



# Handbook for Special Public Notification for Lead

## For Public Drinking Water Suppliers



**Handbook for Special Public Notification  
for  
LEAD  
for  
Public Drinking Water Suppliers**

**Office of Water  
United States Environmental Protection Agency  
Washington, D.C.**

**March 1988  
EPA 570/9-88-002**

#### **ACKNOWLEDGEMENT**

This handbook was prepared for U.S. Environmental Protection Agency under Grant No. T007287-01. Ms. Patricia Ritchey and Ralph Langemeier, EPA Project Officers, Region 7, provided valuable guidance to the project. This handbook was compiled under the direction of Sandra Hick, Ed.D., Division of Continuing Education, the University of Kansas with assistance from Rex Buchanan, Assistant Director of Public Affairs, Geological Survey, the University of Kansas.

The authors wish to thank Mr. Carl Reeverts and Mr. Craig Damron, EPA Office of Drinking Water, Washington, D.C. for their significant assistance in developing and reviewing this handbook.

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## INTRODUCTION

### ***Special Public Notification for Lead***

**C**ongress has made clear the purpose of the special public notification requirement for lead. As stated in the Safe Drinking Water Act, notice is to be given to persons who "may be affected by lead contamination of their drinking water," where such contamination results from either:



(1) the lead content in the construction materials of the public water distribution system; and/or

(2) a water supply that is corrosive enough to cause leaching of lead.

The federal government, through the Environmental Protection Agency, has established specific regulations for notifying the public.



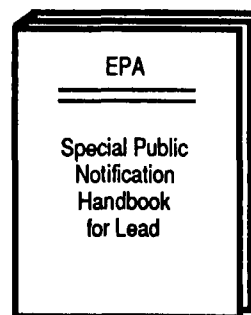
## ***Purpose and Content of this Handbook***

**T**he purpose of this handbook is to take you, step by step, through the process of making the special public notification pertaining to lead in drinking water. This book tells you:

- What information you must provide to the public about lead, even when there has been no violation of the drinking water standards for lead;
- The different types of notices, along with examples of each;
- The kind of information that should be included in a public notice.

This handbook also includes a:

- glossary of technical terms and acronyms (**Appendix A**);
- copy of the portion of the statute that pertains to the special notice for lead (**Appendix E**); and
- copy of the portion of the federal regulations (**Appendix F**) pertaining to special public notification for lead.



### **NOTE! ➡**

States may add additional requirements or elect to give the notice themselves (**Appendix H**). Before sending the special lead notice to your customers, contact your state regulatory agency to ensure its acceptability.

## SECTION 1 *Special Public Notice for Lead*

### *Overview*

**T**he Safe Drinking Water Act Amendments of 1986 established special public notification requirements pertaining to lead.

This special, public notification requirement applies to all community and non-transient non-community public water systems.

The law requires that this notice be given even if there is no violation of the Drinking Water Standard for Lead.

Systems that have violated the **Maximum Contaminant Level (MCL)** for lead (established at **0.05 milligrams per liter [mg/l] or parts per million**)\* must notify their customers according to the General Federal Public Notification Requirements or their state counter-parts. The general federal public notification requirements are described in the **General Public Notification Handbook** to be published separately.

Notices of an MCL violation must be made in addition to the Special Notice for Lead.

**\*NOTE:** EPA is currently revising its requirements pertaining to lead, and expects to reduce the standard significantly.

## Exceptions

Notification is required unless the system can prove that there is no lead-containing material in the water system, including the residential and nonresidential portions. Systems that may be able to meet this requirement should discuss public notification responsibilities with their state regulatory agency. Generally speaking, water systems should assume that they must make the special notification to their consumers.

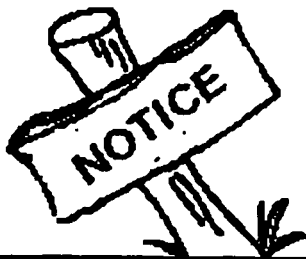
## Consecutive Systems

In the case of **consecutive systems** the owner or operator of a public water system which provides water to another community or non-transient non-community water system is expected to provide one-time notice by letter to the receiving system. The receiving system, in turn, must provide its customers public notice concerning lead according to the lead public notification requirements.

## Methods of Notice

The regulations give systems several options for making this notice: mail, hand-delivery, newspapers, and posting. Systems can use additional means of notice (electronic media, for example) at their discretion or at the direction of their state regulatory agency. When the state is the primacy agent state regulations can be more stringent and may require additional or expanded notice. **The kind of notice required depends on the type of system giving the notice.**

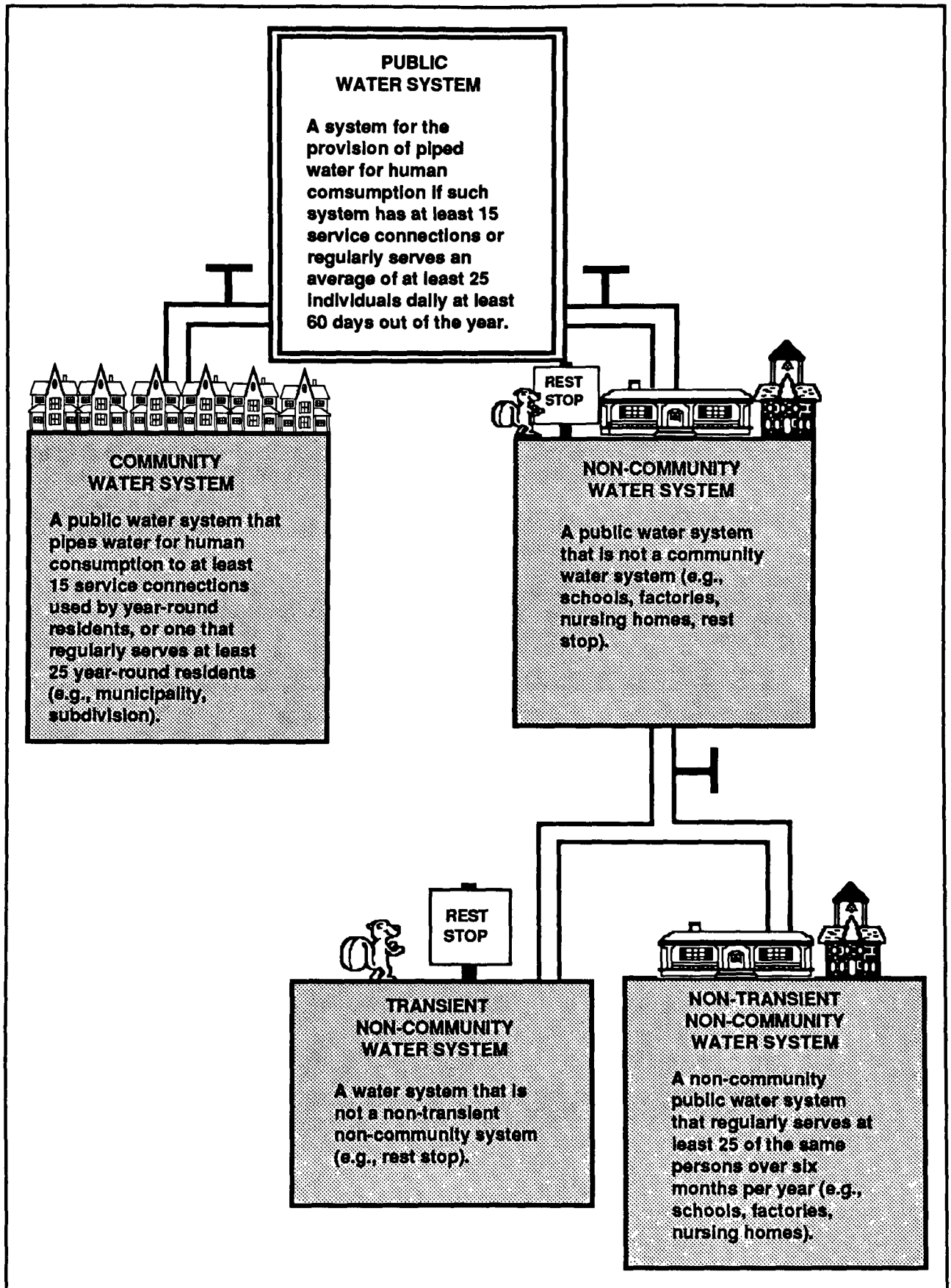
A breakdown of public water systems is given in the diagram on the following page. The definitions of the different types of water systems and examples of each can be found in the Glossary (**Appendix A**). Notification requirements by each type system follow the diagram. Contact your primacy agent, State or EPA, if you are not sure what category you belong in. When in doubt ask.



mail  
hand delivery  
newspaper  
posting



**Section 1 Special Public Notice for Lead**

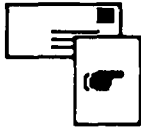





Community public water systems may give notice by:

- mail,
- hand delivery, or
- newspaper.

If systems choose newspapers, they must publish that notice **once** a month for **three** consecutive months, with the first notice coming no later than **June 19, 1988**. They need only provide notice **once** if they do it by hand delivery or mail, and either method must be complete by **June 19, 1988**. The mail notice requirement can be satisfied by including a notice mailed with the water bill or by a separate mailing.

COMMUNITY WATER SYSTEM	
METHOD OF NOTICE	
<b>Mail or Hand Delivery</b>	
	Need to provide only once, but must be completed by June 19, 1988. Mail notice can be satisfied by including with water bill or as a separate mailing.
<b>Newspaper</b>	
	Publish once a month for three consecutive months. First notice no later than June 19, 1988.

Non-transient non-community water systems can give notice by :

- mail,
- hand delivery, or
- newspaper.

They have the additional option of giving notice by

- posting

by June 19, 1988 —

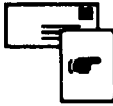


continuously for three consecutive months.

If a non-transient non-community water system (such as a system that provides water for a school or daycare center) chooses **posting**, the posters must be in conspicuous locations and visible continuously for a minimum of three months.



Transient non-community water systems (rest stops, interstate carriers, etc.) are not required to give special notice for lead.



NON-TRANSIENT NON-COMMUNITY WATER SYSTEM	
METHOD OF NOTICE	
<b>Mail or Hand Delivery</b> 	Need to provide only once, but must be completed by June 19, 1988. Mail notice can be satisfied by including with water bill or as a separate mailing.
<b>Newspaper</b> 	Publish once a month for three consecutive months. First notice no later than June 19, 1988.
<b>Posting</b> 	Posted continuously for three consecutive months. Posting to begin no later than June 19, 1988.

The following chapters of this book include more information on each of the methods of notification.

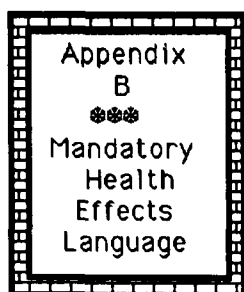
## SECTION 2 *What Information Must be Included in the Special Public Notice For Lead*

**T**he regulations concerning the special notice for lead allow water systems the freedom to include a variety of information specific to their situation. However, certain types of information must go into any public notice, no matter what form it takes. The following section discusses the kind of information that must be included, although its order and emphasis depends on the specific circumstances of each system.

- 1** Notices must contain information about sources of lead in drinking water. The notice should be clear concerning possible sources of lead in the water system itself. It should distinguish between possible lead contamination in the water system, and lead contamination caused by the plumbing system (lead pipes, solder, etc.) within the consumer's home. In other words, even though a water system may provide lead-free water to the consumer, consumers should know that their homes may contain sources of lead contamination.

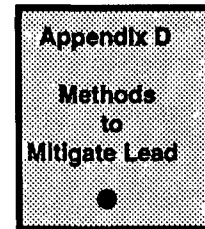


- 2** Notices must include information about potential adverse health effects. Readers want to know the possible adverse health effects of lead and how they should respond. This section of the notice is easily misunderstood. Because this is such a difficult and problematic area, the EPA has established language on the health effects of lead (shown in **Appendix B**). **This language, word for word, must be included in any lead-related notice.** The language should not be modified or broken up by inserting paragraphs or statements of your own.

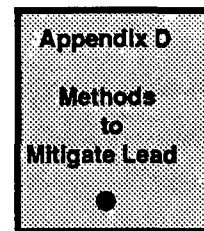


## Section 2 What Information Must be Included In the Special Public Notice for Lead

**3** Notices must include information about reasonably available methods of mitigating known or potential lead content in drinking water. The regulations require that you include information on the reasonably available methods of mitigating lead content in drinking water, and then tell consumers which of those methods are being used to mitigate lead content in their drinking water (Item 4, below). A checklist of currently available methods is given in Appendix D. Include all the items that apply in your public notice.



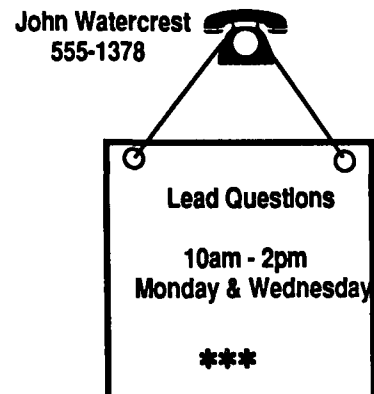
**4** Notices must contain information about the steps being taken to correct the problem. In addition to informing consumers about the methods currently available for mitigating lead content in drinking water, notices should tell consumers what their water system is doing to correct the problem (see the Appendix D checklist). For example, if the system is replacing lead pipe as part of its regular repairs, that information should be in the notice. Corrosion control measures are particularly important.



**5** Notices must include information about alternative water supplies, when there is a need to use them. In most situations, the public does not need to seek alternative water supplies, and that should be made clear. When it is necessary to seek alternative water supplies, this should be emphasized early in the notice. Readers not only want information, they want to know how they should respond.



**6** Notices must include a phone number of the owner, operator, or designee of the public water system. The phone number gives customers a source of further information. In either case, it is helpful if the notice shows a name along with the phone number. The contact person must be able to supply facts about lead and how to correct the problem. Such a source should be well informed and able to answer a variety of questions, including the availability of testing for lead and the costs of such a test. That contact person may not attempt to frustrate the purpose of public notification or to minimize its importance. It is permissible, by the way, for the notice to designate certain office hours when that person is available to answer questions.



## Section 2 What Information Must be Included in the Special Public Notice for Lead

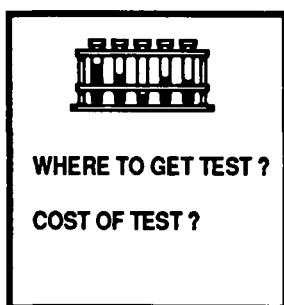


Such sources may wish to maintain a supply of the EPA pamphlet "Lead and Your Drinking Water" to provide additional information to consumers. Information on how to obtain copies of the booklet is available from:

**Drinking Water Booklet**  
**EPA**  
**Washington, DC 20460**

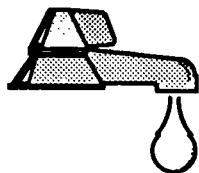
and the EPA regional offices shown in Appendix G.

- 7** Notices must contain specific advice about learning if lead-containing materials were used in home plumbing or the water distribution system. The severity of the problem may depend on



the age of the plumbing. Notices should explain both the sources of lead in drinking water and the testing that is necessary to determine lead levels. Customers should be advised to check to see if lead pipes, solder, or flux have been used in plumbing and to be sure that new plumbing and plumbing repairs use lead-free materials. Notices can inform customers that the only way to be sure about the amount of lead in household water is through testing at a competent laboratory. Testing is especially important for apartment dwellers where flushing may not be effective in reducing lead in water from lead-soldered central piping. It may also be appropriate to include information about testing. The EPA pamphlet "Lead and Your Drinking Water" may be especially helpful here.

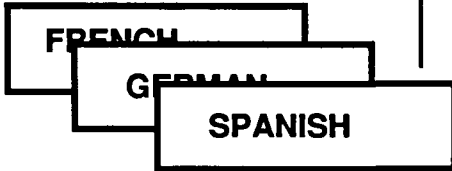
- 8** Notices must give specific advice on minimizing exposure to water that is likely to be contaminated with lead. Consumers need specific information about actions they can take to reduce



known or potential lead content in their water. For example, notices can mention that the cold-water faucet should be used for drinking, cooking, and preparing baby formula, and to run the water until it gets as cold as it is going to get before each use. Notices can point out that if there has been recent heavy water use in the house, such as a shower or doing laundry, flushing the pipes should take five to 30 seconds; otherwise it may take as long as several minutes. The "note" in the federal regulations (Appendix E) gives additional suggestions for providing this information.



- 13** Where appropriate, notices must be multi-lingual. Where a non-English speaking population makes up a significant portion of the water-consuming public, the notices should be in the appropriate language, as well as English.

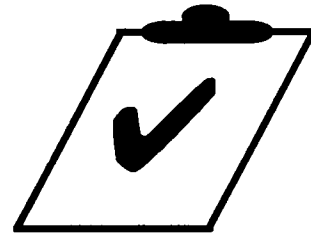


Finally, the law allows considerable freedom about additional information that can be included in a notice. Obviously, notices must contain a great deal of information. Because of the importance of this information in helping consumers make decisions about their water supplies, the information must be presented in clear, non-technical terms. Section 3 of this book contains requirements and guidelines for methods of presenting technical information in the most appropriate manner.



### ***A Checklist of Public Notice Requirements Pertaining to Lead***

**T**he following checklist will help you determine if all requirements have been met for your public notification of lead. Use this checklist as you develop your own notice. (See Appendix C for a copy that may be duplicated for your use.)



#### **Checklist of Public Notice Requirements Pertaining to Lead**

##### **HOW TO USE:**

✓ Check each item that appears in the notice you have prepared. When all items are checked your notice should meet the requirements set for a **Special Public Notification for Lead**.

● **The notice provides a clear and readily understandable explanation of**

- ✓ 1. potential sources of lead in drinking water
- ✓ 2. potential adverse health effects (**mandatory health effects language**)
- ✓ 3. reasonably available methods of mitigating known or potential lead content in drinking water
- ✓ 4. the steps the system is taking to mitigate lead content in drinking water
- NA 5. necessity for seeking alternative water supplies, if any

● **The notice includes**

- ✓ 6. the telephone number of the owner, operator, or designee of the public water system as a source of additional information
- ✓ 7. specific advice about determining if materials containing lead have been used in homes
- ✓ 8. specific advice about how to minimize exposure to water likely to contain high levels of lead

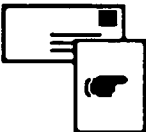



● **The notice**

- ✓ 9. uses print that is easily read
- ✓ 10. content creates no problems that would frustrate the purpose of notice
- ✓ 11. design is clear and conspicuous
- ✓ 12. contains non-technical language
- NA 13. contains multi-lingual information, where appropriate

NA—Not applicable for this public notice example.

## SECTION 3 *Guidelines for Presentation of Information*

The law provides specific requirements about the ways in which information is to be presented to the public. Keep in mind that how a notice is written depends on the type of medium being used.

TYPE OF MEDIUM USED:		Section 4 page
	Mail	20
	Hand delivery	24
	Newspaper	31
	Posting	27

That is, a notice for posting or direct mail may be different than a similar notice for a newspaper. Examples of different notices for different media are shown in examples discussed in Section 4.

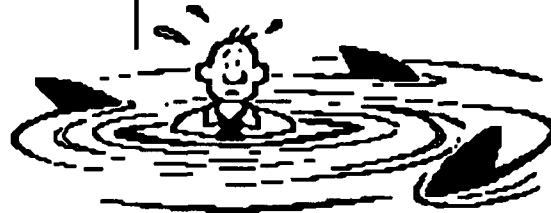
**A**ll of those notices have certain aspects in common. They must be clearly written. If notices contain language that is too technical, and thus unclear or unfamiliar to readers, it almost guarantees that consumers will not read it. While owners and operators of a water system are familiar with the complex terms and language involved in drinking water treatment, most of their customers are not.

Customers must be able to understand and make judgments about water quality and safety;

they can only do that if they are provided the information in a manner that is

- clear
- accurate, and
- precise

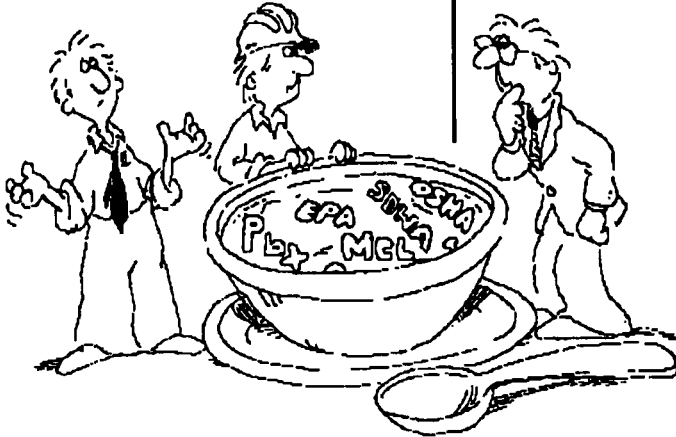
To meet this requirement:



**MAKE IT CLEAR**

**Don't use complicated words** if they can be avoided. The subject of water quality, and its regulation, is complicated enough. Save technical words or phrases for times when they are necessary for understanding or for future education. If such terms are necessary, define them.

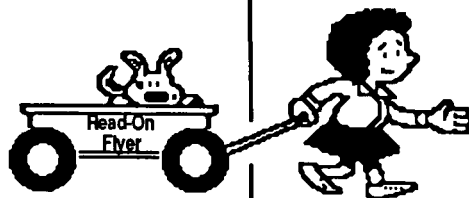
Don't assume that your audience knows the meaning of technical phrases. Also, avoid acronyms or abbreviations.



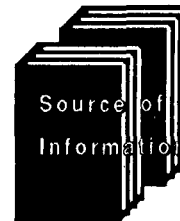
Notices should be so clear that readers can understand them. Remember, it takes years to learn the nature of water quality and its treatment. Don't expect average readers to know the things that you know.

**PRESENT INFORMATION  
IN ORDER  
OF IMPORTANCE**

Many readers, particularly newspaper audiences, read only the **first few paragraphs** of a story, letter, or notice. Those paragraphs, therefore, should contain the **most important information**; the first few paragraphs can also pique audience interest and increase the chance that they will read further.



The first few paragraphs should also include **details about the source of information**, indicating that they are being supplied by a water system. That not only provides information to readers, but it gives the notice additional credibility and lets readers know that they should be concerned. Less important information can generally wait until later.



## BE CONCISE

Regardless of whether you use a letter, mail insert, legal notice or poster, be concise. It sounds simplistic, but studies have shown that short words are easier to understand than long words.

**Make it short!**



Short sentences are easier to understand than long sentences. Short paragraphs are easier to read and understand than long paragraphs. Long news releases stand a better chance of being cut or rewritten, or not used at all, than short ones.

Thus, **be concise. . . .**

Include all of the **necessary information**, but don't clutter up a story or notice with every available piece of information.



**Note:** To check the understandability of a notice, you may wish to show copies to a few typical consumers before mailing or publishing it. Those consumers may help you pinpoint portions of the notice that they do not understand.

## **Section 4      *Types and Examples of Special Public Notice for Lead***

### ***Types of Public Notice***

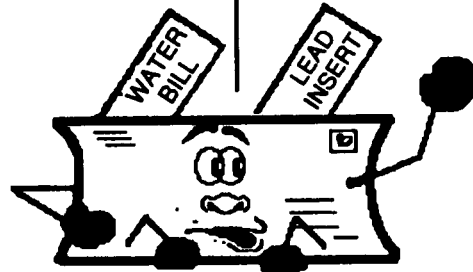
**T**he following section discusses different types of public notice, along with examples of each. Each medium of public notice is different, whether it is

**Mail Delivery,  
Hand Delivery,  
Newspaper or  
Posting.**

Your notices must be written and designed so that they will have maximum impact and should be tailored for each medium as much as possible. In every case, however, the notices must include all the information called for by the **Checklist** in **Section 2** and **Appendix C**.

### ***Notices by Mail***

**M**ail delivery is one of the most effective means of public notice.



Mail delivery can be made with the customer's bill. Two common forms of such notices are:

- **formal letters from the system manager,**  
or
- **a bill stuffer or mail insert,**

often on stiff paper. Another option that may be available to public water systems is to give the notice through the "Town Newsletter," as long as the newsletter is mailed to all customers served by the water system and the notice is conspicuous in the newsletter. Mail delivery notices must contain the **required information** discussed in **Section 2** of this handbook.



Perhaps the biggest problem with these notices is providing the necessary information and getting the customer's attention at the same time. Various design techniques can help. Important information can be highlighted in **boldface** type. Using several type styles will generally make a notice more readable.



Information should **not clutter** up the entire page of a notice; **white space** around the type generally makes the information more readable. As in all notices, a **source for additional information** should be included.



With the advent of computerized desktop-publishing and word-processing systems, larger water systems may have more flexibility in designing such announcements.

**Boldface type: LEAD**

Type styles; Chicago  
Geneva  
Monaco

A Formal Letter sample for the Madison Water Department follows... →

Note: The circled numbers on the example correspond to items found in the **Checklist of Public Notice Requirements Pertaining to Lead, Appendix C**. NA means not applicable in this situation.

## Example: Formal Letter or Bill Stuffer



WATER DEPARTMENT

Madison City Hall  
Madison City, Kansas 4444  
(132)555-1767

To Customers of the Madison Municipal Water Supply:

The Safe Drinking Water Act passed by Congress in 1986 requires all water systems to notify their customers about possible lead contamination in drinking water. Madison water is currently well below the current EPA standards for lead in drinking water, although the Water Department will continue to carefully monitor water quality. Water systems can take steps to make sure that lead does not become a problem in their distribution system, such as replacing lead pipe and service connections. As part of your system's treatment process, the pH level and mineral content of the water are adjusted to deliver minimally corrosive water. The effect of this practice is to produce water that dissolves lead more slowly than corrosive water. In addition, the Madison Water Department will replace any lead pipe that is found in the Water Department system during regular maintenance or repair. However, concerned customers may want to check their water as it comes from the tap to make sure that it is safe. ④  
③

The EPA has provided the water department with the following information:

The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly. ②

Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard.

EPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women.

Lead levels in your drinking water are likely to be highest:

- if your home or water system has lead pipes or
- if your home has copper pipes with lead solder, and
  - if the home is less than five years old, or
  - if you have soft or acidic water, or
  - if water sits in the pipes for several hours

Lead piping and lead solder are two of the most common sources of lead in domestic drinking water. Lead-containing materials can often be spotted through home inspection; plumbers can also inspect your home for lead-containing materials. The only way to be sure about your water's lead content is to have the water tested; the Madison Water Department has information about water testing and can tell you how to reduce the risk from lead contamination. Using water from the cold-water tap and flushing your household system for a few minutes before each use, for example, can help lower exposure to lead. ①  
⑦  
⑧

## **Example: Formal Letter or Bill Stuffer**

**Madison City Water Department  
page 2**

**Flushing may take even less time if there has been recent heavy water use, such as bathing or doing laundry. Other steps are also helpful, including refraining from use of hot water for cooking or drinking; and replacing lead pipes and service connections. The Water Department does not recommend that you seek alternative water supplies unless your water tests above the minimum levels established by law.**

**The Water Department can supply more information, including copies of informational flyers provided by the EPA. Contact Susan Brown at 555-1767 for more information.**

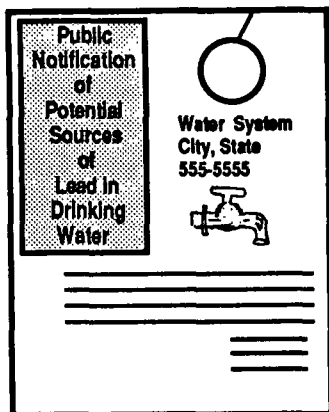
**⑤**

**⑥**

**⑬ NA**

## Notices by Hand Delivery

**H**and delivery of a public notice is also effective. One common method of hand delivery is the use of **doorknob flyers**: flyers with specially designed paper hooks that fit over doorknobs.



The same general guidelines for

- type style,
- size, and
- layout


apply to both doorknob flyers and mail notices. In fact, the same information and design can often be used for both. Local printers should be able to provide the paper necessary for use in doorknob flyers.

See the example of a **Doorknob Flyer** that follows.

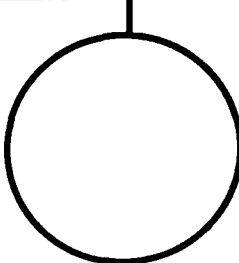


Note: The circled numbers on the example correspond to items found in the **Checklist of Public Notice Requirements Pertaining to Lead, Appendix C**. NA means not applicable in this situation.


## Example: Doorknob Hanger—front side

<div><div><b>MADISON CITY</b></div><div>WATER DEPARTMENT</div><div><b>NOTIFICATION FOR LEAD IN DRINKING WATER</b></div><div><b>SITUATION</b><p>The Safe Drinking Water Act passed by Congress in 1986 requires all water systems to notify customers about possible lead contamination in drinking water.</p><p>Madison water is currently well below the current EPA standards for lead in drinking water. The Water Department will continue to carefully monitor water quality. Water systems can take steps such as replacing lead pipe and service connections, to make sure that lead does not become a problem in their distribution system. As part of your system's treatment process, the pH level and mineral content of the water are adjusted to deliver minimally corrosive water. The effect of this practice is to produce water that dissolves lead more slowly than corrosive water. In addition, the Madison Water Department will replace any lead pipe that is found in the system during regular maintenance or repair.</p></div><div><b>LEAD INFORMATION</b><p>The United States Environmental Protection Agency(EPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly.</p><p>Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard. EPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women.</p><p>Lead levels in your drinking water are likely to be highest:</p><ul style="list-style-type: none"><li>● if your home or water system has lead pipes or</li><li>● if your home has copper pipes with lead solder, and<ul style="list-style-type: none"><li>- if the home is less than five years old, or</li><li>- if you have soft or acidic water, or</li><li>- if water sits in the pipes for several hours.</li></ul></li></ul></div><div><div><b>INFORMATION</b><p>For more information concerning testing , how to reduce the risk from lead contamination, and EPA informational flyers contact:</p><p>Susan Brown Madison City Hall or call 555-1767</p><p>OVER </p></div></div></div>	<div>④</div> <div>③</div> <div>②</div> <div>⑥</div> <div>⑤ NA</div> <div>⑬ NA</div>
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## Example: Doorknob Hanger—back side




**GENERAL INFORMATION ABOUT LEAD  
IN YOUR DRINKING WATER**



Lead piping and lead solder are two of the most common sources of lead in domestic drinking water. The severity of the problem may depend on the age of your plumbing. Lead containing materials can often be spotted through home inspection; plumbers can also inspect your home for lead-containing materials.

If you are concerned about your water's lead content it should be tested.

The Madison City Water Department has information about water testing and can tell you how to reduce the risk from lead contamination.



**TIPS FOR REDUCING LEAD**


Using water from the cold-water tap and flushing your household system for a few minutes before each use can help lower exposure to lead.

Flushing may take even less time if there has been recent heavy water use, such as bathing or doing laundry.

Other steps are also helpful, including :

Refraining from use of hot water for cooking or drinking, and

Replacing lead pipes and service connections.



For more information please contact:

Susan Brown  
Madison City Hall  
or call 555-1767

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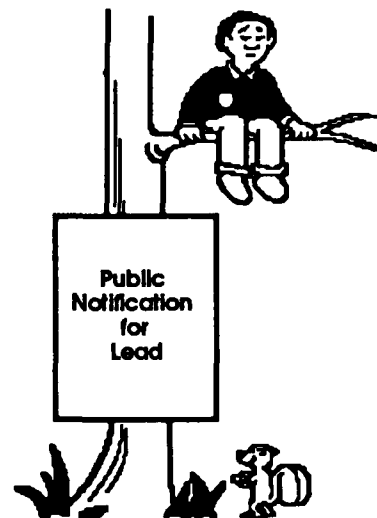
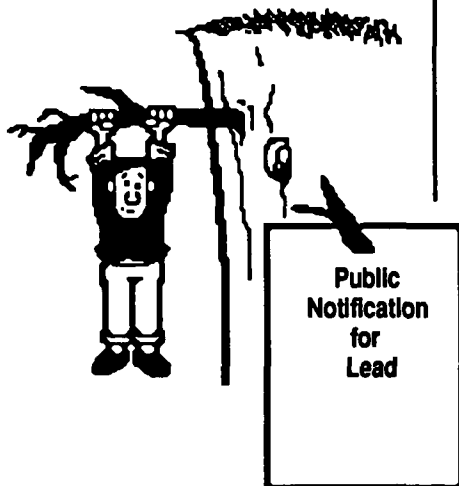
⑧

⑥

### **Posted Notices— For Non-Transient Non-Community Water Systems Only!**

**P**osted notices are yet another method of informing the public about violations. They are, however, for non-transient non-community water systems only! These notices must contain the same **required information** as other forms of notice. Like mailed notices, these posted notices should be designed to attract attention, use:

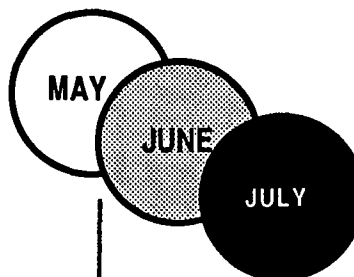
- drawings,
- large amounts of white space around the type, and
- boldface, and
- other type faces as necessary.



These notices should be widely posted at the locations where customers are most likely to see them.

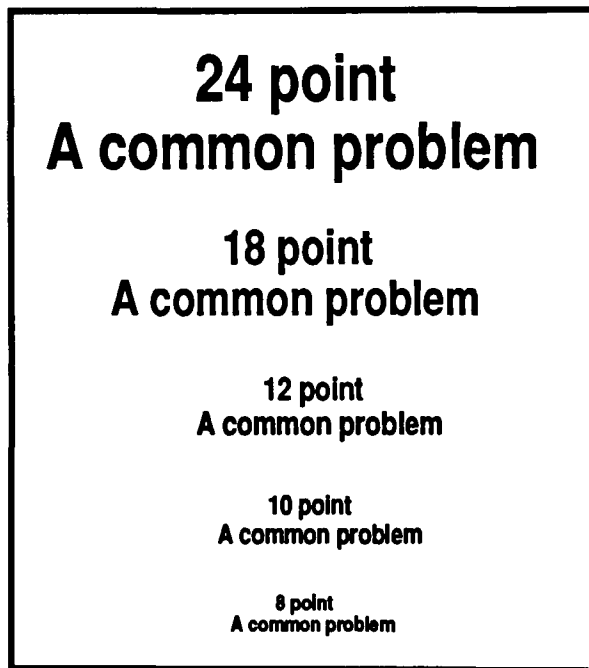
Posters that are too small, or placed in poor locations, frustrate the purpose of the law.

The posters must be in place three consecutive months to satisfy the law.



A common problem with **posted notices** is using type that is too small to read comfortably at a distance. The **headings** of notices should be no smaller than **18 point type**. The **body** of the notice should be **12 point** or larger. Avoid type smaller than **10 point**.

***Point Sizes for Comparison***




An example of two **Posted Notices** follow. Posting of both notices is necessary to meet notification requirements. Please note they have been reduced in size to fit the page format.

Note: The circled numbers on the example correspond to items found in the **Checklist of Public Notice Requirements Pertaining to Lead, Appendix C**. NA means not applicable in this situation.



## Example: Posted Notice

 <b>WATER DEPARTMENT</b>	
<b>PUBLIC NOTIFICATION FOR LEAD IN DRINKING WATER</b>	
<b>SITUATION</b>	<p>The Safe Drinking Water Act passed by Congress in 1986 requires all water systems to notify customers about possible lead contamination in drinking water.</p> <p>Madison water is currently well below the current EPA standards for lead in drinking water. The Water Department will continue to carefully monitor water quality. Water systems can take steps such as replacing lead pipe and service connections, to make sure that lead does not become a problem in their distribution system. As part of your system's treatment process, the pH level and mineral content of the water are adjusted to deliver minimally corrosive water. The effect of this practice is to produce water that dissolves lead more slowly than corrosive water. In addition, the Madison Water Department will replace any lead pipe that is found in the system during regular maintenance or repair.</p>
<b>LEAD INFORMATION</b>	<p>The United States Environmental Protection Agency(EPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly.</p> <p>Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard.</p> <p>EPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women.</p> <p>Lead levels in your drinking water are likely to be highest:</p> <ul style="list-style-type: none"><li>• If your home or water system has lead pipes or</li><li>• If your home has copper pipes with lead solder, and<ul style="list-style-type: none"><li>- if the home is less than five years old, or</li><li>- if you have soft or acidic water, or</li><li>- if water sits in the pipes for several hours</li></ul></li></ul>
<b>INFORMATION</b>	<p>For more information concerning testing, how to reduce the risk from lead contamination, and EPA informational flyers contact: Susan Brown Madison City Hall or call 555-1767</p>
<b>See second page of this posted notice for additional lead related information.</b>	

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13 NA

5 NA


## Example: Posted Notice (continued)

Page 2 of posted notice.

**GENERAL INFORMATION ABOUT LEAD  
IN YOUR DRINKING WATER**

 Lead piping and lead solder are two of the most common sources of lead in domestic drinking water. The severity of the problem may depend on the age of your plumbing. Lead-containing materials can often be spotted through home inspection; plumbers can also inspect your home for lead-containing materials.

If you are concerned about your water's lead content it should be tested. The Madison City Water Department has information about water testing and can tell you how to reduce the risk from lead contamination.



**TIPS FOR REDUCING LEAD**


Using water from the cold-water tap and flushing your household system for a few minutes before each use can help lower exposure to lead.

Flushing may take even less time if there has been recent heavy water use, such as bathing or doing laundry.

Other steps are also helpful, including :

Refraining from use of hot water for cooking or drinking

Replacing lead pipes and service connections.



For more information please contact:

Susan Brown  
Madison City Hall or call  
555-1757

1

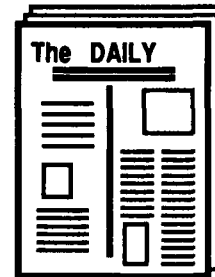
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## Newspaper Notices

**Newspapers** are probably the most common means of public notice. Newspapers are generally considered a credible source of news by readers, and are an important means of communication in many local communities. If systems use newspapers for the special lead notice, the notice must be published:

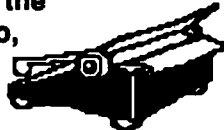


- Once a month for three consecutive months,
- With the first notice no later than June 19, 1988.

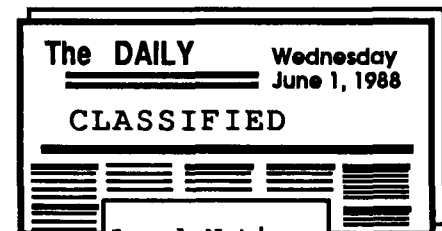
The requirement for newspaper notice can be satisfied either by:

**1** buying space in the newspaper, usually in the legal notices or classified ads section.

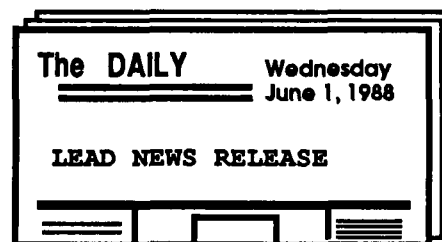
**2** a story by a reporter, if it has the required information. Even so, such a story must be followed by two additional notices, which can be legal notices, or



**3** a news release that is actually printed (providing the printed version includes the required information),



Legal Notice  
Notice Related to Lead  
Contamination of  
Drinking Water from the  
Greenville Water  
Department



#### Section 4 Types and Examples of Special Public Notice for Lead

##### Legal Notice

Notice Related to Lead  
Contamination of  
Drinking Water from the  
Greenville Water  
Department

Because of the competition for reader attention, **legal notices are not the most effective means of public notification**, though they are acceptable and often used.

To make them more effective, **legal notices** should be as large as possible. They should be designed to attract reader attention, using bold faced type and white space in parts of the ad to make the notice more readable.

To help attract reader attention, each notice should be *different from the one before*. More recent notices, for example, can include updates on progress in replacing lead-containing pipe. Water systems may also want to poll their customers to find out how effective the notices are, and revise them accordingly.

In some cases, particularly in smaller towns where competition for newspaper space is less severe, newspapers may also use news releases provided by the water supplier. However, **news releases must still be well written and clear to make sure the information is conveyed accurately**.

Here are the **Steps for Writing a News Release**.

##### STEP 1

News releases should be written on **letterhead paper** that supplies the name, address, and phone number of the public water system.

**WEST HILLS WATER DISTRICT**  
Route 5  
Batesville, Arkansas 33333  
(703)555-5511

**DATE OF RELEASE:** July 5, 1987  
**SOURCE:** Fred Wilholm,  
Water District Manager  
(703) 555-5511

The name and phone number (even if it is the same as the water system) of the person who is the source of the story should also appear at the top of the release, along with the **date** of the news release.

**STEP 2**

Most releases should include a **headline . . .** a line that describes, in as few words as possible, the essence of the story.

**POTENTIAL LEAD CONTAMINATION IN DRINKING WATER**

Providing a headline yourself may prevent someone else from adding an inaccurate headline in the story.

**STEP 3**

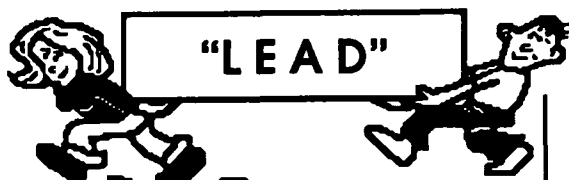
The news release should begin by showing the **location of the story**. That is, if the water system is located in Batesville, the town's name should be **indented** and shown in **capital letters**.

**BATESVILLE—**Though there is no evidence of detectable levels of lead . . .

**STEP 4**

After the location is shown, the story itself can begin. As mentioned previously, the **most important information** should be shown at the beginning of a story, followed by an attribution, which shows the **source** of the story.

**BATESVILLE—**Though there are no detectable levels of lead delivered to the home due to contamination or corrosion in the water supply produced by the West Hills Water District, concerned customers may want to check their tap water for traces of lead, according to water district manager Fred Wilholm.



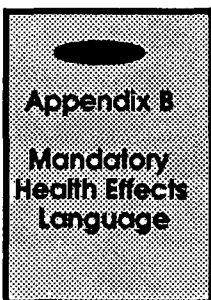
Some news reporters try to include everything about a story in the first sentence. In a technical story, however, that is generally difficult.

The first sentence (known as the "lead" in news writing) often becomes too long and unwieldy. In general it is sufficient to put the **most important information first**, and leave less important information for later.

#### STEP 5

After the "lead," the following paragraph could contain more specific information about exact measurements of the levels and what the allowable levels are. For example:

Tests throughout the West Hills water system show that samples of water leaving the plant contain no detectable levels of lead because of the materials used in the distribution system, Wilholm said. But customers may want to check water from their taps to make sure that their water is not contaminated by household plumbing.



That paragraph could be followed by the **mandatory language about the health effects of lead**, followed by information about the cause and remedy of the situation.

- water samples below minimum standard
- water system required to make a public notice for lead

Further local information would be helpful.

#### ***Section 4 Types and Examples of Special Public Notice for Lead***

A finished Release and a Legal Notice would look like this:



Note: The circled numbers on the example correspond to items found in the Checklist of Public Notice Requirements Pertaining to Lead, Appendix C. NA means not applicable in this situation.

## Example: News Release

**WEST HILLS WATER DISTRICT**  
Route 5  
Batesville, Arkansas 33333  
(703)555-5511

**DATE OF RELEASE: July 5, 1987**

**FOR MORE INFORMATION CONTACT: FRED WILHOLM, WATER DISTRICT MANAGER (703-555-5511)**

### **CUSTOMERS NOTIFIED OF POTENTIAL LEAD CONTAMINATION**

**BATESVILLE—**Though there are no detectable levels of lead delivered to the home due to contamination or corrosion in water supply produced by the West Hills Water District, concerned customers may want to check their tap for traces of lead, according to water district manager Fred Wilholm. (4)

Tests throughout the West Hills water system show that samples of water leaving the plant contain no detectable levels because of materials used in the distribution system, Wilholm said. The Water District does not recommend that customers seek alternative water supplies, Wilholm said, unless water tested at a specific house showed that it was above the maximum allowable level. Lead pipe, lead connections, and lead solder are among the most common sources of lead in drinking water, said Wilholm. Lead levels can generally be reduced by replacing pipe and connections with lead-free materials. As part of your system's treatment process, the pH level and mineral content of the water are adjusted to deliver minimally corrosive water. The effect of this practice is to produce water that dissolves lead more slowly than corrosive water. In addition, the West Hills Water System has begun a program to replace any lead service-connections that deliver water to their customers; replacement should be complete within the next year. (5)

Even though there is no evidence of contamination in water from the Water District, lead can be introduced into the water supply through domestic plumbing, and customers might want to check water from their taps to make sure it is not contaminated by lead materials used in household plumbing. (1)

According to Wilholm, the water system has been required to make the following public notice. (3)

The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly. (7)

Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard. (2)

-add on-



## **Example: News Release**

**Add one  
West Hills Water District**

**EPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women.**

**Lead levels in your drinking water are likely to be highest:**

- If your home or water system has lead pipes or**
- If your home has copper pipes with lead solder, and**
  - If the home is less than five years old, or**
  - If you have soft or acidic water, or**
  - If water sits in the pipes for several hours.**

**Wilholm said that while West Hills water was safe, customers who are concerned about lead may want to have their water supply tested by a reputable laboratory. Where lead may be a problem in drinking water, Wilholm recommended that customers use only their cold-water faucet for drinking, cooking, or making baby formula. He said they should run the water to flush the system until the water gets as cold as possible before each use. When there has been recent major water use in the house, such as laundry or showering, that may only take five to thirty seconds. Otherwise, flushing the system may take up to several minutes. In some cases, customers may need to consider replacing lead pipes, having their water treated with systems that will remove lead, or using bottled water.**

**8**

**Wilholm advised customers to check to see if lead pipes, solder, or flux might have been used in their plumbing and to make sure that new plumbing or plumbing repairs used lead-free materials. Lead is a soft, gray metal. Pipes made of lead can be easily scratched by a key or screwdriver; those scratches will be shiny.**

**7**

**For more information contact Fred Wilholm at the West Hills Water District, 555-5511.**

**6**

**-30-**

**13 NA**

## Example: Legal Notice

### Notice Related to Lead Contamination of Drinking Water From the Greater Greenville Water Department

The Greater Greenville Water Department notifies its customers, as required by 1986 amendments to the Safe Drinking Water Act, that they should consider testing household water supplies for lead content. Water provided by the system is currently well below current standards for lead contamination. Lead content can be reduced by replacing lead pipe or connections with lead-free materials. As part of your system's treatment process, the pH level and mineral content of the water are adjusted to deliver minimally corrosive water. The effect of this practice is to produce water that dissolves lead more slowly than corrosive water. Because the Greenville water system does not contain any lead pipe or service connections, the Department has no plans to replace pipe at this time. Any repairs or additions to the system will continue to be made with lead-free materials.

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④

However, lead piping and lead solder used in household plumbing may contaminate domestic water supplies. Visual inspection by home owners or a plumber can generally reveal the presence of lead in the plumbing system. Because lead is a soft, gray metal, pipes made of lead will scratch easily and the scratches will be shiny. To be sure about their water quality, customers may want to have their own water tested as it comes from the tap. Unless those tests reveal lead levels above the maximum allowable by law, the Department does not recommend that customers seek alternative water supplies.

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The Department provides the following information from the U.S. Environmental Protection Agency.

The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly.

Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard.

②

EPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women.

Lead levels in your drinking water are likely to be highest:

- if your home or water system has lead pipes or
- if your home has copper pipes with lead solder, and
  - if the home is less than five years old, or
  - if you have soft or acidic water, or
  - if water sits in the pipes for several hours.

The water department advises customers that they can take a number of steps to mitigate the problems of lead contamination in drinking water, including using only water from the cold-water tap for cooking or drinking, running the tap for a few minutes to flush the system before using water for cooking or drinking, or replacing lead pipes. Visual inspection can often reveal lead pipes or solder, though testing is the only way to be certain if your water is safe. The Water Department has additional information about testing and about steps that consumers can take to reduce the lead content in their water. For more information, contact Bruce Peters, Public Information Officer at the Department, at 555-1146 between the hours of 8 a.m. and 5 p.m.

⑧

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⑬ NA

## ***Proof of Publication***

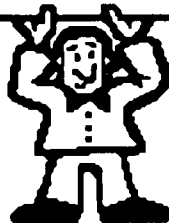
**W**ater systems using newspapers to give public notice may be required to prove to the primacy agent that notification has been published. This can generally be arranged through newspaper advertising offices, which can offer you:

- tearsheets,
- copies of the pages showing your advertisement, or
- through a certification process by which the paper can offer proof that your advertisement was published.

Newspaper advertising offices can provide tearsheets or certification of your advertising, but you should

**Request those items at the time that you place the advertisement.**

**Request those items at the time that you place the advertisement.**



Your state regulatory agency may require or request proof that the notice was given. Such proof can be obtained from your newspaper. Keep the proof (or a good copy) on file in case this is requested.



## **APPENDICES**

**APPENDIX A. GLOSSARY**

**MCL** - Maximum contaminant level, the highest acceptable levels for contaminants as established by the National Primary Drinking Water Regulations.

**NATIONAL PRIMARY DRINKING WATER REGULATIONS** - The source of standards for drinking water. They contain an MCL or treatment technique, and monitoring and reporting requirements.

**PRIMACY AGENT** - The agency that is responsible for regulation of the states' water supply systems. In nearly all cases, this is the state agency that regulates water supply systems. In states where no state agency administers the public drinking water program, EPA is the primacy agent.

**PUBLIC WATER SYSTEM** - A system for the provision of piped water for human consumption if it has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such a system includes: (1) any collection, treatment, storage and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (2) any collection or retreatment storage facilities not under such control which are used primarily in connection with such system. A public water system is either a **community water system** or a **non-community water system**.

1. **COMMUNITY WATER SYSTEM** - A public water system that pipes water for human consumption to at least 15 service connections used by year-round residents, or one that regularly serves at least 25 year-round residents (e.g., municipalities, subdivisions).
2. **NON-COMMUNITY WATER SYSTEM** - A public water system that is not a community water system (see community water system.).
  - a. **NON-TRANSIENT NON-COMMUNITY WATER SYSTEM** - A public water system that is not a community water system and that regularly serves at least 25 of the same persons over six months per year (e.g., schools, factories).
  - b. **TRANSIENT NON-COMMUNITY WATER SYSTEM** - A non-community water system that is not a non-transient non-community water system (e.g., rest stop).

**APPENDIX B. MANDATORY HEALTH EFFECTS LANGUAGE**

The following language is required for use in the one-time public notice related to lead. It must be reproduced word for word in the public notice.

**The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly.**

**Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard.**

**EPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women.**

**Lead levels in your drinking water are likely to be highest:**

- **If your home or water system has lead pipes or**
- **If your home has copper pipes with lead solder, and**
  - **If the home is less than five years old, or**
  - **If you have soft or acidic water, or**
  - **If water sits in the pipes for several hours**

**APPENDIX C. CHECKLIST OF PUBLIC NOTICE REQUIREMENTS  
PERTAINING TO LEAD**

**Checklist  
of  
Public Notice Requirements  
Pertaining to Lead**

**HOW TO USE:**

✓ Check each item that appears in the notice you have prepared. When all items are checked your notice should meet the requirements set for a **Special Public Notification For Lead**.

● **The notice provides a clear and readily understandable explanation of**

- ☐ 1. potential sources of lead in drinking water
- ☐ 2. potential adverse health effects (**mandatory health effects language**)
- ☐ 3. reasonably available methods of mitigating known or potential lead content in drinking water
- ☐ 4. the steps the system is taking to mitigate lead content in drinking water
- ☐ 5. necessity for seeking alternative water supplies, if any

● **The notice includes**

- ☐ 6. the telephone number of the owner, operator, or designee of the public water system as a source of additional information
- ☐ 7. specific advice about determining if materials containing lead have been used in homes
- ☐ 8. specific advice about how to minimize exposure to water likely to contain high levels of lead

● **The notice**

- ☐ 9. uses print that is easily read
- ☐ 10. content creates no problems that would frustrate the purpose of notice
- ☐ 11. design is clear and conspicuous
- ☐ 12. contains non-technical language
- ☐ 13. contains multi-lingual information, where appropriate

**APPENDIX D. CHECKLIST OF CURRENTLY AVAILABLE  
METHODS FOR MITIGATING LEAD CONTENT  
IN DRINKING WATER**

***CHECKLIST OF CURRENTLY AVAILABLE  
METHODS FOR MITIGATING LEAD  
CONTENT IN DRINKING WATER***

- ☐ 1. Monitoring and testing of the corrosivity level of your system's water on a routine basis (indicate frequency) to assure your customers of minimally corrosive water.
- ☐ 2. Monitoring and testing of the lead content of your system's water to determine the levels of lead delivered to the service connections in your customers' homes. Even if the levels of lead are not detectable or below the lead MCL, customers should be informed that tap water may contain lead leached from pipes and solder in their home plumbing.
- ☐ 3. As part of your system's treatment process, the pH level and mineral content of the water are adjusted to deliver minimally corrosive water. The effect of this practice is to produce water that dissolves lead more slowly than corrosive water.
- ☐ 4. The practice of using lead or lead-based materials in the water distribution system has been discontinued.
- ☐ 5. The water distribution system is being surveyed for the extent to which lead lines and other lead-containing materials were used.
- ☐ 6. A replacement program for lead and lead containing materials has been started for your system. The start and completion dates should be indicated in your letter.
- ☐ 7. All plumbers, builders, contractors and others who work within your system's service area have been notified of the federal ban on lead and advised to use only lead-free solder and materials.
- ☐ 8. Other

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**APPENDIX E. SAFE DRINKING WATER ACT  
SECTION 1417: "LEAD BAN" REQUIREMENTS**

**"SEC. 1417. PROHIBITION ON USE OF LEAD PIPES, SOLDER AND FLUX**

**"(a) IN GENERAL -**

**"(1) PROHIBITION. -** Any pipe, solder, or flux, which is used after the enactment of the Safe Drinking Water Act Amendments of 1986, in the installation or repair of -

**"(A) any public water system, or**

**"(B) any plumbing in a residential or nonresidential facility providing water for human consumption which is connected to a public water system, shall be lead free (within the meaning of subsection (d)). This paragraph shall not apply to leaded joints necessary for the repair of cast iron pipes.**

**"(2) PUBLIC NOTICE REQUIREMENTS -**

**"(A) IN GENERAL -** Each public water system shall identify and provide notice to persons that may be affected by lead contamination of their drinking water where such contamination results from either or both of the following:

**"(i) The lead content in the construction of materials of the public water distribution system.**

**"(ii) Corrosivity of the water supply sufficient to cause leaching of lead**  
The notice shall be provided in such manner and form as may be reasonably required by the Administrator. Notice under this paragraph shall be provided notwithstanding the absence of a violation of any national drinking water standard.

**"(B) CONTENTS OF NOTICE. -** Notice under this paragraph shall provide a clear and readily understandable explanation of -

**"(i) the potential sources of lead in the drinking water,**

**"(ii) the potential adverse health effects,**

**"(iii) reasonably available methods of mitigating known or potential lead content in drinking water,**

**"(iv) any steps the system is taking to mitigate lead content in drinking water, and**

**"(v) the necessity for seeking alternative water supplies, if any.**

**"(b) STATE ENFORCEMENT. -**

**"(1) ENFORCEMENT OF PROHIBITION. -** The requirements of subsection (a)(1) shall be enforced in all States effective 24 months after the enactment of this section. States shall enforce such requirements through State or local plumbing codes, or such other means of enforcement as the State may determine to be appropriate.

**"(2) ENFORCEMENT OF PUBLIC NOTICE REQUIREMENTS. -** The requirements of subsection (a)(2) shall apply in all States effective 24 months after the enactment of this section.

**"(c) PENALTIES. -** If the Administrator determines that a State is not enforcing the requirements of subsection (a) as required pursuant to subsection (b), The Administrator may withhold up to 5 percent of Federal funds available to that State for State program grants under section 1443(a).

**"(d) DEFINITION OF LEAD FREE. -** For purposes of this section, the term "lead free"-

**"(1) when used with respect to solders and flux refers to solders and flux containing not more than 0.2 percent lead , and**

**"(2) when used with respect to pipes and pipe fittings refers to pipes and pipe fittings containing not more than 8.0 percent of lead".**

## **APPENDIX E**

### **APPENDIX E. continued.**

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#### **Sections of Public Law 99-339 Which Do Not Amend the Safe Drinking Water Act**

**SEC. 109. (c) BAN ON LEAD WATER PIPES, SOLDER, AND FLUX IN VA AND INSURED OR ASSISTED PROPERTY.-**

(1) **PROHIBITION.** - The Secretary of Housing and Urban Development and the Administrator of the Veterans' Administration may not insure or guarantee a mortgage or furnish assistance with respect to newly constructed residential property which contains a potable water system unless such system uses only lead free pipe, solder, and flux.

(2) **DEFINITION OF LEAD FREE.** - For purposes of paragraph (1) the term "lead free" -

(A) when used with respect to solders and flux refers to solders and flux containing not more than 0.2 percent lead, and

(B) when used with respect to pipes and pipe fittings refers to pipes and pipe fittings containing not more than 8.0 percent lead.

(3) **EFFECTIVE DATE.** - Paragraph (1) shall become effective 24 months after the enactment of this Act.

**(d) LEAD SOLDER AS A HAZARDOUS SUBSTANCE. -**

(1) **IN GENERAL.** - Section 2(f)(1) of the Federal Hazardous Substances Act is amended by adding the following at the end thereof:

"(E) Any solder which has a lead content in excess of 0.2 percent."

(2) **LABELING.** - Section 4 of the Federal Hazardous Substances Act is amended by adding the following at the end thereof:

"(k) The introduction or delivery for introduction into interstate commerce of any lead solder which has a lead content in excess of 0.2 percent which does not prominently display a warning label stating the lead content of the solder and warning that the use of such solder in the making of joints or fittings in any private or public potable water supply system is prohibited."

(8) **EFFECTIVE DATE.** - The amendments made by this subsection shall become effective 24 months after the enactment of this Act.

## APPENDIX F

### APPENDIX F. FEDERAL REGISTER ● SECTION 141.34: EXCERPTS: SPECIAL PUBLIC NOTIFICATION REQUIREMENTS FOR LEAD ● October 28, 1987

#### ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Parts 141, 142, and 143

[WH-FRL-3254-6]

#### Drinking Water Regulations; Public Notification

**AGENCY:** Environmental Protection  
Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** This action under section 1414(c) of the Safe Drinking Water Act (SDWA), 42 U.S.C. 300f *et seq.*, amends the general public notification regulations found at 40 CFR 141.32, and amends the public notification requirements for exceedances of the National Secondary Drinking Water Regulations for fluoride found at 40 CFR 143.5, to make them consistent with the new general public notification requirements. These changes apply to owners and operators of public water systems which fail to comply with certain requirements of the National Primary Drinking Water Regulations (NPDWRs), or certain monitoring requirements, and owners or operators of public water systems which have a variance or exemption. EPA is establishing requirements regarding the manner, form, content and frequency of the public notice.

In addition, EPA is promulgating new public notification requirements regarding lead contamination of drinking water to implement section 1417(a)(2) of the SDWA. The new public notification requirements for lead require public water systems to identify and provide notice to persons who may be affected by lead contamination in their drinking water, where such contamination results from the use of lead in the construction materials of the distribution system. These notification requirements, which apply to owners and operators of community and non-transient non-community water systems, apply in addition to the general public notification requirements for lead. EPA is today establishing requirements regarding the content, form, manner, and frequency of the lead notice.

Finally, EPA is amending the State implementation regulations found at 40 CFR Part 142, Subpart B to require States to adopt, at a minimum, the general public notification requirements found in revised § 141.32, and procedures for implementing § 141.32(b)(3)(iii), which allows States to extend the public notification time frames for certain Tier 2 monitoring violations from three months to one year.

**EFFECTIVE DATE:** The amended general public notice requirements under new 40 CFR 141.32, will take effect April 28, 1989. The public notice requirements for lead found at 40 CFR 141.34, the amended public notification requirements for violations of the Secondary Maximum Contaminant Level (SMCL) for fluoride found at 40 CFR 143.5, and the amended State implementation requirements found at 40 CFR Part 142, Subpart B will take effect November 27, 1987. The redesignation of 40 CFR 141.32 as 40 CFR 141.36 and the new introductory text are effective November 27, 1987. Section 141.36 expires April 28, 1989. In accordance with 40 CFR 23.7, this regulation shall be considered final Agency action for the purposes of judicial review at 1:00 p.m. eastern time on November 12, 1987.

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### *C. Public Notification Requirements for Lead*

EPA proposed in the April 6, 1987 Federal Register notice to establish a new section in Subpart D, § 141.34 Public Notice Requirements Pertaining to Lead, in response to section 1417(a)(2) of the SDWA which requires public notification of lead contamination. Comments on this proposal were numerous and several significant changes have been made as a result. This notice promulgates final regulations under § 141.34 specifying the manner and form of the public notification for lead.

#### 1. Applicability of the Notification Requirement

Section 1417(a)(2) of the Act requires that all public water systems identify and provide notice to persons that may be affected by lead contamination of their drinking water where such contamination results from (1) the lead content in the construction materials of the system, and/or (2) corrosivity of the water supply sufficient to cause leaching of lead. Section 1417 requires public notice for lead even if there is no violation of the drinking water standard (i.e., MCL) for lead. Separate notice for any violation of the lead MCL is also required; the general public notification requirements found at 40 CFR 141.32 would apply to this latter notice.

In the April 6, 1987 notice, EPA proposed that only community water systems be required to give public notice for lead. EPA also asked for comment on an option that would require non-transient non-community water systems (e.g., schools, factories, daycare centers) to give the lead notice as well. These systems serve the same users over long periods of time, so the chronic health risks to users would be similar to the risks to residential populations. Under this option, non-transient non-community water systems would be subject to the same requirements as community water systems, except that these systems would substitute posting for newspaper and direct mail notice, and the notice to new billing units would not be required. More than half of the comments received on this option supported the inclusion of non-transient non-community water systems, citing the statutory language and the potential health risks from these systems for support. Other commenters expressed concern about the availability of data to prepare the notice and various administrative problems in implementation.

As described earlier, subsequent to

the April 6, 1987 proposal, EPA promulgated a definition of non-transient non-community water systems as part of the final NPDWRs for eight VOCs. The NPDWRs for the eight VOCs apply to these systems. EPA intends to apply future NPDWRs to these systems as well. Therefore, the proposal to subject non-transient non-community water systems to the lead notice requirement is consistent with this policy. Based on this policy, the reasons set out in the proposal, and comments received on the proposal, EPA has decided to broaden the applicability of the lead public notice rule to include non-transient non-community water systems in the final rule.

In the April 6, 1987 notice, EPA proposed that the lead notice would not be required if a community water system demonstrated to the State that either the construction materials in the water system (defined to include the residential and non-residential facilities connected to the water system) were lead free, or, if by taking water samples for lead, the water system could show that its water was noncorrosive to lead-containing materials in the water system and all construction materials containing lead in the water system are at least five years old. EPA stated in the proposal that it believed few community water systems would qualify for this exemption.

Comments on this portion of the proposal were numerous; several major concerns were identified. First, a large number of commenters objected to the inclusion of household plumbing in the definition of water system, arguing that household plumbing is beyond the control of the water system and that the lead content of household plumbing is unknown. EPA has retained this definition in the final rule for purposes of determining who must give public notice because the public notice is intended to inform and educate all consumers about the dangers of lead in drinking water from all sources, including lead solder in household plumbing. In addition, this definition is consistent with the applicability of the lead ban (see section 1417(a)(1) of the Act). The public notice is a requirement to inform the public and does not otherwise alter the liabilities or responsibilities of the public water system.

Second, a number of commenters requested that the Agency specifically define when "corrosivity of the water supply [is] sufficient to cause leaching of lead." The proposed rule specified that public water systems were to determine

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corrosivity to lead based on actual water samples. However, all waters are capable of leaching lead to some degree. The rate of leaching depends on many factors, including the type of plumbing materials, amount of lead surface in contact with water, the age of the material, the chemistry and temperature of the water, and the amount of flushing of the plumbing. EPA is currently studying these parameters in the course of developing a revised NPDWR for lead. However, available studies have been unable to correlate any easily measured water quality parameters with lead concentrations at the consumer's tap. These studies also demonstrate that even with optimal treatment there is still a high probability of leaching lead. Therefore, based on current information, EPA has concluded that all community and non-transient non-community water systems should provide the lead public notice unless they can demonstrate to the State that there is no lead-containing material in the water system, including the residential and nonresidential portions of the system. This requirement is reflected on the final rule.

Additional information may become available in the course of developing the monitoring requirements for lead—the revised NPDWR for lead is scheduled for promulgation in mid-1988—that allows a public water system to determine that its water is “non/corrosive” to lead. If so, EPA would consider amending this public notification rule.

Third, a large number of public water system, States, and other commenters suggested that the Agency should allow States to give the lead notice on behalf of public water systems, at least in some cases. EPA agrees that notification by the State may be sometimes appropriate, as long as the State notice on behalf of the water systems contains all the elements listed under § 141.34(c) and (d) (including system-specific information about what each system is doing to mitigate the lead content in drinking water and whether there is any need to serve alternative supplies) and meets the requirements under 141.34(b). See discussion under II.c.3 below.) In order to make State notification a more viable option, the final rule revised the manner of notice from requiring mail and newspaper notice to allowing water systems to give notice either by mail, newspaper, or hand delivery (also, posting is an additional option for non-transient non-community water systems). If a State chooses to give statewide notice of the behalf of the public water systems covered by this rule, the State could, for example, use

newspaper advertisements, in newspapers serving the area, that are of sufficient size and location in the newspaper that they would likely attract widespread attention. In addition, the State should use public service announcements, on radios and television serving the area, that are aired at such times and frequency as are necessary to reach the consumers for which the notice is intended.

EPA disagrees with the commenters who stated that the rule should transfer some of the legal responsibility for the lead notice to the States. The statute and legislative history clearly place the responsibility for fulfilling this requirement on the public water system. Thus, while EPA is allowing States to provide the lead notice on behalf of the water system, under the conditions of § 141.34(f), described below, the water system remains legally liable for ensuring the notice takes place.

Fourth, several States and public water systems thought that public notice should be required only where there was a clear indication that the drinking water would potentially have lead concentrations above the maximum contaminant level set by EPA. The commenters suggested that EPA and the State use data collected under the 1980 corrosivity monitoring requirement to determine which systems should be required to give public notice. EPA disagrees with this interpretation of the statutory requirement; it believes that the statute and legislative history require public water systems to give notice to persons that may be affected by lead contamination; the Act clearly requires lead notice even if there is no MCL violation.

Lastly, one commenter asked about the applicability of the lead notice requirements to consecutive systems. EPA expects the owner or operator of a public water system which is subject to the public notification requirements for lead, and which provides water to another community or non-transient non-community water system, to provide one-time notice by letter to the receiving system. The receiving system, in turn, must provide its customers public notice concerning lead in compliance with the lead public notification requirements.

### 2. Frequency of Notice

Section 1417(b)(2) of the Act states that the public notice requirements for lead “shall apply in all states effective 24 months after the enactment of this section.” In the April 6, 1987, notice EPA proposed to codify this provision by requiring the owner or operator of each community water systems to issue the

initial notice for lead no later than June 19, 1988. EPA also proposed that each system give notice annually for five years from the initial notice or the effective date of the lead ban, whichever was later. (The lead ban is mandated by sections 1417 (a)(1) and (b)(1) of the Safe Drinking Water Act.) EPA proposed a five-year span because experience indicates that lead levels are substantially decreased five years after the last application of new lead solder in water supply systems.

Several commenters objected to the proposed requirement for a repeat notice each year for five consecutive years; most thought a single notice was sufficient and that repeat notices would be costly and difficult for the State to enforce. Several commenters thought that repeat notices were unnecessary because of the lead ban and other outreach activities. Two commenters, on the other hand, thought that the notice should be repeated each year until the lead ban was in effect in the community served by the water system. EPA agrees that the five-year repeat notice requirement is probably not generally necessary and that a mandatory five-year notice would be costly to implement. Certainly the statute does not require ongoing notice. In addition, EPA expects to promulgate a revised NPDWR for lead by June, 1988, and to be in effect by December, 1989 (18 months after promulgation). The revised NPDWR will more directly control lead in drinking water. Therefore, EPA has changed the final rule to require a single year notice, to begin on or before June 19, 1988. If the owner or operator chooses to give newspaper notice, such notice is to be given once a month for three consecutive months. The mail and hand delivery options require one-time notice. If a non-transient non-community water system chooses posting, it is to be continuous for three months.

### 3. Manner of Notice

Section 1417 of the SDWA requires the Administrator to prescribe the manner and form of the public notice for lead. In the April 6, 1987 notice, EPA proposed that notice to the consumer be given by mail delivery (direct mail or with individual water bills) and by newspaper notice.

In the April 6, 1987 proposal, EPA also requested comment on an option to require that public water systems supplement mail notice with hand delivery of notices to individual units or posting at multiple family dwellings, apartment complexes, and other locations where individual consumer may not receive a water bill.

EPA received numerous comments on the manner of notice proposed in the April 6, 1987 notice. Most of the commenters on this aspect of the proposal objected to the requirement for a mail notice, believing that the mail notice was both costly and less effective than other forms of communication (i.e., newspaper, electronic media). Many of these commenters also thought that a mail notice should be tailored to the severity of the problem in the individual water system, with more notices required where a lead problem is known.

EPA agrees that the form of the notice should be tailored to the problems in the individual water system and has decided to make the requirement more flexible. Therefore, the final rule requires that water systems give one notice, using an option of mail notice, newspaper notice, or hand delivery. Posting is an additional option for non-transient non-community water systems. If the water system chooses the newspaper notice, it must give notice once per month for three consecutive months. If posting is chosen by the non-transient non-community water system, it must be continuous for three months. The mail or hand delivery options require single-time notices.

#### 4. Form and Content of Notice

Section 1417(a)(2)(B) of the Act specifically requires that public notices for lead be written in a clear and readily understandable manner. The Act states that notices must include information concerning potential sources of lead in drinking water, potential adverse health effects, reasonably available methods of mitigating known or potential lead content in drinking water, any steps the system is taking to mitigate lead content in drinking water, and the necessity for seeking alternative water supplies, if any.

EPA proposed in the April 6, 1987 notice a list of general requirements for the content of lead public notices. In addition to the statutory requirements outlined above, EPA proposed to require that community water systems include specific advice in the notice on how to minimize exposure to water likely to contain high levels of lead. The April 6, 1987 proposal also set out language on the health effects of lead that would be mandatory for all lead notices. The Agency believes that requiring specific language will ensure accurate and consistent toxicological information in every public notice and simplify the preparation of the individual notices. The proposal gave the community water systems the flexibility to draft the remainder of the notice to best reflect

the specific circumstances of the individual systems.

EPA received numerous comments on this portion of the proposal. Many commenters asked for more complete guidelines on what specific advice EPA thought they should provide consumers. Several asked for "boilerplate language" or a publication that would meet the requirements to be inserted with the water bill. Three commenters recommended boilerplate language to be included in EPA guidelines. EPA agrees and is developing a sample public notice to be distributed as part of a public notification handbook. The Agency has recently published *Lead and Your Drinking Water*, which also is available for this purpose. Also, many commenters objected to the specific health effects language included in the April 6, 1987 proposal, viewing the proposed language as too technical, confusing, and (in some parts) unnecessarily alarming. EPA agrees with this comment and has revised the mandatory language to be more educational, simple, and objective.

#### § 141.34 Public notice requirements pertaining to lead.

(a) *Applicability of public notice requirement.* (1) Except as provided in paragraph (a)(2) of this section, by June 19, 1988, the owner or operator of each community water system and each non-transient, non-community water system shall issue notice to persons served by the system that may be affected by lead contamination of their drinking water. The State may require subsequent notices. The owner or operator shall provide notice under this section even if there is no violation of the national primary drinking water regulation for lead.

(2) Notice under paragraph (a)(1) of this section is not required if the system

demonstrates to the State that the water system, including the residential and non-residential portions connected to the water system, are lead free. For the purposes of this paragraph, the term "lead free" when used with respect to solders and flux refers to solders and flux containing not more than 0.2 percent lead, and when used with respect to pipes and pipe fittings refers to pipes and pipe fittings containing not more than 8.0 percent lead.

(b) *Manner of notice.* Notice shall be given to persons served by the system either by (1) three newspaper notices (one for each of three consecutive months and the first no later than June 19, 1988); or (2) once by mail notice with the water bill or in a separate mailing by June 19, 1988; or (3) once by hand delivery by June 19, 1988. For non-transient non-community water systems, notice may be given by continuous posting. If posting is used, the notice shall be posted in a conspicuous place in the area served by the system and start no later than June 19, 1988, and continue for three months.

(c) *General content of notice.* (1) Notices issued under this section shall provide a clear and readily understandable explanation of the potential sources of lead in drinking water, potential adverse health effects, reasonably available methods of mitigating known or potential lead content in drinking water, any steps the water system is taking to mitigate lead content in drinking water, and the necessity for seeking alternative water supplies, if any. Use of the mandatory language in paragraph (d) of this section in the notice will be sufficient to explain potential adverse health effects.

(2) Each notice shall also include specific advice on how to determine if materials containing lead have been used in homes or the water distribution system and how to minimize exposure to water likely to contain high levels of lead. Each notice shall be conspicuous and shall not contain unduly technical language, unduly small print, or similar problems that frustrate the purpose of the notice. Each notice shall contain the telephone number of the owner, operator, or designee of the public water system as a source of additional information regarding the notice. Where appropriate, the notice shall be multilingual.

(Note (Optional Information): Each notice should advise persons served by the system to use only the cold water faucet for drinking and for use in cooking or preparing baby formula, and to run the water until it gets as cold as it is going to get before each use. If there has recently been major water use in the household, such as showering or bathing,

## APPENDIX F

flushing toilets, or doing laundry with cold water, flushing the pipes should take 5 to 30 seconds; if not, flushing the pipes could take as long as several minutes. Each notice should also advise persons served by the system to check to see if lead pipes, solder, or flux have been used in plumbing that provides tap water and to ensure that new plumbing and plumbing repairs use lead-free materials.

The only way to be sure of the amount of lead in the household water is to have the water tested by a competent laboratory. Testing is especially important to apartment dwellers because flushing may not be effective in high-rise buildings that have lead-soldered central piping. As appropriate, the notice should provide information on testing.]

(d) *Mandatory health effects information.* When providing the information in public notices required under paragraph (c) of this section on the potential adverse health effects of lead in drinking water, the owner or operator of the water system shall include the following specific language in the notice:

"The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly.

"Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard.

"EPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women.

"Lead levels in your drinking water are likely to be highest:

- if your home or water system has lead pipes, or
- if your home has copper pipes with lead solder, and
  - if the home is less than five years old, or
  - if you have soft or acidic water, or
  - if water sits in the pipes for several hours."

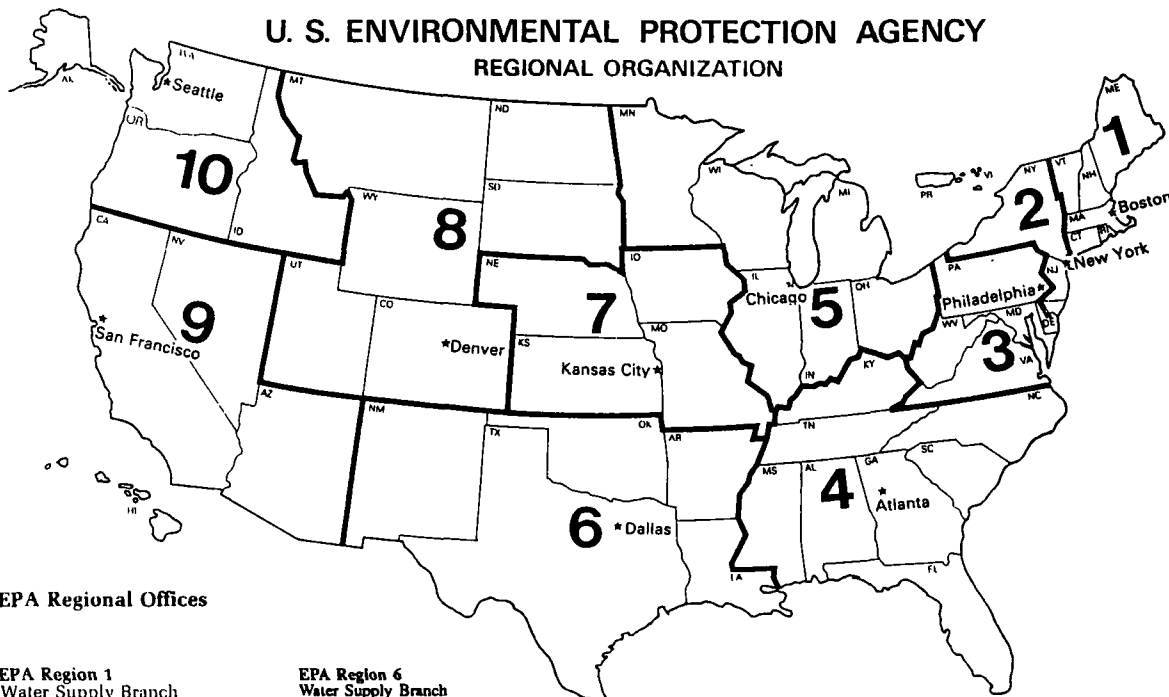
(e) *Notice by the State.* The State may give notice to the public required by this section on behalf of the owner or operator of the water system if the State meets the requirements of paragraph (b) and the notice contains all the information specified in paragraphs (c) and (d) of this section. However, the owner or operator of the water system remains legally responsible for ensuring that the requirements of this section are met.

(f) *Enforcement by the State.* All States shall enforce the requirements of

this section by June 19, 1988, as required by section 1417(b)(2) of the Act. If the Administrator determines that a State is not enforcing these requirements, the Administrator may withhold up to five percent of the State program grant fund under section 1443(a) of the Act.

## APPENDIX G

### APPENDIX G. ENVIRONMENTAL PROTECTION AGENCY REGIONAL OFFICES



#### EPA Regional Offices

**EPA Region 1**  
Water Supply Branch  
JFK Federal Building  
Boston, MA 02203  
(617) 853-03610  
Connecticut, Massachusetts,  
Maine, New Hampshire, Rhode  
Island, Vermont

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

**EPA Region 3**  
Water Supply Branch  
841 Chestnut Street  
Philadelphia, PA 19107  
(215) 587-8227  
Delaware, Maryland,  
Pennsylvania,  
Virginia, West Virginia, District of  
Columbia

**EPA Region 4**  
Water Supply Branch  
345 Courtland Street, N.E.  
Atlanta, GA 30365  
(404) 881-8731  
Alabama, Florida, Georgia,  
Kentucky, Mississippi, North  
Carolina, South Carolina,  
Tennessee

**EPA Region 5**  
Water Supply Branch  
230 South Dearborn Street  
Chicago, IL 60604  
(312) 353-2650  
Illinois, Indiana, Michigan,  
Minnesota, Ohio, Wisconsin

**EPA Region 6**  
Water Supply Branch  
1445 Ross Avenue  
Dallas, TX 75202  
(214) 655-6444  
Arkansas, Louisiana, New Mexico,  
Oklahoma, Texas

**EPA Region 7**  
Water Supply Branch  
726 Minnesota Avenue  
Kansas City, KS 66101  
(913) 236-2815  
Iowa, Kansas, Missouri, Nebraska

**EPA Region 8**  
Water Supply Branch  
One Denver Place  
999 18th Street, Suite 1300  
Denver, CO 80202-2413  
(303) 293-1413  
Colorado, Montana, North  
Dakota,  
South Dakota, Utah, Wyoming

**EPA Region 9**  
Water Supply Branch  
215 Fremont Street  
San Francisco, CA 94105  
(415) 974-0912  
Arizona, California, Hawaii,  
Nevada, American Samoa, Guam,  
Trust Territories of the Pacific,  
Northern Mariana Islands

**EPA Region 10**  
Water Supply Branch  
1200 Sixth Avenue  
Seattle, WA 98101  
(206) 442-4092  
Alaska, Idaho, Oregon,  
Washington



## APPENDIX H. STATE PUBLIC NOTICE FOR LEAD

The public notice requirement for lead gives states the option of giving public notices on behalf of public water systems. These notices, however, must contain all of the same information that is required in notices given by individual systems. In other words, **regardless of the method used, state notices must meet the same standards and requirements as notices prepared by individual water systems.** General guidelines are as follows:

### **Listing of Public Water Systems**

A listing of all community and non-transient non-community public water systems, with system-specific (**Appendix D**) information and a telephone number for each, is preferred. Where the notice involves a large number of systems, categorization is allowed. That is, the notice should list, by method used to mitigate lead content, the public water systems (with telephone numbers) utilizing that method. For example, the notice could list, under one heading, all systems that are replacing lead pipe during regular repairs; under another heading, all systems that have banned the use of lead solder. Systems taking no specific measures related to lead except, for example, conducting routine monitoring would not have to be listed. However, the notice must clearly state that certain systems are not listed and the reasons why. A state telephone contact number (and preferably the name of an individual) should be provided not only as a source of additional information concerning the lead notice, but also to assist consumers in reaching systems not listed.

### **Non-Transient Non-Community Water Systems**

The notice should indicate that non-transient non-community water systems are not currently required to monitor for lead. The state may wish to indicate those systems that may be monitoring (if any). States are responsible for including in the notice system-specific (**Appendix D**) information and system telephone numbers for non-transient non-community water systems, in the same manner as community water systems.

As in the case of local systems, the statewide notice and source of information cannot be used to frustrate the purpose of the notice.

**Under all circumstances public water systems remain legally liable for giving public notice.** They cannot assume that states will give notice on their behalf. If there is any doubt, public water systems should contact their state regulatory agency. Likewise, states intending to give statewide notices are encouraged to contact EPA for assistance. EPA regional offices shown in **Appendix G** can provide information and state contacts.