in the upper atmosphere and contribute to the potential for world climate change.

The overall goal of the Clean Air Act Amendments is to reduce the pollutants in our air by 56 billion pounds a year—224 pounds for every man, woman and child—by the time the law is fully phased in by the year 2005. The new law builds on the strength of the Clean Air Acts of 1970 and 1977 and the environmental lessons learned over the past twenty years. As the following goals are met, we will be breathing cleaner air every year.

- **Control Acid Rain.** Acid rain is caused in large part by power plant emissions of sulfur dioxide and nitrogen oxides. Cutting sulfur dioxide from power plants by half and dramatically reducing nitrogen oxides from industrial and power plants as well as motor vehicles will help restore hundreds of lakes and streams and thousands of acres of damaged forests, slow down aging of historic buildings and monuments, improve visibility, and reduce acidic particles that may threaten public health.

- **Reduce Smog and Other Pollutants.** Urban smog or ground level ozone pollution, produced by motor vehicles and other sources, will be substantially reduced. The object is to reduce volatile organic compounds, nitrogen oxides, and carbon monoxide, which can create or aggravate respiratory, heart and other health problems.

- **Reduce Air Toxics.** Chemical plants, steel mills and other businesses will need to reduce their emissions of an additional 189 air toxics—pollutants associated with cancer, birth defects and other health risks—in addition to those already regulated.

- **Protect the Ozone Layer.** Chlorofluorocarbons (CFCs) and related chemicals that deplete the ozone layer may be phased out of production as early as the end of 1995. CFC recycling, especially for automobile air conditioners and residential, commercial and industrial cooling and refrigeration systems, will be maximized to reduce current emissions.

Do The Clean Air Act Amendments Apply To My Community?

Most provisions will not affect small communities or small local governments, unless the community is included in an area (called a "nonattainment area") that does not meet air quality standards. In that case, your community will need to work closely with the state air program office to bring the area into compliance.

States are responsible for developing the plans for bringing nonattainment areas into compliance. These are legally enforceable, and will include specific requirements to reduce pollution from "stationary sources," such as factories and businesses, and from "mobile sources," such as cars and trucks.

Stationary and mobile source requirements which may apply to your community are described briefly below. If you have questions or need detailed information you will need to contact your local air authority or your state air program office.

Stationary Source Requirements

1. **Municipal power plants** can be affected in two ways, either by requirements to control ground-level ozone or to meet acid rain requirements. Not all municipal power plants will be affected by the acid rain regulations. Any power plant that began commercial operations before November 15, 1990, will be unaffected if it uses non-fossil sources of energy or is simple gas turbines—or is very small units providing less than 25 megawatts of capacity. Any municipal power plant that began operation on or after November 15, 1990, will be affected by the acid rain program. There are, however, small unit exemptions for which your local air authority or state air program office will be able to provide information and technical assistance.
2. EPA has also issued emissions requirements that could affect certain other municipal facilities. For example:
 - Locally owned or operated *municipal waste combustors (MWCs)* with a capacity of more than 250 tons per day of municipal solid waste or refuse-derived fuel. The requirements for MWCs affect any facility built or modified after December 20, 1989. Over the next few years, EPA will be developing requirements that will apply to MWCs with a smaller capacity.
 - Locally owned or operated *hot-mixed asphalt facilities* built or modified after June 1973. A wide variety of alternative testing and monitoring methods are required to control emissions from these facilities.
 - Newly built or modified, and locally owned or operated *petroleum storage vessels* with a capacity of greater than 40,000 gallons.
 - Locally owned or operated incinerators that burn wastes containing more than 10% *sewage sludge* produced by municipal sewage treatment plants. The requirements apply to these facilities if they were built or modified after June 1973.
3. EPA has proposed standards to control emissions from *municipal solid waste landfills*. Because of concerns about smog formation, potential toxic air emissions and methane (a greenhouse gas that may contribute to climate change), EPA's proposed rules apply to municipal solid waste landfills with a design capacity of over 100,000 megagrams. The proposed rule, which will become final

in 1993, will require collection and control of gas from all gas producing portions of the landfill. Your community should explore the possibility of profitable energy recovery from the methane from these landfills.

4. *Woodstoves and fireplace inserts* have become very popular in the past 20 years. Wood smoke often contains a lot of particulates (dust, soot) and much higher levels of hazardous air pollutants, including some cancer-causing chemicals, than smoke from oil- or gas-fired furnaces. In some areas of the country, wintertime air pollution from wood smoke has become so bad that governments have had to curtail the use of woodstoves and fireplaces under certain weather and pollution conditions. Over the next several years, EPA will issue guidelines for reducing pollution from home wood-burning.
5. Since July 1, 1992, EPA has prohibited the deliberate release of *chloroflourocarbons (CFCs)* during service, maintenance, repair or disposal of appliances and industrial process refrigeration. Regulations are being drafted which allow flexibility for safe disposal. For example, your community could require that citizens be responsible for having CFCs recovered prior to municipal pick-up of used appliances, or your community could manage its own recycling/recovery process. Your community should begin looking at retrofits for locally owned or operated chillers and industrial refrigeration equipment to prepare for the 1996 phaseout of ozone-depleting substances.

Mobile Source Requirements

Vehicles are responsible for a great deal of the emissions that cause smog and other air pollutants. If your small community or small local government is designated as being inside an ozone (smog) nonattainment area, the area-specific mobile source requirements will apply. However, most nonattainment areas are large metropolitan areas with heavy vehicle traffic. In any event, some aspects of the mobile sources program will provide substantial benefits to your community, such as the tighter tailpipe standards and the low-sulfur diesel fuel standard for heavy duty vehicles. If you are in an ozone nonattainment area, the following requirements may apply:

- *Cleaner fuels*—Requirements for less polluting, reformulated gasoline will take effect in 1995 for areas with severe ozone problems and in other areas that opt-in to the reformulated gas program. Also, states are required to carry out wintertime programs requiring oxygenated gasoline in 39 cities with carbon monoxide (CO) pollution. This fuel will reduce CO tail pipe emissions by 17 percent.
- *Cleaner new vehicles*—Beginning in 1998, some nonattainment areas must require that 30 percent of new vehicles purchased by fleets meet stricter "clean-fuel" vehicle standards. The fraction of new vehicles that must meet these standards increases to 70 percent by the year 2000. Stricter standards for urban buses are also being phased in beginning in 1994.

- *Better maintained vehicles on the road*—Many cities with serious ozone or carbon-monoxide pollution problems will now be required to have high-tech vehicle emissions inspection and maintenance programs. These "high-tech" or enhanced inspection and maintenance programs are expected to be three times more effective than current inspection programs in reducing emissions from improperly maintained cars and trucks.
- *The transportation provisions* in the Clean Air Act Amendments require local transportation and air quality officials to improve coordination of transportation and air quality plans through a "conformity" process. Transportation plans will have to become much more specific so that their impacts on air quality can be assessed. Local officials should be considering ways to reduce air pollution through changes to transportation systems that enhance public transportation, reduce congestion and expand car-and van-pooling. Localities in severe ozone areas are required to take measures to reduce the numbers of vehicles used by employees of large firms to commute to work.

Actions Your Community Should Be Taking

Air pollution is everybody's business. In addition to complying with the requirements above, your small community or small local government can make a difference in reducing air pollution. For example, you can:

- Learn about the air quality in your area—talk to your local air authority and your state air program office;
- Work with representatives of industry, environmental groups, citizens, and health associations to identify air quality issues and recommend potential solutions; and
- Report problems—if you see an air pollution problem, advise your local or state air program authority.

When environmental scientists talk about air pollution, they talk in terms of millions of tons of emissions of pollution. It is not easy to relate these figures to the smoke coming out of chimneys or the exhaust coming out of cars. However, even small sources of pollution, when added to hundreds or thousands of other small sources, do harm the environment and can be dangerous to public health. If we all do our share to reduce air pollution, the benefits will be tremendous. For example, if consumers set their air conditioners six degrees higher, it will save 190,000 barrels of oil a day and eliminate all those pollutants that come from burning the oil to produce the electricity involved.

Additional Information

The Clean Air Act Amendments regulations are published in Title 40 Code of Federal Regulations Parts 1 to 99.

EPA has established an acid rain hotline number: 617-674-7377 to answer questions and provide program materials. This is not a toll-free number.

"The Clean Air Act Amendments of 1990: A Guide for Small Businesses," U.S. EPA Office of Air and Radiation, September 1992. Available by calling EPA at: 202-260-7400.

"The Plain English Guide to the Clean Air Act," U.S. EPA Office of Air and Radiation, April 1993. Available by calling EPA at: 202-260-7751.

"The Clean Air Act Amendments of 1990: An Introductory Guide To Smart Implementation," The Clean Air Act Advisory Committee, April 1992. Available by calling EPA at: 202-260-7400.

"The Clean Air Act Amendments of 1990: A Primer on Consensus Building," The Clean Air Act Advisory Committee, September 1992. Available by calling EPA at 202-260-7400.

"The Clean Air Act Amendments of 1990: A Guide to Public Financing Options," The Clean Air Act Advisory Committee, November 1992. Available by calling EPA at: 202-260-7400.

For various transportation information materials, contact the National Association of Regional Councils' Clean Air Project in Washington, DC, 202-457-0710.

(See Resource Section for air contacts)

VOLUNTARY PROGRAMS

Pollution Prevention

Background

Since the best approach to protecting human health and the environment is to keep problems from occurring in the first place, EPA has a "Pollution Prevention" strategy—a preferred way to think about protecting the Nation's natural resources, our health, and the quality of life of future generations.

The primary goal of pollution prevention is to

- Stop or reduce the generation of wastes and pollutants at their source. If that is not possible, then,
- Recycling is the next best alternative.

If neither of these is possible, then pollution must be treated in an environmentally safe manner. Pollutants should be released into the environment only as a last resort, and local officials should do everything possible to make sure that the release is environmentally safe.

Instead of using traditional treatment and control methods, pollution prevention aims to anticipate and avoid the generation of pollutants in the first place.

Actions Your Community Should Be Taking

Rulings by courts, pronouncements by EPA, or wishing alone cannot clean up the environment or keep it from becoming more polluted. What we need is an attitude change. Community leaders can help by encouraging environmental awareness and finding ways to create a new ethic—pollution *prevention* first. Small communities are in a unique position to make things happen and to win this battle. They can encourage and stimulate people to prevent pollution in their daily lives in areas like agriculture, transportation, energy generation, hospitals and schools.

Here are ways community leaders can fight pollution and preserve environmental quality, human health and natural resources:

- Set pollution prevention as a major goal and integrate the concept into all your activities. Publicly recognize that pollution prevention is a priority. Talk about it and write about it! Then practice what you preach—set an example.
- Educate the public, businesses and industry about pollution prevention. Help people understand how better uses of natural resources and more efficient ways of working can increase profits and result in a cleaner environment.
- Develop programs that provide environmental alternatives.
- Recycle paper, glass, plastic, aluminum, scrap metal, motor oil and yard waste.
- Use less energy. Set back thermostats, insulate, buy energy-efficient lighting and appliances and make creative use of daylight.
- Use less water. Be conservative. Use ultra-low flush toilets, install water meters, repair leaks, review maintenance schedules, use water conserving landscaping.

- Transportation. Buy energy-efficient automobiles and other vehicles and keep them tuned. Bike or walk when possible.
- Sustainable agriculture. Take advantage of natural methods of protection. Apply pesticides such as insecticides and herbicides carefully if they must be used.
- Reduce smoke, radon, asbestos and other indoor-air pollutants.
- Hazardous waste. Reduce toxic chemical use by encouraging the use and purchase of non-toxic substitutes for toxic ingredients or products. Recycle used motor oil.
- Buy recycled or recyclable products. Seek out reusable, recyclable or returnable packages.
- Lead. Be careful around surfaces covered with lead-based paint, and be cautious when children are nearby during renovation or rehabilitation of old buildings. Test drinking water to make sure it does not contain harmful contaminants such as lead or pesticides.
- Plant trees, shrubs and indoor plants. They replenish the earth's oxygen supply and clean the air by removing pollution.

Additional Information

You can receive additional information about pollution prevention by calling the Pollution Prevention Information Clearinghouse at 202-260-1023 between the hours of 10:00 a.m. to 4:00 p.m. eastern standard time, Monday - Friday. Questions and requests for information can also be mailed to:

Pollution Prevention Clearinghouse
401 M Street, SW PM- 211A
Washington, DC 20460

Other hotlines of interest:

Toxic Substances Control Act Hotline: 202-554-1404
Green Lights Hotline: 202-775-6650

Wellhead Protection

Background

The 1986 Amendments to the Safe Drinking Water Act call upon each state to develop a Wellhead Protection (WHP) Program. This legislation established a nation-wide program to encourage states to develop systematic and comprehensive programs within their jurisdictions to protect public water supply (PWS) wells and wellfields from contamination.

At a minimum, each state's Wellhead Protection Program must:

- Specify roles and duties of state agencies, local government entities and public water suppliers, with respect to Wellhead Protection Programs.
- Delineate the wellhead protection area (WHPA) for each wellhead.
- Identify potential sources of contaminants within each wellhead protection area.
- Develop management approaches to protect the water supply within wellhead protection areas from such contaminants.
- Develop contingency plans for each public water supply system to respond to well or wellfield contamination or emergencies that could lead to contamination.
- Site new wells properly to maximize yield and minimize potential contamination.
- Ensure public participation.

Actions Your Community Should Be Taking

The Wellhead Protection Program works best with the participation of all levels of government. The responsibilities of local governments depend upon: 1) whether their state has a program; and, 2) what the program's guidelines are. Check with your state agency for more information, especially because localities are often in the best position to make sure that wellhead areas are properly protected from contamination. If your state does not have a wellhead protection program, your EPA Regional Office can assist you with starting a local program.

Local governments usually implement zoning decisions, develop land-use plans, oversee building and fire codes, implement health requirements, supply water and sewer services and enforce police powers. Each of these local powers may be used to protect the quality of local aquifers.

Local cities and counties also are often the innovators in developing wellhead protection programs by applying combinations of management techniques (e.g., zoning and source prohibitions) to meet unique local conditions. Localities often protect groundwater as part of larger projects, such as developing growth management plans or economic development efforts. In close cooperation with regional, state and federal agencies, local governments can take positive steps to protect their wellhead areas.

The wellhead protection program can help prevent costly contamination of drinking water supplies. EPA has several publications on the benefit of wellhead protection and easy-to-follow steps to start a program. (Call the EPA Safe Drinking Water Hotline)

Additional Information

EPA Safe Drinking Water Hotline: 1-800-426-4791.

(See Resource Section for water contacts)

Indoor Air

Background

Most people are aware that outdoor air pollution can damage their health but they may not know that indoor air pollution can also have significant harmful effects. Two of the indoor pollutants posing the greatest health risks are radon and second-hand tobacco smoke. Radon, a naturally occurring radioactive gas, is second only to smoking as a cause of lung cancer in this country. Nearly one out of every 15 homes in the United States is estimated to have radon levels that exceed the action level.

Other indoor pollutants of concern include asbestos from building materials; volatile organic compounds from household products like paints, pressed wood furniture, cleaners and solvents; combustion gases from kerosene heaters and unvented or improperly functioning gas and woodstoves; biological contaminants from wet building materials or unhygienic indoor conditions; and, lead from old lead-based paint.

Exposure to indoor air pollutants is believed to have increased over the past several decades. The reasons include construction of more tightly sealed buildings, reductions in ventilation rates to save energy, use of synthetic building materials and furnishings, and use of chemically formulated personal care products, pesticides and household cleaners.

At the federal level, many EPA offices are active in indoor air issues. The Office of Air and Radiation helps coordinate these efforts, as well as operating the Radon Action Program. At the state level, the Radon Action Program and other indoor air pollution problems are managed by both environmental departments and health departments depending on their authority.

How The Indoor Air Program Applies To Your Community

Local communities, in concert with state governments, play a vital role in reducing the public health risk of indoor pollution. It is very likely that there are homes, daycare centers, schools or commercial buildings in your community that have elevated indoor air pollutant levels.

The indoor air program is primarily non-regulatory. In 1988, Congress enacted the Indoor Radon Abatement Act, giving EPA authority for radon training, state grants and other important efforts. Since 1990, EPA has provided over \$30 million funding in grants to states to assist in the development of state radon programs. In addition, EPA has established an action level for indoor radon levels of 4 pCi/L (picocuries per liter).

Actions Your Community Should Be Taking

Many indoor air problems can be easily prevented or fixed once the problem is recognized. Easy access to information about indoor air pollution sources and solutions will help lower people's exposure to indoor pollutants that may jeopardize their health.

Local governments can act to protect their residents from indoor pollution in several ways: first, through developing education and outreach programs; second, through adopting

building codes for new construction, such as the model radon building codes currently proposed by the EPA; third, by encouraging voluntary testing for radon in local communities; fourth, by ensuring that local radon contractors are approved by EPA's Radon Contractor Proficiency Program; and finally, by working in conjunction with the state radon office, state air program office, county health agencies and community organizations, such as the American Lung Association, to elevate local attention to this important health risk.

For the most current information and assistance on indoor air pollution, local governments should contact their state radon program or EPA regional air program offices.

Additional Information

EPA has established a toll-free number for its Indoor Air Quality Information Clearinghouse, 800-438-4318; and a toll-free number for radon, 1-800-SOS-RADON. Many states also have toll-free numbers to answer questions regarding radon.

"The Inside Story: A Guide to Indoor Air Quality," U.S. EPA Office of Radiation and Indoor Air, September 1988. Available from the Indoor Air Quality Information Clearinghouse.

"Building Air Quality: A Guide for Building Owners and Facility Managers," U.S. EPA Office of Radiation and Indoor Air, December 1991. Available from the Government Printing Office, Document #: 055-000-00390-4, Cost: \$24.00.

"A Citizen's Guide to Radon (Second Edition): The Guide to Protecting Yourself and Your Family from Radon," U.S. EPA Office of Radiation and Indoor Air, May 1992. Available from the EPA Public Information Center, 202-260-7751.

"Consumer's Guide to Radon Reduction: How to Reduce Radon Levels in Your Home," U.S. EPA Office of Radiation and Indoor Air, September 1992. Available from the EPA Public Information Center, 202-260-7751.

"Home Buyer's and Seller's Guide to Radon," U.S. EPA Office of Radiation and Indoor Air, February 1993. Available from the EPA Public Information Center, 202-260-7751.

"Radon Measurements in Schools," U.S. EPA Office of Radiation and Indoor Air, March 1989. Available from the EPA Public Information Center, 202-260-7751.

"Radon-Resistant Residential New Construction," U.S. EPA Office of Radiation and Indoor Air, July 1988. Available from the EPA Public Information Center, 202-260-7751.

(See Resource Section for contacts under air and radon)

Green Lights

Background

"Green Lights" is a voluntary program aimed at preventing air pollution and saving energy by reducing emissions from power plants. About one quarter of the electricity sold in the United States is used for lighting.

EPA encourages organizations and individuals to voluntarily switch to energy-efficient lighting. By May of 1993, over 900 companies, state governments and other organizations had enrolled in the Green Lights Program and were cutting electricity use and saving money on their electricity bills.

EPA estimates energy-efficient lighting use in the U.S. could result in a reduction of: annual carbon dioxide emissions of 202 million metric tons, or four percent of the total; 1.3 million metric tons of sulfur dioxide emissions, or seven percent of the total; and, 600,000 metric tons of nitrogen oxide emissions or four percent of the total.

Actions Your Community Should Be Taking

EPA encourages your community to join the Green Lights program by calling the hotline number listed below for information. Green Lights offers consumers of electricity, large and small, the opportunity to save money while helping to prevent air pollution. Small communities and small local governments need to explore the benefits of Green Lights while saving taxpayers' dollars in the process.

Additional Information

EPA has established a hotline number for the Green Lights Program, 202-775-6650. This is not a toll-free number.

"Green Lights (The Second Year): A Bright Investment in the Environment," U.S. EPA Office of Atmospheric Programs, March 1993. Available from hotline.

"Green Lights: An Enlightened Approach to Energy-Efficiency and Pollution Prevention," U.S. EPA Office of Atmospheric Programs, June, 1993. Available from hotline.

"The Climate is Right for Action," U.S. EPA Office of Atmospheric Programs, October 1992. Available from hot-

Environmental Finance Program

Background

Environmental goals cannot be met without financing, which is essential to implementing state and local programs. EPA's Environmental Finance Program focuses on bridging the gap between the growing costs of environmental protection and the ability of state and local governments to meet these rising costs. Drawing upon the financing expertise of its staff and the Environmental Financial Advisory Board (EFAB), the Environmental Finance Program (EFP) seeks to lower costs, increase investment and build capacity by creating partnerships with the private sector and state and local governments to help fund vital environmental infrastructure.

How The Environmental Finance Program Applies To Your Community

The Environmental Finance Program builds and enhances local capacity through the following activities.

- **Environmental Finance Centers (EFCs).** These are university programs on environmental finance that provide state and local officials with training, advisory services, publications, and analyses on financing trends and techniques. The goal is to establish these centers at major universities throughout the country, ideally with at least one in every EPA Region. Currently, two pilot Environmental Finance Centers are underway at the Universities of New Mexico and Maryland, both of which have proven to be effective vehicles for promoting innovative environmental financing techniques.
- **Demonstration projects.** Through support of states and localities, the Environmental Finance Program has tested over 45 "real world" environmental finance models by fostering public-private partnership demonstration projects. Lessons learned from these projects have been published in documents in order to replicate project successes in other communities. For more information about demonstration projects call the Environmental Finance Program at 202-260-1020.
- **Environmental Financing Information Network (EFIN).** This is an electronic multi-media environmental finance database, which provides states and local officials with information and case studies on funding methods. EFIN may be accessed through LEGISNET, the database of the National Conference of State Legislatures; LEX, Public Technology's Local Exchange database; and, EPA's Online Library System (OLS), which will also be used to link the Environmental Finance Centers through the Internet connection or by modem so they can share information on financing techniques. For information about accessing EFIN call 202-260-0420.

Additional Information

For further information on the Environmental Finance Program please call: 202-260-1020.

Environmental Finance Centers:

University of New Mexico: 505-272-7357

University of Maryland: 301-405-6383

RESOURCE SECTION

The **state information** in the Resource Section was provided by The Council of State Governments publication titled: *Resource Guide to State Environmental Management*, 3rd Edition, (August 1993). For more information contact Steve Brown at (606) 231-1866.

ALABAMA (State Contacts)

Name of State Agency

Department of Environmental Management
State Capitol
Montgomery, AL 36130
Air: 205-271-7861

Department of Environmental Management
1751 Congressman W.L. Dickinson Drive
Montgomery, AL 36130

Hazardous Waste: 205-271-7736

Emergency Response: 205-271-7931

Solid Waste: 205-271-7988

Municipal Landfill Permit Review: 205-271-7726

Water Agency: 205-271-7823

Drinking Water: 205-271-7773

Wastewater Discharge Permitting: 205-271-7852

Stormwater Management: 205-271-7852

Underground Storage Tanks: 205-271-7830

Wetlands: 205-271-7782

Waste Minimization/Reduction/Prevention: 205-271-7740

Department of Public Health
434 Monroe Street
Montgomery, AL 36130

Asbestos: 205-261-5007

Radon: 205-242-5315

Agriculture & Industries Department
P.O. Box 3336
Montgomery, AL 36193

Pesticides Control: 205-242-2656

Radon Toll Free Number: 1-800-582-1866

ALABAMA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 4
345 Courtland Street, N.E.
Atlanta, GA 30365

General Information: 404-347-4727

Water Management Division
404-347-4450

- Surface Water
- Ground Water
- Wetlands
- Wastewater
- Drinking Water

Air, Pesticides and Toxics Management Division
404-347-3043

- Air
- Asbestos
- Pesticides
- Radon

Waste Management Division
404-347-3454

- Emergency Response
- Municipal Solid Waste
- Superfund

ALASKA (State Contacts)

Name of State Agency

Department of Environmental Conservation
410 Willoughby Avenue
Juneau, AK 99801

Air: 907-465-5100

Hazardous Waste: 907-465-5150

Emergency Response: 907-465-5220

Water Agency: 907-465-5300

Drinking Water: 907-465-5301

Wastewater Discharge Permitting: 907-465-5300

Stormwater Management: 907-465-5300

Underground Storage Tanks: 907-465-5250, 907-465-5321

Department of Environmental Conservation
P.O. Box O
Juneau, AK 99811

Asbestos: 907-465-2671

Solid Waste: 907-465-2671

Municipal Landfill Permit Review: 907-465-2671

Pesticides Control: 907-465-5280

Department of Environmental Conservation
Pollution Prevention Office
3601 C Street, Suite 1334
Anchorage, AK 99503

Pollution Prevention: 907-563-6529

Department of Health and Social Services
P.O. Box H
Juneau, AK 99811

Radon: 907-465-3019

Radon Toll Free Number: 1-800-478-4845

ALASKA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, WA 98101

General Information: 206-553-4973

Water Division

206-553-1793

- Drinking Water
- Ground Water
- Surface Water
- Wastewater

Air and Toxics Division

206-553-4152

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Division

206-553-1261

- Municipal Solid Waste
- Hazardous Waste
- Superfund

ARIZONA (State Contacts)

Name of State Agency

Department of Environmental Quality
1033 North Central Avenue
Phoenix, AZ 85012

Air: 602-207-2301

Hazardous Waste: 602-207-4153

Solid Waste: 602-207-4123

Municipal Landfill Permit Review: 602-207-4123

Drinking Water: 602-207-4643

Water Agency: 602-207-2305

Industrial Pretreatment Program: 602-207-4687

Wastewater Discharge Permitting: 602-207-4687

Stormwater Management: 602-207-4687

Underground Storage Tanks: 602-207-4345

Wetlands: 602-207-3300

Waste Minimization/Reduction/Prevention: 602-207-4207

Emergency Response: 602-207-4150

Arizona Radiation Regulation Agency

1814 South 40th Street

Phoenix, AZ 85040

Radon: 602-255-4845

Agricultural and Horticultural Commission

688 West Adams, Room 421

Phoenix, AZ 85004

Pesticides Control: 602-542-4373

ARIZONA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection
Region 9
75 Hawthorne Street
San Francisco, CA 94105

General Information: 415-744-1305

Water Management Division

415-744-2125

- Drinking Water
- Ground Water
- Wastewater
- Wetlands

Air and Toxics Division

415-744-1219

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division

415-744-1730

- Municipal Solid Waste
- Hazardous Waste
- Superfund
- Emergency Response

ARKANSAS (State Contacts)

Name of State Agency

Department of Pollution Control and Ecology
P.O. Box 9583
Little Rock, AR 72219

Air: 501-562-7444

Asbestos: 501-562-7444

Hazardous Waste: 501-562-7444

Emergency Response: 501-370-2108

Solid Waste: 501-562-7444

Municipal Landfill Permit Review: 501-562-7444

Water Agency: 501-562-7444

Industrial Pretreatment Program: 501-562-7444

Wastewater Discharge Permitting: 501-562-7444

Stormwater Management: 501-562-7444

Underground Storage Tanks: 501-562-7444

Wetlands: 501-562-7444

Waste Minimization/Reduction/Prevention: 501-570-2128

Department of Health

Division of Radiation Control & Emergency Management

4815 West Markham Street

Little Rock, AR 72205

Radon: 501-661-2574

Drinking Water: 501-661-2623

Arkansas State Plant Board

1 Natural Resources Drive

P.O. Box 1069

Little Rock, AR 72203

Pesticides Control: 501-225-1598

ARKANSAS (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 6
First Interstate Bank Tower at Fountain Place
1445 Ross Avenue, 12th Floor, Suite 1200
Dallas, TX 75202-2733

General Information: 214-655-6444

Water Management Division

214-655-7100

- Drinking Water
- Ground Water
- Wastewater

Air, Pesticides and Toxics Division

214-655-7200

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division

214-655-6700

- Municipal Solid Waste
- Superfund
- Hazardous Waste

Office of Underground Storage Tanks

214-655-6755

- Underground Storage Tanks

CALIFORNIA (State Contacts)

Name of State Agency

Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

Air: 916-445-4383

California Environmental Protection Agency
Integrated Waste Management Board
8800 Cal Center Drive
Sacramento, CA 95826

Solid Waste: 916-255-2200

Municipal Landfill Permit Review: 916-255-2200

Waste Minimization/Reduction/Prevention: 916-322-3330

Department of Health Services
400 P Street
Sacramento, CA 95814

Asbestos: 916-324-1807

Hazardous Waste: 916-322-2308

Emergency Response: 916-324-1782

Department of Health Services
601 N. 7th Street
P.O. Box 942732
Sacramento, CA 95234-7320

Drinking Water: 916-323-6111

Radon: 916-324-2208

Resources Agency
Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236

Water Agency: 916-653-7007

Resources Agency
Coastal Commission
45 Fremont Street, Suite #2000
San Francisco, CA 94105

Wetlands: 415-904-5200

CA State Water Resources Control Board
P.O. Box 944212
Sacramento, CA 95814

Water Agency: 916-657-0941

Industrial Pretreatment Program: 916-657-0775

Wastewater Discharge Permitting: 916-657-0908

Stormwater Management: 916-657-0908

Underground Storage Tanks: 916-227-4303

Department of Pesticide Regulation
1220 N Street, A-414, P.O. Box 942871
Sacramento, CA 95814

Pesticides Control: 916-654-0551

Radon Toll Free Number: 1-800-745-7236

CALIFORNIA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection
Region 9
75 Hawthorne Street
San Francisco, CA 94105

General Information: 415-744-1305

Water Management Division
415-744-2125

- Drinking Water
- Ground Water
- Wastewater
- Wetlands

Air and Toxics Division
415-744-1219

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division
415-744-1730

- Municipal Solid Waste
- Hazardous Waste
- Superfund
- Emergency Response

COLORADO (State Contacts)

Name of State Agency

Office of Environment
4300 Cherry Creek Drive South
Denver, CO 80222-1530

Air: 303-692-3115

Asbestos: 303-692-3164

Radon: 303-692-3030

Hazardous Waste: 303-692-3300

Emergency Response: 303-756-4455

Solid Waste: 303-692-3300

Municipal Landfill Permit Review: 303-692-3445

Drinking Water: 303-692-3500

Industrial Pretreatment Program: 303-692-3608

Wastewater Discharge Permitting: 303-692-3610

Stormwater Management: 303-692-3608

Underground Storage Tanks: 303-692-3453

Pollution Prevention: 303-692-3006

Department of Natural Resources
1313 Sherman Street, Room 818
Denver, CO 80203

Water Agency: 303-866-3311

Wildlife Division
Central Region
6060 Broadway
Denver, CO 80216

Wetlands: 303-291-7231

Water Resources: 303-866-3581

Plant Industry Division
Pesticides Inspection
1525 Sherman Drive, 4th Floor
Denver, CO 80203

Pesticides Control: 303-239-4139

Radon Toll Free Number: 1-800-846-3986

COLORADO (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 8
999 18th Street, Suite 500
Denver, CO 80202-2466

General Information: 303-293-1603

Water Management Division
303-293-1542

- Drinking Water
- Ground Water
- Wastewater

Air and Toxics Division
303-293-0946

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division
303-293-1720

- Municipal Solid Waste
- Hazardous Waste
- Emergency Response (303-330-1788)
- Superfund

CONNECTICUT (State Contacts)

Name of State Agency

Department of Environmental Protection
165 Capitol Avenue, Room 144
Hartford, CT 06106

Air: 203-566-7854

Hazardous Waste: 203-566-6682

Emergency Response: 203-566-4633

Solid Waste: 203-566-5847

Municipal Landfill Permit Review: 203-566-5847

Industrial Pretreatment Program: 203-566-5903

Wastewater Discharge Permitting: 203-566-5903

Stormwater Management: 203-566-5903

Underground Storage Tanks: 203-566-5148

Wetlands: 203-566-7220

Pesticides Control: 203-566-5148

Waste Minimization/Reduction/Prevention: 203-566-2860

Department of Environmental Protection
122 Washington Street
Hartford, CT 06106

Water Agency: 203-566-2110

Department of Health Services
150 Washington Street
Hartford, CT 06106

Asbestos: 203-566-1260

Radon: 203-566-5626

Drinking Water: 203-566-1251

CONNECTICUT (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 1
John F. Kennedy Federal Building
One Congress Street
Boston, MA 02203

General Information: 617-565-3420

Water Management Division

617-565-3478

- Drinking Water
- Wetlands
- Ground Water
- Wastewater

Air Management Division

617-565-3800

- Air
- Asbestos
- Radon
- Pesticides

Waste Management Division

617-573-5700

- Municipal Solid Waste
- Hazardous Waste

Pollution Prevention Program Coordinators

617-565-3387

- Pollution Prevention

DELAWARE (State Contacts)

Name of State Agency

Department of Natural Resources & Environmental Control
89 Kings Highway
P.O. Box 1401
Dover, DE 19903

Air: 302-739-4791

Hazardous Waste: 302-739-3689

Emergency Response: 302-739-3694

Solid Waste: 302-739-3820

Municipal Landfill Permit Review: 302-323-3820

Water Agency: 302-739-4860

Industrial Pretreatment Program: 302-739-4411

Wastewater Discharge Permitting: 302-739-5731

Stormwater Management: 302-739-4411

Underground Storage Tanks: 302-739-4588

Wetlands: 302-739-4691

Waste Minimization/Reduction/Prevention: 302-739-4764

Air Resources Section

715 Grantham

New Castle, DE 19720

Asbestos: 302-323-4542

Division of Public Health

Cooper Building, P.O. Box 637

Dover, DE 19903

Radon: 302-739-3839

Drinking Water: 302-739-5410

Department of Agriculture

Pesticide Compliance Section

2320 South DuPont Highway

Dover, DE 19901

Pesticides Control: 302-739-4811

Radon Toll Free Number: 1-800-554-4636

DELAWARE (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 3
841 Chestnut Building
Philadelphia, PA 19107

General Information: 215-597-9800

Water Management Division

215-597-9410

- Drinking Water
- Ground Water
- Wastewater, Stormwater
- Sludge

Air, Radiation and Toxics Division

215-597-9390

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division

215-597-8181

- Municipal Solid Waste
- Superfund
- Emergency Response
- Underground Storage Tanks

Environmental Services Division

Annapolis Laboratory

410-573-2682

- Hazardous Waste

Environmental Services Division

Wetlands Section

215-597-9301

- Wetlands

Environmental Services Division

Environmental Planning & Assessment Section

215-597-6289

- Pollution Prevention

FLORIDA (State Contacts)

Name of State Agency

Department of Environmental Protection
2600 Blairstone Road
Tallahassee, FL 32399-2400

Air: 904-488-0114

Asbestos: 904-488-1344

Hazardous Waste: 904-488-0300

Emergency Response: 904-488-0190

Solid Waste: 904-922-6104

Municipal Landfill Permit Review: 904-922-6104

Water Agency: 904-488-0130

Drinking Water: 904-487-1762

Industrial Pretreatment Program: 904-488-4522

Wastewater Discharge Permitting: 904-488-4520

Stormwater Management: 904-488-0782

Underground Storage Tanks: 904-488-3935

Wetlands: 904-487-0130

Waste Minimization/Reduction/Prevention: 904-922-6104

Department of Health & Rehabilitative Services
1317 Winewood Boulevard
Tallahassee, FL 32399

Radon: 904-487-1004

Department of Agriculture and Consumer Services
3125 Conner Boulevard
Tallahassee, FL 32399

Pesticides Control: 904-488-3314

Radon Toll Free Number: 1-800-543-8279

FLORIDA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 4
345 Courtland Street, N.E.
Atlanta, GA 30365

General Information: 404-347-4727

Water Management Division

404-347-4450

- Surface Water
- Ground Water
- Wetlands
- Wastewater
- Drinking Water

Air, Pesticides and Toxics Management Division

404-347-3043

- Air
- Asbestos
- Pesticides
- Radon

Waste Management Division

404-347-3454

- Emergency Response
- Municipal Solid Waste
- Superfund

GEORGIA (State Contacts)

Name of State Agency

Department of Natural Resources
205 Butler Street, S.E.
Atlanta, GA 30334

Air: 404-656-6900

Hazardous Waste: 404-656-7802

Emergency Response: 404-656-6905

Department of Natural Resources
205 Butler Street, S.W., East Tower
Atlanta, GA 30334

Water Agency: 404-656-4708

Drinking Water: 404-656-4708

Wetlands: 404-656-4708

Department of Natural Resources
Asbestos Unit
Air Protection Branch
156 Trinity Avenue, Suite 315
Atlanta, GA 30303

Asbestos: 404-656-4999

Department of Human Resources
878 Peachtree Street, N.E., Room 100
Atlanta, GA 30309

Radon: 404-362-2675

Department of Natural Resources
4244 International Parkway
Atlanta, GA 30354

Solid Waste: 404-362-2692

Municipal Landfill Permit Review: 404-362-2692

Underground Storage Tanks: 404-362-2687

Waste Minimization/Reduction/Prevention: 404-362-2539

Industrial Pretreatment Program: 404-362-2680

Wastewater Discharge Permitting: 404-362-2680

Department of Agriculture
Pesticides Division
19 Martin Luther King, Jr. Drive
Atlanta, GA 30334

Pesticides Control: 404-656-4960

Radon Toll Free Number: 1-800-745-0037

GEORGIA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 4
345 Courtland Street, N.E.
Atlanta, GA 30365

General Information: 404-347-4727

Water Management Division
404-347-4450

- Surface Water
- Ground Water
- Wetlands
- Wastewater
- Drinking Water

Air, Pesticides and Toxics Management Division
404-347-3043

- Air
- Asbestos
- Pesticides
- Radon

Waste Management Division
404-347-3454

- Emergency Response
- Municipal Solid Waste
- Superfund

HAWAII (State Contacts)

Name of State Agency

Environmental Health Administration
P.O. Box 3378, 1250 Punchbowl Street
Honolulu, HI 96801

Air: 808-586-4200

Asbestos: 808-586-4200

Radon: 808-586-4700

Hazardous Waste: 808-586-4225

Emergency Response: 808-586-4249

Solid Waste: 808-586-4225

Municipal Landfill Permit Review: 808-586-4225

Drinking Water: 808-586-4258

Department of Land and Natural Resources

P.O. Box 373

Honolulu, HI 96809

Water Agency: 808-587-0214

Plant Industry Division

Pesticides Branch

P.O. Box 22159

Honolulu, HI 96813

Pesticides Control: 808-548-7124

HAWAII (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection
Region 9
75 Hawthorne Street
San Francisco, CA 94105

General Information: 415-744-1305

Water Management Division
415-744-2125

- Drinking Water
- Ground Water
- Wastewater
- Wetlands

Air and Toxics Division
415-744-1219

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division
415-744-1730

- Municipal Solid Waste
- Hazardous Waste
- Superfund
- Emergency Response

IDAHO (State Contacts)

Name of State Agency

Department of Health and Welfare
State House
Boise, ID 83720
Air: 208-334-5898

Department of Health and Welfare
450 West State Street
Boise, ID 83720
Radon: 208-334-6584
Hazardous Waste: 208-334-5879
Emergency Response: 208-334-3263
Solid Waste: 208-334-5860
Municipal Landfill Permit Review: 208-334-5882
Water Agency: 208-334-5860
Drinking Water: 208-334-5879
Wastewater Discharge Permitting: 208-334-5898
Underground Storage Tanks: 208-334-5845
Wetlands: 208-334-5840
Waste Minimization/Reduction/Prevention: 208-334-6664

Water Resources Department
1301 North Orchard
Boise, ID 83720
Water Agency: 208-327-7900
Stormwater Management: 208-327-7900

Agriculture Department
P.O. Box 790
Boise, ID 83720
Pesticides Control: 208-334-3240

Radon Toll Free Number: 1-800-445-8647

IDAHO (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, WA 98101

General Information: 206-553-4973

Water Division
206-553-1793
• Drinking Water
• Ground Water
• Surface Water
• Wastewater

Air and Toxics Division
206-553-4152
• Air
• Asbestos
• Radon
• Pesticides

Hazardous Waste Division
206-553-1261
• Municipal Solid Waste
• Hazardous Waste
• Superfund

ILLINOIS (State Contacts)

Name of State Agency

Illinois Environmental Protection Agency

2200 Churchill Road
Springfield, IL 62706

Air: 217-782-7326

Asbestos: 217-782-2011

Drinking Water: 217-785-8653

Emergency Response: 217-785-0380

Municipal Landfill Permit Review: 217-782-6762

Water: 217-782-1654

Industrial Pretreatment Program: 217-782-1696

Wastewater Discharge Permitting: 217-782-0610

Stormwater Management: 217-782-1654

Underground Storage Tanks: 217-782-6761

Waste Minimization/Reduction/Prevention: 217-782-6761

Hazardous Waste Management (RCRA): 217-782-6760

Department of Nuclear Safety

1035 Outer Park Drive, 3rd Floor
Springfield, IL 62704

Radon: 217-785-9900

Department of Energy and Natural Resources

808 Woodfield Road
Naperville, IL 61874

Hazardous Waste: 217-333-8940

Department of Energy and Natural Resources

25 West Adams Street, Room 300
Springfield, IL 62704

Solid Waste: 217-785-2800

Department of Conservation

24 South Second Street
Springfield, IL 62706

Wetlands: 217-782-3715

Department of Agriculture

P.O. Box 19281
Springfield, IL 62794

Pesticides Control: 217-785-8218

Radon Toll Free Number: 1-800-325-1245

ILLINOIS (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency

Region 5

77 West Jackson Boulevard
Chicago, IL 60604-3507

General Information:

312-353-2000

Water Division

312-353-2147

- Drinking Water
- Ground Water
- Wastewater

Air and Radiation Division

312-353-2212

- Air
- Radon

Waste Management Division

312-886-7579

- Superfund
- Emergency Response

Office of RCRA

312-886-7435

- Municipal Solid Waste
- Underground Storage Tanks
- Hazardous Waste

Environmental Sciences Division

312-353-3808

- Pesticides
- Asbestos

INDIANA (State Contacts)

Name of State Agency

Department of Environmental Management
P.O. Box 6015, 105 South Meridian Street
Indianapolis, IN 46206

Air: 317-232-5586

Asbestos: 317-232-8422

Hazardous Waste: 317-232-4518

Emergency Response: 317-243-5057

Solid Waste: 317-232-4473

Municipal Landfill Permit Review: 317-232-8866

Water Agency: 317-232-8476

Drinking Water: 317-233-4222

Industrial Pretreatment Program: 317-232-8710

Wastewater Discharge Permitting: 317-232-8432

Stormwater Management: 317-232-8703

Wetlands: 317-243-5028

Underground Storage Tanks: 317-233-6412

Health Board

1330 West Michigan Street, Box 1964
Indianapolis, IN 45206

Radon: 317-633-0146

Department of Natural Resources

Water Division

2475 Directors Row
Indianapolis, IN 46241

Water Agency: 317-232-4160

Department of Agriculture

Purdue University

West Lafayette, IN 47907

Pesticides Control: 317-494-1492

Radon Toll Free Number: 1-800-272-9723

INDIANA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3507

General Information: 312-353-2000

Water Division

312-353-2147

- Drinking Water
- Ground Water
- Wastewater

Air and Radiation Division

312-353-2212

- Air
- Radon

Waste Management Division

312-886-7579

- Superfund
- Emergency Response

Office of RCRA

312-886-7435

- Municipal Solid Waste
- Underground Storage Tanks
- Hazardous Waste

Environmental Sciences Division

312-353-3808

- Pesticides
- Asbestos

IOWA (State Contacts)

Name of State Agency

Environmental Protection Division
Wallace State Office Building
900 East Grand
Des Moines, IA 50319

Air: 515-281-8852

Asbestos: 515-281-8443

Hazardous Waste: 515-281-8934

Emergency Response: 515-281-8883

Solid Waste: 515-281-4968

Municipal Landfill Permit Review: 515-281-6807

Water Agency: 515-281-8869

Drinking Water: 515-281-8877

Industrial Pretreatment Program: 515-281-8884

Wastewater Discharge Permitting: 515-281-8877

Stormwater Management: 515-281-7017

Underground Storage Tanks: 515-281-8135

Wetlands: 515-281-8045

Department of Public Health
Bureau of Environmental Health
Lucas State Office Building
Des Moines, IA 50319

Radon: 515-281-4928

Department of Natural Resources
Wallace State Office Building
Des Moines, IA 50319

Waste Minimization/Reduction/Prevention: 515-281-8975

Department of Agriculture and Land Stewardship
Wallace State Office Building
900 E. Grand
Des Moines, IA 50319

Pesticides Control: 515-281-5861

Radon Toll Free Number: 1-800-383-5992

IOWA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 7
726 Minnesota Avenue
Kansas City, KS 66101

General Information: 913-551-7000

Water Management Division

913-551-7030

- Drinking Water
- Ground Water
- Wastewater

Air and Toxics Division

913-551-7020

- Air
- Radon
- Pesticides
- Asbestos

Waste Management Division

913-551-7050

- Municipal Solid Waste
- Superfund

Environmental Services Division

913-551-5000

- Emergency Planning

KANSAS (State Contacts)

Name of State Agency

Department of Health and Environment
Division of Environment
740 Forbes Field
Topeka, KS 66620

Air: 913-296-1593

Asbestos: 913-296-1547

Radon: 913-296-1593

Hazardous Waste: 913-296-1608

Emergency Response: 913-296-1660

Solid Waste: 913-296-1594

Municipal Landfill Permit Review: 913-296-1594

Water Agency: 913-296-5500

Drinking Water: 913-296-5503

Industrial Pretreatment Program: 913-296-5547

Wastewater Discharge Permitting: 913-296-5547

Underground Storage Tanks: 913-296-1678

Wetlands: 913-296-5575

Waste Minimization/Reduction/Prevention: 913-296-1609

Board of Agriculture

Pesticide Registration, Plant Health Division

901 S. Kansas Avenue

Topeka, KS 66612

Pesticides Control: 913-296-2264

KANSAS (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 7
726 Minnesota Avenue
Kansas City, KS 66101

General Information: 913-551-7000

Water Management Division

913-551-7030

- Drinking Water
- Ground Water
- Wastewater

Air and Toxics Division

913-551-7020

- Air
- Radon
- Pesticides
- Asbestos

Waste Management Division

913-551-7050

- Municipal Solid Waste
- Superfund

Environmental Services Division

913-551-5000

- Emergency Planning

KENTUCKY (State Contacts)

Name of State Agency

Department for Environmental Protection
316 St. Clair Mall
Frankfort, KY 40601

Air: 502-564-3382

Asbestos: 502-564-3382

Division of Community Safety
Radon Unit, Radiation Control Branch
275 East Main Street
Frankfort, KY 40621

Radon: 502-564-3700

Department for Environmental Protection
Division of Waste Management
14 Reilly Road, Ft. Boone Plaza
Frankfort, KY 40601

Hazardous Waste: 502-564-6716

Emergency Response: 502-564-2150 or 564-2380 (24 hrs.)

Solid Waste: 502-564-6716

Municipal Landfill Permit Review: 502-564-6716

Water Agency: 502-564-3410

Drinking Water: 502-564-3410

Industrial Pretreatment Program: 502-564-3410

Wastewater Discharge Permitting: 502-564-3410

Stormwater Management: 502-564-3410

Underground Storage Tanks: 502-564-6716

Wetlands: 502-564-3410

Department of Agriculture
Division of Pesticides
500 Mero Street, Capital Plaza Tower
Frankfort, KY 40601

Pesticides Control: 502-564-7274

KENTUCKY (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 4
345 Courtland Street, N.E.
Atlanta, GA 30365

General Information: 404-347-4727

Water Management Division

404-347-4450

- Surface Water
- Ground Water
- Wetlands
- Wastewater
- Drinking Water

Air, Pesticides and Toxics Management Division

404-347-3043

- Air
- Asbestos
- Pesticides
- Radon

Waste Management Division

404-347-3454

- Emergency Response
- Municipal Solid Waste
- Superfund

LOUISIANA (State Contacts)

Name of State Agency

Department of Environmental Quality
P.O. Box 82135
Baton Rouge, LA 70884
Air: 504-765-0219
Asbestos: 504-765-0219
Radon: 504-765-0219

Department of Environmental Quality
P.O. Box 82178
Baton Rouge, LA 70884
Hazardous Waste: 504-765-0355
Emergency Response: 504-295-8900
Solid Waste: 504-765-0249
Municipal Landfill Permit Review: 504-765-0810
Waste Minimization/Reduction/Prevention: 504-765-0249

Department of Environmental Quality
P.O. Box 82215
Baton Rouge, LA 70884

Water Agency: 504-765-0634
Industrial Pretreatment Program: 504-765-0634
Wastewater Discharge Permitting: 504-765-0634
Stormwater Management: 504-765-0634
Wetlands: 504-765-0634

Department of Environmental Quality
P.O. Box 82178
Baton Rouge, LA 70884
Underground Storage Tanks: 504-765-0243

Department of Health and Hospitals
P.O. Box 60630
New Orleans, LA 70160
Drinking Water: 504-568-5101

Department of Agriculture and Forestry
Pesticide Commission
P.O. Box 44153
Baton Rouge, LA 70894
Pesticides Control: 504-925-3763
Radon Toll Free Number: 1-800-256-2494

LOUISIANA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 6
First Interstate Bank Tower at Fountain Place
1445 Ross Avenue, 12th Floor, Suite 1200
Dallas, TX 75202-2733

General Information: 214-655-6444

Water Management Division
214-655-7100
• Drinking Water
• Ground Water
• Wastewater

Air, Pesticides and Toxics Division
214-655-7200
• Air
• Asbestos
• Radon
• Pesticides

Hazardous Waste Management Division
214-655-6700
• Municipal Solid Waste
• Superfund
• Hazardous Waste

Office of Underground Storage Tanks
214-655-6755
• Underground Storage Tanks

MAINE (State Contacts)

Name of State Agency

Department of Environmental Protection
State House Station 17
Augusta, ME 04333
Air: 207-287-2437
Asbestos: 207-582-8740
Hazardous Waste: 207-287-2651
Emergency Response: 207-287-2651
Solid Waste: 207-582-8740
Municipal Landfill Permit Review: 207-582-8740
Water Agency: 207-287-3901
Industrial Pretreatment Program: 207-287-3901
Wastewater Discharge Permitting: 207-287-3901
Stormwater Management: 207-287-7764
Underground Storage Tanks: 207-287-2651
Wetlands: 207-287-2111
Waste Minimization/Reduction/Prevention: 207-287-2651

Department of Human Services
Division of Health Engineering
Indoor Air Program
State House Station 10
Augusta, ME 04333
Radon: 207-287-5692

Department of Human Services
Division of Health Engineering
State House Station 11
Augusta, ME 04333
Drinking Water: 207-287-5694

Agricultural and Rural Resources Bureau
Pesticides Control Board
State House Station 28
Augusta, ME 04333
Pesticides Control: 207-287-3871

Radon Toll Free Number: 1-800-232-0842

MAINE (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 1
John F. Kennedy Federal Building
One Congress Street
Boston, MA 02203

General Information: 617-565-3420

Water Management Division

617-565-3478
• Drinking Water
• Wetlands
• Ground Water
• Wastewater

Air Management Division

617-565-3800
• Air
• Asbestos
• Radon
• Pesticides

Waste Management Division

617-573-5700
• Municipal Solid Waste
• Hazardous Waste

Pollution Prevention Program Coordinators

617-565-3387
• Pollution Prevention

MARYLAND (State Contacts)

Name of State Agency

Department of the Environment
2500 Broening Highway
Baltimore, MD 21224

Air: 410-631-3255

Asbestos: 410-631-3200

Hazardous Waste: 410-631-3343

Solid Waste: 410-631-3318

Municipal Landfill Permit Review: 410-631-3364

Water Agency: 410-631-3567

Drinking Water: 410-631-3702

Industrial Pretreatment Program: 410-631-3621

Wastewater Discharge Permitting: 410-631-3671

Stormwater Management: 410-631-3543

Underground Storage Tanks: 410-631-3324

Waste Minimization/Reduction/Prevention: 410-631-3315

Department of the Environment
201 W. Preston Street, 7th Floor
Baltimore, MD 21201

Radon: 410-333-3130

Environmental Response and Restoration
Emergency Response Division
2103 Annapolis Road
Baltimore, MD 21030

Emergency Response: 410-333-2950

Water Resources Administration
Water and Wetlands Program
Tawes State Office Building
Annapolis, MD 21401

Wetlands: 410-974-3877

Department of Agriculture
Pesticides Regulation Section, Plant Industries & Resource
Conservation
50 Harry S. Truman Parkway
Annapolis, MD 21401

Pesticides Control: 410-841-5710

Radon Toll Free Number: 1-800-872-3666

MARYLAND (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 3
841 Chestnut Building
Philadelphia, PA 19107

General Information: 215-597-9800

Water Management Division
215-597-9410

- Drinking Water
- Ground Water
- Wastewater, Stormwater
- Sludge

Air, Radiation and Toxics Division
215-597-9390

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division
215-597-8181

- Municipal Solid Waste
- Superfund
- Emergency Response
- Underground Storage Tanks

Environmental Services Division
Annapolis Laboratory
410-573-2682

- Hazardous Waste

Environmental Services Division
Wetlands Section
215-597-9301

- Wetlands

Environmental Services Division
Environmental Planning & Assessment Section
215-597-6289

- Pollution Prevention

MASSACHUSETTS (State Contacts)

Name of State Agency

Department of Environmental Protection
1 Winter Street
Boston, MA 02108

Air: 617-292-5593

Asbestos: 617-292-5631

Hazardous Waste: 617-292-5853

Emergency Response: 617-292-5851

Solid Waste: 617-292-5939

Municipal Landfill Permit Review: 617-292-5979

Water Agency: 617-292-5529 or 617-292-5647

Drinking Water: 617-292-5529

Industrial Pretreatment Program: 617-292-5665

Underground Storage Tanks: 617-292-5886

Wetlands: 617-292-5518

Department of Environmental Protection
Division of Water Pollution Control
P.O. Box 4062

Grafton, MA 02211

Wastewater Discharge Permitting: 508-792-7470

Stormwater Management: 508-792-7470

Water Agency:

Department of Public Health
305 South Street
Jamaica Plain, MA 02130

Radon: 617-727-6214

Department of Food and Agriculture
Pesticides Bureau, Regulatory Services
100 Cambridge Street, 21st Floor
Boston, MA 02202

Pesticides Control: 617-727-7712

Radon Toll Free Number: 1-800-445-1255

MASSACHUSETTS (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 1
John F. Kennedy Federal Building
One Congress Street
Boston, MA 02203

General Information: 617-565-3420

Water Management Division

617-565-3478

- Drinking Water
- Wetlands
- Ground Water
- Wastewater

Air Management Division

617-565-3800

- Air
- Asbestos
- Radon
- Pesticides

Waste Management Division

617-573-5700

- Municipal Solid Waste
- Hazardous Waste

Pollution Prevention Program Coordinators

617-565-3387

- Pollution Prevention

MICHIGAN (State Contacts)

Name of State Agency

Michigan Department of Natural Resources
Bureau of Environmental Protection
P.O. Box 30028
Lansing, MI 48909

Air: 517-373-7023

Asbestos: 517-373-7023

Emergency Response: 517-373-7998

Industrial Pretreatment Program: 517-373-8088

Wastewater Discharge Permitting: 517-373-8088

Stormwater Management: 517-373-8088

Surface Water: 517-373-1949

Underground Storage Tanks: 517-373-1230

Wetlands: 517-373-8000

Michigan Department of Natural Resources
Bureau of Environmental Protection
P.O. Box 30241
Lansing, MI 48909

Hazardous Waste: 517-373-2730

Solid Waste: 517-373-2730

Municipal Landfill Permit Review: 517-373-2730

Waste Minimization/Reduction/Prevention: 517-335-2142

Public Health Department
P.O. Box 30195, 3423 North Logan Street
Lansing, MI 48909

Radon: 517-335-8200

Drinking Water: 517-335-9218

Department of Agriculture
Pesticide & Plant Pest Management Division
P.O. Box 30017
Lansing, MI 48909

Pesticides Control: 517-373-1087

MICHIGAN (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3507

General Information: 312-353-2000

Water Division

312-353-2147

- Drinking Water
- Ground Water
- Wastewater

Air and Radiation Division

312-353-2212

- Air
- Radon

Waste Management Division

312-886-7579

- Superfund
- Emergency Response

Office of RCRA

312-886-7435

- Municipal Solid Waste
- Underground Storage Tanks
- Hazardous Waste

Environmental Sciences Division

312-353-3808

- Pesticides
- Asbestos

MINNESOTA (State Contacts)

Name of State Agency

Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155
Air: 612-296-7331
Asbestos: 612-296-7513
Hazardous Waste: 612-643-3402
Emergency Response: 612-643-3439
Solid Waste: 612-296-7340
Municipal Landfill Permit Review: 612-297-1781
Industrial Pretreatment Program: 612-296-7230
Wastewater Discharge Permitting: 612-296-7713
Stormwater Management: 612-296-8280

Natural Resources Department
500 Lafayette Road
St. Paul, MN 55155

Water Agency: 612-296-4810
Underground Storage Tanks: 612-296-0433
Wetlands: 612-296-0515

Department of Health
925 Delaware Street, S.E.
Minneapolis, MN 55440

Radon: 612-627-5071

Department of Health
717 Delaware Street, S.E.
Minneapolis, MN 55440

Drinking Water: 612-623-5227

Department of Agriculture
Pesticides Regulatory Section
90 West Plato Boulevard
St. Paul, MN 55107

Pesticides Control: 612-296-8547

Radon Toll Free Number: 1-800-798-9050

MINNESOTA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3507

General Information: 312-353-2000

Water Division
312-353-2147
• Drinking Water
• Ground Water
• Wastewater

Air and Radiation Division
312-353-2212
• Air
• Radon

Waste Management Division
312-886-7579
• Superfund
• Emergency Response

Office of RCRA
312-886-7435
• Municipal Solid Waste
• Underground Storage Tanks

Environmental Sciences Division
312-353-3808
• Pesticides
• Asbestos

MISSISSIPPI (State Contacts)

Name of State Agency

Department of Natural Resources
P.O. Box 10385
Jackson, MS 39209

Air: 601-961-5171

Asbestos: 601-961-5171

Hazardous Waste: 601-961-5171

Emergency Response: 601-961-5079

Solid Waste: 601-961-5171

Municipal Landfill Permit Review: 601-961-5171

Industrial Pretreatment Program: 601-961-5171

Wastewater Discharge Permitting: 601-961-5159

Stormwater Management: 601-961-5171

Underground Storage Tanks: 601-961-5171

Wetlands: 601-961-5171

Waste Minimization/Reduction/Prevention: 601-961-5171

Department of Health
P.O. Box 1700
Jackson, MS 39215

Radon: 601-354-6657

Drinking Water: 601-960-7518

Office of Land and Water Resources
P.O. Box 10631
Jackson, MS 39289

Water Agency: 601-961-5202

Department of Natural Resources
Office of Pollution Control
P.O. Box 10631
Jackson, MS 39209

Water Agency: 601-961-5171

Department of Agriculture & Commerce
P.O. Box 5207
Mississippi State, MS 39762

Pesticides Control: 601-325-3390

Radon Toll Free Number: 1-800-626-7739

MISSISSIPPI (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 4
345 Courtland Street, N.E.
Atlanta, GA 30365

General Information: 404-347-4727

Water Management Division
404-347-4450

- Surface Water
- Ground Water
- Wetlands
- Wastewater
- Drinking Water

Air, Pesticides and Toxics Management Division
404-347-3043

- Air
- Asbestos
- Pesticides
- Radon

Waste Management Division
404-347-3454

- Emergency Response
- Municipal Solid Waste
- Superfund

MISSOURI (State Contacts)

Name of State Agency

Department of Natural Resources
Environmental Quality Division
P.O. Box 176
Jefferson City, MO 65102

Air: 314-751-4817

Asbestos: 314-751-0572

Hazardous Waste: 314-751-3176

Solid Waste: 314-751-3176

Municipal Landfill Permit Review: 314-751-3176

Water Agency: 314-751-1300

Drinking Water: 314-751-0678

Industrial Pretreatment Program: 314-751-6996

Wastewater Discharge Permitting: 314-751-6825

Stormwater Management: 314-751-6825

Underground Storage Tanks: 314-751-6825

Wetlands: 314-751-1300

Environmental Improvement Authority
Missouri Waste Exchange
P.O. Box 176
Jefferson City, MO 65102

Waste Minimization/Reduction/Prevention: 314-751-4919

Department of Health
P.O. Box 570
Jefferson City, MO 65101
Radon: 314-751-6083

Environmental Emergency Response Unit
Field Services Section
2010 Missouri Boulevard
Jefferson City, MO 65102
Emergency Response: 314-751-7929

Department of Agriculture
P.O. Box 630
Jefferson City, MO 65102
Pesticides Control: 314-751-5503

Radon Toll Free Number: 1-800-669-7236

MISSOURI (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 7
726 Minnesota Avenue
Kansas City, KS 66101

General Information: 913-551-7000

Water Management Division

913-551-7030

- Drinking Water
- Ground Water
- Wastewater

Air and Toxics Division

913-551-7020

- Air
- Radon
- Pesticides
- Asbestos

Waste Management Division

913-551-7050

- Municipal Solid Waste
- Superfund

Environmental Services Division

913-551-5000

- Emergency Planning

MONTANA (State Contacts)

Name of State Agency

Department of Health and Environmental Science
Environmental Sciences Division
Cogswell Building
Helena, MT 59620

Air: 406-444-3454
Asbestos: 406-444-3454
Radon: 406-444-3671
Hazardous Waste: 406-444-2821
Emergency Response: 406-444-2821
Solid Waste: 406-444-2821
Municipal Landfill Permit Review: 406-444-2821
Water Agency: 406-444-2406
Drinking Water: 406-444-2406
Industrial Pretreatment Program: 406-444-2406
Wastewater Discharge Permitting: 406-444-2406
Underground Storage Tanks: 406-444-2821
Wetlands: 406-444-2406
Waste Minimization/Reduction/Prevention: 406-444-2821

Department of Natural Resources and Conservation
1520 E. 6th Avenue
Helena, MT 59620

Water Agency: 406-444-6603

Department of Agriculture
Environmental Management Division
Agriculture and Livestock Building
Helena, MT 59620

Pesticides Control: 406-444-2944

MONTANA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 8
999 18th Street, Suite 500
Denver, CO 80202-2405

General Information: 303-293-1603

Water Management Division
303-293-1542
• Drinking Water
• Ground Water
• Wastewater

Air and Toxics Division
303-293-0946
• Air
• Asbestos
• Radon
• Pesticides

Hazardous Waste Management Division
303-293-1720
• Municipal Solid Waste
• Hazardous Waste
• Emergency Response
• Superfund

NEBRASKA (State Contacts)

Name of State Agency

Department of Environmental Control

P.O. Box 98922

Lincoln, NE 68509

Air: 402-471-2189

Asbestos: 402-471-2189

Hazardous Waste: 402-471-4217

Emergency Response: 402-471-4251

Solid Waste: 402-471-4210

Municipal Landfill Permit Review: 402-471-4210

Drinking Water: 402-471-4700

Industrial Pretreatment Program: 402-471-4239

Wastewater Discharge Permitting: 402-471-4239

Underground Storage Tanks: 402-471-3343

Wetlands: 402-471-4700

Pesticides Control: 402-471-2023

Waste Minimization/Reduction/Prevention: 402-471-4217

Department of Health

P.O. Box 95007

Lincoln, NE 68509

Radon: 402-471-2169

Department of Water Resources

P.O. Box 94676

Lincoln, NE 68509

Water Agency: 402-471-2363

Radon Toll Free Number: 1-800-334-9491

NEBRASKA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency

Region 7

726 Minnesota Avenue

Kansas City, KS 66101

General Information: 913-551-7000

Water Management Division

913-551-7030

- Drinking Water

- Ground Water

- Wastewater

Air and Toxics Division

913-551-7020

- Air

- Radon

- Pesticides

- Asbestos

Waste Management Division

913-551-7050

- Municipal Solid Waste

- Superfund

Environmental Services Division

913-551-5000

- Emergency Planning

NEVADA (State Contacts)

Name of State Agency

Nevada Department of Conservation & Natural Resources
Division of Environmental Protection
Capitol Complex, 123 West Nye Lane
Carson City, NV 89710

Air: 702-687-5065

Hazardous Waste: 702-687-5872

Solid Waste: 702-687-5872

Municipal Landfill Permit Review: 702-687-5872

Water Agency: 702-687-5883

Industrial Pretreatment Program: 702-687-4670

Wastewater Discharge Permitting: 702-687-5870

Stormwater Management: 702-687-4670

Underground Storage Tanks: 702-687-5872

Wetlands: 702-687-4670

Department of Human Resources
505 East King Street
Carson City, NV 89710

Radon: 702-687-5394

Drinking Water: 702-687-4750

Department of Military
Division of Emergency Management
2525 South Carson Street
Carson City, NV 89710

Emergency Response: 702-687-4240

Department of Agriculture
P.O. Box 11100, 350 Capitol Hill Avenue
Reno, NV 89510

Pesticides Control: 702-789-0180

NEVADA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection
Region 9
75 Hawthorne Street
San Francisco, CA 94105

General Information: 415-744-1305

Water Management Division
415-744-2125

- Drinking Water
- Ground Water
- Wastewater
- Wetlands

Air and Toxics Division
415-744-1219

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division
415-744-1730

- Municipal Solid Waste
- Hazardous Waste
- Superfund
- Emergency Response

NEW HAMPSHIRE (State Contacts)

Name of State Agency

Department of Environmental Services
64 North Main Street, Caller Box 2033
Concord, NH 03302

Air: 603-271-1370

Asbestos: 603-271-1370

Water Agency: 603-271-3406

Wetlands: 603-271-3406

Health & Human Services Building
6 Hazen Drive
Concord, NH 03301

Radon: 603-271-4588

Emergency Response: 603-271-3339

Hazardous Waste: 603-271-2942

Solid Waste: 603-271-2925

Municipal Landfill Permit Review: 603-271-2935

Drinking Water: 603-271-3503

Industrial Pretreatment Program: 603-271-3503

Wastewater Discharge Permitting: 603-271-3503

Stormwater Management: 603-271-3503

Underground Storage Tanks: 603-271-3503

Waste Minimization/Reduction/Prevention: 603-271-2901

New Hampshire Department of Agriculture
Caller Box 2042
Concord, NH 03301

Pesticides Control: 603-271-3550

Radon Toll Free Number: 1-800-852-3345 or x4674

NEW HAMPSHIRE (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 1
John F. Kennedy Federal Building
One Congress Street
Boston, MA 02203

General Information: 617-565-3420

Water Management Division
617-565-3478

- Drinking Water
- Wetlands
- Ground Water
- Wastewater

Air Management Division
617-565-3800

- Air
- Asbestos
- Radon
- Pesticides

Waste Management Division
617-573-5700

- Municipal Solid Waste
- Hazardous Waste

Pollution Prevention Program Coordinators
617-565-3387

- Pollution Prevention

NEW JERSEY (State Contacts)

Name of State Agency

Department of Environmental Protection
401 East State Street
Trenton, NJ 08625

Air: 609-292-6710

Hazardous Waste: 609-292-9120

Emergency Response: 609-984-3219

Solid Waste: 609-530-8591

Municipal Landfill Permit Review: 609-530-4004

Drinking Water: 609-292-5550

Industrial Pretreatment Program: 609-633-3823

Wastewater Discharge Permitting: 609-984-4429

Stormwater Management: 609-633-7010

Underground Storage Tanks: 609-984-3156

Wetlands: 609-292-2795

Pesticides Control: 609-530-4123

Waste Minimization/Reduction/Prevention: 609-633-1418

Division of Environmental Quality
380 Scotch Road, CN 411
Trenton, NJ 08625

Radon: 609-987-6378

Department of Health
CN 360
Trenton, NJ 08625

Asbestos: 609-984-2193

Radon Toll Free Number: 1-800-648-0394

NEW JERSEY (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 2
Jacob K Javits Federal Building
26 Federal Plaza
New York, NY 10278

General Information: 212-264-2657

Water Management Division

212-264-2513

- Drinking Water
- Ground Water
- Surface Water
- Wetlands
- Wastewater

Air and Waste Management Division

212-264-2301

- Air
- Municipal Solid Waste
- Radon
- Hazardous Waste

Emergency and Remedial Response

212-264-8672

- Emergency Response
- Superfund

Environmental Services Division

908-321-6765

- Pesticides

NEW MEXICO (State Contacts)

Name of State Agency

New Mexico Environment Department
P.O. Box 26110
Santa Fe, NM 87502

Air: 505-827-0042

Asbestos: 505-827-0064

Hazardous Waste: 505-827-4363

Emergency Response: 505-827-2850

Solid Waste: 505-827-0169

Municipal Landfill Permit Review: 505-827-0197

Water Agency: 505-827-2850

Drinking Water: 505-827-2945

Industrial Pretreatment Program: 505-827-0187

Wastewater Discharge Permitting: 505-827-0187

Stormwater Management: 505-827-0187

Underground Storage Tanks: 505-827-2932

Waste Minimization/Reduction/Prevention: 505-827-4308

Health Department

1190 St. Francis Drive, P.O. Box 26610

Santa Fe, NM 87502

Radon: 505-827-2389

District Corps of Engineers

P.O. Box 1580

Albuquerque, NM 87103

Wetlands: 505-766-2776

Department of Agriculture

P.O. Box 30005

Las Cruces, NM 88003

Pesticides Control: 505-646-2133

NEW MEXICO (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 6

First Interstate Bank Tower at Fountain Place
1445 Ross Avenue, 12th Floor, Suite 1200
Dallas, TX 75202-2733

General Information: 214-655-6444

Water Management Division

214-655-7100

- Drinking Water
- Ground Water
- Wastewater

Air, Pesticides and Toxics Division

214-655-7200

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division

214-655-6700

- Municipal Solid Waste
- Superfund
- Hazardous Waste

Office of Underground Storage Tanks

214-655-6755

- Underground Storage Tanks

NEW YORK (State Contacts)

Name of State Agency

Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233

Air: 518-457-7230

Hazardous Waste: 518-457-5861

Emergency Response: 518-457-3891 (1-800-457-7362 24 hrs.)

Solid Waste: 518-457-6603

Municipal Landfill Permit Review: 518-457-2051

Water Agency: 518-457-6674

Industrial Pretreatment Program: 518-457-5968

Wastewater Discharge Permitting: 518-457-5968

Stormwater Management: 518-457-3656

Underground Storage Tanks: 518-457-7463

Wetlands: 518-457-5581

Pesticides Control: 518-457-7482

Waste Minimization: 518-457-9257

New York State Energy Office
Radon Programs
Two Rockefeller Plaza
Albany, NY 12223

Radon: 518-474-4995

Department of Health
Bureau of Public Water Supply Protection
2 University Place, Western Avenue
Albany, NY 12203

Drinking Water: 518-458-6731

Radon Toll Free Number: 1-800-458-1158

NEW YORK (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 2
Jacob K Javits Federal Building
26 Federal Plaza
New York, NY 10278

General Information: 212-264-2657

Water Management Division
212-264-2513

- Drinking Water
- Ground Water
- Surface Water
- Wetlands
- Wastewater

Air and Waste Management Division
212-264-2301

- Air
- Municipal Solid Waste
- Radon
- Hazardous Waste

Emergency and Remedial Response
212-264-8672

- Emergency Response
- Superfund

Environmental Services Division
908-321-6765

- Pesticides

NORTH CAROLINA (State Contacts)

Name of State Agency

Department of Environment, Health and Natural Resources
P.O. Box 27687
Raleigh, NC 27611

Air: 919-733-3340

Asbestos: 919-733-3680

Radon: 919-733-4283

Hazardous Waste: 919-733-2178

Solid Waste: 919-733-0692

Municipal Landfill Permit Review: 919-733-0692

Water Agency: 919-733-4064

Drinking Water: 919-733-2321

Industrial Pretreatment Program: 919-733-5083

Wastewater Discharge Permitting: 919-733-7015

Stormwater Management: 919-733-7015

Underground Storage Tanks: 919-733-3221

Wetlands: 919-733-2302

Waste Minimization/Reduction/Prevention: 919-733-2178

Department of Crime Control and Public Safety
Division of Emergency Management
116 West Jones Street
Raleigh, NC 27603

Emergency Response: 919-733-3867

Department of Agriculture
Food and Drug Protection Division
P.O. Box 27687
Raleigh, NC 27611

Pesticides Control: 919-733-3556

NORTH CAROLINA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 4
345 Courtland Street, N.E.
Atlanta, GA 30365

General Information: 404-347-4727

Water Management Division

404-347-4450

- Surface Water
- Ground Water
- Wetlands
- Wastewater
- Drinking Water

Air, Pesticides and Toxics Management Division

404-347-3043

- Air
- Asbestos
- Pesticides
- Radon

Waste Management Division

404-347-3454

- Emergency Response
- Municipal Solid Waste
- Superfund

NORTH DAKOTA (State Contacts)

Name of State Agency

North Dakota State Department of Health
Environmental Health Section
1200 Missouri Avenue, Box 5520
Bismark, ND 58502

Air: 701-221-5188

Asbestos: 701-221-5188

Radon: 701-221-5188

Hazardous Waste: 701-221-5166

Emergency Response: 701-221-5166

Solid Waste: 701-221-5166

Municipal Landfill Permit Review: 701-221-5166

Water Agency: 701-221-5210

Drinking Water: 701-221-5210

Industrial Pretreatment Program: 701-221-5210

Wastewater Discharge Permitting: 701-221-5210

Stormwater Management: 701-221-5210

Underground Storage Tanks: 701-221-5166

Waste Minimization/Reduction/Prevention: 701-221-5166

State Water Commission

Drainage Section

900 E. Boulevard

Bismark, ND 58505

Wetlands: 701-224-2750

Department of Agriculture

Pesticides Division

600 E. Boulevard

Bismark, ND 58505

Pesticides Control: 701-224-4756

NORTH DAKOTA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency

Region 8

999 18th Street, Suite 500

Denver, CO 80202-2405

General Information: 303-293-1603

Water Management Division

303-293-1542

- Drinking Water
- Ground Water
- Wastewater

Air and Toxics Division

303-293-0946

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division

303-293-1720

- Municipal Solid Waste
- Hazardous Waste
- Emergency Response
- Superfund

OHIO (State Contacts)

Name of State Agency

Ohio Environmental Protection Agency
Box 1049, 1800 Watermark
Columbus, OH 43266-0149

Air: 614-644-2270

Asbestos: 614-644-2270

Hazardous Waste: 614-644-2934

Emergency Response: 614-644-3196

Solid Waste: 614-644-3135

Municipal Landfill Permit Review: 614-644-2956

Water Agency: 614-644-2001

Drinking Water: 614-644-2752

Industrial Pretreatment Program: 614-644-2025

Wastewater Discharge Permitting: 614-644-2001

Stormwater Management: 614-644-2017

Underground Storage Tanks: 614-644-2944

Waste Minimization/Reduction/Prevention: 614-644-2956

Department of Health
1224 Kinear Road, P.O. Box 118
Columbus, OH 43266

Radon: 614-644-2727

Department of Natural Resources
Fountain Square, Building G
Columbus, OH 43224

Wetlands: 614-265-6413

Department of Agriculture
8995 East Main Street
Reynoldsburg, OH 43068

Pesticides Control: 614-866-6361

Radon Toll Free Number: 1-800-523-4439

OHIO (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3507

General Information: 312-353-2000

Water Division

312-353-2147

- Drinking Water
- Ground Water
- Wastewater

Air and Radiation Division

312-353-2212

- Air
- Radon

Waste Management Division

312-886-7579

- Superfund
- Emergency Response

Office of RCRA

312-886-7435

- Municipal Solid Waste
- Underground Storage Tanks
- Hazardous Waste

Environmental Sciences Division

312-353-3808

- Pesticides
- Asbestos

OKLAHOMA (State Contacts)

Name of State Agency

Oklahoma State Department of Health
Environmental Health Services
1000 N.E. 10th Street
Oklahoma City, OK 73117

Air: 405-271-5220

Asbestos: 405-271-5220

Radon: 405-271-5221

Hazardous Waste: 405-271-5338

Emergency Response: 405-271-8056

Solid Waste: 405-271-7159

Municipal Landfill Permit Review: 405-271-7097

Drinking Water: 405-271-5205

Waste Minimization/Reduction/Prevention: 405-271-7047

Water Resources Board

600 North Harvey

P.O. Box 150

Oklahoma City, OK 73101

Water Agency: 405-231-2500

Industrial Pretreatment Program: 405-231-2541

Wastewater Discharge Permitting: 405-231-2541

Stormwater Management: 405-231-2541

Water Resources Board

P.O. Box 53585

Oklahoma City, OK 73152

Underground Storage Tanks: 405-271-2549

Department of Agriculture

Pest Management Section

2800 North Lincoln Boulevard

Oklahoma City, OK 73105

Pesticides Control: 405-521-3864

OKLAHOMA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 6
First Interstate Bank Tower at Fountain Place
1445 Ross Avenue, 12th Floor, Suite 1200
Dallas, TX 75202-2733

General Information: 214-655-6444

Water Management Division

214-655-7100

- Drinking Water
- Ground Water
- Wastewater

Air, Pesticides and Toxics Division

214-655-7200

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division

214-655-6700

- Municipal Solid Waste
- Superfund
- Hazardous Waste

Office of Underground Storage Tanks

214-655-6755

- Underground Storage Tanks

OREGON (State Contacts)

Name of State Agency

Oregon Department of Environmental Quality
811 Southwest Sixth Avenue
Portland, OR 97204

Air: 503-229-5397

Asbestos: 503-229-5186

Hazardous Waste: 503-229-5913

Emergency Response: 503-229-5373

Solid Waste: 503-229-5782

Municipal Landfill Permit Review: 503-229-5782

Water Agency: 503-229-5279

Industrial Pretreatment Program: 503-229-5256

Wastewater Discharge Permitting: 503-229-6099

Stormwater Management: 503-229-5256

Underground Storage Tanks: 503-229-5733

Waste Minimization/Reduction/Prevention: 503-229-6165

Department of Human Resources
1400 Southwest Fifth Avenue
Portland, OR 97201

Radon: 503-229-5797

Division of Health
State Office Building, Room 608
Portland, OR 97201

Drinking Water: 503-229-6302

Department of Land Conservation and Development
1600 State Street
Salem, OR 97310

Wetlands: 503-378-3805

Department of Agriculture
635 Capitol Street, N.E.
Salem, OR 97310

Pesticides Control: 503-378-3776

OREGON (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, WA 98101

General Information: 206-553-4973

Water Division

206-553-1793

- Drinking Water
- Ground Water
- Surface Water
- Wastewater

Air and Toxics Division

206-553-4152

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Division

206-553-1261

- Municipal Solid Waste
- Hazardous Waste
- Superfund

PENNSYLVANIA (State Contacts)

Name of State Agency

Pennsylvania Department of Environmental Resources
400 Market Street
Market Street State Office Building
Harrisburg, PA 17105

Air: 717-787-9702

Asbestos: 717-787-9257

Radon: 717-787-2480

Hazardous Waste: 717-787-7381

Solid Waste: 717-787-9870

Municipal Landfill Permit Review: 717-787-7381

Industrial Pretreatment Program: 717-787-8184

Wastewater Discharge Permitting: 717-787-8184

Drinking Water: 717-787-9037

Underground Storage Tanks: 717-787-8184

Waste Minimization/Reduction/Prevention: 717-787-7382

Water Agency: 717-787-4686

Wetlands: 717-787-6827

Stormwater Management: 717-783-7577

Department of Agriculture
Division of Agronomic Services, Bureau of Plant Industry
2301 North Cameron Street
Harrisburg, PA 17110

Pesticides Control: 717-787-4843

Radon Toll Free Number: 1-800-237-2366

PENNSYLVANIA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 3
841 Chestnut Building
Philadelphia, PA 19107

General Information: 215-597-9800

Water Management Division
215-597-9410

- Drinking Water
- Ground Water
- Wastewater, Stormwater
- Sludge

Air, Radiation and Toxics Division
215-597-9390

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division
215-597-8181

- Municipal Solid Waste
- Superfund
- Emergency Response
- Underground Storage Tanks

Environmental Services Division
Annapolis Laboratory
410-573-2682

- Hazardous Waste

Environmental Services Division
Wetlands Section
215-597-9301

- Wetlands

Environmental Services Division
Environmental Planning & Assessment Section
215-597-6289

- Pollution Prevention

RHODE ISLAND (State Contacts)

Name of State Agency

Department of Environmental Management
291 Promenade Street
Providence, RI 02908-5767

Air: 401-277-2808

Hazardous Waste: 401-277-2797

Emergency Response: 401-277-2797

Solid Waste: 401-277-2797

Municipal Landfill Permit Review: 401-277-2797

Water Agency: 401-277-3162 or 401-277-3961

Industrial Pretreatment Program: 401-277-6519

Wastewater Discharge Permitting: 401-277-6519

Stormwater Management: 401-277-3434

Underground Storage Tanks: 401-277-2234

Wetlands: 401-277-6820

Waste Minimization/Reduction/Prevention: 401-277-2797

Department of Health
206 Canon Building, 75 Davis Street
Providence, RI 02908

Asbestos: 401-277-2466

Radon: 401-277-2438

Department of Environmental Management
Division of Agriculture
22 Hayes Street
Providence, RI 02908

Pesticides Control: 401-297-2782

RHODE ISLAND (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 1
John F. Kennedy Federal Building
One Congress Street
Boston, MA 02203

General Information: 617-565-3420

Water Management Division

617-565-3478

- Drinking Water
- Wetlands
- Ground Water
- Wastewater

Air Management Division

617-565-3800

- Air
- Asbestos
- Radon
- Pesticides

Waste Management Division

617-573-5700

- Municipal Solid Waste
- Hazardous Waste

Pollution Prevention Program Coordinators

617-565-3387

- Pollution Prevention

SOUTH CAROLINA (State Contacts)

Name of State Agency

Sout Carolina Department of Health and Environmental
Control
2600 Bull Street
Columbia, SC 29201

Air: 803-734-4750

Asbestos: 803-734-4551

Radon: 803-734-4631

Hazardous Waste: 803-734-5200

Emergency Response: 803-734-5189

Solid Waste: 803-734-5200

Municipal Landfill Permit Review: 803-734-5259

Water Agency: 803-734-5300

Drinking Water: 803-734-5310

Industrial Pretreatment Program: 803-734-5300

Wastewater Discharge Permitting: 803-734-5300

Underground Storage Tanks: 803-734-5331

Waste Minimization/Reduction/Prevention: 803-734-5191

Water Resources Commission
1201 Main Street
Columbia, SC 29201

Water Agency: 803-737-0800

Wetlands: 803-737-0800, 803-737-0880

Land Resources Commission
2221 Devine Street, Suite 222
Columbia, SC 29205

Stormwater Management: 803-734-9100

Clemson University
Department of Fertilizer and Pesticide Control
256 Poole Agricultural Center
Clemson, SC 29634

Pesticides Control: 803-656-3171

Radon Toll Free Number: 1-800-768-0362

SOUTH CAROLINA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 4
345 Courtland Street, N.E.
Atlanta, GA 30365

General Information: 404-347-4727

Water Management Division

404-347-4450

- Surface Water
- Ground Water
- Wetlands
- Wastewater
- Drinking Water

Air, Pesticides and Toxics Management Division
404-347-3043

- Air
- Asbestos
- Pesticides
- Radon

Waste Management Division

404-347-3454

- Emergency Response
- Municipal Solid Waste
- Superfund

SOUTH DAKOTA (State Contacts)

Name of State Agency

Department of Environment and Natural Resources
Joe Foss Building, 523 East Capitol Avenue
Pierre, SD 57501-3181

Air: 605-773-3351

Asbestos: 605-773-3153

Radon: 605-773-3351

Hazardous Waste: 605-773-3153

Emergency Response: 605-773-3351

Solid Waste: 605-773-3153

Municipal Landfill Permit Review: 605-773-3153

Water Agency: 605-773-4216 or 605-773-3754

Drinking Water: 605-773-3754

Industrial Pretreatment Program: 605-773-3351

Wastewater Discharge Permitting: 605-773-3351

Stormwater Management: 605-773-3351

Underground Storage Tanks: 605-773-3351

Wetlands: 605-773-4216

Waste Minimization/Reduction/Prevention: 605-773-3153

Department of Agriculture

Pesticides, Regulatory Services Division

Anderson Building, 445 East Capitol

Pierre, SD 57501

Pesticides Control: 605-773-4032

SOUTH DAKOTA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 8
999 18th Street, Suite 500
Denver, CO 80202-2405

General Information: 303-293-1603

Water Management Division

303-293-1542

- Drinking Water
- Ground Water
- Wastewater

Air and Toxics Division

303-293-0946

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division

303-293-1720

- Municipal Solid Waste
- Hazardous Waste
- Emergency Response (303-330-1788)
- Superfund

TENNESSEE (State Contacts)

Name of State Agency

Environment and Conservation Department
701 Broadway, Room 100 Customs House
Nashville, TN 37243

Air: 615-532-0554

Asbestos: 615-532-0554

Radon: 615-532-0733

Hazardous Waste: 615-532-0780

Solid Waste: 615-532-0780

Municipal Landfill Permit Review: 615-532-0804

Water Agency: 615-532-0191

Drinking Water: 615-532-0191

Industrial Pretreatment Program: 615-532-0649

Wastewater Discharge Permitting: 615-532-0625

Stormwater Management: 615-532-0649

Underground Storage Tanks: 615-532-0945

Wetlands: 615-532-0708

Waste Minimization/Reduction/Prevention: 615-532-0109

Tennessee Emergency Response Council
c/o Tennessee Emergency Management Agency
3041 Sidco
Nashville, TN 37204

Emergency Response: 800-262-3300

Department of Agriculture
Division of Plant Industries
P.O. Box 40627
Nashville, TN 37204

Pesticides Control: 615-360-1030

Radon Toll Free Number: 1-800-232-1139

TENNESSEE (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 4
345 Courtland Street, N.E.
Atlanta, GA 30365

General Information: 404-347-4727

Water Management Division
404-347-4450

- Surface Water
- Ground Water
- Wetlands
- Wastewater
- Drinking Water

Air, Pesticides and Toxics Management Division
404-347-3043

- Air
- Asbestos
- Pesticides
- Radon

Waste Management Division
404-347-3454

- Emergency Response
- Municipal Solid Waste
- Superfund

TEXAS (State Contacts)

Name of State Agency

Texas Air Control Board
12124 Park 35 Circle
Austin, TX 78753
Air: 512-908-1100
Asbestos: 512-908-1529

Department of Health
1212 East Anderson Lane
Austin, TX 78756

Radon: 512-834-6688

Texas Water Commission
P.O. Box 13087
Austin, TX 78711

Hazardous Waste: 512-908-2334
Emergency Response: 512-908-2510
Solid Waste: 512-908-6692
Municipal Landfill Permit Review: 512-908-6692
Water Agency: 512-463-8246
Industrial Pretreatment Program: 512-463-8201
Wastewater Discharge Permitting: 512-462-7742
Stormwater Management: 512-463-8412
Underground Storage Tanks: 512-908-2106
Waste Minimization/Reduction/Prevention: 512-463-8175

Water Development Board
P.O. Box 13231
Austin, TX 78711

Water Agency: 512-463-7848

Department of Health
Drinking Water Utilities Division
1100 West 49th Street
Austin, TX 78756

Drinking Water: 512-371-6319

General Land Office
Coastal Division
1700 North Congress
Austin, TX 78701

Wetlands: 512-463-5059

Department of Agriculture
Pesticide Enforcement Division
P.O. Box 12847
Austin, TX 78711
Pesticides Control: 512-463-7550

TEXAS (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 6
First Interstate Bank Tower at Fountain Place
1445 Ross Avenue, 12th Floor, Suite 1200
Dallas, TX 75202-2733

General Information: 214-655-6444

Water Management Division
214-655-7100
• Drinking Water
• Ground Water
• Wastewater

Air, Pesticides and Toxics Division
214-655-7200
• Air
• Asbestos
• Radon
• Pesticides

Hazardous Waste Management Division
214-655-6700
• Municipal Solid Waste
• Superfund
• Hazardous Waste

Office of Underground Storage Tanks
214-655-6755
• Underground Storage Tanks

UTAH (State Contacts)

Name of State Agency

Department of Environmental Quality
150 North 1950 West
Salt Lake City, UT 84114

Air: 801-536-4000

Asbestos: 801-536-4000

Emergency Response: 801-536-4100

Underground Storage Tanks: 801-536-4100

Department of Environmental Quality
Division of Radiation Control
168 North 1950 West
Salt Lake City, UT 84114

Radon: 801-536-4250

Department of Environmental Quality
288 North 1460 West
Salt Lake City, UT 84114

Hazardous Waste: 801-538-6170

Solid Waste: 801-538-6170

Municipal Landfill Permit Review: 801-538-6170

Water Agency: 801-538-6146

Drinking Water: 801-538-6159

Industrial Pretreatment Program: 801-538-6146

Wastewater Discharge Permitting: 801-538-6146

Stormwater Management: 801-538-6146

Wetlands: 801-538-6146

Pollution Prevention: 801-536-4480

Department of Agriculture
Division of Plant Industry
350 North Redwood Road
Salt Lake City, UT 84116

Pesticides Control: 801-538-7180

UTAH (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 8
999 18th Street, Suite 500
Denver, CO 80202-2405

General Information: 303-293-1603

Water Management Division

303-293-1542

- Drinking Water
- Ground Water
- Wastewater

Air and Toxics Division

303-293-0946

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division

303-293-1720

- Municipal Solid Waste
- Hazardous Waste
- Emergency Response (303-330-1788)
- Superfund

VERMONT (State Contacts)

Name of State Agency

Agency of Natural Resources
103 South Main Street
Waterbury, VT 05671-0402

Air: 802-241-3840

Hazardous Waste: 802-241-3888

Emergency Response: 802-241-8702

Solid Waste: 802-241-3444

Municipal Landfill Permit Review: 802-241-3822

Water Agency: 802-241-3777 or 3770

Industrial Pretreatment Program: 802-241-3822

Wastewater Discharge Permitting: 802-241-3822

Stormwater Management: 802-241-3822

Underground Storage Tanks: 802-241-3888

Wetlands: 802-241-3770

Waste Minimization/Reduction/Prevention: 802-241-3888

Department of Health
108 Cherry Street, P.O. Box 70
Burlington, VT 05402

Asbestos: 802-863-7220

Drinking Water: 802-863-7223

Department of Health
Division of Occupational & Radiological Health
Administration Building, 10 Baldwin Street
Montpelier, VT 05602

Radon: 802-828-2886

Department of Agriculture
Plant Industry Division
116 State Street
Montpelier, VT 05602

Pesticides Control: 802-828-2435

Radon Toll Free Number: 1-800-640-0601

VERMONT (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 1
John F. Kennedy Federal Building
One Congress Street
Boston, MA 02203

General Information: 617-565-3420

Water Management Division

617-565-3478

- Drinking Water
- Wetlands
- Ground Water
- Wastewater

Air Management Division

617-565-3800

- Air
- Asbestos
- Radon
- Pesticides

Waste Management Division

617-573-5700

- Municipal Solid Waste
- Hazardous Waste

Pollution Prevention Program Coordinators

617-565-3387

- Pollution Prevention

VIRGINIA (State Contacts)

Name of State Agency

Department of Environmental Quality
200-202 North 9th Street
9th Street Office Building, 8th Floor
P.O. Box 10089
Richmond, VA 23240

Air: 804-786-2378
Asbestos: 804-786-6079

Department of Environmental Quality
P.O. Box 11143, 211 North Hamilton Street
Richmond, VA 23230

Water Agency: 804-527-5000
Industrial Pretreatment Program: 804-527-5030
Wastewater Discharge Permitting: 804-527-5030
Stormwater Management: 804-527-5083
Underground Storage Tanks: 804-527-5202

Department of Health
109 Governor Street
Richmond, VA 23219

Radon: 804-786-5932
Drinking Water: 804-786-6277

Department of Environmental Quality
Department of Waste Management
101 North 14th Street, 11th Floor
Richmond, VA 23219

Hazardous Waste: 804-225-2862
Solid Waste: 804-225-2892
Municipal Landfill Permit Review: 804-225-2892
Waste Minimization/Reduction/Prevention: 804-371-8712

Department of Emergency Services
310 Turner Road
Richmond, VA 23225

Emergency Response: 804-674-2497

Marine Resources Commission
P.O. Box 756
Newport News, VA 23607

Wetlands: 804-247-2200

Department of Agriculture and Consumer Services
P.O. Box 1163
Richmond, VA 23209

Pesticides Control: 804-371-6558

Radon Toll Free Number: 1-800-468-0138

VIRGINIA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 3
841 Chestnut Building
Philadelphia, PA 19107

General Information: 215-597-9800

Water Management Division
215-597-9410

- Drinking Water
- Ground Water
- Wastewater, Stormwater
- Sludge

Air, Radiation and Toxics Division
215-597-9390

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division
215-597-8181

- Municipal Solid Waste
- Superfund
- Emergency Response
- Underground Storage Tanks

Environmental Services Division
Annapolis Laboratory
410-573-2682

- Hazardous Waste

Environmental Services Division
Wetlands Section
215-597-9301

- Wetlands

Environmental Services Division
Environmental Planning & Assessment Section
215-597-6289

- Pollution Prevention

WASHINGTON (State Contacts)

Name of State Agency

Washington State Department of Ecology
Mail Stop PV-11
P.O. Box 47600
Olympia, WA 98504

Air: 206-459-6255

Asbestos: 206-649-7107

Hazardous Waste: 206-459-6316

Emergency Response: 206-438-3007

Solid Waste: 206-459-6259

Municipal Landfill Permit Review: 206-438-7474

Water Agency: 206-438-7090

Drinking Water: 206-438-8199

Industrial Pretreatment Program: 206-586-0373

Wastewater Discharge Permitting: 206-438-7054

Stormwater Management: 206-438-7037

Underground Storage Tanks: 206-438-7999

Waste Minimization/Reduction/Prevention: 206-438-7145

Department of Health
Division of Radiation Protection
MS LE-13, Airdustrial Center Building 5
Olympia, WA 98504

Radon: 206-753-3468

Water Resources Program
Water and Shorelands
MS PV-11
Olympia, WA 98504

Water Agency: 206-459-6056

Wetlands: 206-459-6777

Department of Agriculture
Pesticide Management Division
406 General Administration Building AX-41

Pesticides Control: 206-753-5062

Radon Toll Free Number: 1-800-323-9727

WASHINGTON (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, WA 98101

General Information: 206-553-4973

Water Division

206-553-1793

- Drinking Water
- Ground Water
- Surface Water
- Wastewater

Air and Toxics Division

206-553-4152

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Division

206-553-1261

- Municipal Solid Waste
- Hazardous Waste
- Superfund

WEST VIRGINIA (State Contacts)

Name of State Agency

West Virginia Department of Commerce, Labor and
Environmental Resources

Division of Environmental Protection

Office of Air Quality

1558 Washington Street East

Charleston, WV 25311-2599

Air: 304-558-3286

Office of Environmental Health Services

815 Quarrier Street, Morrison Building

Charleston, WV 25301

Asbestos: 304-558-2981

Radon: 304-558-2981

Water Agency: 304-558-2981

Drinking Water: 304-558-2981

Office of Waste Management

1356 Hansford Street

Charleston, WV 25301

Hazardous Waste: 304-558-5393

Emergency Response: 304-558-5989

Solid Waste: 304-558-7763

Municipal Landfill Permit Review: 304-558-7763

Underground Storage Tanks: 304-558-6371

Waste Minimization/Reduction/Prevention: 304-558-5393

Office of Water Resources

617 Broad Street

Charleston, WV 25301

Industrial Pretreatment Program: 304-558-4086

Wastewater Discharge Permitting: 304-558-0375

Stormwater Management: 304-558-0375

Wetlands: 304-558-2108

Department of Agriculture

Laboratory Services Division

1900 Kanawha Boulevard, East

Charleston, WV 25305

Pesticides Control: 304-558-2226

Radon Toll Free Number: 1-800-922-1255

WEST VIRGINIA (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency

Region 3

841 Chestnut Building

Philadelphia, PA 19107

General Information: 215-597-9800

Water Management Division

215-597-9410

- Drinking Water
- Ground Water
- Wastewater, Stormwater
- Sludge

Air, Radiation and Toxics Division

215-597-9390

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division

215-597-8181

- Municipal Solid Waste
- Superfund
- Emergency Response
- Underground Storage Tanks

Environmental Services Division

Annapolis Laboratory

410-573-2682

- Hazardous Waste

Environmental Services Division

Wetlands Section

215-597-9301

- Wetlands

Environmental Services Division

Environmental Planning & Assessment Section

215-597-6289

- Pollution Prevention

WISCONSIN (State Contacts)

Name of State Agency

Department of Natural Resources

P.O. Box 7921

Madison, WI 53707

Air: 608-266-0603

Asbestos: 608-267-7541

Hazardous Waste: 608-266-7055

Emergency Response: 608-267-7562

Solid Waste: 608-266-0520

Municipal Landfill Permit Review: 608-266-0520

Water Agency: 608-266-8631

Drinking Water: 608-267-7651

Industrial Pretreatment Program: 608-266-7721

Wastewater Discharge Permitting: 608-266-7721

Stormwater Management: 608-266-9254

Underground Storage Tanks: 608-267-7562

Wetlands: 608-266-8034

Pesticides Control: 608-266-6977

Waste Minimization/Reduction/Prevention: 608-267-7565

Division of Health, Department of Health &

Social Services

P.O. Box 309

Madison, WI 53701

Radon: 608-267-4796

Radon Toll Free Number: 1-800-798-9050

WISCONSIN (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency

Region 5

77 West Jackson Boulevard

Chicago, IL 60604-3507

General Information: 312-353-2000

Water Division

312-353-2147

- Drinking Water
- Ground Water
- Wastewater

Air and Radiation Division

312-353-2212

- Air
- Radon

Waste Management Division

312-886-7579

- Superfund
- Emergency Response

Office of RCRA

312-886-7435

- Municipal Solid Waste
- Underground Storage Tanks
- Hazardous Waste

Environmental Sciences Division

312-353-3808

- Pesticides
- Asbestos

WYOMING (State Contacts)

Name of State Agency

Department of Environmental Quality
122 W. 25th Street, Herschler Building
Cheyenne, WY 82002

Air: 307-777-7391

Asbestos: 307-777-7391

Hazardous Waste: 307-777-7752

Emergency Response: 307-777-7781

Solid Waste: 307-777-7752

Municipal Landfill Permit Review: 307-777-7752

Water Agency: 307-777-7781

Drinking Water: 307-777-7957

Wastewater Discharge Permitting: 307-777-7781

Underground Storage Tanks: 307-777-7781

Wetlands: 307-777-7781

Waste Minimization/Reduction/Prevention: 307-777-7752

Department of Health
Hathaway Building
Cheyenne, WY 82002

Radon: 307-777-7957

Department of Agriculture
Technical Services
2219 Carey Avenue
Cheyenne, WY 82002

Pesticides Control: 307-777-6590

Radon Toll Free Number: 1-800-458-5847

WYOMING (Federal Contacts)

Name of Federal Agency

U.S. Environmental Protection Agency
Region 8
999 18th Street, Suite 500
Denver, CO 80202-2405

General Information: 303-293-1603

Water Management Division
303-293-1542

- Drinking Water
- Ground Water
- Wastewater

Air and Toxics Division
303-293-0946

- Air
- Asbestos
- Radon
- Pesticides

Hazardous Waste Management Division
303-293-1720

- Municipal Solid Waste
- Hazardous Waste
- Emergency Response
- Superfund

Comments and Evaluations

Your comments, evaluations, and suggestions are for the assembly of subsequent issues.

What sections did you find most helpful? _____

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Ease of reading? _____ Comments _____

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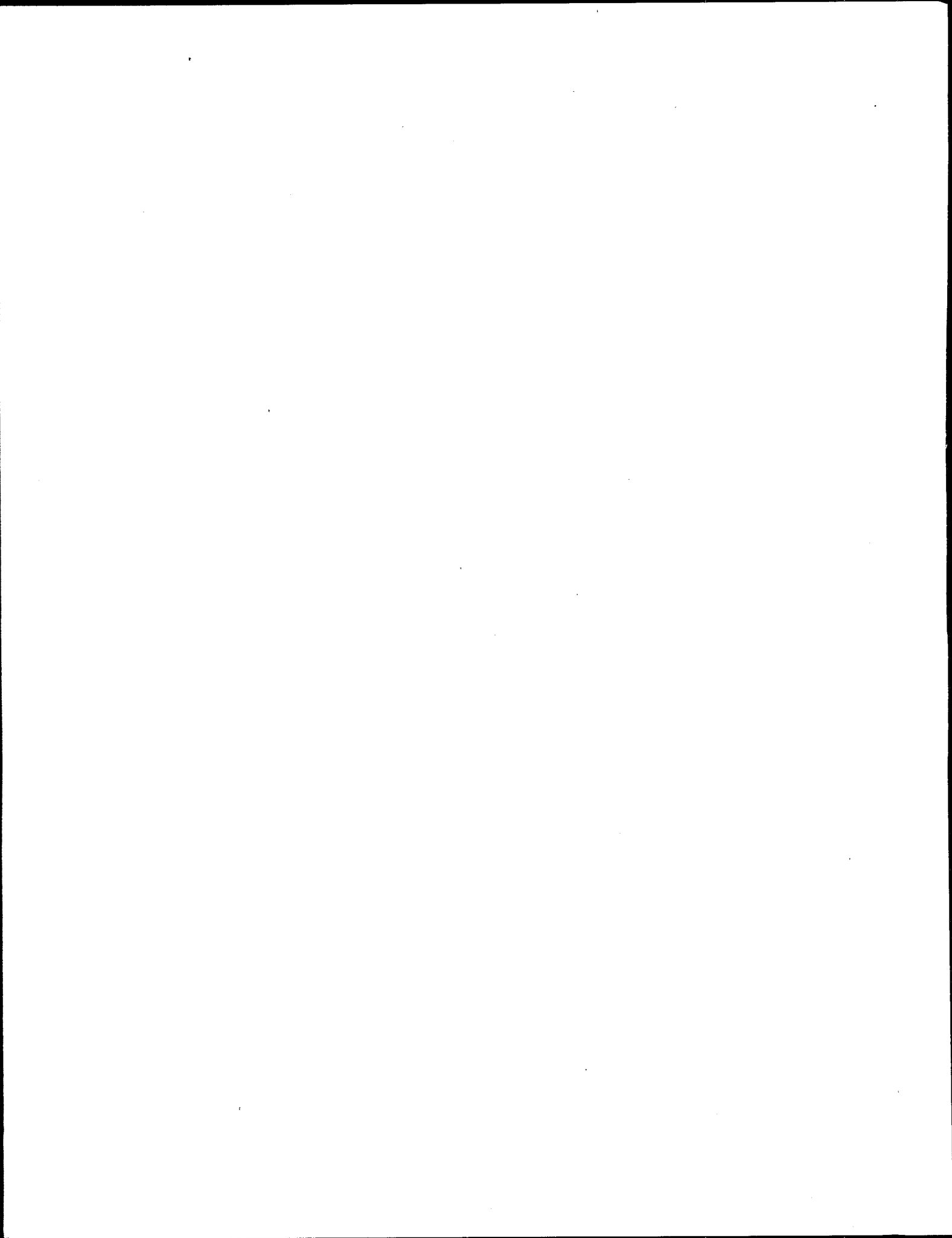
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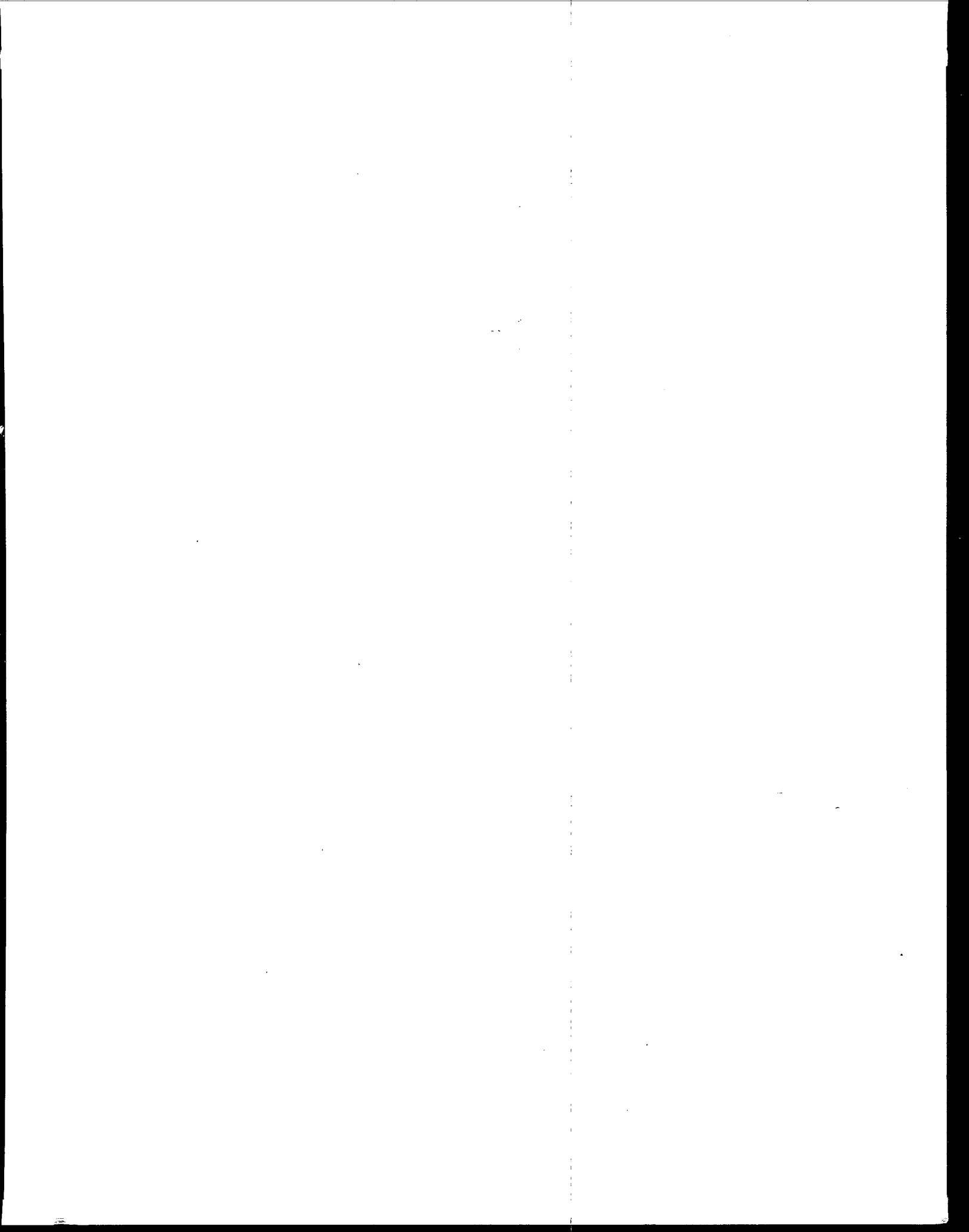
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Environmental Protection Agency**
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