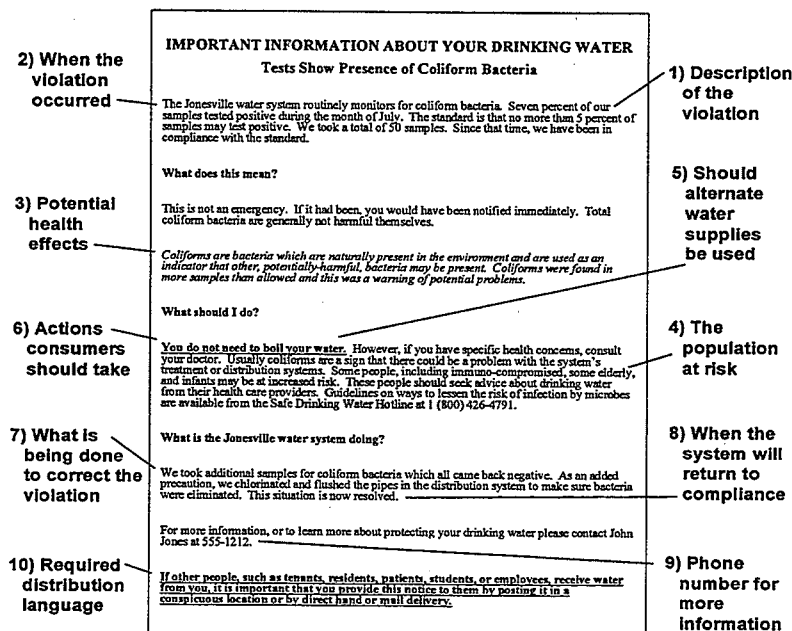




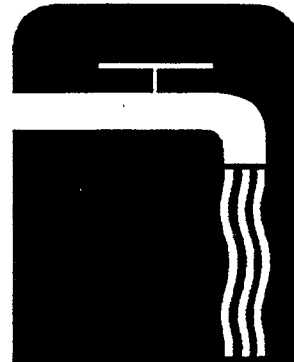
Public Notification Handbook—Draft for Comment

The Required Elements of a Public Notice





APR 27 1999



To Interested Parties:

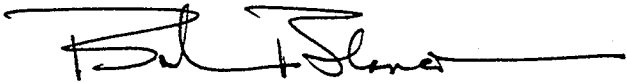
We are pleased to release this draft *Public Notification Handbook* for your review and comment. The *Handbook* will assist water systems in implementing the revised public notification regulations to incorporate new statutory provisions under the 1996 Safe Drinking Water Act (SDWA) amendments. EPA recently released for comment through the Federal Register the proposed new public notification regulations. We strongly encourage you to review the proposed new regulations and the *Handbook* together, and work with EPA and ASDWA to make the final *Handbook* useful and effective in helping water systems.


The *Public Notification Handbook* is intended to make public water system owners' and operators' jobs easier and public notices more effective. EPA and ASDWA developed the draft *Handbook* under a Steering Committee comprised of representatives from the American Water Works Association, Association of Metropolitan Water Agencies, National Association of Water Companies, National Rural Water Association, and League of Women Voters. We held two public meetings in June and September, 1998 to review and test the effectiveness of early drafts of the handbook. The draft *Handbook* is the result of that collaboration.

If you have suggestions that may improve the usefulness and effectiveness of the *Handbook*, please let us know. We welcome comment on all aspects of the *Handbook*. In addition to soliciting written comments, we are planning several meetings to improve the *Handbook* before its release in final form. These meetings will be scheduled between now and late summer. For information on the status of the *Handbook* or the schedule of meetings, please contact the EPA Safe Drinking Water Hotline at (800) 426-4791.

Please submit written comments on the *Handbook* by July 31, 1999 to EPA, Attn: Carl Reeverts, Office of Ground Water and Drinking Water (4604), 401 M Street, S.W., Washington, D.C. 20460. You may also submit comments to Carl via E-mail at reeverts.carl@epa.gov.

Sincerely,


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Office of Ground Water and
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Vanessa Leiby, Executive Director
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Public Notification Handbook— Draft for Comment

April 27, 1999

Disclaimer: This handbook is a supplement to, not a substitute for, the public notification regulations. Thus, it cannot impose legally-binding requirements on EPA, states, or water suppliers and may not apply to a particular situation. EPA and State decisionmakers retain the discretion to adopt approaches on a case-by-case basis that differ from the handbook, where appropriate. You should read the regulations thoroughly to ensure that you are in compliance. The public notice regulations are in the Code of Federal Regulations under Chapter 40, Part 141, Subpart Q, beginning at section 141.200.

Contents

Acronyms	iii
1. Introduction	1
2. How to Use This Handbook	3
Appropriate Use of the Templates	4
3. Summary of Requirements	5
When and how do I need to notify my consumers?	5
Whom must I inform when a violation occurs?	5
What kinds of violations require public notice?	6
What information do I need to include in each notice for a violation?	8
What standard language do I have to include in my notices?	10
What information do I need to include for special notices for fluoride and for unregulated contaminant monitoring?	10
What information do I need to include if I've been issued a variance or exemption?	10
Are there formatting requirements for public notices?	11
Will I have to provide notices in languages other than English?	11
What information must I provide my privacy agency?	12
4. Making Public Notification Work	13
How can I prepare for public notification before a violation occurs?	13
How can I make a notice more easily readable?	14
How can I ensure that the media distributes an accurate notice?	14
What other steps should I take after issuing a notice?	15
How can I prevent overreaction to a public notice?	15
5. Tier 1 Notice Requirements and Suggestions	17
What is the deadline for issuing a Tier 1 notice?	17
Which methods of delivery must I use?	17
Suggestions for Effective Public Notification Delivery	18
Suggestions for Layout of the Notice	19
TIER 1 TEMPLATES	21
Nitrate Notice--Template 1-1	23
Spanish Nitrate Notice--Template 1-1A	25
Fecal Coliform or <i>E. coli</i> Notice--Template 1-2	27
Spanish Fecal Coliform or <i>E. coli</i> Notice --Template 1-2A	29
Waterborne Disease Outbreak Notice--Template 1-3	31
Notice for Turbidity Single Exceedance as Tier 1--Template 1-4	33
Tier 1 "Problem Corrected" Notice--Template 1-5	35
6. Tier 2 Notice Requirements and Suggestions	37
What is the deadline for issuing a Tier 2 notice?	37

Which methods of delivery must I use?	37
Suggestions for Effective Public Notification Delivery	38
Suggestions for Layout of the Notice	39
 TIER 2 TEMPLATES	41
Unresolved Total Coliform Notice--Template 2-1	43
Resolved Total Coliform Notice--Template 2-2	45
Chemical or Radiological MCLs Notice--Template 2-3	47
SWTR Failure to Filter Notice--Template 2-4	49
SWTR Turbidity Single Exceedance Notice--Template 2-5	51
SWTR Turbidity Monthly Exceedance Notice--Template 2-6	53
SWTR Disinfection Treatment Notices--Template 2-7	55
Lead Public Education Notice--Template 2-8	57
LCR Failure to Install Corrosion Control--Template 2-9	59
 7. Tier 3 Notice Requirements and Suggestions	61
What is the deadline for issuing a Tier 3 notice?	61
Which methods of delivery must I use?	61
Suggestions for Effective Public Notification Delivery	62
How can I coordinate Tier 3 notices with the CCR?	62
Suggestions for the Layout of the Notice	63
 TIER 3 TEMPLATES	65
Monitoring Violation Notice--Template 3-1	67
 8. Special Needs of Non-Community Systems	69
Summary of Public Notification Requirements -- A Recap	69
What are the required methods of delivery?	69
Suggestions for the Layout of the Notice	71
How should the notice be formatted to get people's attention?	71
How should I tailor the notices to my situation?	72
Suggestions for Effective Public Notice Delivery	72
How can I make posting effective?	72
What other methods are available for non-community systems to reach all consumers?	73
 TEMPLATES FOR NON-COMMUNITY SYSTEMS	75
Nitrate Notice--Template NC-1	77
Fecal Coliform or <i>E. coli</i> Notice--Template NC-2	79
Unresolved Total Coliform Notice--Template NC-3	81
 Appendix A	
NPDWR Violations and Other Situations Requiring Public Notice	85
 Appendix B	
Standard Health Effects Language for Public Notification	91
 Appendix C	
Translated Phrases	101

Acronyms

CCR	Consumer Confidence Report
CWS	Community Water System
DBP	Disinfection Byproduct
EPA	Environmental Protection Agency
IESWTR	Interim Enhanced Surface Water Treatment Rule
IOC	Inorganic Chemical
LCR	Lead and Copper Rule
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MRDL	Maximum Residual Disinfectant Level
NCWS	Non-Community Water System
NPDWR	National Primary Drinking Water Regulations
NTNCWS	Non-Transient Non-Community Water System
OGWDW	EPA's Office of Ground Water and Drinking Water
OW	Office of Water
PN	Public Notification
PWS	Public Water System
SDWA	Safe Drinking Water Act
SMCL	Secondary Maximum Contaminant Level
SOC	Synthetic Organic Chemical
SWTR	Surface Water Treatment Rule
TCR	Total Coliform Rule
TT	Treatment Technique
TWS	Transient Non-Community Water System
VOC	Volatile Organic Chemical
WQP	Water Quality Parameters

1. Introduction

This handbook is intended to make public water system owners' and operators' jobs easier and public notices more effective. State and Tribal primacy agencies should find this handbook useful as well. By explaining the revised public notification rule and providing specific examples of notices, EPA hopes to streamline the public notification process and enhance water systems' ability to comply with Federal and State requirements. Public notification of drinking water violations provides a means to protect public health, build trust with consumers through open and honest sharing of information, and establish an ongoing, positive relationship with the community. Public notice can also help consumers understand rate increases and support increased funding for drinking water treatment and protection.

The handbook is designed to meet the needs of public water systems of all sizes. Throughout the handbook there are suggestions and instructions targeted to very small community systems (systems that serve 500 people or less). These suggestions, along with other useful hints for creating effective notices, are set aside in shaded boxes throughout the handbook. Some of these instructions may also be applicable to small systems serving more than 500. In addition, Chapter 8 specifically addresses the requirements for non-community systems.

2. How to Use This Handbook

This handbook contains information to help you prepare and issue a public notice. **We strongly recommend that you read this handbook, especially Chapters 2-4, before you are faced with a violation.** Listed below are the required actions you must take to respond to a drinking water violation:

1. **Determine what tier your violation falls into.** Use Table 2 on page 7 for a summary of major violations and your deadline for providing public notice. You can also refer to Appendix A for a listing by contaminant.
2. **For Tier 1 violations, immediately consult with your primacy agency when you learn of the violation.** You must issue the notice within 24 hours as required, even if you are unable to contact the primacy agency.
3. **Familiarize yourself with the requirements for public notices.** Read the "Summary of Requirements" chapter starting on page 5, which describes content, mandatory language, formatting, and distribution requirements that are applicable to all notices. Chapter 4 provides guidance on working with the media and planning ahead.
4. **Determine the appropriate method(s) of delivery.** Chapters 5, 6, and 7 describe the method of delivery requirements for Tier 1, 2, and 3 notices, respectively, as well as ideas for creating the most effective notice possible. Required methods vary based on system type. **If you are a non-community system, go to Chapter 8, which begins on page 69, for assistance on delivery methods.**
5. **Develop a notice, modifying the templates to fit your situation.** At the ends of Chapters 5, 6, and 7 are templates for commonly occurring violations, along with violation-specific instructions for modifying each template. Chapter 8 contains templates tailored to non-community systems. The instructions for each template are on the front of the page; the corresponding template is on the back. Most violations have **required health effects language**, which is found in Appendix B and in some templates.
6. **Provide your notice to all persons served** as soon as practicable but within the allowed time frame. Use the method of delivery chosen in step 4 above.
7. **Send a copy of the notice to your primacy agency** within ten days after you distribute the notice, along with a letter certifying that all public notification requirements have been met.

2. How to Use This Handbook

Appropriate Use of the Templates

The templates in this handbook are designed to help operators create public notices for a variety of violations. **However, it is important to note that the templates included here are not inclusive and may not be appropriate for all violations.** Depending on the severity of your violation, it may be necessary to modify the instructions you give to consumers and to change the timing of the notice. For instance, if trichloroethylene levels are ten times the standard (rather than a slight exceedance), you would not want to tell your customers that they could continue to drink the water. If turbidity exceeds five turbidity units, depending on other factors, you may need to issue a boil water notice. In these cases, you should issue a notice immediately, rather than wait up to 30 days. It is important to consult your local health department or primacy agency in such situations. In some cases, your primacy agency may instruct you to make these changes.

Note that the public notice requirements described in this handbook are based on Federal regulations. States or Tribes may have alternate public notice requirements or more stringent drinking water standards. **You should check with your primacy agency to make sure you meet its specific requirements.**

3. Summary of Requirements

When and how do I need to notify my consumers?

EPA has assigned each violation to one of three categories, or tiers, based on the risk of adverse health effects. After you learn of a violation, public notice must be provided following the requirements summarized in Table 1 below. Delivery requirements for community water systems (CWSs) and non-community water systems (NCWSs) differ. Additionally, every new billing customer or hookup must be notified of any ongoing violations.

Table 1			
Requirements for Issuing Public Notice (Based on Proposed Rule)			
Tier	Deadline for Notice	Methods to Use	Go to. . .
1	24 hours*	Radio or television or hand delivery or posting	Chapter 5
2	30 days **	CWS: Mail or hand delivery (+ another method as needed)	Chapter 6
		NCWS: Posting, hand delivery, or mail (+ another method as needed)	Chapter 8
3	1 year***	CWS: Mail or hand delivery (+ another method as needed)	Chapter 7
		NCWS: Posting, hand delivery, or mail (+ another method as needed)	Chapter 8
<p>* For Tier 1, systems must consult with the primacy agency during this time period as well.</p> <p>** The primacy agency may extend this deadline to up to 3 months.</p> <p>*** EPA strongly recommends consolidating all Tier 3 violations occurring within a given year into an annual notice, including the Consumer Confidence Report where applicable.</p>			

Whom must I inform when a violation occurs?

If you are faced with a violation or situation requiring public notification, you must provide the notice to **all persons served** by your system. This means you must take all steps reasonably calculated to inform people if they would not be reached by the most commonly used methods of notification.

For example, if a community water system mailed a notice to billing customers only, people who do not receive water bills, such as tenants whose utilities are included in their rent or people who work in the area served by the system but live elsewhere, would not receive a notice. Publishing a notice in the newspaper, or providing copies of the notice to landlords to distribute to their tenants would help reach those people. At a non-community system, hand delivery of notices would reach only those consumers who are present when the notices are distributed. Posting would reach visitors or newcomers.

The requirement to include standard language to encourage distribution of the notice to all persons served is designed to increase public awareness of the situation. Use of this language does **not** relieve you of your obligation to notify all persons served, however.

What kinds of violations require public notice?

In general, public notice is required for any of the following violations:

- Exceedances of maximum contaminant levels (MCLs);
- Violation of treatment techniques;
- Monitoring and testing procedure violations; and
- Failure to comply with the schedule of a variance or exemption.

Other situations (not violations) which require notice include:

- Occurrence of a waterborne disease outbreak;
- Operation under a variance or exemption;
- Exceedance of the secondary maximum contaminant level for fluoride; and
- Availability of unregulated contaminant monitoring results.

Table 2 on the next page shows the organization of violations and situations into tiers, based on the seriousness of any potential adverse health effects. For a complete list of contaminants and their appropriate tiers, refer to Appendix A.

Table 2
Violations and Situations Requiring Public Notice
(Based on Proposed Rule)

Notice Required Within 24 Hours

Tier 1 Violations and Other Situations Requiring Public Notice:*

1. Violation of the maximum contaminant level (MCL) for total coliform, when fecal coliform or *E. coli* are present in the water distribution system (as specified in 40 CFR Part 141.63(b)), or failure to test for fecal coliform or *E. coli* after the presence of coliform bacteria in the distribution system has been confirmed (as specified in 40 CFR 141.21(e);
 2. Violation of the MCL for nitrate, nitrite, or combined nitrate+nitrite, as defined in 40 CFR Part 141.62 and determined according to 40 CFR Part 141.23(l)(3);
 3. Violation of the maximum residual disinfectant level (MRDL) for chlorine dioxide, when one or more repeat samples taken in the distribution system exceed the MRDL, or when required repeat samples are not taken in the distribution system, as defined in 40 CFR Part 141.65(a);
 4. Occurrence of a waterborne disease outbreak, as defined in 40 CFR Part 141.2; and
 5. Other violations or situations with significant potential to have serious adverse effects on human health as a result of short term exposure, as determined by the primacy agency either in its regulations or on a case-by-case basis.
- * If your system has any of these violations, in addition to issuing public notice, you are required to consult with your primacy agency as soon as possible but within 24 hours after you learn of the violation. See Chapter 6 on Tier 1 public notice for more details.

Notice Required Within 30 Days**

Tier 2 Violations Requiring Public Notice

1. All violations of the MCL, MRDL, and treatment technique requirements not included in Tier 1;
2. Violations of the monitoring requirements where the primacy agency determines that a Tier 2 public notice is required, taking into account potential health impacts and persistence of the violation; and
3. Failure to comply with the terms and conditions of any variance or exemption in place.

** Primacy agencies may extend this to 90 days.

Notice Required Within 1 Year

Tier 3 Violations and Other Situations Requiring Public Notice

1. Monitoring violations, unless the primacy agency determines that the violation requires a Tier 2 notice;
2. Failure to comply with an established testing procedure;
3. Operation under a variance granted under §1415 or exemption granted under §1416 of the Safe Drinking Water Act; and
4. Any other violations and situations determined by the primacy agency to require a Tier 3 public notice *including exceedance of the secondary MCL for fluoride and the availability of monitoring data for unregulated contaminants.*

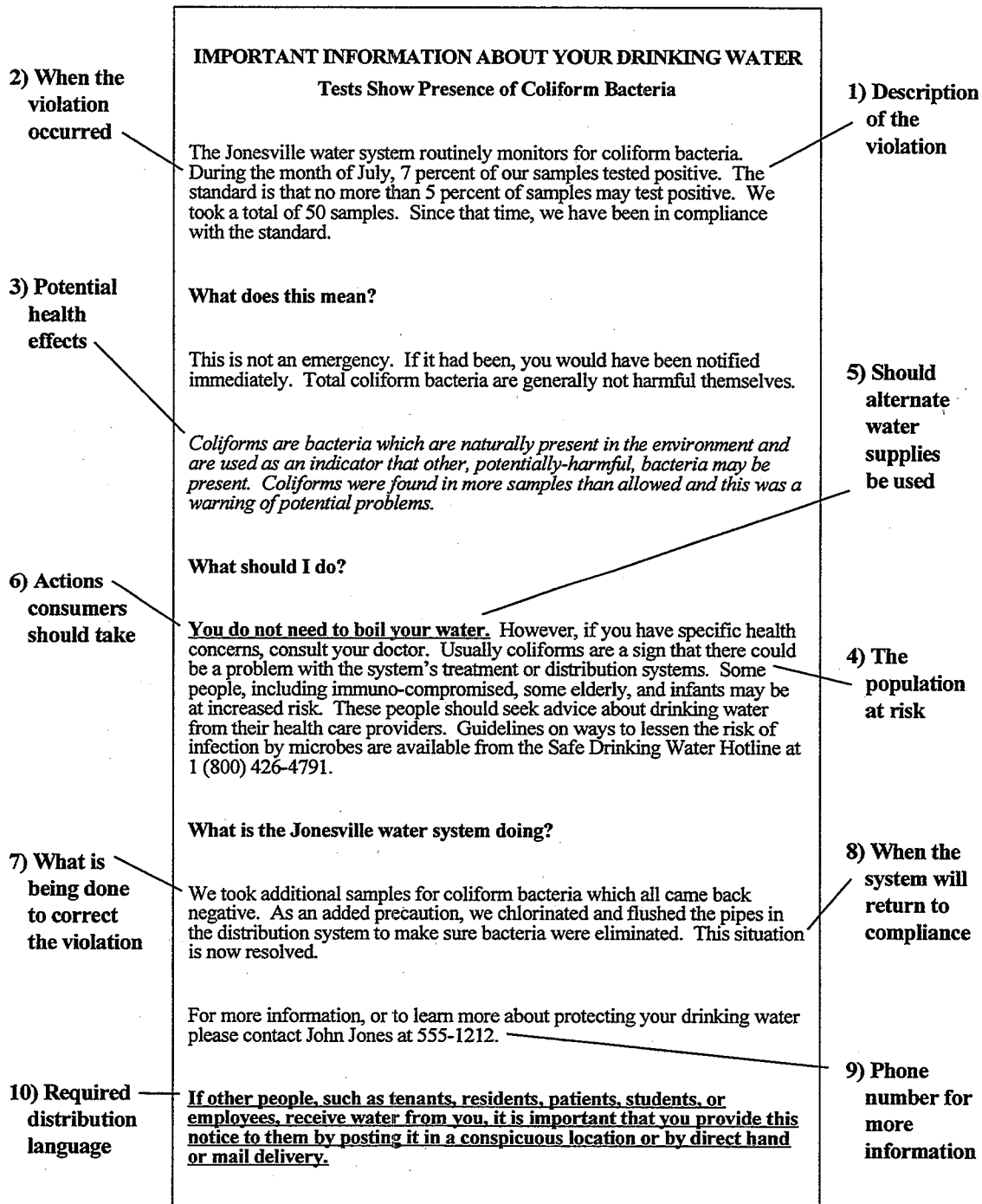
***What information
do I need to include
in each notice for a
violation?***

Your public notice must include specific information in order to be considered complete. For each violation and for the occurrence of a waterborne disease outbreak, you must provide a clear and readily understandable explanation of the following:

1. The violation, including the contaminant of concern, and (as applicable) the contaminant level;
2. When the violation occurred;
3. Any potential adverse health effects from drinking the water;
4. The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in their drinking water;
5. Whether alternative water supplies should be used;
6. What actions consumers should take, including when they should seek medical help, if known;
7. What you are doing to correct the violation;
8. When you expect to return to compliance;
9. Your phone number or the number of a designee of the public water system as a source of additional information concerning the notice; and
10. A statement encouraging notice recipients to distribute the notice to other persons served, using the standard language given on page 10.

Some required elements may not be applicable to your violation. However, you must still address the element in the notice. For example, if it is unnecessary for consumers to boil their water or drink bottled water, you should tell them they do not need to do so. This is especially important for Tier 2 notices, where a violation may have been resolved by the time the notice is issued or may have been the result of a monthly average. You should consult with your primacy agency or a local health department for the appropriate information for some elements of the notice, such as the actions consumers should take. The local health department also can help you determine what other system-specific information, such as population at risk, should be included in your notice. Figure 1 contains an example showing how all the content elements fit into a notice.

Figure 1
The Required Elements of a Public Notice



What standard language do I have to include in my notices?

- *Language to encourage distribution of the notice to all persons served.* You must include the following language in all notices. Use of this language does not relieve you of your obligation to notify all persons served:

"If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery."

- *Health effects language for MCL violations, treatment technique violations, and violations of the conditions of a variance or exemption.* **You must include the health effects language specified in Appendix B for such violations.**

- *Language for monitoring violations (including testing procedure violations).* You must include the following language for all monitoring and testing procedure violations:

"Because we ["did not monitor or test" or "failed to monitor or test completely"] during [compliance period], we do not know whether the contaminant was present in your drinking water, and we are unable to tell you whether your health was at risk during this time."

What information do I need to include for special notices for fluoride and for unregulated contaminant monitoring?

- *Fluoride.* If your system exceeds the secondary maximum contaminant level of 2.0 mg/l for fluoride but does not exceed the MCL of 4.0 mg/l, you must include the special fluoride language provided in Appendix B in your notice and fill in the blanks as appropriate. You do not need to include the ten elements listed above, as these are addressed in the language. You must follow the Tier 3 schedule for delivery. You may include this information in your Consumer Confidence Report.
- *Unregulated Contaminant Monitoring.* If you monitor for unregulated contaminants, you must issue a public notice stating that the results of the monitoring are available and give a phone number to call for those results. You do not have to include the actual results, unless you are a community water system, in which case you must report the results in your Consumer Confidence Report. You do not need to include the ten elements listed above, but you must follow the Tier 3 schedule. You may include this information in an annual notice for Tier 3 situations and violations if you are a non-transient non-community system.

What information do I need to include if I've been issued a variance or exemption?

Notices for operating under a variance or exemption have different content requirements than notices for the violations described above. If you are operating under a variance or exemption, you must notify your consumers within one year of obtaining it and repeat the notice annually for as long as the variance or exemption exists. You must include the following in your notice:

3. Summary of Requirements

- ✓ An explanation of the reason(s) for the variance or exemption;
- ✓ The date on which the variance or exemption was issued;
- ✓ A brief status report on the steps you are taking to install treatment, find alternative sources of water, or otherwise comply with the terms and schedules of the variance or exemption; and
- ✓ A notice of any opportunity for public input in the review of the variance or exemption.

***Are there
formatting
requirements for
public notices?***

All public notices must meet certain formatting standards. These requirements help prevent the notice from being buried in a newspaper and help ensure that consumers can easily read and understand the notice. Notices must:

- ✓ Be displayed in a conspicuous way (where applicable);
- ✓ Not contain overly technical language or very small print;
- ✓ Not be formatted in a way that defeats the purpose of the notice; and
- ✓ Not contain language which nullifies the purpose of the notice.

Your primacy agency may have special formatting requirements. Check to be sure that you meet all its requirements.

***Will I have to
provide notices in
languages other
than English?***

Your primacy agency may have established criteria for what constitutes a large proportion of the people you serve. Check to find out what these criteria are. If a large proportion of the population you serve does not speak English, you are required to provide at least partially multilingual notices. If this is the case, your notice must contain information in the appropriate language(s) regarding the importance of the notice, or it must provide a phone number or address to call or write for a translated copy of the notice or for information or assistance in the appropriate language.

You may wish to provide notices in multiple languages if non-English-speaking populations are in your service area, whether or not you have a large proportion of such people. Although you are not required to provide full translations of notices, translation is strongly recommended for Tier 1 notices and for other violations that pose a serious health risk. Primacy agencies may be able to provide you with some assistance in finding translators, but it is your responsibility to get the notice translated. Schools and universities often have students who can translate notices. Make contacts ahead of time with universities, high school teachers, and other services for low-cost translations.

Spanish templates for nitrate and fecal coliform notices are included with the templates for Tier 1 violations at the end of Chapter 5. These templates are exact translations of the English Tier 1 templates, so if the English templates have to be modified, the Spanish ones must also change. In addition, translations in several languages of important phrases such as "do not drink the water" and "boil your water before using" are included in Appendix C.

***What information
must I provide my
privacy agency?***

After you provide the notice to your consumers, you must send your privacy agency a copy of each type of notice you distribute (e.g., newspaper, radio, mail notices) and a letter certifying you have met all the public notification requirements. Sample certification language is provided below:

The public water system indicated above hereby confirms that public notice has been provided to consumers in accordance with the delivery requirements and deadlines given for each tier in 40 CFR Part 141.202 to 141.204. Further, the system certifies that the content and format of this notice meets the requirements of 40 CFR Parts 141.205, 141.207, and 141.208.

4. Making Public Notification Work

How can I prepare for public notification before a violation occurs?

- Integrate planning for Tier 1 public notification into your community emergency management plan. When a serious violation occurs, you will already have an established chain of command and have other departments available to assist you, including working with your local health department or sanitarian. Consumers may call the health department for information; if you coordinate with the department, you will be able to give out consistent information. Also work with your community's emergency managers to establish ties with the state office that works with NOAA/National Weather Service (NWS) to access the Emergency Alert System (EAS). Through memoranda of agreement between states and the NWS, communities can broadcast alerts of non-weather emergencies, including drinking water violations, via NOAA Weather Radio and NOAA Weather Wire Service.
- As part of planning for Tier 1 notification, work with the media ahead of time. Explain to them what constitutes an emergency. Explain to them what your needs will be during a crisis.
- Establish contacts with institutions and people who can translate notices into other languages for you. See page 11 for more on multilingual notices.
- Obtain fact sheets on contaminants from EPA's Safe Drinking Water Hotline at 1(800) 426-4791 or the Agency's website at <http://www.epa.gov/safewater/dwhealth.html>. This way, if your consumers call to ask for information, you will be able to help them. The fact sheets are updated periodically, so make sure you have the most recent version. The Hotline also can provide phone numbers for state lab certification offices, where you can get a list of labs certified to analyze tap water.
- If you are going to provide or recommend bottled water, especially for a Tier 1 violation, you should confirm ahead of time and periodically reconfirm that available bottled water supplies meet the Food and Drug Administration safety standards.
- Implement ongoing public education programs for contaminants at risk of violation; that is, contaminants whose levels are below the MCL but have the potential in the future to exceed it (or have previously exceeded it). This would apply to naturally occurring contaminants, such as radium, fluoride, or arsenic, and for recurring pollution problems (e.g., nitrate, pesticides). With an education program in place, consumers will be better informed if a violation occurs.

How can I make a notice more easily readable?

- Assume that consumers only read the top half of the notice (or what can be read in five seconds). The most important information, especially instructions to protect consumers' health, should be placed on the top half of the notice in large print. Smaller type is appropriate for the less critical elements, e.g., what the system is doing, an explanation of the cause of the violation, etc.
- Try to limit the wordiness of the notice. A question and answer format is easy to read and guides readers to the important information that is likely to concern them. Bullets and bold text are also effective.
- Highlight the name of your system with bold letters, especially where people in your area are served by more than one water system. You may want to print the notices on your system's letterhead which, coupled with the title of the notice, will make people immediately recognize that the notice is important.

How can I ensure that the media distributes an accurate notice?

- If you write a press release or get a reporter to write a story for the **newspaper**, give the newspaper the list of required elements and tell the press that these elements must be included. The most important information, including the violation, the population at risk, the instructions to consumers, and potential health effects, should be near the beginning. Be sure to include a contact name and telephone number so the press can call you for more information.
- When you send the notice to **radio and TV stations and newspapers**, write "PRESS RELEASE FOR PUBLIC SAFETY" at the top of the notice to emphasize its importance.
- If the newspaper will not publish a story or press release, you may need to buy space to print the notice in its entirety. You should buy an **advertisement** as close to the front of the paper as possible and make it large enough that people will easily see it. Legal notices are not recommended because they rarely meet the formatting requirements for notices and are not widely read.
- If the press will not run a story on your violation, ask an official from your **emergency management department** to participate by reading the notice on the air or agreeing to an interview. The press may be more likely to air a notice connected to such officials.
- Develop an ongoing relationship with the media. Hold an annual **media day** where you can explain how your system operates, including any improvements you may be implementing. In addition, look into whether local news outlets hold community outreach days—this is another way to

form a relationship with the media. The more informed the members of the media are about the water system in general, the more accurate and positive they will be when writing about a violation. They will also be more likely to give your story the space it needs. Designate one person on your staff to serve as a liaison to the media.

What other steps should I take after issuing a notice?

Your primacy agency may require you to do follow-up or "problem corrected" notices for violations, particularly for Tier 1 violations. If it does not, you should consider issuing such a notice anyway. Sometimes, initial notices can not provide information on the source of the contamination. Providing a notice with updated information demonstrates that you are working on the problem. Consumers will expect to receive official word that the problem is solved or being addressed. Template 1-5 at the end of Chapter 5 is an example of a notice for a corrected violation.

How can I prevent overreaction to a public notice?

Public education can minimize overreaction to a water problem and can help focus community attention on the source of a problem. Public education about contaminants, what a public notice means, and specific types of water problems is an excellent public relations tool. It helps create a sense of partnership between you and your customers and reduces the prevalence of the "us versus them" mentality.

Public notification for recurring problems such as nitrate is more effective if supplemented by a public education program. There are a number of ways to create awareness of a contaminant problem and of what it means for public health. These include factsheets, public meetings at community centers, newspaper or local TV and radio coverage, working with local libraries to establish a reference section on the problem, newsletters or factsheets mailed with monthly bills or otherwise distributed broadly throughout the community. Information that is helpful to the public includes:

- Descriptions of the contaminant(s);
- Information on how contaminants get into the water;
- What you are doing to prevent or correct the problem;
- Why the problem recurs, and what the public can do to prevent a recurrence;
- If and why protection measures have a limited effectiveness; and
- The impact on the consumer.

While ongoing problems warrant implementing an early and ongoing public education campaign, public response to a notice can point you to other areas in which public education would be useful. For example, if you receive a high number of calls about a notice, there is probably a need for greater public understanding of the problem.

5. Tier 1 Notice Requirements and Suggestions

Tier 1 notices must be issued for: violations of the MCL for total coliform where **fecal coliform** or *E. coli* are present or for failure to test for fecal coliform or *E. coli* after the presence of total coliform is confirmed; violations of the MCL for **nitrate**, **nitrite**, or **combined nitrate and nitrite**; violations of the maximum residual disinfectant level (MRDL) for **chlorine dioxide** where required repeat samples in the distribution system exceed the MRDL or are not taken; the occurrence of a **waterborne disease outbreak**; or other situations which could cause serious health effects, as determined by your primacy agency. Notices must meet content, format, and multilingual requirements described in Chapter 3, "Summary of Requirements."

What is the deadline for issuing a Tier 1 notice?

As soon as practicable but within 24 hours, you must:

- Issue a public notice.
- Consult with your primacy agency.



Required Elements of a Public Notice

1. A description of the violation;
2. When the violation occurred;
3. Potential adverse health effects;
4. Population(s) at risk;
5. Whether alternative water supplies should be used;
6. Actions consumers should take, including when they should seek medical help, if known;
7. What you are doing to correct the violation;
8. When you expect to return to compliance;
9. Phone number for additional information; and
10. Standard language encouraging distribution to all persons served.

The consultation with the primacy agency is independent of the public notice itself. You must issue the notice within 24 hours, even if you are unable to contact anyone at the primacy agency. As a result of the consultation, your primacy agency may set additional public notice requirements. It may ask you to issue repeat notices for continuing violations, "problem corrected" notices, or, if your initial notice does not meet the requirements, another initial notice.

Remember to send a copy of the notice and certification to your primacy agency within ten days.

Which methods of delivery must I use?

You must use one or more of the following: broadcast media (radio and television), posting, or hand delivery. The method(s) you choose must be reasonably calculated to reach all persons served. Therefore, you may need to use other methods *in addition* to those previously mentioned. For instance, you could provide the notice to local radio and television stations; then, to reach people who don't watch or listen to the news, you could also put the notice in the newspaper. You must use at least one of the required methods and whatever other methods are necessary to help you reach all consumers.

5. Tier 1 Notice Requirements and Suggestions

Suggestions for Effective Public Notification Delivery

- When **choosing a method** for public notification, you should consider several issues, including the population served, population density (i.e., is the system rural, urban, or suburban), available manpower, and proximity to and relationship with radio and television stations and newspapers.



Tips for Very Small Community Systems

Very small community systems (those serving 500 people or less) in most cases can use hand delivery supplemented by posting.

If your system is **relatively small but serves more than 500 people**, hand delivery and posting may work for you. If the population served is unlikely to hear a notice over the radio or if a radio station is not in range, hand delivery combined with posting at grocery stores or banks is appropriate. Alternatively, a system serving a rural town of 2,000 might not have a radio station but could be within range of a radio station in a larger town. Such a station might be more willing to air a notice than a station in a large city. The unaffected population may be less alarmed than in a metropolitan area, since listeners are accustomed to hearing news about other communities in the region. You may still need to use additional methods of notification.

- **Non-community systems** should refer to Chapter 8 of this handbook, "Special Needs of Non-Community Systems."
- **Large systems** should use a combination of broadcast media and newspaper, if available. You should also supplement media notices by posting in public buildings and delivering multiple copies to clinics or community centers.
- When you write a notice for **radio or television**, assume that it will only receive a few seconds of air time. Make sure the most important information, including a phone number to call for more information, will be included.

- For TV notices, ask the station or cable company to put "**scrollers**" across the screen similar to National Weather Service announcements for tornado watches. This is a good way to put the notice on TV and reach people who don't watch the news, as well as target a subsection of the TV audience. You can also work the appropriate state office to broadcast alerts on NOAA Weather Radio and NOAA Weather Wire Service.



Selecting a Delivery Method

Here are some questions to consider when determining how to deliver your notice:

- My system is in a suburban area. How can I write the notice so that it will not alarm the rest of the metropolitan area when delivered through the media? Can I be sure the radio or TV station will give the notice the air time it needs?
- Will the local newspaper write an accurate article about the violation? Will it prominently publish a press release? Will I need to buy an ad or notice?

- Send a **broadcast fax**. Program your fax machine with the fax numbers of all radio and television stations in the area so that the push of a button sends the notice to all of them.
- It is strongly recommended that you fully **translate** Tier 1 notices into other languages if there are non-English-speaking populations in your service area. At a minimum, you must include some information in the appropriate language. See page 11 for more information.
- See Chapter 4, "Making Public Notification Work," for **tips** on working with the media.

Suggestions for Layout of the Notice

Tier 1 notices should convey the urgency of the situation and make clear to consumers what actions they must take. Templates 1-1 through 1-4 at the end of this chapter offer sample language and instructions for preparing Tier 1 public notices. Template 1-1A contains Spanish language for a Nitrate notice; Template 1-2A contains Spanish language for a fecal coliform or *E. coli* notice.

1. Title -- Public notices for Tier 1 violations, especially those used for posting, hand delivery, or in a newspaper, should have an eye-catching and attention-getting title. For example, "WARNING" is better than "Public Notice." This should be followed by the targeted audience or the population at risk, such as "People served by ____ Water System" for notices alerting consumers of fecal coliform violations or disease outbreaks, or "Infants under 6 months" for notices alerting consumers of nitrate violations. These lines should be in large and/or bold type and centered across the top of the page. Notices for TV, radio, or newspaper articles need a more descriptive headline, such as "Water System Detects Fecal Bacteria, Consumers Should Boil Their Water."
2. Consumer Actions -- The instructions to consumers should be next in your notice. This should be a short phrase in large type, such as "Boil Your Water" or "Do Not Drink the Water."
3. Description of the Violation -- A short description of the violation should follow instructions to consumers in large type. As soon as consumers read "Boil Your Water" for a fecal coliform notice, they will ask why they should do so. However, since this is a headline, it should be kept short and concise. As another example, for nitrate violations, you could say, "High nitrate levels have been detected." Then the level detected should be listed in normal type, followed by the maximum contaminant level (MCL), or action level, if applicable. A more detailed explanation of the violation should be given in the body of the notice.

5. Tier 1 Notice Requirements and Suggestions

4. Other Consumer Actions — For nitrate violations, the notice should instruct consumers not to boil water, since that may be their first reaction, and explain why. For microbiological violations, provide detailed instructions on using boiled water for brushing teeth, cooking, making ice, etc. If you instruct consumers to use bottled water, you should make sure that locally available brands meet standards.
5. Other Elements — The following order is suggested for the remaining elements: whether (and where) consumers should seek alternative drinking water sources, potential health effects (using the language in Appendix B), date the violation was found, corrective action the system is taking, when the system expects to return to compliance, and a phone number for more information. If you are coordinating with the local health department, you may wish to also list its phone number. Do not alter the health effects language in any way.
6. Optional Elements — If you know the source of the contamination, include it in the notice. This information helps the consumer understand why there is a violation and what is necessary to resolve it. It also reinforces the fact that drinking water is a vulnerable resource that must be protected.
7. Public Water System ID Number— You should include your PWS ID number at the bottom of the notice. This will help your primacy agency track compliance and prevent tracking errors between systems with similar names.

TIER 1 TEMPLATES

The pages that follow contain templates for Tier 1 violations, as listed below. Along with each template are instructions, including the required method of delivery and instructions for completing individual sections of the notice.

Mandatory language on health effects, which must be included exactly as written, is presented in *italics*.

You must also include the following language in all notices. Use of this language does *not* relieve you of your obligation to notify all persons served:

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Templates

Nitrate Notice--Template 1-1
Spanish Nitrate Notice--Template 1-1A
Fecal Coliform or *E. coli* Notice--Template 1-2
Spanish Fecal Coliform or *E. coli* Notice --Template 1-2A
Waterborne Disease Outbreak Notice--Template 1-3
Turbidity Single Exceedance as Tier 1--Template 1-4
Tier 1 "Problem Corrected" Notice--Template 1-5

Instructions for Nitrate Notice--Template 1-1

Template on Reverse

Since exceeding the nitrate maximum contaminant level is a Tier 1 violation, you must provide public notice to all persons served as soon as possible but within 24 hours after you learn of the violation. During this time period you must also contact your primacy agency. You should also coordinate with your local health department. **This template is also applicable to nitrite and nitrate+nitrite violations.** You must use one or more of the following methods to deliver the notice to consumers:

- Radio
- Television
- Hand or direct delivery
- Posting

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings) if necessary to reach all persons served.

The notice on the reverse is appropriate for hand delivery or a newspaper notice. However, you may wish to shorten it before using it for a radio or TV notice. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Alternative Sources of Water

If you are providing alternative sources of water for infants, your notice should say where to obtain it. Remember that bottled water can also be contaminated. If you are not providing water and you instruct consumers to buy bottled water, find out which brands have been tested and meet the standard for nitrates and tell your consumers.

Repeat Notices

If this is a repeat notice (as required by your primacy agency), or if your system's nitrate levels fluctuate around the MCL, you may wish to include an explanation similar to the following:

As you may recall, on [date], you were also notified of high nitrate levels that occurred during the ____ quarter of the year. Since that time the water system has been monitoring the nitrate concentration every three months. Seasonal fluctuations in nitrate concentrations have been observed, due to nitrates contained in fertilizer. It appears that high nitrates occur during the later summer and fall. Note that previous tests prior to [year] show that we were meeting drinking water standards for nitrate.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with nitrate/nitrite violations. Use the following language, if appropriate, or develop your own:

- We are investigating water treatment and other options. These may include drilling a new well or mixing the water with low-nitrate water from another source.

After Issuing the Notice

Make sure to send your primacy agency a copy of the notice and a letter certifying you have met all the public notice requirements within ten days. You should also issue a follow-up notice in addition to meeting any repeat notice requirements your primacy agency sets.

WARNING

FOR PARENTS OF INFANTS 6 MONTHS AND YOUNGER

Served by [system]

DO NOT USE THE WATER FOR INFANT FORMULA

High nitrate levels have been detected. A routine sample showed a nitrate concentration in the drinking water of [level and units]. This is above the nitrate standard, or maximum contaminant level (MCL), of [state/federal MCL].

What does this mean to me?

- **Do not boil the water.** Boiling, freezing, filtering, or letting water stand does not reduce the nitrate level. In fact, boiling water can make the nitrates more concentrated. Water, juice, and formula for children under six months of age should not be prepared with tap water. Bottled water or some other water low in nitrates should be used.
- *Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.* Blue baby syndrome is indicated by blueness of the skin.
- Symptoms in infants can develop rapidly, with health deteriorating over a period of days. If symptoms occur in a child less than 6 months old, seek medical attention immediately.
- Continue to use bottled water for infants until further notice. Adults and children older than six months can drink the tap water. However, if you are pregnant or have specific health concerns, you may wish to consult your doctor.
- We learned of the nitrate levels on [date].

What is the water system doing?

[Describe corrective action.]

- We will inform you when this problem has been corrected. We anticipate resolving the problem by [date.]
- For more information, please contact ____ at ____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for Spanish Nitrate Notice--Template 1-1A
Template on Reverse

The template on reverse is an exact Spanish translation of template 1-1 for nitrate. All the instructions of template 1-1 apply. If you modify the English template, you should modify this template accordingly. Schools or universities may be able to provide low cost translations. See page 11 for suggestions on multilingual notices.

AVISO

PADRES DE FAMILIA CON BEBES DE 6 MESES DE EDAD Y MENORES

Servidos por [system] o en la vecindad de [area]

NO USEN EL AGUA PARA PREPARAR ALIMENTOS PARA BEBES

Altos niveles de nitratos han sido detectados. Una muestra de rutina mostró una concentración de nitratos en el agua de [level and units in Spanish]. Este nivel está por encima de la norma, o nivel máximo de contaminación (NMC) de [state/federal MCL in Spanish].

¿Que significa esto para mi?

- **No hierva el agua.** Hervir, congelar, filtrar o dejar el agua en reposo no reduce el nivel de nitratos. De hecho, al hervir el agua puede aumentar aún más la concentración de nitratos. Agua, jugo o leche en polvo para bebés menores de seis (6) meses de edad no debe prepararse con agua de la pluma. Debe emplear agua embotellada u otra agua baja en nitratos.
- *Bebés menores de seis (6) meses que ingieran agua con nitratos en exceso del nivel máximo de contaminación (NMC) pueden enfermar seriamente y, de no ser tratados, pueden morir. Los síntomas incluyen dificultad en respirar y síndrome de bebé azul.* El síndrome de bebé azul se refiere al color azulado que toma la piel del bebé.
- Los síntomas en los bebes pueden desarrollarse con rapidez, con el deterioro de su salud en los días subsiguientes. Si los síntomas ocurren en infantes menores de seis (6) meses de edad, busque atención médica inmediatamente.
- Continúe dándole agua embotellada a sus bebés hasta próximo aviso. Adultos e infantes mayores de seis (6) meses de edad pueden tomar el agua de la pluma. Sin embargo, si usted está embarazada o tiene algún problema de salud en particular, puede optar por hacer una consulta con su médico.
- Supimos del nivel de nitratos en la siguiente fecha: [date in Spanish day-month-year]

¿Qué está haciendo la Oficina de Agua Potable?

[describe corrective action in Spanish]

- Le informaremos cuando el problema haya sido corregido. Anticipamos que resolveremos el problema el [date in Spanish day-month-year]
- Para mayor información, por favor póngase en contacto con _____ al _____.

Si otras personas, tales como inquilinos, residentes, pacientes, estudiantes o empleados reciben agua de usted, es importante que usted les provea copia de esta notificación, ya sea colocándola en un lugar visible, distribuyéndola a mano, o mediante el correo.

Instructions for Fecal Coliform or *E. coli* Notice--Template 1-2

Template on Reverse

Since exceeding the fecal coliform or *E. coli* maximum contaminant level is a Tier 1 violation, you must provide public notice to all persons served as soon as possible but within 24 hours after you learn of the violation. During this time, you must also contact your primacy agency. You should also coordinate with your local health department. One or both agencies should tell you whether to instruct consumers to boil water. You must use one or more of the following methods to deliver the notice to consumers:

- Radio
- Television
- Hand or direct delivery
- Posting

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings) if necessary to reach all persons served.

The notice on the reverse is appropriate for hand delivery or a newspaper notice. However, you may wish to shorten it before using it for a radio or TV notice. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Population Served

Make sure it is clear who is served by your water system--you may need to list the municipalities you serve.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with fecal coliform or *E. coli* violations. Use the following language, if appropriate, or develop your own:

- We are chlorinating and flushing the water system.
- We are increasing sampling for coliform bacteria to determine the source of the contamination.
- We are repairing the wellhead seal.
- We are repairing the storage tank.
- We are restricting water intake from the river/lake/reservoir to prevent additional bacteria from entering the water system and restricting water use to emergencies.

After Issuing the Notice

- Send a copy of the notice and a certification letter to your primacy agency within ten days from the time you issue the notice.
- It is a good idea to issue a "problem corrected" notice when the violation is resolved. See Template 1-5.

WARNING
Effective Immediately

People served by [system]

BOIL YOUR WATER BEFORE USING

Fecal coliform [or *E. coli*] bacteria were found in your water supply on [date].

- Bring all water to a boil, let it boil for one minute, and let cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, and food preparation until further notice.

What does this mean to me?

- *Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.*
- The symptoms above are not caused only by organisms in drinking water, but may be caused by other factors. If you experience any of these symptoms and they persist, you may want to seek medical advice. People at increased risk should seek advice about drinking water from their health care providers.

What is the water system doing?

[Describe corrective action.]

- We will inform you when tests show no bacteria and you no longer need to boil your water. We anticipate resolving the problem by [date.]
- For more information on this situation, please contact ____ at _____. Guidelines on ways to lessen the risk of infection by microbes are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for Spanish Fecal Coliform or *E. coli* Notice --Template 1-2A
Template on Reverse

The template on reverse is an exact Spanish translation of template 1-2 for fecal coliform or *E. coli*. All the instructions of template 1-2 apply. If you modify the English template, you should modify this template accordingly. Schools or universities may be able to provide low cost translations. See page 11 for suggestions on multilingual notices.

AVISO Efectivo Inmediatamente

Personas Servidas por [system]

HIERVAN EL AGUA ANTES DE USARLA

Bacterias coliformes fecales (*E. coli*) fueron encontradas en su servicio de agua el día [date in Spanish day-month-year].

Hierva toda el agua, déjela hervir por un minuto, y déjela reposar antes de usarla, o utilice agua embotellada. Agua hervida o embotellada debe ser usada para beber, hacer hielo, lavarse los dientes, lavar los platos y para preparar la comida hasta próximo aviso.

¿Que significa esto para mí?

- Coliformes fecales o *E. coli* son bacterias cuya presencia indica que el agua esta contaminada con desechos humanos o de animales. Microbios de esos desechos pueden causar diarrea, cólicos, nausea, dolores de cabeza u otros síntomas. Pueden representar un peligro para la salud de infantes, niños y niñas de corta edad y personas con sistemas inmunológicos en alto riesgo.
- Los síntomas descritos arriba no ocurren solamente debido a los microbios. También pueden ser causados por otros motivos. Si usted siente estos síntomas y estos persisten, usted puede optar por hacer una consulta con su médico. Personas en situaciones de alto riesgo deben consultar con sus proveedores de servicios médicos.

¿Qué está haciendo la Oficina de Agua Potable?

[describe corrective action in Spanish]

- Le informaremos cuando las pruebas demuestren que no hay bacterias y que usted ya no necesita hervir su agua. Anticipamos que resolveremos el problema el [date in Spanish day-month-year]
- Para mayor información, por favor póngase en contacto con _____ al _____.
Guías sobre métodos para reducir el riesgo de contraer una infección por microbios esta disponible en la Línea Caliente Sobre Agua Potable en el 1-800-426-4791.

Si otras personas, tales como inquilinos, residentes, pacientes, estudiantes o empleados reciben agua de usted, es importante que usted les provea copia de esta notificación, ya sea colocándola en un lugar visible, distribuyéndola a mano, o mediante el correo.

Instructions for Waterborne Disease Outbreak Notice--Template 1-3

Template on Reverse

Since a waterborne disease outbreak is a Tier 1 situation, you must provide public notice to all persons served as soon as possible but within 24 hours after you learn of the violation. You must also contact your primacy agency during this time. You should also coordinate with your local health department. One or both agencies should tell you whether to instruct consumers to boil water. You must use one or more of the following methods to deliver the notice to consumers:

- Radio
- Television
- Hand or direct delivery
- Posting

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings) if necessary to reach all persons served.

The notice on the reverse is appropriate for hand delivery or a newspaper notice. However, you may wish to shorten it before using it for a radio, TV notice, or posting. Within 10 days after issuing the notice, send a copy to your primacy agency.

Describing the Outbreak

If known, list any organisms detected, the number of affected people, any water treatment problems contributing to the outbreak, and any sources of contamination, such as flooding.

Potential Health Effects

No mandatory health effects language exists for waterborne disease outbreaks. You may wish to use the sentence below, if appropriate, or contact your primacy agency or health department. These symptoms are common to many diseases caused by microscopic organisms:

- Symptoms may include nausea, cramps, diarrhea, jaundice, and associated headaches and fatigue.

Population at Risk

Some people who contract waterborne diseases can be affected more severely than others, as described on the reverse page. The specific language on the reverse is not mandatory, but you must provide information on the population at risk. In addition, make sure it is clear who is served by your water system--you may need to list the municipalities you serve.

Corrective Action

In your notice, describe the corrective actions you are taking. Listed below are some steps commonly taken by water systems with waterborne disease outbreaks. Use the following language, if appropriate, or develop your own:

- We are repairing our filtration system.
- We are increasing sampling for disease-causing organisms.

It is a good idea to issue a "problem corrected" notice when the outbreak is under control. See Template 1-5.

Make sure to send your primacy agency a copy of the notice and a letter certifying you have met all the public notice requirements within ten days.

WARNING
Effective Immediately

People served by [system]

BOIL YOUR WATER BEFORE USING

Disease-causing organisms have gotten into the water supply. We learned of an outbreak from [agency] on [date].

- Bring all water to a boil, let it boil for one minute, and let cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, washing dishes, brushing teeth, and food preparation until further notice.

What does this mean to me?

- These organisms are causing illness in people served by the water system, according to the ____ Health Department. [Describe the outbreak].
- [Describe symptoms of the waterborne disease.] If you experience one or more of these symptoms and they persist, contact your doctor.
- Some people, including immuno-compromised people, some elderly, and infants may be at increased risk. These people should seek advice about drinking water from their health care providers.

What is the water system doing?

[Describe corrective action.]

- We will inform you when you no longer need to boil your water. We anticipate resolving the problem by [date].
- For more information on the situation, please contact ____ at _____. Guidelines on ways to lessen the risk of infection by microbes are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for Notice for Turbidity Single Exceedance as Tier 1--Template 1-4

Template on Reverse

If your primacy agency has designated this turbidity single exceedance as a Tier 1 violation, you must provide public notice to all persons served within 24 hours after you learn of the violation. (Turbidity is not Tier 1 by regulation, but may frequently be elevated to Tier 1 by the primacy agency. Water systems are subject to different turbidity standards depending on system type and size. Some systems have limits of 5 NTU, while others have limits of 1 NTU.) You should also coordinate with your local health department. One or both agencies should tell you whether to instruct consumers to boil water. You must use one or more of the following methods to deliver the notice to consumers:

- Radio
- Television
- Hand or direct delivery
- Posting

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings) if necessary to reach all persons served.

The notice on the reverse is appropriate for hand delivery or a newspaper notice. However, you may wish to shorten it before using it for a radio or TV notice or posting. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Population Served

Make sure it is clear who is served by your water system—you may need to list the municipalities you serve.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with turbidity single exceedance. Use the following language, if appropriate, or develop your own:

- We are sampling both untreated and treated water for the presence and concentration of coliform bacteria.
- We are monitoring chlorine levels and will adjust the amount of chlorine added as necessary.
- We shut down the water plant and cleaned all the filters.

Source of the Problem

If you know why the turbidity is high, explain it in your notice. For instance, unusual conditions, such as heavy rains and flooding, can overburden the water plant, and treated water may therefore not meet the standards.

After Issuing the Notice

- Send a copy of the notice and a certification letter to your primacy agency within ten days after you issue the notice.
- It is a good idea to issue a "problem corrected" notice when the violation is resolved. See Template 1-5.

WARNING

Effective Immediately

People served by [system]

BOIL YOUR WATER BEFORE DRINKING

Turbidity (cloudiness) levels in your water supply were above the limit of 5 turbidity units on [date]. Levels reached [number] turbidity units.

- Bring all water to a boil, let it boil for one minute, and let cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, washing dishes, brushing teeth, and food preparation until further notice.

What does this mean to me?

- We routinely monitor your water for turbidity, which tells us whether we are effectively filtering and disinfecting the water supply.
- *Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.*
- The symptoms above, however, are not caused only by organisms in drinking water, but also by other factors. If you experience any of these symptoms and they persist, you may want to seek medical advice.
- Some people, including immuno-compromised people, some elderly, and infants may be at increased risk. These people should seek advice about drinking water from their health care providers.

What is the water system doing?

[Describe corrective action.]

- We anticipate resolving the problem by [date.] We will inform you when turbidity returns to appropriate levels and when you no longer need to boil your water.
- For more information on this situation, please contact ____ at _____. Guidelines on ways to lessen the risk of infection by microbes are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for Tier 1 "Problem Corrected" Notice--Template 1-5

Template on Reverse

It is a good idea to issue a notice when a serious violation has been resolved. Although EPA regulations do not require such notices, your primacy agency may require you to issue one. You should coordinate with your local health department as well. Below are some recommended methods for a "problem corrected" notice. You should but are not required to use the same methods you used for the original notice.

- Radio
- Television
- Newspaper
- Hand or direct delivery
- Posting

You may wish to use additional methods (e.g., delivery of multiple copies to hospitals, clinics, or apartment buildings) if necessary to reach all persons served.

The notice on the reverse is very general and can be used for any violation. However, to help restore consumers' confidence in the water system, you should modify the notice to fit your situation. Although the public should have seen your initial notice, there may be additional information you learned after the notice was issued. Therefore, you should describe the violation again and discuss how the problem was solved.

DRINKING WATER PROBLEM CORRECTED

Customers of [system] were recently notified of a problem with their drinking water and were advised to [describe recommended action]. We are pleased to be able to report that the problem has been corrected and that it is no longer necessary to [describe recommended action]. We apologize for any inconvenience and thank you for your patience.

As always, you may call ____ at ____ with any comments or questions.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

6. Tier 2 Notice Requirements and Suggestions

Tier 2 notices are required for violations of maximum contaminant levels (**MCLs**), maximum residual disinfectant levels (**MRDLs**), and **treatment technique requirements not included in Tier 1; monitoring violations (if required by the primacy agency); and failure to comply with the terms and conditions of a variance or exemption.** Tier 2 notices are considered less urgent than Tier 1 violations because there is little immediate risk to consumers or the system may have already returned to compliance by the time the notice is issued. Tier 2 notices must meet the content, format and multilingual requirements described in detail in Chapter 3.

What is the deadline for issuing a Tier 2 notice?

Tier 2 notices must be issued as soon as practicable but within 30 days after a violation is discovered. Extensions of the 30-day deadline to up to three months from the date of the violation may be granted by the primacy agency; you should check with your agency.

Following the initial notice, you must repeat the notice every three months for as long as the violation persists, unless your primacy agency determines the situation warrants a different repeat notice frequency. In such cases, repeat notices must be no less frequent than once a year. If the public notice is posted, it must remain in place during the length of the violation. For total coliform MCL violations, for example, you are not in compliance again until samples collected during the month following the violation meet the standard. You must also notify new billing customers or hookups of any ongoing violations prior to or at the time their service begins.

Which methods of delivery must I use?

Unless directed otherwise by the primacy agency, if you operate a **community water system**, you must provide notice by:

1. Mail or other direct delivery to each customer receiving a bill or other service connections, and
2. Any other method reasonably calculated to reach other people regularly served by the system if they would not normally be reached by the first method. Such methods may include publication in a local newspaper, posting in public places, or delivery to community organizations.



Required Elements of a Public Notice

1. A description of the violation;
2. When the violation occurred;
3. Potential adverse health effects;
4. Population(s) at risk;
5. Whether alternative water supplies should be used;
6. Actions consumers should take, including when they should seek medical help, if known;
7. What you are doing to correct the violation;
8. When you expect to return to compliance;
9. Phone number for additional information; and
10. Standard language encouraging distribution to all persons served.

Unless directed otherwise by the primacy agency, if you operate a **non-community water system**, you must provide notice by the following methods (see Chapter 8 for more information):

6. Tier 2 Notice Requirements and Suggestions

1. Posting the notice in conspicuous locations or by mail or direct delivery to each consumer, and
2. Any other method reasonably calculated to reach other people served by the system if they would not normally be reached by the first method. Such methods may include publication in a local newspaper or newsletter distributed to consumers, use of e-mail to notify employees or students, or delivery of multiple copies in central locations.

For **both system types**, there are a few cases where you may be able to reach all persons served with the first method you choose. In such cases, you may not need to use additional methods. At a gas station, for instance, posting would be sufficient to reach all persons served.

Suggestions for Effective Public Notification Delivery

- If you **mail** the notice, send it to all service connections, if possible, and not just billing customers. Be sure to tell owners or managers of home owners associations, apartment buildings, or resort rental properties to pass the information along to their tenants. You may wish to send multiple copies of the notice to building managers. Billing customers can be reached via inserts in their water bills, if the bills are distributed and received within 30 days of the violation.

- Notices in **newspapers** may be in the form of an article or a paid advertisement. However, articles are more effective than paid notices because they are more likely to be noticed and read. Work with the local newspaper to write an article on the violation and what the system is doing to correct it. Be sure that anyone at the paper who writes or edits an article knows what items must be included to meet the requirements for public notification. If your system is located in the suburban area of a large city, you should request that your notice be placed in the weekly community news section. Also, focus on getting articles published in smaller **community newspapers, homeowners association newsletters**, or similar publications.



Tips for Very Small Community Systems

Compare the cost of mailing and labor for hand delivery before choosing a method. Because notice delivery is not required immediately after this type of violation, hand delivery may not be necessary. However, it may be cheaper and in some cases may take less time than putting together a mailing. If your notice deadline coincides with your billing schedule, you may be able to include your notice in the bill at no extra cost. Whichever method you choose, you should supplement it with posting in common areas and gathering places, such as banks, grocery stores, and restaurants. If a daily or weekly newspaper is available, you may wish to purchase an ad to publish the notice, or have the newspaper write a story on the violation.

- **Paid advertisements** offer an advantage because you are guaranteed the notice will appear exactly as you write it. Try to purchase ad space in the front section of the paper. Legal notices tend to get lost in the back of the paper where few people read them. If your notice must appear with other paid notices, a descriptive title becomes very important. The header "notice" may be overlooked, but the mention of the community's drinking water supply gets people's attention.

Suggestions for Layout of the Notice

Tier 2 notices should answer the most common questions people will have about the violation: What does this mean to me? What should I do? What is the water system doing? The tone of a Tier 2 notice is less urgent than that of a Tier 1 notice. A question and answer format that anticipates consumers' concerns is recommended for each section. Templates 2-1 through 2-9 at the end of this chapter offer sample language and instructions for preparing Tier 2 public notices.

1. Title – The notice should have a descriptive title but should not be overly alarming. The title “Drinking Water Notice” or “Important Information about Your Drinking Water” would be more appropriate than “Drinking Water Alert.” Follow with a subtitle describing the situation, such as: “Tests Show Levels of [Contaminant] Above Drinking Water Standards.”
2. Describe What Happened – The notice should briefly describe what happened and give some background as to how the violation was discovered. For example, say that you routinely test the water and that the most recent samples showed a violation. Provide a context for the exceedance by giving the applicable drinking water standard and whether the exceedance is a monthly, quarterly, or other type of average. If the problem has already been corrected, be sure to communicate this clearly.
3. Explain How the Violation Affects Consumers – Be clear that the situation is not an emergency and that consumers would have been notified immediately if it had been. In the case of treatment technique violations, explain that treatment is important to preventing disease outbreaks but that there is no evidence of disease or bacteria in the water. For turbidity exceedances, explain how high turbidity levels may be related to the presence of organisms in drinking water.
4. Explain What Consumers Should Do – Next, the notice should tell customers what they need to do, even if no action is necessary. This will usually be: “you do/do not need to seek other sources of drinking water.” Since people’s first reaction is to boil their water, explain the effect of boiling (i.e., whether boiling is necessary, has no effect, or is harmful). Tell consumers that if they have specific health concerns, especially for the young, old, or immuno-compromised (undergoing chemotherapy, HIV-positive, or other immune system problems), they may want to consult their doctors.
5. Describe What You Are Doing to Correct the Problem – Inform consumers of the steps you are taking to correct the problem, such as the installation of new treatment, increased frequency or type of monitoring, or your collaboration with the appropriate state agency. Tell them when you expect the drinking water to again meet the standard. Provide the name and telephone number of someone who can answer any questions consumers may have. When giving out contact information, invite people to learn more

6. Tier 2 Notice Requirements and Suggestions

about protecting their drinking water by saying: "for more information, or to learn more about protecting your drinking water, please contact . . ."

6. Optional Elements — If you know the source of the contamination, include it in the notice. This helps reassure consumers that you have investigated the problem and are taking steps to address it. It also reinforces the fact that drinking water is a vulnerable resource that must be protected.
7. Public Water System ID Number— You should include your PWS ID number at the bottom of the notice. This will help your primacy agency track compliance and prevent tracking errors between systems with similar names.

TIER 2 TEMPLATES

The pages that follow contain templates for Tier 2 violations. Along with each template are instructions, including the required method of delivery and instructions for completing individual sections of the notice.

Mandatory language on health effects, which must be included exactly as written, is presented in *italics*.

You must also include the following language in all notices. Use of this language does *not* relieve you of your obligation to notify all persons served:

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Templates

Unresolved Total Coliform Notice--Template 2-1

Resolved Total Coliform Notice--Template 2-2

Chemical or Radiological MCLs Notice--Template 2-3

SWTR Failure to Filter Notice--Template 2-4

SWTR Turbidity Single Exceedance Notice--Template 2-5

SWTR Turbidity Monthly Exceedance Notice--Template 2-6

SWTR Disinfection Treatment Notices--Template 2-7

Lead Public Education Notice--Template 2-8

LCR Failure to Install Corrosion Control--Template 2-9



Instructions for Unresolved Total Coliform Notice--Template 2-1

Template on Reverse

This template is applicable to systems required to take less than 40 samples per month. See below for language applicable to systems taking 40 or more samples. Since exceeding the total coliform bacteria maximum contaminant level is a Tier 2 violation, you must provide public notice to all persons served as soon as possible but within 30 days after you learn of the violation. Persistent total coliform problems can be serious. Check with your primacy agency to make sure you meet all requirements. You must issue a repeat notice every three months for as long as the violation persists, unless your primacy agency determines the situation warrants a different repeat notice frequency.

Community systems must use one of the following methods:

- Hand or direct delivery
- Mail, as a separate notice or included with the bill

Non-community systems must use one of the following methods:

- Posting
- Hand delivery
- Mail

In addition, both community and non-community systems must use *another* method reasonably calculated to reach others if they would not be reached by the first method. Such methods could include newspapers, e-mail, or delivery to community organizations.

The notice on the reverse is appropriate for hand delivery or mail. However, you may wish to shorten it before using it for posting. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Description of the Violation

Use the following language if you are required to take 40 or more samples per month:

- We routinely monitor for the presence of drinking water contaminants. We took [number] samples during the month of [month]. During [month], ____ percent of our samples showed the presence of total coliform bacteria. The standard is that no more than 5 percent of samples may do so.

Corrective Action

In your notice, describe corrective actions you are taking. If you know what is causing the coliform problem, explain. Listed below are some steps commonly taken by water systems with total coliform violations. Use the following language, if appropriate, or develop your own:

- We are chlorinating and flushing the water system.
- We are increasing sampling for coliform bacteria.
- We are repairing the wellhead seal.
- We are repairing the storage tank.
- We will inform you when additional samples show no coliform bacteria.

Make sure to send a copy of the notice and a letter certifying you have met all the public notice requirements to your primacy agency within ten days. It is a good idea to inform your consumers when the violation has been resolved. See Template 1-5 for a "problem corrected" notice template.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Tests Show Presence of Coliform Bacteria

We routinely monitor for the presence of drinking water contaminants. We took [number] samples during the month of [month]. During [month], [number] of our samples showed the presence of total coliform bacteria. The standard is that no more than 1 sample per month may do so.

What does this mean?

This is not an emergency. If it had been, you would have been notified immediately. Total coliform bacteria are generally not harmful themselves.

Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Usually, coliforms are a sign that there could be a problem with the system's treatment or distribution systems.

Some people, including immuno-compromised people, some elderly, and infants may be at increased risk. These people should seek advice about drinking water from their health care providers. Guidelines on ways to lessen the risk of infection by microbes are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

What should I do?

You do not need to boil your water or take other corrective actions. However, if you have specific health concerns, consult your doctor.

What is the water system doing?

[Describe corrective action.]

We will inform you when additional samples show no coliform bacteria. We anticipate resolving the problem by [date.]

For more information, or to learn more about protecting your drinking water please contact ____ at ____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for Resolved Total Coliform Notice—Template 2-2

Template on Reverse

This template is applicable to systems required to take less than 40 samples per month. See below for language applicable to systems taking 40 or more samples. Since exceeding the total coliform bacteria maximum contaminant level is a Tier 2 violation, you must provide public notice to all persons served as soon as possible but within 30 days after you learn of the violation, unless your primacy agency extends this deadline. Some states have more stringent requirements for coliform violations. Check with your primacy agency to make sure you meet all its requirements.

Community systems must use one of the following methods:

- Hand or direct delivery
- Mail, as a separate notice or included with the bill

Non-community systems must use one of the following methods:

- Posting
- Hand delivery
- Mail

In addition, both community and non-community systems must use *another* method reasonably calculated to reach others if they would not be reached by the first method. Such methods could include newspapers, e-mail, or delivery to community organizations.

The notice on the reverse is appropriate for hand delivery or mail. However, you may wish to shorten it before using it for posting. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Description of the Violation

Make sure that the notice is clear about the fact that the coliform problem has been resolved, and there is no current cause for concern.

Use the following language if you are required to take 40 or more samples per month:

- We routinely monitor for the presence of drinking water contaminants. We took [number] samples during the month of [month]. During [month], ____ percent of our samples showed the presence of total coliform bacteria. The standard is that no more than 5 percent of samples may do so.

Corrective Action

In your notice, describe corrective actions you have taken. Listed below are some steps commonly taken by water systems with total coliform violations. Use the following language, if appropriate, or develop your own:

- We have increased sampling for coliform bacteria to catch the problem early if it recurs.
- The well and/or distribution system has been disinfected and additional samples do not show presence of coliform bacteria.

After Issuing the Notice

Make sure to send a copy of the notice along with a letter certifying you have met all the public notice requirements to your primacy agency within ten days.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Tests in [month] Showed Presence of Coliform Bacteria

We routinely monitor for the presence of drinking water contaminants. We took [number] samples during the month of [month]. During [month], [number] of our samples tested positive for the presence of total coliform bacteria. The standard is that no more than one sample per month may do so. Subsequent tests indicate that the bacteria are no longer present in the water supply.

What does this mean?

This is not an emergency. If it had been, you would have been notified immediately. Total coliform bacteria are generally not harmful themselves.

Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Usually, coliforms are a sign that there could be a problem with the system's treatment or distribution systems.

What should I do?

You do not need to boil your water or take other corrective action. However, if you have specific health concerns, consult your doctor.

What did the water system do?

[Describe corrective action.]

For more information, or to learn more about protecting your drinking water please contact ____ at ____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for Chemical or Radiological MCLs Notice—Template 2-3

Template on Reverse

Since exceeding chemical or radiological maximum contaminant levels (MCLs) is a Tier 2 violation, you must provide public notice to all persons served as soon as possible but within 30 days after you learn of the violation, unless your primacy agency extends this deadline. You must issue a repeat notice every three months for as long as the violation persists, unless your primacy agency determines the situation warrants a different repeat notice frequency.

Community systems must use one of the following methods:

- Hand or direct delivery
- Mail, as a separate notice or included with the bill

Non-community systems must use one of the following methods:

- Posting
- Hand delivery
- Mail

In addition, both community and non-community systems must use *another* method reasonably calculated to reach others if they would not be reached by the first method. Such methods could include newspapers, e-mail, or delivery to community organizations.

The notice on the reverse is appropriate for hand delivery or mail. However, you may wish to shorten it before using it for posting. **(The health effects language on the reverse is generic. You must replace it with the specific language on your contaminant from Appendix B of the handbook.)**

Corrective Action

In your notice, describe corrective actions you are taking. Do not use overly technical terminology when describing treatment methods. Listed below are some steps commonly taken by water systems with chemical or radiological violations. Use the following language, if appropriate, or develop your own:

- We are working with [local/state agency] to evaluate the water supply and research options to correct the problem. These options may include treating the water to remove [contaminant] or connecting to _____'s water supply.
- We have stopped using the contaminated well. We have increased pumping from other wells, and we are investigating drilling a new well.
- We will increase the frequency at which we test the water for [contaminant].
- We have since taken samples at this location and had them tested. They show that we meet the standards.

Repeat Notices

If this is an ongoing violation and/or you fluctuate above and below the MCL, it is a good idea to give the history behind the violation, including the source of contamination, if known. You should list the date of the initial detection, as well as how levels have changed over time. If levels are changing as a result of treatment you can indicate this.

After Issuing the Notice

Make sure to send your primacy agency a copy of the notice and a letter certifying you have met all public notification requirements within ten days.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Tests Show Levels of ____ above Drinking Water Standards

The ____ system routinely monitors for the presence of drinking water contaminants. Testing results we received on [date] show that the system exceeds the standard, or maximum contaminant level, for [contaminant]. [[Contaminant] was found at [level]/The average level of [contaminant] over the last four quarters was [level].] The standard for [contaminant] is [MCL].

What does this mean to me?

This is not an emergency. If it had been, you would have been notified immediately. However, *some people who drink water containing [contaminant] [well] in excess of the maximum contaminant level over many years could experience [health effect] [or may have an increased risk of cancer].*

What should I do?

You do not need to use an alternative (e.g., bottled) water supply. However, if you have specific health concerns, consult your doctor.

What is the water system doing?

[Describe corrective action.]

We will inform you when [contaminant] levels meet the standards. We anticipate resolving the problem by [date.]

For more information, or to learn more about protecting your drinking water please contact ____ at ____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for SWTR Failure to Filter Notice--Template 2-4

Template on Reverse

Since surface water treatment technique violations are included in Tier 2, you must provide public notice to all persons served as soon as possible but within 30 days after you learn of the violation, unless your primacy agency extends this deadline. You must issue a repeat notice every three months for as long as the violation persists, unless your primacy agency determines the situation warrants a different repeat notice frequency.

Community systems must use one of the following methods:

- Hand or direct delivery
- Mail, as a separate notice or included with the bill

Non-community systems must use one of the following methods:

- Posting
- Hand delivery
- Mail

In addition, both community and non-community systems must use *another* method reasonably calculated to reach others if they would not be reached by the first method. Such methods could include newspapers, e-mail, or delivery to community organizations.

The notice on the reverse is appropriate for hand delivery or mail. However, you may wish to shorten it before using it for posting. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with surface water treatment technique violations. Use the following language, if appropriate, or develop your own:

- Our filtration system needs upgrades to meet the requirements.
- We are installing filtration. We expect that the filtration system will be operational by [month, year].
- We are monitoring for turbidity (cloudiness), disinfectant levels, and the presence of bacteria. We continue to meet the standards for these measurements.

Repeat Notices

For repeat notices, you should state how long the violation has been ongoing and remind consumers of when you sent out the previous notice. If you are making progress in installing filtration, describe it. Alternatively, if funding or other issues are delaying installation, let the consumers know.

After Issuing the Violation

Make sure to send your primacy agency a copy of the notice and a certification letter within ten days after you issued the notice.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
____ Water System Does Not Meet Treatment Requirements

The water you drink is treated by ____ water system before it reaches you. However, this treatment does not meet all the current State and Federal requirements for drinking water.

The water currently is treated with chlorine or other disinfectants to kill bacteria. However, disinfection does not always kill other disease-causing organisms, such as *giardia* and other parasites. Filtration is an effective way to remove such parasites. We are required to filter the water, but have not yet installed a filtration system.

What does this mean to me?

This is not an emergency. If it had been you would have been notified immediately. We do not know of any cases of contamination. However, until improvements are made, there is an increased chance that disease-causing organisms could contaminate the water supply.

Some people, including immuno-compromised people, some elderly, and infants may be at increased risk. These people should seek advice about drinking water from their health care providers. Guidelines on ways to lessen the risk of infection by microbes are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. These symptoms, however, are not caused only by organisms in drinking water, but also by other factors. If you experience any of these symptoms and they persist, you may want to seek medical advice.

What should I do?

You do not need to boil your water. However, if you have specific health concerns, consult your doctor. A home filter will not necessarily solve the problem, because not all home filters protect against parasites. Call NSF International at 1(800) NSF-8010 or the Water Quality Association at 1(800) 749-0234 for information on appropriate filters.

What is the water system doing?

Filtration is the best method to remove these organisms.

[Describe corrective action.]

We anticipate resolving the problem by [date.] Until filtration is installed, you will receive a notice similar to this every three months.

If you would like more information, please call ____ at ____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for SWTR Turbidity Single Exceedance Notice--Template 2-5

Template on Reverse

Since surface water treatment filtration treatment technique violations are included in Tier 2, you must provide public notice to all persons served as soon as possible but within 30 days after you learn of the violation, unless your primacy agency extends this deadline. Turbidity exceedances can be serious, and some states have more stringent requirements. Check with your primacy agency to make sure you meet all its requirements. In addition, turbidity standards vary by system type and size—if you are subject to the requirements of the Interim Enhanced Surface Water Treatment Rule, you may be subject to stricter turbidity limits of 1 NTU. The limit of 5 NTU still applies to other systems. Check with your primacy agency if you are unsure which limits apply to you.

Community systems must use one of the following methods:

- Hand or direct delivery
- Mail, as a separate notice or included with the bill

Non-community systems must use one of the following methods:

- Posting
- Hand delivery
- Mail

In addition, both community and non-community systems must use *another* method reasonably calculated to reach others if they would not be reached by the first method. Such methods could include newspapers, e-mail, or delivery to community organizations.

The notice on the reverse is appropriate for hand delivery or mail. However, you may wish to shorten it before using it for posting. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Explaining Turbidity

If space permits, you may wish to explain the common causes of high turbidity and how it can overload the capabilities of the water treatment plant.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with filtration treatment technique violations. Use the following language, if appropriate, or develop your own:

- We added chemicals that reduce turbidity.
- We sampled both untreated and treated water for the presence of coliform bacteria.
- We monitored chlorine levels and will adjust the amount of chlorine added as necessary.
- We shut down the water plant and cleaned all the filters.

After Issuing the Notice

Make sure to send a copy of the notice and a letter certifying you have met all public notice requirements to your primacy agency within ten days.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
____ Water System Does/Did Not Meet Treatment Requirements

People served by [system] or living in [area]

- We routinely monitor your water for turbidity (cloudiness), which tells us whether we are effectively filtering and disinfecting the water supply. Turbidity levels in your water supply were ____ turbidity units on [date]. This is above the limit of 5 [or 1] turbidity units.

What does this mean to me?

- This is not an emergency. If it had been, you would have been notified immediately. A problem occurred with the treatment system at the water plant.
- *Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.*
- These symptoms are not caused only by organisms in drinking water and may be caused by other factors. If you experience any of these symptoms and they persist, you may want to seek medical advice.
- Some people, including immuno-compromised people, some elderly, and infants may be at increased risk. These people should seek advice about drinking water from their health care providers. Guidelines on ways to lessen the risk of infection by microbes are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

What should I do?

- **You do not need to boil your water or take other corrective actions.** However, if you have specific health concerns, consult your doctor.

What is the water system doing?

[Describe corrective action.]

- Turbidity levels since [date] have been below the limit.
- For more information, please contact ____ at ____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for SWTR Turbidity Monthly Exceedance Notice--Template 2-6

Template on Reverse

Since surface water treatment filtration treatment technique violations are included in Tier 2, you must provide public notice to all persons served as soon as possible but within 30 days after you learn of the violation, unless your primacy agency extends this deadline. Turbidity standards vary by system type and size. If you are subject to the requirements of the Interim Enhanced Surface Water Treatment Rule, you may be subject to stricter turbidity limits of 0.3 NTU. The limit of 0.5 NTU [or 1 NTU for some systems] still applies to other systems. Check with your primacy agency if you are unsure which limits apply to you.

Community systems must use one of the following methods:

- Hand or direct delivery
- Mail, as a separate notice or included with the bill

Non-community systems must use one of the following methods:

- Posting
- Hand delivery
- Mail

In addition, both community and non-community systems must use *another* method reasonably calculated to reach others if they would not be reached by the first method. Such methods could include newspapers, e-mail, or delivery to community organizations.

The notice on the reverse is appropriate for hand delivery or mail. However, you may wish to shorten it before using it for posting. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Explaining Turbidity

If space permits, you may wish to explain the common causes of high turbidity and how it can overload the capabilities of the water treatment plant.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with filtration treatment technique violations. Use the following language, if appropriate:

- We are sampling/we sampled both untreated and treated water for the presence of coliform bacteria.
- We are sampling/we sampled chlorine levels and will adjust/adjusted the amount of chlorine added as necessary.

Return to Compliance

Depending on whether or not turbidity levels meet the standards, use one of the following sentences:

- We expect to have turbidity returned to appropriate levels by [date].
- Turbidity levels so far this month have been at appropriate levels.

After Issuing the Notice

Make sure to send a copy of the notice to your state along with a letter certifying you have met all public notice requirements within ten days.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
_____ Water System Does/Did Not Meet Treatment Requirements

We routinely monitor for turbidity (cloudiness). This measurement tells us whether we are effectively filtering and disinfecting the water supply.

During the month of [month], _____ percent of turbidity samples were above 0.5 [or 0.3] turbidity units. The standard is that no more than 5 percent of samples may exceed 0.5 [or 0.3] turbidity units.

What does this mean to me?

This is not an emergency. If it had been, you would have been notified immediately. The turbidity levels are relatively low, but their persistence is a concern.

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

These symptoms are not caused only by organisms in drinking water and may be caused by other factors. If you experience any of these symptoms and they persist, you may want to seek medical advice.

Some people, including immuno-compromised people, some elderly, and infants may be at increased risk. These people should seek advice about drinking water from their health care providers. Guidelines on ways to lessen the risk of infection by microbes are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

What should I do?

You do not need to boil your water. However, if you have specific health concerns, consult your doctor.

What is the water system doing?

[Describe corrective action.]

[Describe when you expect to return to compliance.]

For more information, or to learn more about protecting your drinking water please contact _____ at _____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for SWTR Disinfection Treatment Notices--Template 2-7

Template on Reverse

Since surface water treatment disinfection treatment technique violations are included in Tier 2, you must provide public notice to all persons served as soon as possible but within 30 days after you learn of the violation, unless your privacy agency extends this deadline.

Community systems must use one of the following methods:

- Hand or direct delivery
- Mail, as a separate notice or included with the bill

Non-community systems must use one of the following methods:

- Posting
- Hand delivery
- Mail

In addition, both community and non-community systems must use *another* method reasonably calculated to reach others if they would not be reached by the first method. Such methods could include newspapers, e-mail, or delivery to community organizations.

You must leave the health effects language in italics unchanged.

Description of the Violation

Choose from the following descriptions of contact time or disinfectant residual violations, and modify to fit your situation.

Contact Time - In order to ensure proper disinfection, water in the treatment plant must be in contact with chlorine or a similar disinfectant for a minimum amount of time. On [date], this did not occur.

Although chlorine quickly kills most bacteria, it is less effective against organisms such as viruses and parasites. For this reason, water needs to mix with chlorine for a longer time period to kill such organisms. The amount of time necessary, or the "contact time," depends on the amount of disinfectant in the water and the temperature of the water.

Disinfectant Residual - We routinely monitor for disinfectant residual in the distribution system. This measurement tells us whether we are effectively disinfecting the water supply. Disinfectant residual is the amount of chlorine or related disinfectant present in the pipes of the distribution system. If the amount of disinfectant is too low, organisms could survive in the pipes.

Monthly exceedance - During the months of _____, disinfectant residual was undetectable in more than 5% of samples. The standard is that disinfectant may be undetectable in no more than 5% of samples each month for two months in a row.

Single exceedance - On [date], disinfectant levels dropped below 0.2 milligrams per liter for ____ hours. The standard is that levels may not drop below 0.2 for more than four hours.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with filtered systems technique violations. Use the following language, if appropriate, or develop your own:

- We are sampling/we sampled both untreated and treated water for the presence of coliform bacteria.
- We are sampling/we sampled disinfectant levels and will adjust/adjusted the amount of disinfectant added as necessary to maintain adequate levels.

Make sure to send a copy of the notice and a certification letter to your privacy agency.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
____ Water System Does/Did Not Meet Treatment Requirements

[Description of the violation - use descriptions from instructions on reverse.]

What does this mean to me?

This is not an emergency. If it had been, you would have been notified immediately. Tests taken during this same time period did not indicate the presence of bacteria in the water.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

These symptoms, however, are not caused only by organisms in drinking water, but also by other factors. If you experience any of these symptoms and they persist, you may want to seek medical advice.

Some people, including immuno-compromised people, some elderly, and infants may be at increased risk. These people should seek advice about drinking water from their health care providers. Guidelines on ways to lessen the risk of infection by microbes are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

What should I do?

You do not need to boil your water or take other corrective actions. However, if you have specific health concerns, consult your doctor.

What is the water system doing?

[Describe corrective action.]

[Disinfectant residual levels/contact times] so far this month have met all requirements.

For more information, or to learn more about protecting your drinking water please contact ____ at ____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for LCR Lead Public Education Notice--Template 2-8

Template on Reverse

Since lead and copper treatment technique violations are included in Tier 2, you must provide public notice to all persons served as soon as possible but within 30 days after you learn of the violation, unless your primacy agency extends this deadline. You must also conduct a lead education program.

Community systems must use one of the following methods:

- Hand or direct delivery
- Mail, as a separate notice or included with the bill

Non-community systems must use one of the following methods:

- Posting
- Hand delivery
- Mail

In addition, both community and non-community systems must use *another* method reasonably calculated to reach others if they would not be reached by the first method. Such methods could include newspapers, e-mail, or delivery to community organizations.

The notice on the reverse is appropriate for hand delivery or mail. However, you may wish to shorten it before using it for posting. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Corrective Actions

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with lead public education violations. Use the following language, if appropriate, or develop your own:

- We will be providing brochures with more detailed information on lead by [date]. This information will also be given to schools, hospitals, the health department, and other organizations.
- We will be installing corrosion control treatment to help reduce lead levels by [date].

If consumers ask for information on testing their water, you should have on hand the names of laboratories consumers can call. You can also give them information about filters. Not all home filters are appropriate for removing lead. Tell consumers to call NSF International at 1(800) NSF-8010 or the Water Quality Association at 1(800) 749-0234 for information on appropriate filters.

After Issuing the Notice

Make sure to send your primacy agency a copy of the notice and a letter certifying that you have met all the public notice requirements within ten days.

When corrosion control or other treatment has been effective at reducing lead levels, you may wish to inform your consumers by sending a "problem corrected" notice. See Template 1-5.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

_____ Water System Did Not Conduct Lead Education Program

Your drinking water may pick up lead from lead and brass pipes and plumbing fixtures as it travels from the treatment plant into your home. At the treatment plant, the water [does not contain lead/contains _____ milligrams per liter of lead], but it may pick up additional lead from your home if your plumbing contains lead or brass.

We routinely sample water at **consumers' taps** for lead. If more than 10 percent of our samples show lead levels above 0.015 milligrams per liter (the federally established "action level"), we are required to conduct a public education program for lead. Samples taken during [months] showed that _____ percent of samples had lead levels above the action level. We should have completed the education program within 60 days after we learned the results of the sampling. We have not yet conducted this program.

What should I do?

You can take the following steps to reduce your exposure to lead.

- Call the number below if you want to find out how to get your water tested for lead.
- Find out whether your house contains lead pipes or solder.
- Run your water for 15-30 seconds before using it for drinking or cooking. This flushes any standing lead from the pipes.
- Don't use hot tap water for cooking; instead, heat cold tap water on the stove. Lead dissolves more easily in hot water.
- **Do not boil your water.** Boiling water makes the lead more concentrated.

What does this mean to me?

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

What is the water system doing?

[Describe corrective action.]

This is not an emergency. If it had been, you would have been notified immediately. We anticipate meeting requirements for lead treatment by [date]. We will conduct another education program in one year if lead levels are still high.

For more information, contact _____ at _____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for LCR Failure to Install Corrosion Control--Template 2-9

Template on Reverse

Since lead and copper treatment technique violations are included in Tier 2, you must provide public notice to all persons served as soon as possible but within 30 days after you learn of the violation, unless your primacy agency extends this deadline. You must issue a repeat notice every three months for as long as the violation persists, unless your primacy agency determines the situation warrants a different repeat notice frequency.

Community systems must use one of the following methods:

- Hand or direct delivery
- Mail, as a separate notice or included with the bill

Non-community systems must use one of the following methods:

- Posting
- Hand delivery
- Mail

In addition, both community and non-community systems must use *another* method reasonably calculated to reach others if they would not be reached by the first method. Such methods could include newspapers, e-mail, or delivery to community organizations.

The notice on the reverse is appropriate for hand delivery or mail. However, you may wish to shorten it before using it for posting. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Explaining the Violation

If the delay in installation is related to outside circumstances, such as funding, you can explain these. Consumers will be more supportive of rate increases or may pressure local authorities to provide funds.

This template is written for systems which are required to install corrosion control after exceeding lead action levels. Some large systems must install corrosion control even if they have never exceeded the lead action level. You may need to modify the template if this applies to you.

The following may help you explain the violation:

- This is a treatment violation, but it does not mean there is lead in your drinking water. However, it is important that we take measures to control lead levels in the water, because ingesting lead can cause serious health consequences.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with lead and copper treatment technique violations. Use the following language, if appropriate, or develop your own:

- We conducted a lead public education program in [month, year]. You should have received a brochure explaining in more detail steps you can take to reduce exposure.

Make sure to send your primacy agency a copy of the notice and a letter certifying you have met all the public notice requirements within ten days.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER Lead Treatment Violation

We routinely sample water for lead at consumers' taps. Your drinking water may pick up lead from lead and brass pipes and plumbing fixtures as it travels from the treatment plant into your home. At the treatment plant, the water [does not contain lead/contains ____ milligrams per liter of lead], but it may pick up additional lead from your home if your plumbing contains lead or brass.

As a result of lead levels in the water above the limit, or "action level," we are required to install corrosion control treatment. This treatment helps prevent lead in the pipes from dissolving into the water. Corrosion control should have been installed by [date], but installation is incomplete.

What should I do?

You can take the following steps to reduce your exposure to lead.

- Call the number below to find out how to get your water tested for lead.
- Find out whether your house contains lead pipes or solder.
- Run your water for 15-30 seconds before using it for drinking or cooking. This flushes any standing lead from the pipes.
- Don't use hot tap water for cooking; instead, heat cold tap water on the stove. Lead dissolves more easily in hot water.
- **Do not boil your water.** Boiling water makes the lead more concentrated.

What does this mean to me?

Infants and children who drink water containing lead in excess of the Action Level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems, high blood pressure, or may be at an increased risk of getting cancer.

What is the water system doing?

[Describe corrective action.]

This is not an emergency. If it had been, you would have been notified immediately. Corrosion control will be in place by [date].

For more information, contact ____ at ____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

7. Tier 3 Notice Requirements and Suggestions

Tier 3 notices are required for **testing procedure** violations, **monitoring** violations (except failure to monitor for fecal coliform (or *E. coli*) and any monitoring violations elevated to Tier 1 or 2 by the primacy agency), **operation under a variance or exemption**, and **special notices for fluoride** secondary maximum contaminant level (SMCL) exceedances and availability of **unregulated contaminant monitoring** data. Tier 3 notices must meet content (including standard language), format, and multilingual requirements described in Chapter 3, "Summary of Requirements."

What is the deadline for issuing a Tier 3 notice?

You must issue a public notice for a Tier 3 violation or situation within one year of learning of the violation or situation and must issue a repeat notice annually thereafter for as long as the violation or situation exists. You may wish to streamline Tier 3 public notification by inserting your notices into the Consumer Confidence Report (CCR) required for community water systems or by issuing

a separate annual or semi-annual notice containing all the monitoring violations that occurred in the past year or six months.



Required Elements of a Public Notice

1. A description of the violation;
2. When the violation occurred;
3. Potential adverse health effects;
4. Population(s) at risk;
5. Whether alternative water supplies should be used;
6. Actions consumers should take, including when they should seek medical help, if known;
7. What you are doing to correct the violation;
8. When you expect to return to compliance;
9. Phone number for additional information; and
10. Standard language encouraging distribution to all persons served.

Following the initial notice, you must repeat the notice annually for as long as the violation or situation exists. If the public notice is posted, it must remain in place during the length of the violation. For monitoring violations, for example, you are not in compliance again until samples during the following monitoring period are taken. You must also notify new billing customers or hookups of any ongoing violations prior to or at the time their service begins.

Which methods of delivery must I use?

Unless directed otherwise by the primacy agency, if you operate a **community water system**, you must provide notice by:

1. Mail or other direct delivery to each customer receiving a bill or other service connections, and
2. Any other method reasonably calculated to reach other people regularly served by the system if they would not normally be reached by the first method. Such methods may include publication in a local newspaper, posting in public places, or delivery to community organizations.

7. Tier 3 Notice Requirements and Suggestions

Unless directed otherwise by the primacy agency, if you operate a **non-community water system**, you must provide notice by the following methods (see Chapter 8 for more information):

1. Posting the notice in conspicuous locations or by mail or direct delivery to each consumer, and
2. Any other method reasonably calculated to reach other persons served by the system if they would not normally be reached by the first method. Such methods may include publication in a local newspaper or newsletter distributed to consumers, use of e-mail to notify employees or students, or delivery of multiple copies in central locations.

If you post a notice, it must remain posted for as long as the violation persists. If the violation is already resolved by the time you write the notice, you should post the notice for at least one week.

For **both system types**, there are a few cases where you may be able to reach all persons served with the first method you choose. In such cases, you may not need to use additional methods. In a community water system, such as a small town, a second method would be necessary to reach non-resident employees or restaurant customers. At a gas station, on the other hand, posting would be sufficient to reach all persons served.

Suggestions for Effective Public Notification Delivery

If you have multiple Tier 3 violations or other situations requiring notice, you should strongly consider combining such notices into one annual notice. An annual notice can help you save preparation, delivery, and printing costs. If you are a community water system, you should include these notices in the Consumer Confidence Report (CCR), whenever possible. Most Tier 3 situations and violations must already be included in the CCR under the CCR regulation. If you are a non-community system, you should consider compiling an annual notice.

How can I coordinate Tier 3 notices with the CCR?

CCRs must be published in July of every year and must include information from the previous calendar year. Under this schedule, notice of any Tier 3 violations that occurred in the first half of the previous calendar year may not reach consumers until



Tips for Very Small Community Systems

It is strongly recommended that you include Tier 3 violations and situations in your CCR. Whether you use the CCR or issue a separate notice, compare the cost of mailing and labor for hand delivery before choosing a method. Hand delivery may be cheaper and in some cases may take less time than preparing a mailing. However, you may be able to include your notice with the bill at no extra cost. Supplement whichever method you choose by posting notices in common areas and gathering places, such as banks, grocery stores, and restaurants, or by publishing it in a newspaper.

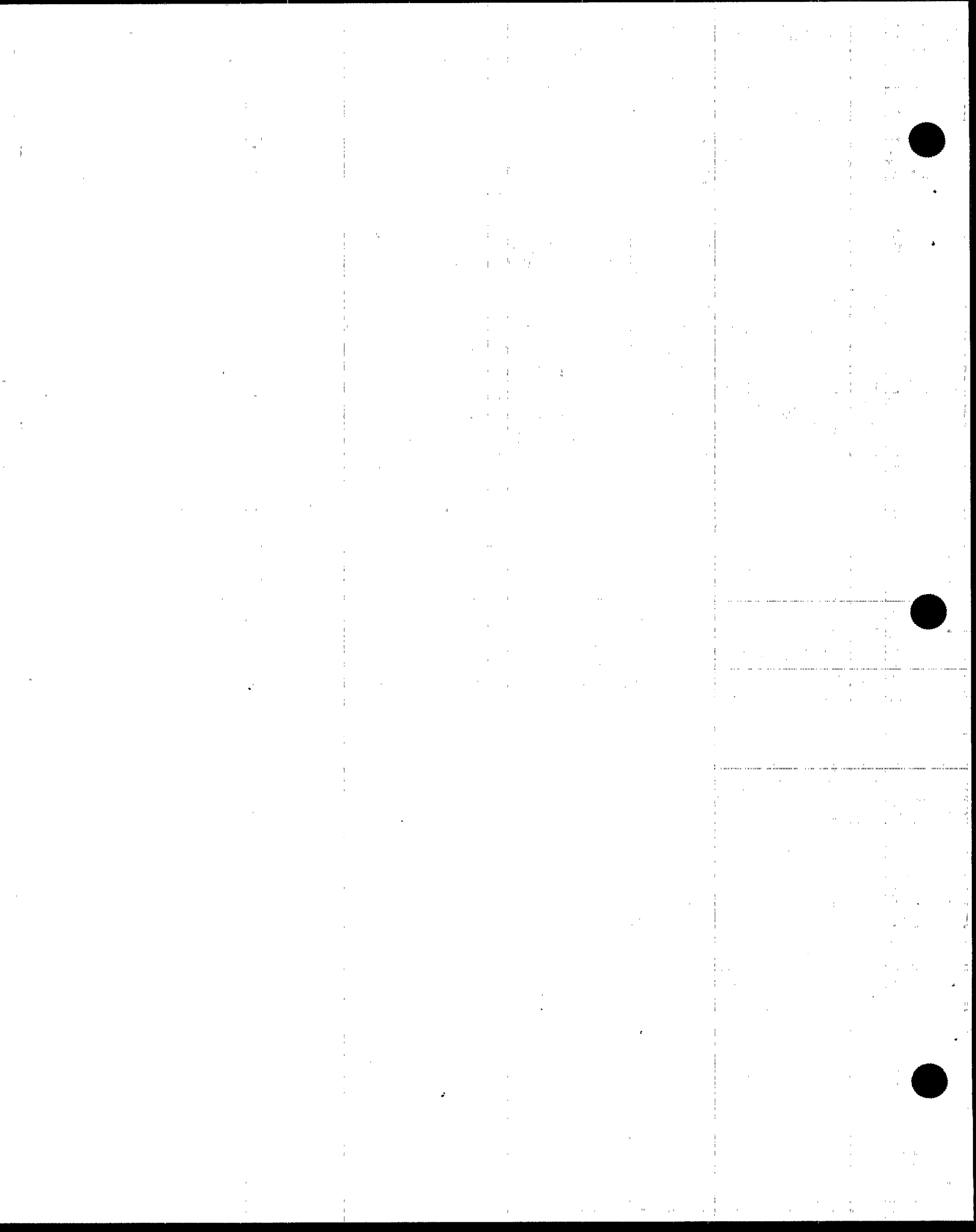
more than a year later. This is a violation of public notice requirements. To avoid this problem but still be able to use the CCR for public notification, you should consult with your primacy agency about publishing the CCR early. If you publish as soon after the end of the previous calendar year as possible, most or all of your violations will meet the one-year deadline. In addition, if you use the CCR for public notification, it must be provided to all persons served, as described on the previous pages, or you must provide a separate public notice to those who will not receive the CCR.

Suggestions for the Layout of the Notice

The format of a Tier 3 notice depends on your circumstances and on the number of violations you are reporting. If you have multiple monitoring violations, it may be simpler and shorter to list them in a table. The table could include columns for monitoring periods, number of samples required during this period, number of samples actually taken, and whether samples were taken during the following monitoring period. However, not all monitoring violations are the same. A coliform violation in which one of 100 samples was missed is less serious than missing one of two required samples. You may feel it is more appropriate to describe each violation in a paragraph. Template 3-1 at the end of this chapter offers sample language and instructions for preparing public notices for monitoring violations.

In a notice for monitoring violations, it is important to tell consumers the implications of the violation. They may wonder why they weren't told earlier, whether there is any health risk, and why the samples were not taken. You should respond to their concerns. A statement clarifying that no emergency exists, that the notice is for informational purposes, and that subsequent monitoring showed no problems will help reassure consumers.

You should include your PWS ID number at the bottom of the notice. This will help your primacy agency track compliance and prevent tracking errors between systems with similar names.



TIER 3 TEMPLATES

Following is a template for a monitoring violation notice. Along with the template are instructions, including the required method of delivery and instructions for completing individual sections of the notice.

Mandatory language on unknown risk, which must be included exactly as written, is presented in *italics*.

You must also include the following language in all notices. Use of this language does not relieve you of your obligation to notify all persons served:

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Instructions for Monitoring Violation Notice--Template 3-1

Template on Reverse

Since most monitoring violations are included in Tier 3, you must provide public notice to all persons served within one year after you learn of the violation. However, it is good public relations policy to provide the notice as soon as possible after learning of the violation. Multiple monitoring violations can be serious, and your primacy agency may have more stringent requirements. Check with your primacy agency to make sure you meet its requirements.

Community systems must use one of the following:

- Hand or direct delivery
- Mail, as a separate notice or included with the bill

Non-community systems must use one of the following:

- Posting
- Hand delivery
- Mail

In addition, both community and non-community systems must use *another* method reasonably calculated to reach others if they would not be reached by the first method. Such methods could include newspapers, e-mail, or delivery to community organizations. If you post the notice, it must remain posted until the violation is resolved (until samples required in the current monitoring period are taken). If the violation has been resolved, you should post the notice for at least one week.

The notice on the reverse is appropriate for insertion in the CCR or other annual report, as well as for notices for individual violations. This example presents violations in a table; however, you may write out an explanation for each violation if you wish. For any monitoring violation for volatile organic compounds (VOCs) or other groups, you may list the group name in the table, but you must provide the name of every chemical in the group in a footnote.

You may need to modify the notice if you had any monitoring violations for which monitoring later showed a maximum contaminant level or other violation. In such cases, you should refer to the public notice you issued at that time.

If you modify the notice, you may not alter the language in italics. This language is mandatory.

After Issuing the Notice

Make sure to send your primacy agency a copy of the notice and a letter certifying you have met all the public notice requirements within ten days.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met

[System] did not test for several contaminants as required by State and Federal laws. *Because we did not monitor or failed to monitor completely during [compliance period], we did not know whether the contaminants were present in your drinking water, and we are unable to tell you whether your health was at risk during that time.*

Samples taken since then show that all results met acceptable limits.

What does this mean to me?

This is not an emergency. **You do not need to boil water or use an alternative source of water at this time.**

The contaminants we did not monitor for are listed in the table below, with the period during which samples should have been taken, the number of samples of each contaminant required, the number taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Monitoring Period	Number of Samples Required	Number of Samples Taken During Monitoring Period	Date Additional Samples Were or Will Be Taken
VOCs ¹	1/96-12/98	1	0	2/99
Total Coliform Bacteria	10/1/98-10/31/98	100	93	11/1/98-11/31/98

If you have any questions or comments about these violations, please call _____ at _____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

¹VOCs, also known as volatile organic compounds, are tested by collecting one sample and testing that sample for all the VOCs. VOCs include benzene, carbon tetrachloride, chlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, cis-dichloroethylene, trans-dichloroethylene, dichloromethane, 1,2-dichloropropane, ethylbenzene, styrene, tetrachloroethylene, 1,1,1-trichloroethane, trichloroethylene, toluene, 1,2,4-trichlorobenzene, 1,1-dichloroethylene, 1,1,2-trichloroethane, vinyl chloride, and xylene.

8. Special Needs of Non-Community Systems

This chapter discusses ways to tailor public notices for non-community systems (e.g., schools, businesses, gas stations, campgrounds, and restaurants). Non-community systems have different delivery requirements than community systems, although in practice, the delivery methods used by non-community systems and very small community systems will be similar. This chapter also contains templates for total coliform, fecal coliform, and nitrate violations designed for posting.



Also Read . . .

Chapter 2: "How to Use the Handbook"
Chapter 3: "Summary of Requirements"
Chapter 4: "Making Public Notification Work"

See Chapters 5-7 for additional templates and more detail on the delivery requirements for Tier 1, 2, and 3 notices.

Transient non-community water systems provide water to a population that changes day-to-day. They include **campgrounds, rest areas, hotels, and restaurants**.

Transient non-community water systems are required only to meet drinking water standards for nitrate and coliform and the requirements of the Surface Water Treatment Rule. Operators of these systems should in most cases not need any templates other than those included in this chapter; however, you may need to refer to other chapters for more details on the requirements.

Nontransient non-community systems are non-community water systems that provide water to the same people at least six months a year. Examples of nontransient systems include **schools** and **office buildings**. Nontransient non-community water systems are subject to the same requirements as community water

systems (except they are not subject to rules on fluoride, radionuclides, and arsenic). Operators of these systems will need to refer to templates in other chapters of this handbook for chemical or treatment technique violation notices.

Summary of Public Notification Requirements – A Recap

Table 3 on the following page summarizes the violations included in each tier, the deadlines for issuing a public notice, and the approved methods of delivery. Refer to the "Summary of Requirements" starting on page 5 for a complete description of the violations and timeframes. For a complete list of violations and their respective tiers, refer to Appendix A. **You should check with your primacy agency to make sure you meet its specific requirements.**

Read the other chapters of this handbook before a violation occurs to familiarize yourself with the public notification process and its requirements.

What are the required methods of delivery?

For **Tier 1** violations, you must use one of the following methods to distribute required notices: posting, hand delivery, newspapers, or radio and/or television. You may need to use another method if needed to reach all persons served. You must use posting, hand delivery, or mail for **Tier 2 and 3**, plus

8. Special Needs of Non-Community Systems

another method to reach others if they would not normally be reached by the first method.

There are a few situations where you may be able to reach all persons served with the first method you choose. In such cases, you may not need to use additional methods. A gas station, for instance, would likely reach all potential consumers by posting.

Table 3 Public Notice Requirements for Non-Community Systems (Based on proposed rule)			
Tier	Violation Categories or Situations in Tier* (see also Appendix A)	Deadline— Within...	Methods to Use (see Chapters 5-7)
1	<ul style="list-style-type: none"> • Presence of fecal coliform or <i>E. coli</i> or failure to test for fecal coliform/<i>E. coli</i> after coliform is confirmed. • Nitrate, nitrite, or combined nitrate and nitrite maximum contaminant level. • Chlorine dioxide MRDL. • Waterborne disease outbreak. • Other violations or situations as determined by the primacy agency. 	24 hours**	Posting, hand delivery, radio, and/or television Plus any other method calculated to reach others not reached by the first method
2	<ul style="list-style-type: none"> • All MCL, MRDL, and treatment technique violations not included in Tier 1. • Monitoring violations as determined by the primacy agency. • Violations of the conditions of a variance or exemption. 	30 days ***	Posting, hand delivery, or mail Plus any other method calculated to reach others not reached by the first method
3	<ul style="list-style-type: none"> • Monitoring violations not requiring Tier 2 notice. • Failure to comply with testing procedures. • Operation under a variance or exemption. • Any other violations and situations determined by the primacy agency to require a Tier 3 public notice <i>including exceedance of the secondary MCL for fluoride and the availability of monitoring data for unregulated contaminants</i> (as listed in Appendix A). 	1 year****	Posting, hand delivery, or mail Plus any other method calculated to reach others not reached by the first method
* Transient systems are not subject to MRDLs, MCLs (except coliform, nitrate/nitrite/nitrate+nitrite) or treatment techniques (except for those specified the Surface Water Treatment Rule). ** You must also notify the State primacy agency within 24 hours of learning of the violation. *** The primacy agency may extend this deadline to up to 3 months. **** You should consider combining Tier 3 violations or situations into an annual notice.			



Required Elements of a Public Notice

1. A description of the violation;
2. When the violation occurred;
3. Potential adverse health effects;
4. Population(s) at risk;
5. Whether alternative water supplies should be used;
6. Actions consumers should take, including when they should seek medical help, if known;
7. What you are doing to correct the violation;
8. When you expect to return to compliance;
9. Phone number for additional information; and
10. Standard language encouraging distribution to all persons served.

In addition to the elements shown in the box, a public notice also must include the following standard language:

- ✓ Standard health effects language for MCL violations, treatment technique violations, and violations of the condition of a variance or exemption (specified in Appendix B); and
- ✓ Standard language for monitoring and testing procedure violations.

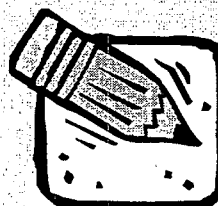
See page 10 for more details on standard language. You may also be required to translate part of your notice if a large proportion of the population served does not speak English. See page 11 for a more detailed description. Spanish-language templates for nitrate and fecal coliform violations are provided with the Tier 1 templates in Chapter 5.

Suggestions for the Layout of the Notice

In addition to being concise and readable, notices for non-community systems should be appropriate to the consumers' situation. For example, visitors at a rest stop just need to be aware they shouldn't drink the water, rather than be told to boil it. See Templates NC-1 through NC-3 at the end of this chapter for examples of postings. See Chapter 3 for a description of the formatting requirements for public notices.

How should the notice be formatted to get people's attention?

A person walking by a posted notice is unlikely to read the entire notice. Therefore, you should format the notice so that consumers will see and read the most important information first. This should consist of a title designed to catch their attention, information on the population at risk (if applicable), actions consumers should take, a very short description of the violation, and where to



Formatting Hints

Limit the notice to one page. Be concise.

Display important elements in bold and/or large type and/or all upper case letters.

List each of the most important elements on a separate line and center the text, leaving a blank line between each element.

Other required elements, such as health effects and your corrective actions, can be provided in paragraph format, with a title for each paragraph if space permits.

8. Special Needs of Non-Community Systems

obtain alternative sources of water if alternative water supplies should be used.

How should I tailor the notices to my situation?

If you are providing bottled or other sources of water, list the location from which you are distributing or selling it. If you use water for cooking (e.g., you are a **restaurant** or a **rest stop**), be sure to let customers know that you are using bottled water for this purpose.

If your system supplies water to people for cooking (such as a **campground**), your notice should provide instructions on how to use the water to cook. For example, in the case of a nitrate violation, instruct consumers not to boil the water. For fecal coliform or *E. coli* violations, instruct them to use boiled water for brushing teeth, washing dishes, and food preparation.

Suggestions for Effective Public Notice Delivery

For transient systems (such as a **restaurant** or a **rest stop**) or nontransient systems (such as **schools** or **office buildings**) with fecal coliform or *E. coli* violations, where the water is used for drinking only, simply tell consumers not to drink the water.

For systems serving a large proportion of non-English speaking people, such as some schools, national or state parks, or rest areas, you should include the appropriate translated phrases provided in Appendix C.

Most non-community systems can probably use some combination of posting and hand delivery. For instance, a transient system such as a **campground** could post notices in bathrooms or at pumps and hand out flyers to campers as they register. A **school** could post notices at water fountains and send a notice home with students for their parents. A **resort** could hand deliver notices to guests' rooms or cottages as well as post them in common areas. A system serving a **seasonal resort town** could even mail notices to service connections.

If you have multiple monitoring violations throughout the year, you may wish to consolidate notices into one **annual notice** prepared at the end of the year. This may save money by reducing the amount of time you spend on posting, copying, and delivering. However, you may find it easier to issue notices as violations occur, rather than trying to pull up records and compile them at the end of the year. It may also make more sense to issue individual notices if you are a transient system. An annual notice at such a system would not have much relevance to someone who passed through the area served by the system one day out of the year.

How can I make posting effective?

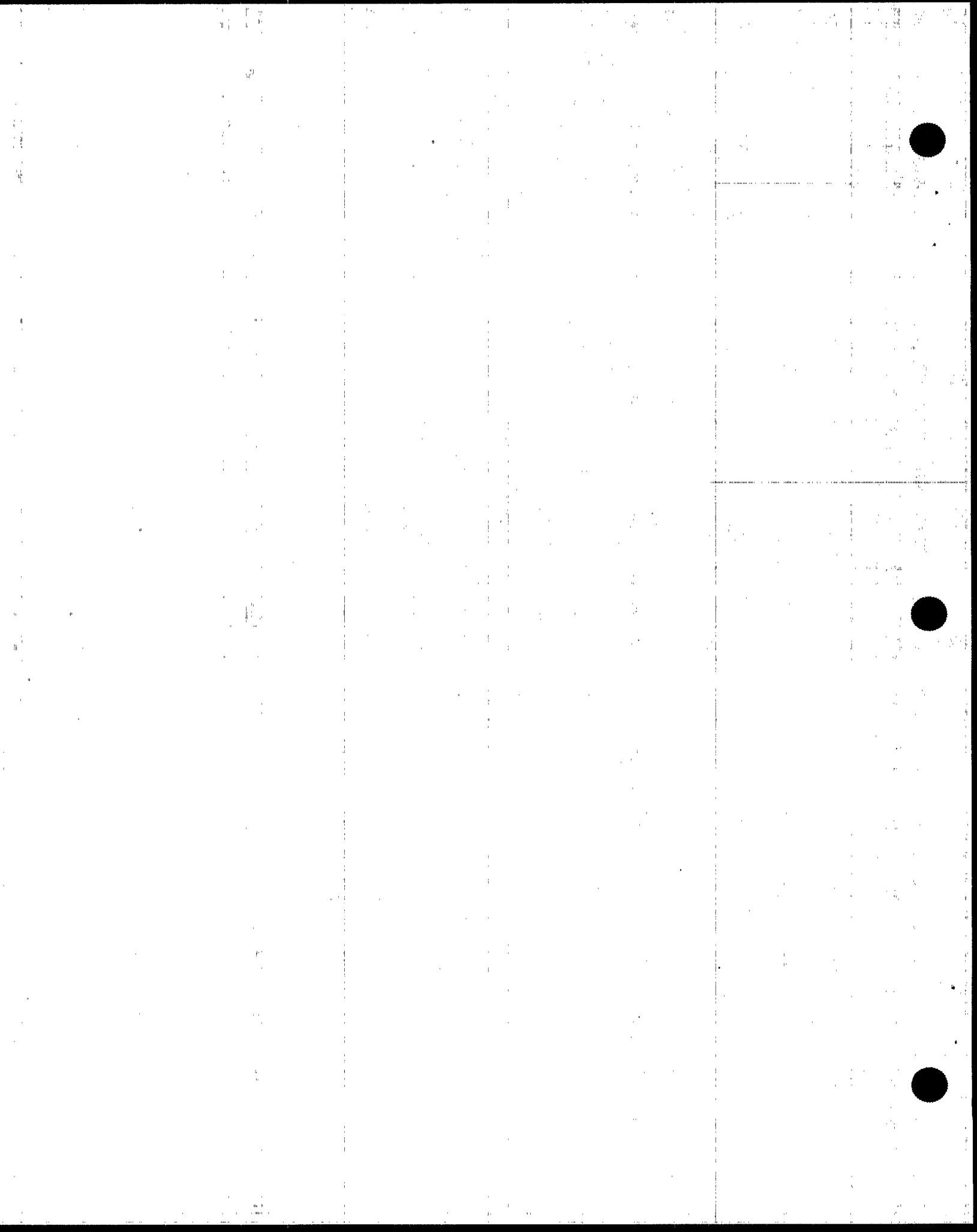
Post notices at all water fountains and sinks, on bulletin boards, outside administrative offices, and at any other appropriate central location. Posted notices must remain posted for as long as the violation persists. For example, total coliform violations are not resolved unless the following month's samples meet the standards. Postings about resolved violations should remain in place

for at least one week. This is especially important in transient systems where consumers are continuously entering and leaving the area served.

What other methods are available for non-community systems to reach all consumers?

You may also want to use some of these ideas in addition to one of the required methods listed above:

- The Internet (e-mail and home pages) — This method is most appropriate for systems where users regularly use computers and e-mail, such as a **business** or a **college**. Posting or some other method of notification would still be required for visitors who may not have access to e-mail. Home pages are a good place to furnish updates and more detailed information after the initial notice is provided.
- Sound trucks — Sound trucks might be useful as a supplement to hand delivery. They are most appropriate for distribution at a time of day when most people are expected to be home or in a concentrated area such as a beach or campground.
- Spoken word — If you are doing hand delivery and time permits, take the time to explain the situation as you hand deliver the notice.
- Answering machines — Include public notice information on the greeting of your machine. The greeting can be updated as you make progress in resolving the violation. It also enables you to at least partially answer your customers' questions and fix the problem at the same time.
- Newsletters — If you have a corporate or college newsletter, include your notice in your next issue.
- Community organizations — Distribute multiple copies to social service agencies or clinics. This way doctors or case workers will be informed if their patients or clients ask them about the implications of the violation.



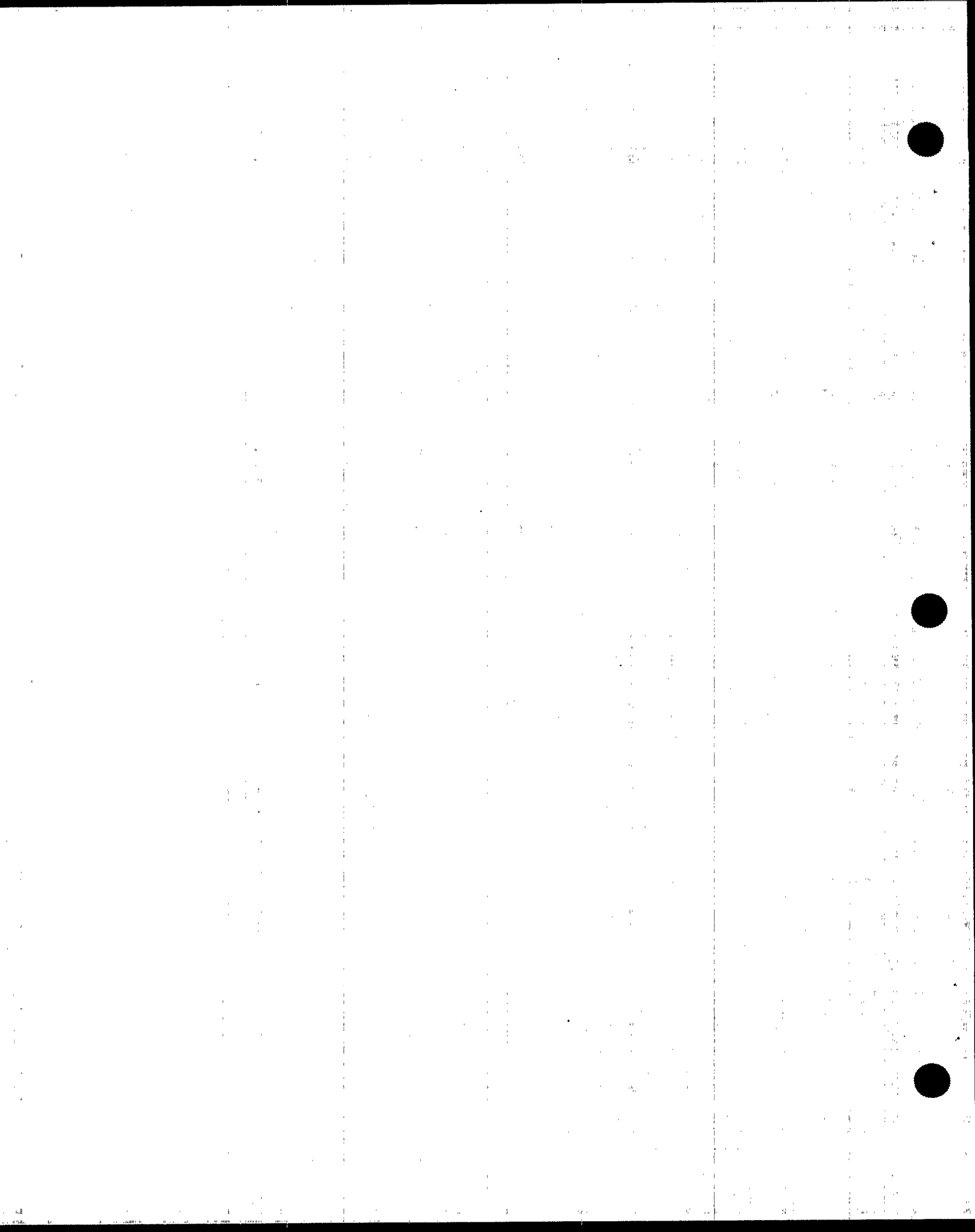
TEMPLATES FOR NON-COMMUNITY SYSTEMS

The pages that follow contain templates for nitrate, fecal coliform, and total coliform for non-community systems. They are designed for posting, and their instructions to consumers are tailored to systems where consumers will not be able to boil or otherwise treat their water. Along with each template are instructions, including the required method of delivery and instructions for completing individual sections of the notice.

Mandatory language on health effects, which must be included exactly as written, is presented in *italics*.

You must include the following language in all notices. Use of this language does *not* relieve you of your obligation to notify all persons served:

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.



Instructions for Nitrate Notice--Template NC-1

Template on Reverse

Since exceeding the nitrate maximum contaminant level is a Tier 1 violation, you must provide public notice to all persons served as soon as possible but within 24 hours after you learn of the violation. During this time period, you must also contact your primacy agency. **This template is also applicable to nitrite and nitrate+nitrite violations.** You must use one or more of the following methods to deliver the notice to consumers:

- Posting
- Hand or direct delivery
- Radio
- Television

You may need to use additional methods if necessary to reach all persons served. Such methods could include newspapers, e-mail, or delivery to community organizations.

The notice on the reverse is appropriate for posting. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Alternative Sources of Water

If you are selling or providing bottled water, your notice should say where to obtain it. You should make sure that any water you make available or instruct consumers to buy meets nitrate standards.

Repeat Notices

If this is a repeat notice (as required by your primacy agency), or if your system's nitrate levels fluctuate around the MCL, you may wish to include an explanation similar to the following:

As you may recall, on [date], you were also notified of high nitrate levels that occurred during the _____ quarter of the year. Since that time the water system has been monitoring the nitrate concentration every three months. Seasonal fluctuations in nitrate concentrations have been observed, due to nitrates contained in fertilizer. It appears the high nitrates occur during the later summer and fall. Note that previous tests prior to [year] show that we were meeting drinking water standards for nitrate.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with nitrate/nitrite violations. Use the following language, if appropriate:

- We are investigating water treatment and other options. These may include drilling a new well or mixing the water with low-nitrate water from another source.

After Issuing the Notice

Make sure to send your primacy agency a copy of the notice and a letter certifying that you have met all the public notification requirements within ten days.

WARNING

FOR PARENTS OF INFANTS 6 MONTHS AND YOUNGER DO NOT USE THE WATER FOR INFANT FORMULA

High nitrate levels were detected on [date]

Bottled water should be used. [We are providing bottled water for
infants and their families at ____]

Adults and children older than 6 months can drink the water

A routine sample on [date] showed a nitrate concentration in the drinking water of [level and units]. This is above the nitrate standard, or maximum contaminant level, of [state/federal MCL].

Possible Health Effects

Infants below the age of six months who drink water containing nitrate in excess of the maximum contaminant level could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Blue baby syndrome is indicated by blueness of the skin.

Symptoms in infants can develop rapidly, with health deteriorating over a period of days. If symptoms occur in a child less than 6 months old, seek medical attention immediately.

If you are pregnant or have specific health concerns, you may wish to consult your doctor.

Steps We Are Taking

[Describe corrective action.]

We anticipate resolving the problem by [date.] We will inform you when this problem has been corrected.

For more information, please contact ____ at ____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Instructions for Fecal Coliform or *E. coli* Notice--Template NC-2

Template on Reverse

This template is intended for systems where consumers will not be able to boil water. See the instructions below on how to modify for other situations. Since exceeding the fecal coliform or *E. coli* maximum contaminant level is a Tier 1 violation, you must provide public notice to all persons served within 24 hours after you learn of the violation. During this time period you must also contact your primacy agency. You must use one or more of the following methods to deliver the notice to consumers:

- Posting
- Hand or direct delivery
- Radio
- Television

You may need to use additional methods if necessary to reach all persons served. Such methods could include newspapers, e-mail, or delivery to community organizations.

The notice on the reverse is appropriate for posting. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Instructions to Consumers

You may need to modify the instruction based on your system type. For instance, at a campground, you might tell consumers to boil the water before drinking or using for food preparation.

Alternative Sources of Water

If you are providing alternative sources of water, your notice should say where it can be obtained. You should make sure that any water you make available meets standards for bacteria and other contaminants.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with fecal coliform violations. Use the following language, if appropriate:

- We are chlorinating and flushing the water system.
- We are increasing sampling for coliform bacteria.
- We are repairing the wellhead seal.
- We are repairing the storage tank.

WARNING

DO NOT DRINK THE WATER

Fecal coliform [or *E. coli*] bacteria were found in the water supply
on [date]

Bottled water is available from _____

Possible Health Effects

Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Steps We Are Taking

[Describe corrective action.]

We will inform you when additional samples show no coliform bacteria and you may drink the water. We anticipate resolving the problem by [date.]

For more information, please contact ____ at ____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

People at increased risk should seek advice about drinking water from their health care providers. Guidelines on ways to lessen the risk of infection by microbes are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

Water System ID: _____

Instructions for Unresolved Total Coliform Notice--Template NC-3

Template on Reverse

This template is intended for systems where consumers will not need to boil their water and where they will not have the facilities to do so. Since exceeding the total coliform bacteria maximum contaminant level is a Tier 2 violation, you must provide public notice to all persons served as soon as possible but within 30 days after you learn of the violation. Persistent total coliform problems can pose a serious health risk, and your primacy agency may elevate such situations to Tier 1. Check with your primacy agency to make sure you meet all its requirements. You must issue a repeat notice every three months for as long as the violation persists, unless the primacy agency determines the situation warrants a different repeat notice frequency. Alternative language for systems required to take more than 40 samples a month is provided below.

Non-community systems must use one of the following methods:

- Posting
- Hand delivery
- Mail

You must also use *another* method reasonably calculated to reach others if they would not be reached by the first method. Such methods could include newspapers, e-mail, or delivery to community organizations.

The notice on the reverse is appropriate for posting. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory.

Description of the Violation

Use the following language if you are required to take 40 or more samples per month:

- We routinely monitor for the presence of drinking water contaminants. During the month of [month], _____ percent of our samples showed the presence of total coliform bacteria. The standard is that no more than 5 percent of samples may do so.

Corrective Action

In your notice, describe corrective actions you are taking. If you know what is causing the coliform problem, explain. Listed below are some steps commonly taken by water systems with total coliform violations. Use the following language, if appropriate, or develop your own:

- We are chlorinating and flushing the water system.
- We are increasing sampling for coliform bacteria.
- We are repairing the wellhead seal.
- We are repairing the storage tank.
- We will inform you when additional samples show no coliform bacteria.

Make sure to send a copy of the notice and a letter certifying you have met all the public notice requirements to your primacy agency within ten days.

It is a good idea to inform your consumers when the violation has been resolved, especially if you have regular customers. See Template 1-5 for a "problem corrected" notice template.

DRINKING WATER NOTICE

Tests Show Presence of Coliform Bacteria in Water

We routinely monitor for the presence of drinking water contaminants. We took [number] samples during the month of [month]. During [month], [number] of our samples showed the presence of total coliform bacteria. The standard is that no more than one sample per month may do so.

What This Means

This is not an emergency. Total coliform bacteria are generally not harmful themselves.

Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Usually, coliforms are a sign that there could be a problem with the system's treatment or distribution systems.

You may drink the water. However, if you have specific health concerns, consult your doctor.

Some people, including immuno-compromised people, some elderly, and infants may be at increased risk. These people should seek advice about drinking water from their health care providers. Guidelines on ways to lessen the risk of infection by microbes are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

Steps We Are Taking

[Describe corrective action.]

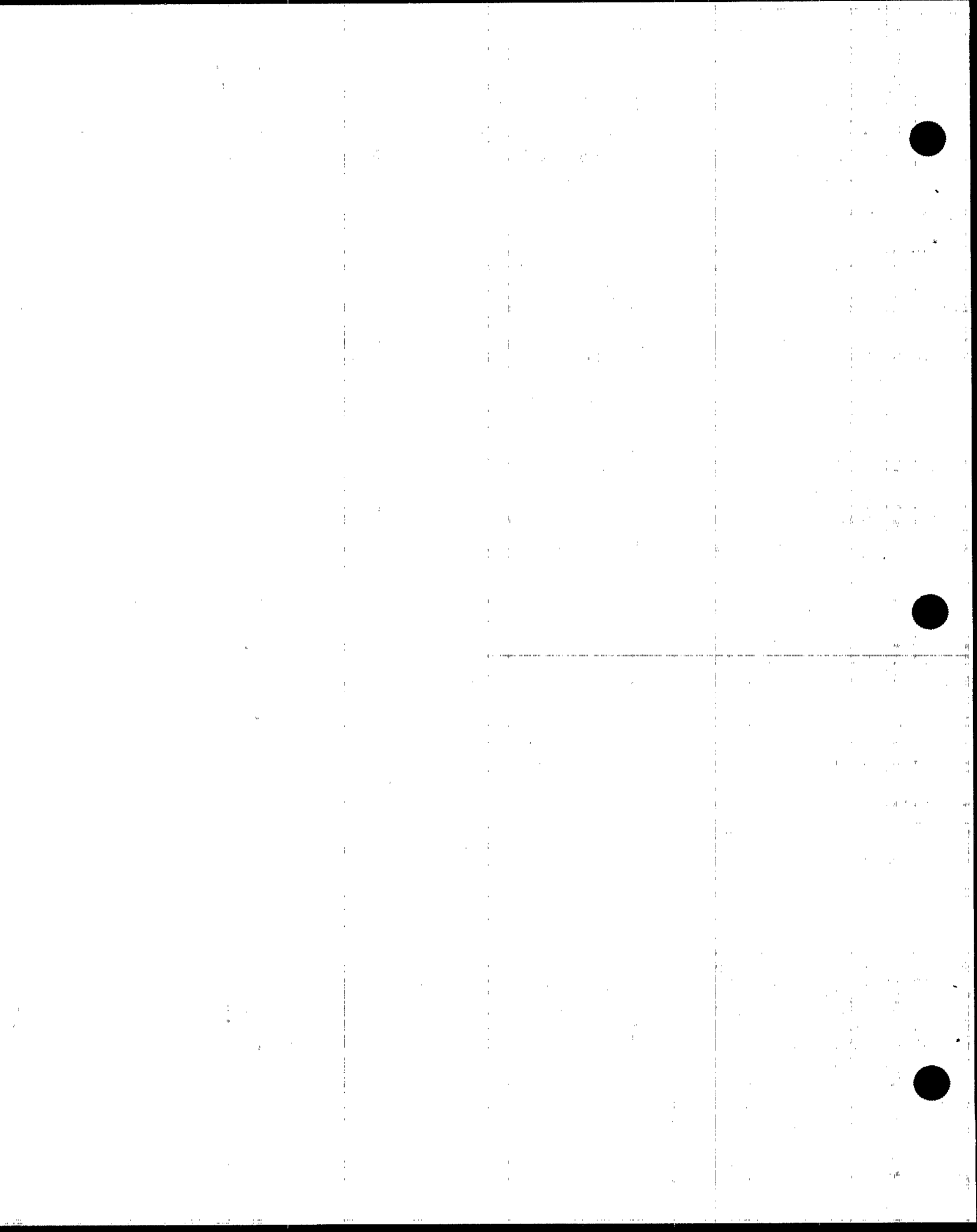
We will inform you when additional samples show no coliform bacteria. We anticipate resolving the problem by [date.]

For more information, or to learn more about protecting your drinking water please contact ____ at ____.

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

Water System ID: _____

Appendices



Appendix A
NPDWR Violations and Other Situations Requiring Public Notice¹
(From Appendix A of 40 CFR 141, Subpart Q)

Contaminant	MCL/MRDL/TT Violations ²		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
I. Violations of National Primary Drinking Water Regulations (NPDWR):³				
Microbiological Contaminants				
Total coliform	2	141.63(a)	3	141.21(a-d)
Fecal coliform/ <i>E. coli</i>	1	141.63(b)	1	141.21(e)
Turbidity	2	141.13, 141.71(c)	3	141.22
Surface Water Treatment Rule violations	2	141.70-141.73	3	141.74
Interim Enhanced Surface Water Treatment Rule violations	2	141.170- 141.173 ⁴	3	141.172 141.174
Inorganics				
Antimony	2	141.62(b)	3	141.23(a, c)
Arsenic	2	141.11(b) 141.23(n)	3	141.23(a, l, m)
Asbestos (fibers >10 µm)	2	141.62(b)	3	141.23(a-b)
Barium	2	141.62(b)	3	141.23(a, c)
Beryllium	2	141.62(b)	3	141.23(a, c)
Cadmium	2	141.62(b)	3	141.23(a, c)
Chromium (total)	2	141.62(b)	3	141.23(a, c)
Cyanide	2	141.62(b)	3	141.23(a, c)
Fluoride	2	141.62(b)	3	141.23(a, c)
Mercury (inorganic)	2	141.62(b)	3	141.23(a, c)
Nitrate	1	141.62(b)	3	141.23(a, d) 141.23(f)(2)
Nitrite	1	141.62(b)	3	141.23(a, e) 141.23(f)(2)
Nitrate+Nitrite	1	141.62(b)	3	141.23(a)
Selenium	2	141.62(b)	3	141.23(a, c)
Thallium	2	141.62(b)	3	141.23(a, c)
Lead and Copper Rule (Action Level for lead is 0.015 mg/L, for copper is 1.3 mg/L)				
Lead and Copper Rule	2	141.80-141.85	3	141.86-141.89
Synthetic Organic Chemicals (VOCS)				
2,4-D	2	141.61(c)	3	141.24(h)
2,4,5-TP (Silvex)	2	141.61(c)	3	141.24(h)
Alachlor	2	141.61(c)	3	141.24(h)
Atrazine	2	141.61(c)	3	141.24(h)
Benzo(a)pyrene (PAHs)	2	141.61(c)	3	141.24(h)
Carbofuran	2	141.61(c)	3	141.24(h)
Chlordane	2	141.61(c)	3	141.24(h)
Dalapon	2	141.61(c)	3	141.24(h)
Di (2-ethylhexyl) adipate	2	141.61(c)	3	141.24(h)
Di (2-ethylhexyl) phthalate	2	141.61(c)	3	141.24(h)

Appendix A
NPDWR Violations and Other Situations Requiring Public Notice¹
(From Appendix A of 40 CFR 141, Subpart Q)

Contaminant	MCL/MRDL/TT Violations ²		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
Dibromochloropropane	2	141.61(c)	3	141.24(h)
Dinoseb	2	141.61(c)	3	141.24(h)
Dioxin (2,3,7,8-TCDD)	2	141.61(c)	3	141.24(h)
Diquat	2	141.61(c)	3	141.24(h)
Endothall	2	141.61(c)	3	141.24(h)
Endrin	2	141.61(c)	3	141.24(h)
Ethylene dibromide	2	141.61(c)	3	141.24(h)
Glyphosate	2	141.61(c)	3	141.24(h)
Heptachlor	2	141.61(c)	3	141.24(h)
Heptachlor epoxide	2	141.61(c)	3	141.24(h)
Hexachlorobenzene	2	141.61(c)	3	141.24(h)
Hexachlorocyclopentadiene	2	141.61(c)	3	141.24(h)
Lindane	2	141.61(c)	3	141.24(h)
Methoxychlor	2	141.61(c)	3	141.24(h)
Oxamyl (Vydate)	2	141.61(c)	3	141.24(h)
Pentachlorophenol	2	141.61(c)	3	141.24(h)
Picloram	2	141.61(c)	3	141.24(h)
Polychlorinated biphenyls (PCBs)	2	141.61(c)	3	141.24(h)
Simazine	2	141.61(c)	3	141.24(h)
Toxaphene	2	141.61(c)	3	141.24(h)
Volatile Organic Chemicals (VOCs)				
Benzene	2	141.61(a)	3	141.24(f)
Carbon tetrachloride	2	141.61(a)	3	141.24(f)
Chlorobenzene (monochlorobenzene)	2	141.61(a)	3	141.24(f)
<i>o</i> -Dichlorobenzene	2	141.61(a)	3	141.24(f)
<i>p</i> -Dichlorobenzene	2	141.61(a)	3	141.24(f)
1,2-Dichloroethane	2	141.61(a)	3	141.24(f)
1,1-Dichloroethylene	2	141.61(a)	3	141.24(f)
<i>cis</i> -1,2-Dichloroethylene	2	141.61(a)	3	141.24(f)
<i>trans</i> -1,2-Dichloroethylene	2	141.61(a)	3	141.24(f)
Dichloromethane	2	141.61(a)	3	141.24(f)
1,2-Dichloropropane	2	141.61(a)	3	141.24(f)
Ethylbenzene	2	141.61(a)	3	141.24(f)
Styrene	2	141.61(a)	3	141.24(f)
Tetrachloroethylene	2	141.61(a)	3	141.24(f)
Toluene	2	141.61(a)	3	141.24(f)
1,2,4-Trichlorobenzene	2	141.61(a)	3	141.24(f)
1,1,1-Trichloroethane	2	141.61(a)	3	141.24(f)
1,1,2-Trichloroethane	2	141.61(a)	3	141.24(f)
Trichloroethylene	2	141.61(a)	3	141.24(f)
Vinyl chloride	2	141.61(a)	3	141.24(f)
Xylenes (total)	2	141.61(a)	3	141.24(f)

Appendix A
NPDWR Violations and Other Situations Requiring Public Notice¹
(From Appendix A of 40 CFR 141, Subpart Q)

Contaminant	MCL/MRDL/TT Violations ²		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
Radioactive Contaminants				
Beta/photon emitters	2	141.16	3	141.25(a) 141.26(b)
Alpha emitters	2	141.15(b)	3	141.25(a) 141.26(a)
Combined radium (226 & 228)	2	141.15(a)	3	141.25(a) 141.26(a)
Disinfection Byproducts (DBPs). Byproduct Precursors, Disinfectant Residuals. Where disinfection is used in the treatment of drinking water, disinfectants combine with organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). EPA also sets standards for controlling the levels of disinfectants and DBPs in drinking water, which includes trihalomethanes (THMs) and haloacetic acids (HAAs). ⁵				
Total trihalomethanes (TTHMs) -Chloroform -Bromodichloromethane -Dibromochloromethane -Bromoform	2	141.12, ⁶ 141.64(a)	3	141.30, 141.132(a-b)
Haloacetic Acids (HAA5) -Monochloroacetic acid -Dichloroacetic acid -Trichloroacetic acid -Monobromoacetic acid -Dibromoacetic acid	2	141.64(a)	3	141.132(a-b)
Bromate	2	141.64(a)	3	141.132(a-b)
Chlorite	2	141.64(a)	3	141.132(a-b)
Chlorine (MRDL)	2	141.65(a)	3	141.132(a, c)
Chloramine (MRDL)	2	141.65(a)	3	141.132(a, c)
Chlorine dioxide (MRDL), ≥ 2 consecutive samples at entry point only are above MRDL	2	141.65(a), 141.133(c)(2)	3	141.132(a, c) 141.133(c)(2)
Chlorine dioxide (MRDL), sample(s) in distribution system above MRDL	1	141.65(a), 141.133(c)(2)	1	141.132(a, c) 141.133(c)(2)
Control of DBP precursors--TOC (TT)	2	141.135(a-b)	3	141.132(a, d)
Bench marking and disinfection profiling	N/A	N/A	3	141.172
Development of monitoring plan	N/A	N/A	3	141.132(f)
Other Treatment Techniques				
Acrylamide (TT)	2	141.111	N/A	N/A
Epichlorohydrin (TT)	2	141.111	N/A	N/A
II. Unregulated Contaminant Monitoring Results:⁷				
Unregulated contaminants	N/A	N/A	3	141.40
Nickel	N/A	N/A	3	141.23(c, k)

Appendix A

NPDWR Violations and Other Situations Requiring Public Notice¹

(From Appendix A of 40 CFR 141, Subpart Q)

Contaminant	MCL/MRDL/TT Violations ²		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
III. Public Notification for Variances and Exemptions:				
Operation under a variance or exemption	3	1415, 1416 ⁸	N/A	N/A
Violation of conditions of a variance or exemption	2	1415, 1416	N/A	N/A
IV. Other Situations Requiring Public Notification:				
Fluoride secondary maximum contaminant level (SMCL) exceedance	3	143.3	N/A	N/A
Availability of unregulated contaminant monitoring data	3	141.40	N/A	N/A
Waterborne disease outbreak	1	141.2, 141.71(c)(2)(ii)	N/A	N/A
Other situations as determined by primacy agency	⁹	N/A	N/A	N/A

Appendix A Endnotes

1. Violations and other situations not listed in this table do not require notice, unless otherwise determined by the primacy agency. Primacy agencies may move violations requiring public notice to a higher tier as well (e.g., Tier 3 to Tier 2).

2. MCL - Maximum contaminant level, MRDL - Maximum residual disinfectant level, TT - Treatment technique

3. The term *Violations of National Primary Drinking Water Regulations (NPDWR)* is used here to include violations of MCL, MRDL, treatment technique, monitoring, and testing procedure requirements.

4. Most of the requirements of the Interim Enhanced Surface Water Treatment Rule (63 FR 69477) (§§141.170-141.171, 141.73-141.174) become effective December 16, 2001 for Subpart H systems (surface water systems and ground water systems under the direct influence of surface water) serving more than 10,000. The Surface Water Treatment Rule (§§141.70-141.73, 141.74) remains in effect for these systems until that time. However, §141.172 has some requirements that become effective as soon as April 16, 1999.

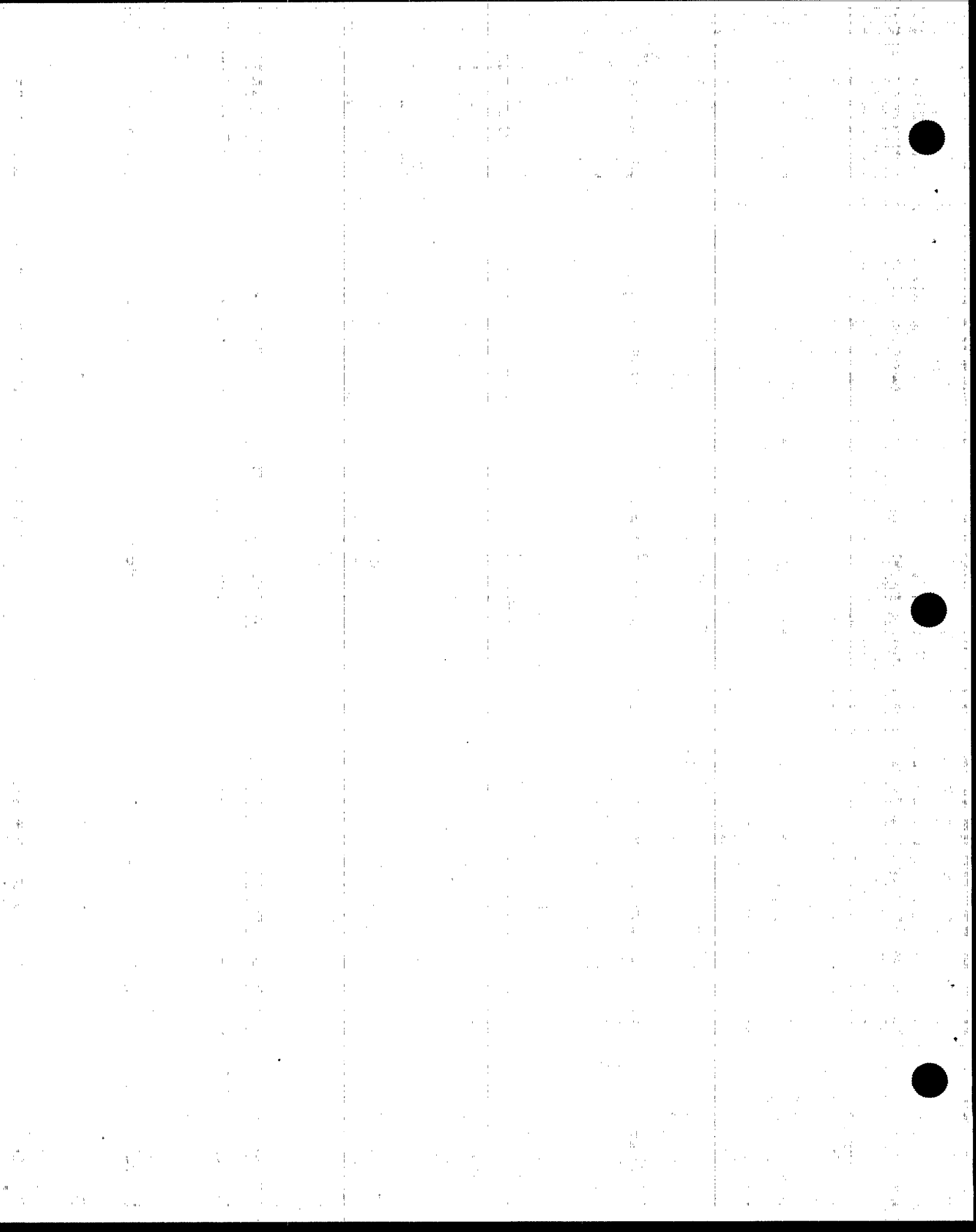
5. Subpart H community and non-transient non-community systems serving $\geq 10,000$ must comply with new DBP MCLs, disinfectant MRDLs, and related monitoring requirements beginning December 16, 2001. All other community and non-transient non-community systems must meet the MCLs and MRDLs beginning December 16, 2003.

6. §141.12 is deleted after December 16, 2003.

7. Monitoring is currently required for 34 unregulated contaminants listed in §141.40. These include aldicarb, aldicarb sulfone, and aldicarb sulfoxide.

8. This citation refers to §§1415 and 1416 of the Safe Drinking Water Act. *There are no regulations* requiring water systems to comply with the conditions of a variance or exemption. However, §§1415 and 1416 require that "a schedule prescribed . . . for a public water system granted a variance [or exemption] shall require compliance by the system . . ."

9. Primacy agencies may place other situations in any tier they believe appropriate, based on threat to public health.



Appendix B
Standard Health Effects Language for Public Notification
(From Appendix B of 40 CFR 141, Subpart Q)

Contaminant	MCLG ¹ mg/L	MCL ² mg/L	Standard Health Effects Language for Public Notification
National Primary Drinking Water Regulations (NPDWR):			
Microbiological Contaminants			
1a. Total coliform	Zero	Presence ³	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
1b. Fecal coliform/ <i>E. coli</i>	Zero	Presence	Fecal coliforms and <i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.
2. Turbidity	None	1 NTU ⁴ / 5 NTU ⁵	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
Interim Enhanced Surface Water Treatment Rule (IESWTR) violations: 3. <i>Giardia lamblia</i> 4. Viruses 5. Heterotrophic plate count (HPC) bacteria ⁶ 6. <i>Legionella</i> 7. <i>Cryptosporidium</i>	Zero	TT ⁷	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. ⁸
Inorganics			
8. Antimony	0.006	0.006	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.
9. Arsenic	None	0.05	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
10. Asbestos (>10 µm)	7 MFL ⁹	7 MFL	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
11. Barium	2	2	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Appendix B
Standard Health Effects Language for Public Notification
(From Appendix B of 40 CFR 141, Subpart Q)

Contaminant	MCLG ¹ mg/L	MCL ² mg/L	Standard Health Effects Language for Public Notification
12. Beryllium	0.004	0.004	Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
13. Cadmium	0.005	0.005	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
14. Chromium (total)	0.1	0.1	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
15. Cyanide	0.2	0.2	Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.
16. Fluoride	4.0	4.0	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.
17. Mercury (inorganic)	0.002	0.002	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
18. Nitrate	10	10	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
19. Nitrite	1	1	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
20. Nitrate+Nitrite	10	10	Infants below the age of six months who drink water containing nitrate and nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
21. Selenium	0.05	0.05	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.
22. Thallium	0.0005	0.002	Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.
Lead and Copper Rule			
23. Lead	Zero	TT ¹⁰	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Appendix B
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Contaminant	MCLG ¹ mg/L	MCL ² mg/L	Standard Health Effects Language for Public Notification
24. Copper	1.3	TT ¹¹	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Synthetic Organic Compounds			
25. 2,4-D	0.07	0.07	Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.
26. 2,4,5-TP (Silvex)	0.05	0.05	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.
27. Alachlor	Zero	0.002	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, experience anemia, or may have an increased risk of getting cancer.
28. Atrazine	0.003	0.003	Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.
29. Benzo(a)pyrene (PAHs)	Zero	0.0002	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties or may have an increased risk of getting cancer.
30. Carbofuran	0.04	0.04	Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.
31. Chlordane	Zero	0.002	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver, or nervous system, and may have an increased risk of getting cancer.
32. Dalapon	0.2	0.2	Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.
33. Di (2-ethylhexyl) adipate	0.4	0.4	Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.
34. Di(2-ethylhexyl) phthalate	Zero	0.006	Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.
35. Dibromochloropropane (DBCP)	Zero	0.0002	Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

Appendix B
Standard Health Effects Language for Public Notification
 (From Appendix B of 40 CFR 141, Subpart Q)

Contaminant	MCLG ¹ mg/L	MCL ² mg/L	Standard Health Effects Language for Public Notification
36. Dinoseb	0.007	0.007	Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.
37. Dioxin (2,3,7,8-TCDD)	Zero	3×10 ⁻⁸	Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
38. Diquat	0.02	0.02	Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
39. Endothall	0.1	0.1	Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.
40. Endrin	0.002	0.002	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.
41. Ethylene dibromide	Zero	0.00005	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.
42. Glyphosate	0.7	0.7	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.
43. Heptachlor	Zero	0.0004	Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.
44. Heptachlor epoxide	Zero	0.0002	Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.
45. Hexachlorobenzene	Zero	0.001	Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.
46. Hexachlorocyclopentadiene	0.05	0.05	Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.
47. Lindane	0.0002	0.0002	Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.
48. Methoxychlor	0.04	0.04	Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.
49. Oxamyl (Vydate)	0.2	0.2	Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.

Appendix B
Standard Health Effects Language for Public Notification
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Contaminant	MCLG ¹ mg/L	MCL ² mg/L	Standard Health Effects Language for Public Notification
50. Pentachlorophenol	Zero	0.001	Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.
51. Picloram	0.5	0.5	Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.
52. Polychlorinated biphenyls (PCBs)	Zero	0.0005	Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.
53. Simazine	0.004	0.004	Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.
54. Toxaphene	Zero	0.003	Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.
Volatile Organic Chemicals			
55. Benzene	Zero	0.005	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
56. Carbon tetrachloride	Zero	0.005	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
57. Chlorobenzene (monochlorobenzene)	0.1	0.1	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.
58. o-Dichlorobenzene	0.6	0.6	Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.
59. p-Dichlorobenzene	0.075	0.075	Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.
60. 1,2-Dichloroethane	Zero	0.005	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
61. 1,1-Dichloroethylene	0.007	0.007	Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
62. cis-1,2-Dichloroethylene	0.07	0.07	Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
63. trans-1,2-Dichloroethylene	0.1	0.1	Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.

Appendix B
Standard Health Effects Language for Public Notification
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Contaminant	MCLG ¹ mg/L	MCL ² mg/L	Standard Health Effects Language for Public Notification
64. Dichloromethane	Zero	0.005	Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
65. 1,2-Dichloropropane	Zero	0.005	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
66. Ethylbenzene	0.7	0.7	Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.
67. Styrene	0.1	0.1	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.
68. Tetrachloroethylene	Zero	0.005	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.
69. Toluene	1	1	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
70. 1,2,4-Trichlorobenzene	0.07	0.07	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
71. 1,1,1-Trichloroethane	0.2	0.2	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.
72. 1,1,2-Trichloroethane	0.003	0.005	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.
73. Trichloroethylene	Zero	0.005	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
74. Vinyl chloride	Zero	0.002	Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.
75. Xylenes (total)	10	10	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.
Radioactive Contaminants			
76. Beta/photon emitters	Zero	4 mrem/yr ¹²	Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Appendix B
Standard Health Effects Language for Public Notification
(From Appendix B of 40 CFR 141, Subpart Q)

Contaminant	MCLG ¹ mg/L	MCL ² mg/L	Standard Health Effects Language for Public Notification
77. Alpha emitters	Zero	15 pCi/L ¹³	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
78. Combined radium (226 & 228)	Zero	5 pCi/L	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
Disinfection Byproducts (DBPs), Byproduct Precursors, and Disinfectant Residuals: Where disinfection is used in the treatment of drinking water, disinfectants combine with organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). EPA also sets standards for controlling the levels of disinfectants and DBPs in drinking water, which include trihalomethanes (THMs) and haloacetic acids (HAAs). ¹⁴			
79. Total trihalomethanes (TTHMs) -Chloroform -Bromodichloromethane -Dibromochloromethane -Bromoform	Zero ¹⁵ Zero 0.06 Zero	0.10/ 0.080 ^{16,17}	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.
80. Haloacetic Acids (HAA5) -Monochloroacetic acid -Dichloroacetic acid -Trichloroacetic acid -Monobromoacetic acid -Dibromoacetic acid	None Zero 0.3 None None	0.060 ¹⁸	Some people who drink water containing HAAs in excess of the MCL over many years may have an increased risk of developing cancer.
81. Bromate	Zero	0.010	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of developing cancer.
82. Chlorite	0.08	1.0	Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant mothers who drink water containing chlorite in excess of the MCL. Some people may experience anemia.
83. Chlorine	4 (MRDLG) ¹⁹	4.0 (MRDL) ²⁰	Some people who contact drinking water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
84. Chloramines	4 (MRDLG)	4.0 (MRDL)	Some people who contact drinking water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.

Appendix B

Standard Health Effects Language for Public Notification

(From Appendix B of 40 CFR 141, Subpart Q)

Contaminant	MCLG ¹ mg/L	MCL ² mg/L	Standard Health Effects Language for Public Notification
85a. Chlorine dioxide, ≥ 2 consecutive samples at entry point only are above MRDL	0.8 (MRDLG)	0.8 (MRDL)	<p>Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant mothers who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.</p> <p>The chlorine dioxide violations reported today are the result of exceedances at the treatment facility only, not within the distribution system which delivers water to consumers. Continued compliance with chlorine dioxide levels within the distribution system minimizes the potential risk of these violations to consumers.</p>
85b. Chlorine dioxide, sample(s) in distribution system are above MRDL	0.8 (MRDLG)	0.8 (MRDL)	<p>Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant mothers who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.</p> <p>The chlorine dioxide violations reported today include exceedances of the EPA standard within the distribution system which delivers water to consumers. Violations of the chlorine dioxide standard within the distribution system may harm human health based on short-term exposures. Certain groups, including fetuses, infants, and young children, may be especially susceptible to nervous system effects from excessive chlorine dioxide exposure.</p>
86. Control of DBP precursors (TOC)	None	TT	<p>Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by products. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs), which may lead to adverse health effects, liver or kidney problems, or nervous system effects.</p>
Other Treatment Techniques			
87. Acrylamide	Zero	TT	<p>Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.</p>
88. Epichlorohydrin	Zero	TT	<p>Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.</p>

Appendix B Endnotes

1. MCLG - Maximum contaminant level goal
2. MCL - Maximum contaminant level

3. For water systems analyzing at least 40 samples per month, no more than 5.0 percent of the monthly samples may be positive for total coliforms. For systems analyzing fewer than 40 samples per month, no more than one sample per month may be positive for total coliforms.

4. NTU - Nephelometric turbidity unit

5. The MCL for the monthly turbidity average is 1 NTU; the MCL for the 2-day average is 5 NTU. The standard language for turbidity may be also be used where a turbidity exceedance is the reason for a treatment technique violation.

6. The bacteria detected by HPC are not necessarily harmful. HPC is simply an alternative method of determining disinfectant residual levels. The number of such bacteria is an indicator of whether there is enough disinfectant in the distribution system.

7. TT - Treatment technique

8. This language may be used for both SWTR and IESWTR violations.

9. Millions of fibers per liter

10. Action Level = 0.015 mg/L

11. Action Level = 1.3 mg/L

12. Millirems per year

13. Picocuries per liter

14. Surface water systems and ground water systems under the direct influence of surface water are regulated under Subpart H of 40 CFR 141. Subpart H community and non-transient non-community systems serving $\geq 10,000$ must comply with DBP MCLs and disinfectant maximum residual disinfectant levels (MRDLs) beginning December 16, 2001. All other community and non-transient noncommunity systems must meet the MCLs and MRDLs beginning December 16, 2003.

15. The MCLG for chloroform may change if the final DBP rule changes.

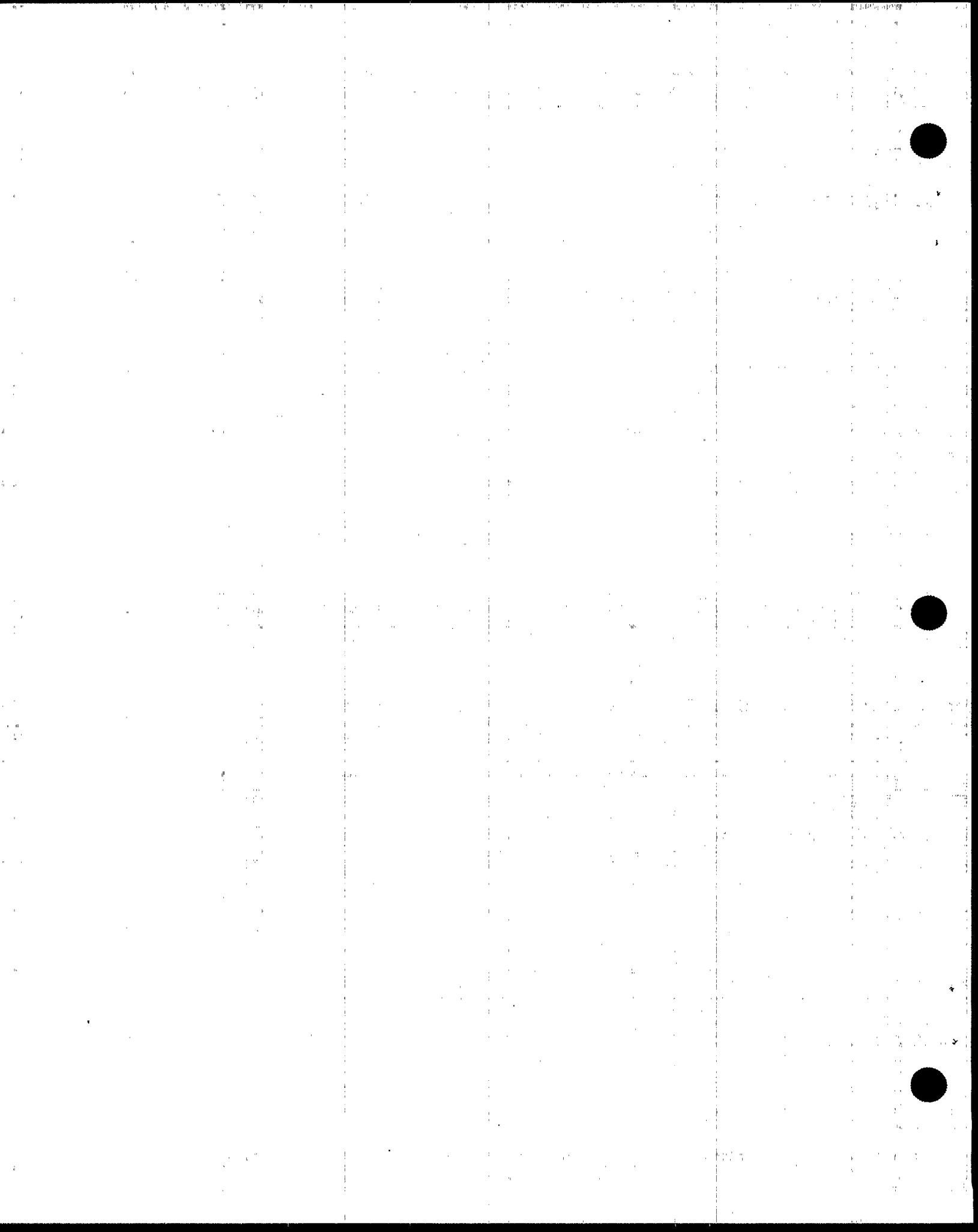
16. The MCL of 0.10 mg/l for TTHMs is in effect until December 16, 2001 for Subpart H community water systems larger than 10,000. This MCL is in effect until December 16, 2003 for community water systems with a population larger than 10,000 using only ground water not under the direct influence of surface water. After these deadlines, the MCL will be 0.080 mg/l. On December 16, 2003, all systems serving less than 10,000 will have to comply with the new MCL as well.

17. The MCL for total trihalomethanes is the sum of the concentrations of the individual trihalomethanes.

18. The MCL for haloacetic acids is the sum of the concentrations of the individual haloacetic acids.

19. MRDLG - Maximum residual disinfectant level goal

20. MRDL - Maximum residual disinfectant level



Appendix C

Translated Phrases

Language	"This report contains very important information about your drinking water. Translate it, or speak with someone who understands it."	"Don't drink the water"	"Boil your water before using"
Spanish	Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.	No tome el agua.	Hiervan el agua antes de usarla.
French	Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.	Ne buvez pas l'eau.	Faites premièrement bouillir l'eau avant de l'utiliser.
Chinese	<u>這份報告含有非常重要有關您喝的水 的資料。請找懂得這份報告的人翻譯 或解釋給您聽。</u>		
Korean	아래의 보고는 귀하께서 드시는 식수에 대한 중요한 정보가 포함되어 있습니다. 번역을 하시기 아니면 이 보고를 읽고 이해하시는 분과 말씀하시기를 바랍니다.		
Vietnamese			

The water glass pictured below may be useful in a posted notice that would be seen by many non-English speaking people to illustrate that they should not drink the water.





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