Colorado Department of Public Health and Environment
Water Quality Control Division
Attn: Public Notification Specialist
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
Business Hours Contact: 303 692-3501
Emergency After-Hours Contact: 1-877-518-5608
FAX Number: 303 782-0390
E-mail: comments.wqcd@state.co.us
http://www.cdphe/state/co.us/wq/wqhom.asp

Public Notification Rule Guidance Handbook for Colorado Public Water Systems

May 1, 2003

Colorado Department of Public Health and Environment

This guidance handbook is provided by the State of Colorado for Public Water Systems and addresses requirements for the Public Notification Rule. The handbook offers guidance on how and when Public Notification must be provided. It also provides templates for use in the event that Public Notification is required.

The document is not, however, the actual U.S. Environmental Protection Agency or State of Colorado regulation, nor is it a regulation itself. It does state the regulatory requirements and provides alternative methods of compliance with the regulation, in a format, designed to be easily read and understood. The actual regulation can be found in 40 CFR Part 141 Subpart Q.

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Introduction

The Public Notification Rule is intended to ensure that consumers will always know if there is problem with their drinking water. Community and Non-Community water systems must notify the people who drink their water if the level of a contaminant in the water exceeds the Environmental Protection Agency (EPA) or the Colorado Primary Drinking Water Regulations (CPDWR). The Colorado Department of Public Health and Environment (CDPHE) and the Water Quality Control Division (WQCD) administer the regulations.

Community Water System means a public water system that:

a) serves at least 15 service connections used by year-round residents of the area served by the system; or,
b) regularly serves at least 25 year-round residents.

Non-Community Water System means a public water system that is not a Community Water System. A Non-Community Water System is further defined as either a Non-Transient Non-Community Water System or a Transient Non-Community Water System.

Who Must Give Public Notification?

The Public Notification Rule applies to all Public Water Systems (PWSs) with violations of the Colorado Primary Drinking Water Regulations (CPDWR) or other situations as identified by the CDPHE, as posing a public health risk. Each owner or operator of a PWS that is required to give Public Notification must provide the Public Notification to all persons served by the system.

How to Contact the WQCD During Normal Business Hours

Colorado Department of Public Health and Environment
Water Quality Control Division – Drinking Water Program
Attn: Public Notification Rule Specialist
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
Telephone: 303 692-3500
FAX Number: 303 782-0390
E-mail: comments.wqcd@state.co.us
http://www.cdphe/state/co.us/wq/wqhom.asp

After-Hours Acute Tier 1 Emergency Number

Public Notification is required within 24 hours of the violation for violations and situations with significant potential to have serious adverse effects on human health as a result of short-term exposure. Should the Acute Tier 1 Emergency take place after regular business hours or on weekends, you must contact the CDPHE/WQCD within the mandated 24 hour period by calling the following number:

After Hours Emergency Response Telephone Number: **1- 877- 518-5608**

When Do You Issue a Public Notification?

A Public Notification must be issued when one of the following situations occurs:

- Failure to meet a maximum contaminant level (MCL) found in Appendix B of this document or the maximum residual disinfectant levels (MRDLs);
- Failure to comply with a prescribed treatment technique;
- Failure to comply with a variance or exemption schedule;
- Failure to meet monitoring requirements;
- Failure to use a prescribed testing procedure; or
- The granting of a variance or exemption, or continued operation while subject to a variance or exemption

Special Purpose Notifications

A special purpose Public Notification must also be issued if one of the following situations occur:

1. Occurrence of a waterborne disease outbreak or other waterborne emergency;
2. Exceedance of the nitrate MCL by Non-Community water systems, where granted permission by the CDPHE;
3. Exceedance of the SMCL for fluoride;
4. Unavailability of unregulated contaminant monitoring data; and
5. Other violations and situations determined by the CDPHE to require a Public Notification under Subpart Q.

Failure to Issue Public Notification

If your system fails to issue a required Public Notification, CDPHE may issue the Public Notification on your behalf and/or take enforcement action for failure to issue Public Notification. An enforcement action could result in monetary civil penalties (fines). If there are any questions on the Public Notification process, please contact the CDPHE/WQCD Rule Specialist.

Defining Public Notification Tiers

The Public Notification Rule classifies violations of drinking water standards and other situations into three tiers based upon the risk of adverse health effects:

Tier 1:

For violations and situations with significant potential to have serious adverse effects on human health as a result of short-term exposure.

1. The PWS must provide Public Notification to customers as soon as practical, but no later than 24 hours after the system learns of the violation.

2. The PWS must also initiate consultation as soon as possible with the CDPHE/WQCD Rule Specialist to determine additional Public Notification requirements, but no later than 24 hours after the system learns of the violation.

3. The PWS must comply with any additional Public Notification requirements that are established as a result of the consultation with the CDPHE/WQCD Rule Specialist. Such requirements may include: timing, form, manner, frequency, and content of repeat notifications (if any) and other actions designed to reach all persons served.

The following violations pose an acute risk to health and are considered a Tier 1:

1. Exceeding the MCL for total coliforms when fecal coliform or *E.coli* are present in the water distribution system; or failure to monitor for fecal coliforms or *E.coli* when any repeat sample tests positive for coliform;

2. Exceeding the nitrate, nitrite, or total nitrate and nitrite standard; or a failure to take a confirmation sample within 24 hours of the system's receipt of the first sample showing an exceedance of the nitrate or nitrite MCL;

3. Violation of the MRDL for chlorine dioxide, when one or more samples taken in the distribution system the day following an exceedance of the MRDL at the entrance of the distribution system exceed the MRDL; or failure to take the required samples in the distribution system;

4. Violation of the Turbidity MCL where the CDPHE/WQCD determines after consultation that a Tier 1 Notification is required instead of a Tier 2; or where consultation does not take place within 24 hours after the system learns of the violation;

5. Occurrence of a waterborne disease outbreak; or other waterborne emergency, such as a failure or significant interruption in key water treatment processes, a natural disaster that disrupts the water supply or distribution system, or a chemical spill or unexpected loading of possible pathogens into the source water that significantly increases the potential for drinking water contamination

6. Other violations or situations with significant potential to have serious adverse effects on human health as a result of short-term exposure by CPDWR regulations, or on a case-by-case basis.

Tier 2:

For other violations and situations with potential to have serious adverse effects on human health. The PWS must provide Public Notification to customers within 30 days, with an extension up to three months at the discretion of the CDPHE/WQCD Rule Specialist.

Tier 3:

For all other violations and situations requiring a Public Notification not included in Tier 1 and Tier 2. Public Notification must be provided to customers within 12 months of the violation(s).

Ways of Issuing Public Notification

The requirements for minimum delivery for Public Notification to customers are based on Tiers and whether or not your system is a Community or Non-Community Public Water System.

Tier 1

Deadline for Notification: Both Community and Non-Community Public Water Systems shall contact the CDPHE/WQCD Rule Specialist for initial consultation within 24 hours of receiving notification of the violation. Within the same 24 hour period, the system is required to provide Public Notification to its customers.

Delivery Methods: Both Community and Non-Community. Public Water Systems are required to use, at a minimum, one or more of the following methods:

1) Appropriate broadcast media (radio or television);
2) Posting;
3) Hand delivery; or
4) Another delivery method approved in writing by the CDPHE/WQCDRule Specialist.

Tier 2

Deadline for Notification: Both Community and Non-Community Public Water Systems must provide Public Notification to their customers within 30 days after the system learns of the violation.

IMPORTANT EXCEPTION*: Turbidity MCL Violation based on the average of samples over two days, or with a turbidity single exceedance treatment technique violation, the system must consult with the CDPHE/WQCD Rule Specialist within 24 hours after learning of the violation.*

FAILURE TO CONTACT THE CDPHE/WQCD RULE SPECIALIST WITHIN 24 hours WILL RESULT IN AN AUTOMATIC UPGRADE TO A TIER 1 VIOLATION.

Delivery Methods: Unless directed otherwise by the CDPHE/WQCD in writing, a Public Water System must provide Public Notification by the following methods:

<u>Community Water Systems:</u>
1) Mail or other direct delivery (i.e., hand); and
2) Any other method reasonably calculated to reach other persons regularly served.

<u>Non-Community Water Systems:</u>
1) Posting, or mail, or direct delivery; and
2) Any other method reasonably calculated to reach other persons regularly served.

Tier 3

Deadline for Notification: For all systems, Public Notification is due to customers within one year after the system learns of the violation(s).

(Note: The CDPHE/WQCD recommends consolidating all Tier 3 violations and situations occurring within a given year into an annual Notification, i.e., Consumer Confidence Report. For example: if your Tier 3 violation happens during August of any year, consolidate it into the next year's June Consumer Confidence Report. This would be within your 12-month Public Notification Requirement).

Delivery Methods: Unless directed by the CDPHE/WQCD in writing, a Public Water System must provide Public Notification by the following methods:

Community Water Systems:
(1) Mail or other direct delivery; and
(2) Any other method reasonably calculated to reach other persons regularly served.

Non-Community Water Systems:
(1) Posting, or mail, or direct delivery; and
(2) Any other method reasonably calculated to reach other persons regularly served.

A copy of each Public Notification must be sent to the CDPHE/WQCD Rule Specialist within ten (10) days of issuance to customers, along with the Certification Form, Appendix C. Where the Public Notification was made by newspaper, a copy of the actual newspaper advertisement must be sent to the CDPHE/WQCD along with the Certification Form within the same ten (10) days of issuance to customers. Following the initial Public Notification, repeat Public Notification (s) must be provided every three months, by any of the methods detailed above, for as long as the violation exists.

Required Content of Public Notification

All Public Notification(s) must include a clear and easily understood explanation of each violation and must contain the following 10 elements:

1. Description of the violation or situation including the contaminant(s) of concern, and if applicable, the contaminant level(s);
2. Date when violation or situation occurred;
3. Any potential adverse health effects from the violation or situation, including any standard language provided in the rule;
4. The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in their drinking water;
5. Whether alternate water supplies should be used;
6. What actions consumers should take, including when to seek medical help, if known;
7. What the system is doing to correct the violation or situation;
8. When the system expects to return to compliance or resolve the situation;
9. Contact information: name, business address, PWSID number, phone number of the water system operator, owner, or designee of the Public Water System that can provide additional information; and
10. A statement using standard language from the rule, encouraging Public Notification recipients to distribute the Public Notification to other individuals served, where applicable.

Public Notification Certificate of Delivery Requirement

The Public Notice rule requires a Public Water System within 10 days of completing the public notification requirements for the initial public notice and any repeat notices, to submit to the State a certification that it has fully complied with the public notification regulations.

A public water system must include with the certification a representative copy of each type of notice distributed, published, posted, and made available to the persons served by the system and to the media (e.g., newspaper article, press release to TV/radio, mail notices).

When systems certify, they are also stating that future requirements for notifying new billing units of the violation or situation will be met.

Mandatory Health Effects Language

Health effects language is a required inclusion for each Public Notification. The Public Notification Templates included in this handbook contain the mandatory language for most chemicals; Appendix B also contains a complete listing of required health effects language for each contaminant.

Fluoride Requirements

Public Water Systems that exceed the fluoride secondary MCL (SMCL) of 2.0 mg/L must notify users on an annual basis as long as the violation exists. Public Water Systems that exceed the fluoride primary MCL of 4.0 mg/L must issue a Public Notification on a quarterly basis.

Public Notification Templates

TIER 1 TEMPLATES FOR COMMUNITY WATER SYSTEMS

Templates for Tier 1 violations and waterborne disease outbreaks:

1. Nitrate PN101/01
2. Nitrate Spanish version PN102/01
3. Fecal Coliform/*E.coli* PN103/01
4. Fecal Coliform/*E.coli* Spanish version PN104/01
5. Waterborne Disease PN105/01
6. Turbidity Single Exceedance PN106/01
7. Chlorine Dioxide MRDL PN107/01
8. Problem Corrected Notification PN108/01

Along with each template are instructions, including the required method of delivery and instructions for completing individual sections of the Public Notification.

The templates are intended to assist the system. No system is required to use the template, but they are required to comply with all the Public Notification Rule requirements, including the delivery methods, general content and mandatory health effects language. 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 Public Notifications, where applicable. Use of this language does *not* relieve you of your obligation to take steps reasonably calculated to notify all persons served:

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

TIER 1 – DRINKING WATER WARNING

[System Name] water has high levels of Nitrate

DO NOT GIVE THE WATER TO INFANTS UNDER 6 MONTHS OLD OR USE IT TO MAKE INFANT FORMULA

Water sample results received [date] showed nitrate levels of [level and units]. This is above the nitrate standard, or maximum contaminant level (MCL), of 10 mg/L. Nitrate in drinking water is a serious health concern for infants less than six months old.

What should I do?

- ✓ **DO NOT GIVE THE WATER TO INFANTS.** ***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, seek medical attention immediately.

- ✓ Water, juice, and formula for children under six months of age should not be prepared with tap water. Bottled water or other water low in nitrates should be used for infants until further notice.

- ✓ **DO NOT BOIL THE WATER.** Boiling, freezing, filtering, or letting water stand does not reduce the nitrate level. Excessive boiling can make the nitrates more concentrated, because nitrates remain behind when the water evaporates.

- ✓ Adults and children older than six months can drink the tap water (nitrate is a concern for infants because they can't process nitrates in the same way adults can). However, if you are pregnant or have specific health concerns, you may wish to consult your doctor.

What happened? What is being done?

Nitrate in drinking water can come from natural, industrial, or agricultural sources (including septic systems and run-off). Levels of nitrate in drinking water can vary throughout the year. This public water system will let you know when the amount of nitrate is again below the limit.

[Describe corrective action, seasonal fluctuations, and when system expects to return to compliance.]

For more information, please contact [system contact name] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for Nitrate Notification - PN101/01

THIS IS APPROPRIATE FOR COMMUNITY PUBLIC WATER SYSTEMS

Since exceeding the nitrate maximum contaminant level is a Tier 1 violation, you must contact the CDPHE/WQCD Rule Specialist for initial consultation within 24 hours of learning of the violation. You must provide Public Notification to persons served as soon as practical but within 24 hours after you learn of the violation. You should also coordinate with your local health department. **This template is also applicable to nitrite and total nitrate and nitrite violations.** If you are a Community Water System you must use one or more of the following methods to deliver the Public Notification to consumers:

1. Radio
2. Television
3. Hand or direct delivery
4. Posting in conspicuous locations

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), since Public Notification must be provided in a manner reasonably calculated to reach all persons served.) The template on the reverse is appropriate for hand delivery or a newspaper Public Notification. However, you may wish to modify it before using it for a radio or TV Notification. If you do, you must still include all required elements and leave the health effects language in ***italics*** unchanged, as this language is mandatory. If you post or hand deliver, print your Public Notification on letterhead, if available. A different template is provided for Non-Community Water Systems. (see page 53).

Alternative Sources of Water

If you are providing bottled water, your Public Notification should say where it can be obtained. Remember that bottled water can also be contaminated. If you are providing bottled water, make sure it meets the standard for nitrates and all other regulated contaminants, particularly microbiological contaminants, by contacting the bottler and asking for the most recent test results.

Repeat Public Notifications

If this is a repeat Public Notification, or if your system's nitrate levels fluctuate around the MCL, you may wish to include an explanation similar to the following:

"You were initially notified of high nitrate levels on [date]. Since that time we have been monitoring the nitrate concentration every three months. Seasonal fluctuations in nitrate concentrations (due to nitrates contained in fertilizer) have been observed. It appears that high nitrates occur during the later summer and fall. Note that prior to [year] we were meeting drinking water standards for nitrate."

Corrective Action

In your Public Notification, describe corrective actions you are taking. The bullet below describes one action commonly taken by water systems with nitrate/nitrite violations. Use this language, if appropriate, or develop your own:

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

After Issuing the Public Notification

Make sure to send the CDPHE/WQCD Rule Specialist a copy of all Public Notification(s) and a certification that you have met all the Public Notification requirements within ten days after issuing the Public Notification. You should notify health professionals in the areas served by the system that there is a violation. Individuals may call their doctors with questions, and the doctors should have the information they need to respond appropriately. They also need to make sure the water is not provided to infants in their care.

A Spanish translation is on the next page.

TIER 1 - AVISO SOBRE SU AGUA POTABLE

Agua del sistema [system name] tiene altos niveles de nitratos - NO DAR DE BEBER ESTA AGUA A BEBES MENORES DE 6 MESES DE EDAD NI USARLA PARA HACER LECHE DE FORMULA

Resultados de mustras de agua recibidos en [date of violation in Spanish (day-month-year)] muestran concentraciones 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 [MCL in Spanish]. Nitratos en agua potable puede generar serios problemas de salud para bebés menores de 6 meses de edad.

) Que debo hacer?

- ✓ **NO LE DE ESTA AGUA A BEBES.** ***Bebes menores de seis (6) meses que ingieran agua con nitratos en exceso del nivel máximo de contaminación (NMC) se 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.

- ✓ Agua, jugo o leche en polvo para bebés menores de seis (6) meses de edad no debe prepararse con agua del grifo. Debe emplear agua embotellada u otra agua baja en nitratos hasta próximo aviso.

- ✓ **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, debido a que los nitratos permanecen cuando parte del agua se evapora.

- ✓ Adultos e infantes mayores de seis (6) meses de edad pueden tomar el agua del grifo. (Los nitratos son peligrosos para los bebes debido a que ellos no pueden procesar los nitratos de la misma manera que los adultos). Sin embargo, si usted está embarazada o tiene algún problema de salud en particular, puede optar por hacer una consulta con su médico.

) Qué pasó?) Qué se está haciéndo al respecto?

Nitratos en el agua pueden provenir de fuentes naturales, industriales or de la agricultura (incluyendo descargas de tanques sépticos y lluvias). Las concentraciones de nitratos en el agua potable varían a lo largo del año. Nosotros les avisaremos cuando los niveles de nitratos estén nuevamente debajo del límite.

[Describe corrective action, seasonal fluctuations, and when the system expects to return to compliance in Spanish.] Para mayor información, favor contactar a [name of contact] al teléfono [phone number] o escribiendo a [mailing address].

Por favor comparta esta información con otros que pueden tomar de esta agua, colocando este aviso en lugares visibles, o remitiéndolo por correo, o entregandolo manualmente. Es de particular interés distribuir este aviso ampliamente si usted lo recibe representando un negocio, un hospital u hogar de infantes u hogar de ancianos o comunidad residencial.

Este aviso ha sido enviado a usted por [system]
Numero de Identificación : _____
Fecha de distribución: _____

Instructions for Spanish Nitrate Notification - PN102/01

THIS IS APPROPRIATE FOR COMMUNITY PUBLIC WATER SYSTEMS

The template is a Spanish translation of Template PN101/01 for nitrate. All the instructions of Template PN101/01 apply. If you modify the English language template, you should modify this template accordingly. Schools or Universities may be able to provide low cost translations.

TIER 1 - DRINKING WATER WARNING

[System name] water is contaminated with [fecal coliform] or [*E. coli*]

BOIL YOUR WATER BEFORE USING

Fecal coliform [or *E. coli*] bacteria were found in the water supply on [date]. These bacteria can make you sick, and are a particular concern for people with weakened immune systems.

What should I do?

- ✓ **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a boil, let it boil for one minute, and let it 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.** Boiling kills bacteria and other organisms in the water.

- ✓ ***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, some of the elderly and people with severely compromised immune systems.***

- ✓ The symptoms above are not caused only by organisms in drinking water. 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 happened? What is being done?

Bacterial contamination can occur due to a break in the distribution system (pipes) or a failure in the water treatment process.

[Describe problem with 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 within [estimated time frame].

For more information, please contact [name of contact] at [phone number] or [mailing address]. General guidelines on ways to lessen the risk of infection by microbes are available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for Fecal Coliform or E. Coli Notification – PN103/01

THIS IS APPROPRIATE FOR COMMUNITY PUBLIC WATER SYSTEMS

Since exceeding the fecal coliform or *E coli* maximum contaminant level (MCL) is a Tier 1 violation, you must provide Public Notification to persons served as soon as practical, but within 24 hours after you learn of the violation. During this time, you must also contact the Rule Specialist at the CDPHE/WQCD. You should also coordinate with your local health department. You may have to modify the template if you also have high nitrate levels or other coliform MCL violations. You must use one or more of the following methods to deliver the Public Notification to consumers:

- Radio
- Television
- Hand or direct delivery
- Posting in conspicuous locations

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), since Public Notification must be provided in a manner reasonably calculated to reach all persons served.

The Public Notification on the reverse is appropriate for hand delivery or a newspaper Public Notification. However, you may wish to modify it before using it for a radio or TV. If you do, you must still include all required elements and leave the health effects language in ***italics*** unchanged, as it is mandatory language. An alternate template is provided for Non-Community Water Systems. (See page 55).

Population Served

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

Corrective Action

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

- We are chlorinating and flushing the water system.
- We are switching to an alternate drinking water source.
- 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 Public Notification

Send a copy of all Pubic Notification(s) and a certification that you have met all the Public Notification requirements to the CDPHE/WQCD Rule Specialist within ten days from the time you issue the Public Notification.

It is recommended that you notify health professionals in the public water system service area. Individuals may call their doctors with questions about how the violation may affect their health, and the doctors should have the information they need to respond appropriately. In addition, health professionals, including dentists, use tap water during their procedures and need to know of contamination so they can use bottled water.

The CDPHE/WQCD requires a **"Problem Corrected"** Notification when the violation is resolved.

TIER 1 - AVISO SOBRE SU AGUA POTABLE

El Agua del Sistema [system name] esta contaminado con [bacterias coliformes fecales] [*E. coli*]

HIERVAN EL AGUA ANTES DE USARLA

Bacterias coliformes fecales (o *E. coli*) fueron encontradas en su servicio de agua el dia [date of violation in Spanish (day-month-year)]. Estas bacterias pueden enfermarle, y son especialmente peligrosas para personas con las defensas bajas o sistemas imunológicos débiles.

) Que debo hacer?

- ✓ **NO BEBA EL AGUA SIN ANTES HERVIRLA**. Hierva toda el agua, déjela hervir por un minuto, y déjela reposar antes de usarla, o utilize 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. Hierviendo morta a bacteria y otros organismos en el agua.

- ✓ *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 diarrhea, cólicos, nausea, dolores de cabeza u otros síntomas. Pueden representar un peligro para la salud de bebés, niños y niñas de corta edad, algunas de las personas de major edad y personas con sistemas immunológicos 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 pasó?) Qué se está haciéndo al respecto?

Contaminación bacteriana puede ocurrir cuando exceso de aguas rebasan sus cauces y entran a las fuentes de agua potable (por ejemplo, luego de una lluvia fuerte). También pueden ocurrir cuando se rompe un sistema de recolección de aguas negras, o cuando hay una falla en el tratamiento de agua.

[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 of expected resolution in Spanish day-month-year].

Para mayor información, por favor póngase en contacto con [contact name] al [phone number] o escribiendo a [mailing address].

Por favor comparta esta información con otros que pueden tomar de esta agua, colocando este aviso en lugares visibles, o remitiéndolo por correo, o entregandolo manualmente. Es de particular interés distribuir este aviso ampliamente si usted lo recibe representando un negocio, un hospital u hogar de infantes u hogar de ancianos o comunidad residencial.

Este aviso ha sido enviado a usted por [system]
Numero de Identificación : _____
Fecha de distribución: _____

Instructions for Spanish Fecal Coliform or E. Coli Notification – PN104/01

THIS IS APPROPRIATE FOR COMMUNITY PUBLIC WATER SYSTEMS

The template on the reverse is a Spanish translation of Template PN103/01 for fecal coliform or *E. coli*. All the instructions on Template PN103/01apply. If you modify the English template, you should modify this template accordingly. Schools or Universities may be able to provide low cost translations.

TIER 1 - DRINKING WATER WARNING

BOIL YOUR WATER BEFORE USING

Disease-causing organisms have entered [system name] water supply.

These organisms are causing illness in people served by [system name]. We learned of a waterborne disease outbreak from [agency] on [date].

What should I do?

- ✓ **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a boil, let it boil for one minute, and let it 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. Boiling kills bacteria and other organisms in the water.

- ✓ [Describe symptoms of the waterborne disease.] If you experience one or more of these symptoms and they persist, contact your doctor. People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers.

What happened? What is being done?

[Describe the outbreak, corrective action, and when the outbreak might end.]

We will inform you when you no longer need to boil your water.

For more information, please contact [name of system contact] at [phone number] or [mailing address]. General guidelines on ways to lessen the risk of infection by microbes are available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.

Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, Schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions Waterborne Disease Outbreak Notification – PN105/01

THIS IS APPROPRIATE FOR COMMUNITY PUBLIC WATER SYSTEMS

Since a waterborne disease outbreak is a Tier 1 situation, you must provide Public Notification to persons served as soon as practical but within 24 hours after you learn of the situation. You must also contact the CDPHE/WQCD Rule Specialist during this time. You should coordinate with your local health department as well. You must issue a Public Notification if you are experiencing a waterborne emergency other than a waterborne disease outbreak, such as one caused by flooding or treatment failure. In such cases, you may be able to modify this template to apply to your situation. Check with the CDPHE/WQCD for more direction. More information on waterborne disease outbreaks and emergencies is available from the Centers for Disease Control and Prevention (www.cdc.gov/health/diseases.htm, 1-800-311-3435. For a waterborne disease outbreak or other emergency, you must use one or more of the following methods to deliver the Public Notification to consumers:

- Radio
- Television
- Hand or direct delivery
- Posting in conspicuous locations

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), since Public Notification must be provided in a manner reasonably calculated to reach all persons served. If you post or hand deliver, print your Public Notification on letterhead, if available. The Public Notification on the reverse is appropriate for hand delivery or a newspaper Notification. However, you may wish to modify it before using it for a radio, TV, or posting. If known, list any organisms detected, the number of affected people, any water treatment problems contributing to the waterborne disease outbreak, and any sources of contamination, such as flooding.

There is no mandatory health effects language exists for waterborne disease outbreaks. You may wish to use the sentence below, if appropriate, or contact the CDPHE/WQCD Rule Specialist for guidance. These symptoms are common to many diseases caused by microscopic organisms:

Symptoms may include nausea, cramps, diarrhea, 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 areas you serve.

The Rule Specialist can provide you with epidemiological information on specific waterborne diseases.

Corrective Action

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

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

After Issuing the Public Notification

Make sure to send copies of Public Notification(s) and a statement certifying that you've met all Public Notification requirements to the CDPHE/WQCD Rule Specialist within ten days after issuing the Public Notification. It is a good idea to issue a "Problem Corrected" Notification (page 25) when the waterborne disease outbreak is under control. It is recommended that you notify health professionals in the area of the outbreak. Individuals may call their doctors with questions about how the situation may affect their health, and the doctors should have the information they need to respond appropriately. In addition, health professionals, including dentists, use tap water during their procedures and need to know of contamination so they can use bottled water.

TIER 1 - DRINKING WATER WARNING

[System name] has high turbidity levels

BOIL YOUR WATER BEFORE USING

We routinely monitor your water for turbidity (cloudiness). This tells us whether we are effectively filtering the water supply. A water sample taken [date] showed turbidity levels of [number] turbidity units. This is above the standard of [standard] turbidity units. Because of these high levels of turbidity, there is an increased chance that the water may contain disease-causing organisms.

What should I do?

- ✓ **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a boil, let it boil for one minute, and let it 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.

- ✓ ***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***. People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice from their health care providers about drinking water.

- ✓ The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.

What happened? What is being done?

[Describe reason for the high turbidity, corrective action, and when the system expects to return to compliance.]

We will inform you when turbidity returns to appropriate levels and when you no longer need to boil your water.

For more information, please contact [name of system contact] at [phone number] or [mailing address]. General guidelines on ways to lessen the risk of infection by microbes are available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.

Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions Notification for Turbidity Single Exceedance- PN106/01

THIS IS APPROPRIATE FOR COMMUNITY AND NON-COMMUNITY PUBLIC WATER SYSTEMS

If the CDPHE/WQCD has designated this turbidity single exceedance as a Tier 1 violation, you must provide Public Notification to persons served within 24 hours after it has been designated Tier 1. Turbidity violations are Tier 2 by default, but may frequently be elevated to Tier 1 by the Rule Specialist at the CDPHE/WQCD. In addition, violations are automatically elevated if you are unable to consult with the CDPHE/WQCD within 24 hours. **If your Public Notification has been elevated to a Tier 1, you must issue a Public Notification within 24 hours of notification of violation.** You may elevate the violation to Tier 1 yourself as well. You should also coordinate with your local health department. The CDPHE/WQCD will advise you whether you should instruct consumers to boil their water. You must use one or more of the following methods to deliver the Public Notification to consumers:

- Radio
- Television
- Hand or direct delivery
- Posting in conspicuous locations

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), since Public Notification must be provided in a manner reasonably calculated to reach all persons served. If you post or hand deliver, print your Public Notification on letterhead, if you have it. The Public Notification on the reverse is appropriate for hand delivery or a newspaper Notification. However, you may wish to modify it before using it for a radio or TV, or posting. If you modify the Public Notification, you must leave the health effects language in ***italics*** unchanged, as it is mandatory language.

Population Served

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

Corrective Action

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

- We are adding chemicals that reduce turbidity.
- We are sampling both untreated and treated water for the presence of coliform bacteria.
- We are monitoring chlorine levels and will adjust them as needed to compensate for filtration problems.
- We are inspecting and cleaning the filters.

Source of the Problem

If you know why the turbidity is high, explain it in your Public Notification. For instance, unusual conditions, such as heavy rains and flooding, can overburden the water plant, and treated water may therefore not meet the standards. In addition, run-off from parts of the watershed could contain increased concentrations of sediment and animal waste.

After Issuing the Public Notification

Send a copy of all Public Notification(s) and a certification that you have met Public Notification requirements to the Rule Specialist at the CDPHE/WQCD within ten days after you issue the Public Notification. It is a good idea to issue a **"Problem Corrected"** (page 25) Public Notification when the violation is resolved. It is recommended that you notify health professionals in the service area of the violation. Individuals may call their doctors with questions about how the violation may affect their health, and the doctors should have the information they need to respond appropriately. In addition, health professionals, including dentists, use tap water during their procedures and need to know of potential microbiological contamination so they can use bottled water.

TIER 1 - DRINKING WATER WARNING

[System Name] water has high levels of Chlorine Dioxide

PREGNANT WOMEN AND YOUNG CHILDREN SHOULD NOT DRINK THE WATER

Sampling results received [date] showed chlorine dioxide levels of [level and units]. This is above the standard, or maximum residual disinfectant level (MRDL) of 0.8 milligrams per liter. Chlorine dioxide is used for disinfection, but too much of it over a short period of time may harm the development of children, infants, and fetuses.

What should I do?

- ✓ **DO NOT USE THIS WATER IF YOU ARE PREGNANT OR GIVE IT TO YOUNG CHILDREN.** Bottled water should be used until further Notification. ***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.***

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. **There are no obvious symptoms, but chlorine dioxide can affect development of the nervous system.**

- ✓ Water, juice, and formula for young children and for pregnant women should not be prepared with tap water.

- ✓ Adults who are not pregnant and older children can drink the tap water because their nervous systems are already developed. However, if you have specific health concerns, you may wish to consult your doctor.

What happened? What is being done?

Chlorine dioxide is used in small amounts every day to kill bacteria and other organisms that may be in your drinking water. A problem occurred with our chlorine dioxide generator, and too much chlorine dioxide was released. [Describe corrective action and when you expect to return to compliance.]

For more information, please contact [name of system contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for Chlorine Dioxide MRDL Notification – PN107/01

THIS IS APPROPRIATE FOR COMMUNITY AND NON-COMMUNITY PUBLIC WATER SYSTEMS

Exceeding the chlorine dioxide maximum residual disinfectant level (MRDL) is a Tier 1 violation when; one or more of the samples taken *in the distribution system* on the day after exceeding the MRDL at the entrance of the distribution system; or when *required samples are not taken* in the distribution system. In both cases you must provide Public Notification to persons served as soon as practical but within 24 hours after you learn of the violation. (Exceeding the chlorine dioxide MRDL *at the entry point to the distribution system only* is a Tier 2 violation; modify this template to create a Tier 2 Notification.) You must also contact the Rule Specialist at the CDPHE/WQCD within 24 hours of learning of the violation. You should also coordinate with your local health department. You must use one or more of the following methods to deliver the Public Notification to consumers:

- ✓ Radio
- ✓ Television
- ✓ Hand or direct delivery
- ✓ Posting in conspicuous locations

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), since Public Notification must be provided in a manner reasonably calculated to reach all persons served. If you post or hand deliver, print your Public Notification on letterhead, if you have it.
The Public Notification on the reverse is appropriate for hand delivery or a newspaper Notification. However, you may wish to modify it before using it for radio or TV. If you do, you must still include all required elements and leave the health effects language in ***italics*** unchanged, as it is mandatory language.

Alternative Sources of Water

If you are selling or providing bottled water, your Notification should say where it can be obtained. Remember that bottled water can also be contaminated or be high in chlorine dioxide if the bottler uses municipal water. Make sure the bottled water meets all primary drinking water regulations by contacting the bottler and asking for the most recent test results.

Population at Risk

The language on the reverse lists "young children" as one of the groups at increased risk. Because the potential health effects of chlorine dioxide are based on tests on laboratory animals, there is no way to determine at exactly what age a child may safely drink the water. If your consumers have questions, encourage them to err on the side of caution.

Corrective Action

In your Public Notification, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with chlorine dioxide violations. Use one or more of the following statements, if appropriate, or develop your own:

- ✓ We are resetting the generator to generate the correct amount of chlorine dioxide.
- ✓ We are repairing the generator.
- ✓ We have already fixed the problem but it will take additional time for the extra chlorine dioxide to be flushed from the distribution system (pipes).

After Issuing the Public Notification

Make sure to send the Rule Specialist at the CDPHE/WQCD a copy of all Public Notification(s) and a certification that you have met all the Public Notification requirements within ten days after issuing the Public Notification. It is a good idea to issue a **"Problem Corrected"** Notification when the violation is resolved. It is recommended that you notify health professionals in the service area. Individuals may call their doctors with questions about how the violation may affect their health, and the doctors should have the information they need to respond appropriately.

TIER 1 TEMPLATES FOR NON-COMMUNITY WATER SYSTEMS

There are separate templates for use by Non-Community public water systems. They are generally 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 themselves.

- Nitrate Notification PNNC01/01
- Fecal Coliform/*E. coli* PNNC02/01

Along with each template are instructions for completing individual sections of the Public Notification, including the required method of delivery.

The templates are intended to assist the system. No system is required to use the template, but they are required to comply with all the Public Notification Rule requirements, including the delivery methods, general content and mandatory health effects language. Mandatory language on health effects, which must be included exactly as written, is presented in ***italics.***

You must include the following language in all Public Notifications. If you post the Public Notification, this language would not be appropriate, since the message would be available to anyone who passes it; in such cases you may omit the language from your Public Notification. Use of this language does *not* relieve you of your obligation to take steps reasonably calculated to notify persons served:

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

DRINKING WATER WARNING

FOR PARENTS OF INFANTS 6 MONTHS OLD 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 10 mg/L MCL.

Possible Health Effects

Infants below the age of six months old 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. Nitrate is a concern for infants because they can't process nitrates in the same way adults can.

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 within [estimated time frame]. We will inform you when this problem has been corrected. For more information, please contact [name of system contact] at [phone number] or [location/address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being produced by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for Nitrate Notification – PNNC01/01

THIS IS APPROPRIATE FOR NON-COMMUNITY PUBLIC WATER SYSTEMS

Since exceeding the nitrate maximum contaminant level (MCL) is a Tier 1 violation, you must provide Public Notification to persons served as soon as practical but within 24 hours after you learn of the violation. During this time period, you must also contact the Rule Specialist at the CDPHE/WQCD. **This template is also applicable to nitrite and total nitrate/nitrite violations.** You must use one or more of the following methods to deliver the Public Notification to consumers:

- ✓ Posting in conspicuous locations
- ✓ Hand or direct delivery
- ✓ Radio
- ✓ Television

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals or clinics), since Public Notification must be provided in a manner reasonably calculated to reach all persons served.

If you modify the Public Notification, you must leave the health effects language in ***italics*** unchanged. This language is mandatory. The language to encourage distribution of the Public Notification is included on this Public Notification; however, if you post this Public Notification, omit the mandatory language to encourage distribution, as it is not needed since posting makes the Public Notification available to everyone who passes by

Alternative Sources of Water

If you are selling or providing bottled water, your Public Notification should say where it could be obtained. Remember that bottled water can also be contaminated. If you are providing bottled water, make sure it meets the standard for nitrates by contacting the bottler and asking for the most recent test results.

Repeat Public Notifications

If this is a repeat Public Notification (as required by the CDPHE/WQCD), 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 Public Notification, 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 Public Notification

Make sure to send the Rule Specialist at the CDPHE/WQCD copies of all Public Notification(s) and a certification that you have met all the Public Notification requirements within ten days after issuing the Public Notification.
It is a good idea to inform your consumers when the violation has been resolved, especially if you have regular customers.

WARNING

DO NOT DRINK THE WATER
DO NOT USE FOR PREPARING INFANT FORMULA

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, some of the elderly, and people with severely compromised immune systems.

People at increased risk should seek advice about drinking water in general from their health care providers.

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 within [estimated time frame]. For more information, please contact [name of system contact] of [system name] at [phone number] or [location/address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being produced by [system name]:
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for Fecal Coliform or E. coli Notification – PNNC02/01

THIS IS APPROPRIATE FOR NON-COMMUNITY PUBLIC WATER SYSTEMS

This template is intended for systems where consumers will not be able to boil water. See the instructions below on how to modify this template for other situations. Since exceeding the fecal coliform or *E. coli* maximum contaminant level is a Tier 1 violation, you must provide Public Notification to persons served as soon as practical but within 24 hours after you learn of the violation. During this time period you must also contact the Rule Specialist at the CDPHE/WQCD. You must use one or more of the following methods to deliver the Public Notification to consumers:

- ✓ Posting in conspicuous locations
- ✓ Hand or direct delivery
- ✓ Radio
- ✓ Television

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals or clinics), since Public Notification must be provided in a manner reasonably calculated to reach all persons served.

If you modify the Public Notification, you must leave the health effects language in ***italics*** unchanged. This language is mandatory. The language to encourage distribution of the Public Notification is included on this Public Notification; however, if you post this Public Notification, omit the mandatory language to encourage distribution, as it is not needed since posting makes the Public Notification available to everyone who passes by.

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. Instructions also should depend on whether your system has elevated nitrate levels.

Alternative Sources of Water

If you are selling or providing bottled water, your Public Notification should say where it could be obtained. Remember that bottled water can also be contaminated. If you are providing bottled water, make sure it meets the standard for bacteria and all other regulated contaminants by contacting the bottler and asking for the most recent test results.

Corrective Action

In your Public Notification, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with fecal coliform violations. Use one or more of the following actions, 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.

After Issuing the Public Notification

Make sure to send the Rule Specialist at the CDPHE/WQCD copies of all Public Notification(s) and a certification that you have met all the Public Notification requirements within ten days after issuing the Public Notification.

It is a good idea to inform your consumers when the violation has been resolved, especially if you have regular customers.

TIER 1 - DRINKING WATER PROBLEM CORRECTED

Customers of [system name] were notified on [date] of a problem with our drinking water and were advised to [describe recommended action]. We are pleased 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.

[Add further details here when appropriate.]

As always, you may contact [system contact name] at [phone number] or [mailing address] with any comments or questions.

Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for "Problem Corrected" Notification – PN108/01

THIS IS APPROPRIATE FOR COMMUNITY AND NON-COMMUNITY PUBLIC WATER SYSTEMS

It is a good idea to issue a Public Notification when a serious violation or situation has been resolved. The CDPHE/WQCD requires that you issue a **"Problem Corrected"** Notification. You should coordinate with your local health department as well. Below are some recommended methods for a **"Problem Corrected"** Notification. You should use the same delivery methods you used for the original Public Notification.

- ✓ Radio
- ✓ Television
- ✓ Newspaper
- ✓ Hand or direct delivery
- ✓ Posting in conspicuous locations

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. If you post or hand deliver, print your Public Notification on letterhead, if available.

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

TIER 2 TEMPLATES

The following pages contain Community and Non-Community Water System templates for Tier 2 violations and waterborne disease outbreaks, as listed below:

1. Unresolved Total Coliform PN201/01 for Community Water Systems
2. Resolved Total Coliform PN202/01
3. Chemical or Radiological MCL PN203/01
4. Fluoride MCL PN204/01
5. SWTR Failure to Filter PN205/01
6. SWTR Turbidity Exceedance PN206/01
7. SWTR Disinfection Treatment PN207/01
8. Lead and Copper Rule (LCR) Failure to Install Corrosion Control PN208/01
9. Unresolved Total Coliform PN for Non-Community Water Systems

Instructions for Unresolved Total Coliform Notification-PN201/01

Template on Reverse

Since exceeding the total coliform bacteria maximum contaminant level (MCL) is a Tier 2 violation, you must provide Public Notification to persons served as soon as practical but within 30 days after you learn of the violation. Persistent total coliform problems can be serious. You must issue a repeat Public Notification every three months for as long as the violation persists.

Community systems must use of the following methods:

- ✓ Hand or direct delivery
- ✓ Mail, as a separate Public Notification or included with the bill

Non-Community systems should use the alternate template.

In addition, you 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 mail, post, or hand deliver, print your Public Notification on letterhead, if available. For posting notices, see page 57.

The Public Notification on the reverse is appropriate for hand delivery or mail. If you modify the Public Notification, you must still include all the required elements and leave the health effects language in ***italics*** unchanged. This language is mandatory.

Description of the Violation

The description of the violation and the MCL vary depending on the number of samples you take. The following table should help you complete the second paragraph of the template.

If You Take Less Than 40 Samples a Month	If You Take More Than 40 Samples a Month
State the number of samples testing positive for coliform. The standard is that no more than one sample per month may be positive.	State the percentage of samples testing positive for coliform. The standard is that no more than five percent of samples may test positive each month.

Corrective Action

In your Public Notification, describe corrective actions you are taking. If you know what is causing the coliform problem, explain this in the Public Notification. Listed below are some steps commonly taken by water systems with total coliform violations. Use one or more of the following statements, if appropriate, or develop your own:

- ✓ We are chlorinating and flushing the water system.
- ✓ We are increasing sampling for coliform bacteria.
- ✓ We are investigating the source of contamination.

- ✓ We are repairing the wellhead seal.
- ✓ We are repairing the storage tank.
- ✓ We will inform you when additional samples show no coliform bacteria.

After Issuing the Public Notification

After issuing the Public Notification, make sure to send copies of all Public Notification(s) and a certification that you have met all the Public Notification requirements to the Rule Specialist at the CDPHE/WQCD within ten days after issuing the Public Notification. It is a good idea to inform your consumers when the violation has been resolved.

(THIS IS APPROPRIATE FOR COMMUNITY PUBLIC WATER SYSTEMS)

TIER 2 - IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Tests Show Coliform Bacteria in [System Name] Water

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. We took [number] samples for coliform bacteria during [month]. [Number/percentage] of those samples showed the presence of coliform bacteria. The standard is that no more than [1 sample per month/5 percent of our samples] may do so.

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.
- ✓ People with severely compromised immune systems, infants, and some elderly persons may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

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 treatment or distribution system (pipes). Whenever we detect coliform bacteria in any sample, we do follow-up testing to see if other bacteria of greater concern, such as fecal coliform or *E.coli*, are present. **We did not find any of these bacteria in our subsequent testing.** If we had, we would have notified you immediately. However, we are still finding coliforms in the drinking water.

What happened? What is being done?

[Describe corrective action.]

We are still detecting coliform bacteria. We will inform you when our sampling shows that no bacteria are present. We anticipate resolving the problem within [estimated time frame].

For more information, please contact [name of system contact] at [phone number] or [mailing address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for Resolved Total Coliform Notification-PN202/01

Template on Reverse

Since exceeding the total coliform bacteria maximum contaminant level (MCL) is a Tier 2 violation, you must provide Public Notification to persons served as soon as practical but within 30 days after you learn of the violation.

Community systems must use of the following methods:

- ✓ Hand or direct delivery
- ✓ Mail, as a separate Public Notification or included with the bill

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

- ✓ Posting in conspicuous locations
- ✓ Hand delivery
- ✓ Mail

In addition, you 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 mail, post, or hand deliver, print your Public Notification on letterhead, if available.

The Public Notification on the reverse is appropriate for hand delivery or mail. However, you may wish to modify it before using it for posting. If you do, you must still include all the required elements and leave the health effects language in ***italics*** unchanged. This language is mandatory.

Description of the Violation

Make sure that the Public Notification is clear about the fact that the coliform problem has been resolved, and there is no current cause for concern. The description of the violation and the MCL vary depending on the number of samples you take. The following table should help you complete the second paragraph of the template.

If You Take Less Than 40 Samples a Month	**If You Take More Than 40 Samples a Month**
State the number of samples testing positive for coliform. The standard is that no more than one sample per month may be positive.	State the percentage of samples testing positive for coliform. The standard is that no more than five percent of samples may test positive each month.

Corrective Action

In your Public Notification, describe corrective actions you have taken. Listed below are some steps commonly taken by water systems with total coliform violations. Use one or more of the following statements, 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 Public Notification

Make sure to send copies of all Public Notification(s) and a certification that you have met all the Public Notification requirements to the Rule Specialist at the CDPHE/WQCD within ten days after issuing Public Notification.

(THIS IS APPROPRIATE FOR COMMUNITY AND NON-COMMUNITY PUBLIC WATER SYSTEMS)

TIER 2 - IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Tests Showed Coliform Bacteria in [System Name] Water

Our water system recently violated a drinking water standard. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We routinely monitor for drinking water contaminants. We took [number] samples to test for the presence of coliform bacteria during [month]. [Number/percentage] of our samples showed the presence of total coliform bacteria. The standard is that no more than [1 sample per month/5 percent of samples] may do so.

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.
- ✓ People with severely compromised immune systems, infants, and some elderly persons may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

What does this mean?

This is not an emergency. If it had been, you would have been notified immediately. 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 system (pipes). Whenever we detect coliform bacteria in any sample, we do follow-up testing to see if other bacteria of greater concern, such as fecal coliform or *E. coli*, are present. **We did not find any of these bacteria in our subsequent testing, and further testing shows that this problem has been resolved.**

What happened? What was done?

[Describe corrective action.]

For more information, please contact [name of system contact] at [phone number] or [mailing address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for Chemical or Radiological MCLs Notification-PN203/01

Template on Reverse

Since exceeding chemical or radiological maximum contaminant levels (MCLs) is a Tier 2 violation, you must provide Public Notification to persons served as soon as practical but within 30 days after you learn of the violation. You must issue a repeat Notification every three months for as long as the violation persists. Check with the Rule Specialist at CDPHE/WQCD to make sure you meet all requirements.

Community systems must use of the following methods:

- ✓ Hand or direct delivery
- ✓ Mail, as a separate Public Notification or included with the bill

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

- ✓ Posting in conspicuous locations
- ✓ Hand delivery
- ✓ Mail

In addition, you 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 mail, post, or hand deliver, print your Public Notification on letterhead, if available.

The Public Notification on the reverse is appropriate for hand delivery or mail. However, you may wish to modify it before using it for posting. If you do, you must still include all the required elements and you may not modify the mandatory health effects language.

Corrective Action

In your Public Notification, 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 one or more of the following actions, if appropriate, or develop your own:

- ✓ We are working with the CDPHE/WQCD to evaluate the water supply and researching options to correct the problem. These options may include treating the water to remove [contaminant] or connecting to [system]'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 Public Notifications

If this is an ongoing violation and/or you fluctuate above and below the MCL, you can give the history behind the violation, including the source of contamination, if known. 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 Public Notification

Make sure to send the Rule Specialist at the CDPHE/WQCD copies of all Public Notification(s) and a certification that you have met all Public Notification requirements within ten days after issuing the Public Notification.

(THIS IS APPROPRIATE FOR COMMUNITY AND NON-COMMUNITY PUBLIC WATER SYSTEMS)

TIER 2 - IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

[System Name] Has Levels of [Contaminant] Above Drinking Water Standards

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Testing results we received on [date] show that our system exceeds the standard, or maximum contaminant level (MCL), for [contaminant]. The standard for [contaminant] is [MCL]. The average level of [contaminant] over the last year was [level]. *Or* [Contaminant] was found at [level].

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 does this mean?

This is not an immediate risk. If it had been, you would have been notified immediately. However, [Insert relevant health effects language from Appendix B.]

What happened? What is being done?

[Describe corrective action.] We anticipate resolving the problem within [estimated time frame].

For more information, please contact [name of system contact] at [phone number] or [mailing address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for Fluoride MCL Notification-PN204/01

Template on Reverse

Since exceeding the fluoride maximum contaminant level (MCL) is a Tier 2 violation, you must provide Public Notification to persons served as soon as practical but within 30 days after you learn of the violation. You must issue a repeat Public Notification every three months for as long as the violation persists. **If you exceed the secondary maximum contaminant level of 2 milligrams per liter but not the MCL of 4 milligrams per liter, you must issue a special Public Notification with different health effects language.**

Community systems must use of the following methods:

- ✓ Hand or direct delivery
- ✓ Mail, as a separate Public Notification or included with the bill

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

- ✓ Posting in conspicuous locations
- ✓ Hand delivery
- ✓ Mail

In addition, you 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 mail, post, or hand deliver, print your Public Notification on letterhead, if available.

The Public Notification on the reverse is appropriate for hand delivery or mail. However, you may wish to modify it before using it for posting. If you do, you must still include all the required elements and you may not modify the mandatory health effects language.

Corrective Action

In your Public Notification, 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 fluoride violations. Use one or more of the following actions, if appropriate, or develop your own:

- ✓ We are working with CDPHE/WQCD to evaluate the water supply and researching options to correct the problem. These options may include treating the water to remove fluoride or connecting to [system]'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 fluoride.
- ✓ We have since taken samples at this location and had them tested. They show that we meet the standards.

Repeat Public Notifications

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. 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 should indicate that fact.

After Issuing the Public Notification

Make sure to send the Rule Specialist at the CDPHE/WQCD copies of all Public Notification(s) and a certification that you have met all Public Notification requirements within ten days after issuing the Public Notification.

(THIS IS APPROPRIATE FOR COMMUNITY AND NON-COMMUNITY PUBLIC WATER SYSTEMS)

TIER 2 - IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

[System Name] Has Levels of Fluoride Above Drinking Water Standards

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Testing results we received on [date] show that our system exceeds the standard, or maximum contaminant level (MCL), for fluoride. The average level of fluoride in samples taken during the last year was [level and units]. The standard for fluoride is that the average of samples taken over the last year may not exceed [MCL].

What should I do?

Children under the age of nine should use an alternative source of water that is low in fluoride. In addition, you may want to consult your dentist about whether to avoid dental products containing fluoride. Adults and children over age nine should consult their dentist or doctor and show him/her this Public Notification to determine if an alternate source of water low in fluoride should be used.

What does this mean?

This is not an emergency. If it had been, you would have been notified immediately. Fluoride in small amounts helps prevent tooth decay. However, ***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. Fluoride in drinking water at half the MCL or greater may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums.*** Although it takes many years of exposure to fluoride for bone disease to develop, mottling can occur after a relatively short period of exposure.

What happened? What is being done?

Fluoride contamination is rarely due to human activity. Fluoride occurs naturally in some areas and is found in high concentrations in our source water. [Describe corrective action.] We anticipate resolving the problem within [estimated time frame].

For more information, please contact [name of contact] at [phone number] or [mailing address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for SWTR Failure to Filter Notification-PN205/01

Template on Reverse

Since surface water treatment technique violations are included in Tier 2, you must provide Public Notification to persons served as soon as practical but within 30 days after you learn of the violation. You must issue a repeat Public Notification every three months for as long as the violation persists. Community systems must use one of the following methods:

- ✓ Hand or direct delivery
- ✓ Mail, as a separate Public Notification or included with the bill

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

- ✓ Posting in conspicuous locations
- ✓ Hand delivery
- ✓ Mail

In addition, you 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 mail, post, or hand deliver, print your Public Notification on letterhead, if available.

The Public Notification on the reverse is appropriate for hand delivery or mail. However, you may wish to modify it before using it for posting. If you do, you must still include all the required elements and leave the health effects language in ***italics*** unchanged. This language is mandatory.

Corrective Action

In your Public Notification, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with surface water treatment technique violations. Use one or more of the following actions, 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 Public Notifications

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

After Issuing the Public Notification

Make sure to send the Rule Specialist at the CDPHE/WQCD copies of all Public Notification(s) and a certification that you have met the Public Notification requirements within ten days after you issued the Public Notification.

(THIS IS APPROPRIATE FOR COMMUNITY AND NON-COMMUNITY PUBLIC WATER SYSTEMS)

TIER 2 - IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

[System Name] Does Not Meet Treatment Requirements

Our water system recently violated a drinking water standard. Although this situation does not require that you take immediate action, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

On [date], the CDPHE/WQCD ordered us to filter the water in addition to disinfecting. We are required to install this filtration because we do not have an adequate filtration in place.

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.

People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice from their health care providers about drinking water. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

What does this mean?

This is not a situation requiring that you take immediate action. 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.

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. If you experience any of these symptoms and they persist, you may want to seek medical advice.

What happened? What is being done?

Filtration is the best method for removing these organisms. [Describe corrective action.]

We anticipate resolving the problem within [estimated time frame]. Until filtration is installed, you will receive a Public Notification similar to this every three months. For more information, please contact [name of contact] at [phone number] or [mailing address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for SWTR Turbidity Exceedance Notification-PN206/01

Template on Reverse

Since surface water treatment filtration treatment technique violations are included in Tier 2, you must provide Public Notification to persons served as soon as practical but within 30 days after you learn of the violation. This template may also be adapted for use with turbidity MCL violations.

For Exceedances of Single Turbidity Limits	**For Exceedances of Monthly Turbidity Limits**
You must consult with the CDPHE/WQCD Rule Specialist as soon as practical but within 24 hours of learning of the violation. During the consultation, the CDPHE/WQCD may choose to elevate your turbidity exceedance to Tier 1. If consultation does not occur, the violation is automatically elevated to Tier 1. For a Tier 2 Notification, describe your violation as follows in the second paragraph of the Public Notification: Normal turbidity levels at our plant are [number] turbidity units. A water sample taken [date] showed levels of [number] turbidity units. This was above the standard of [standard] units. Because of these high levels of turbidity, there is an increased chance that the water may contain disease-causing organisms.	Use the following language to describe your violation and insert into the second paragraph of the template: Water samples for [month] showed that [percentage] percent of turbidity measurements were over [standard] turbidity units the standard is that no more than 5 percent of samples may exceed [standard] turbidity units per month. The turbidity levels are relatively low. However, their persistence is a concern. Normal turbidity levels at our plant are [number] units.

Community systems must use one of the following methods:

- ✓ Hand or direct delivery
- ✓ Mail, as a separate Public Notification or included with the bill

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

- ✓ Posting in conspicuous locations
- ✓ Hand delivery
- ✓ Mail

In addition, you 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 mail, post, or hand deliver, print your Public Notification on letterhead, if available. The Public Notification on the reverse is appropriate for hand delivery or mail. However, you may wish to modify it before using it for posting. If you do, you must still include all the required elements and leave the health effects language in ***italics*** unchanged. This language is mandatory.

Corrective Action

In your Public Notification, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems having a filtration treatment technique violation. Use one or more of the following actions, 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 adjusted them as needed to compensate for the filtration problems.
- ✓ We inspected and cleaned the filters.

After Issuing the Public Notification

Make sure to send copies of all Public Notification(s) and a certification that you have met all Public Notification requirements to the Rule Specialist at the CDPHE/WQCD within ten days after issuing the Public Notification.

(THIS IS APPROPRIATE FOR COMMUNITY AND NON-COMMUNITY PUBLIC WATER SYSTEMS)

TIER 2 - IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

[System Name] Did Not Meet Treatment Requirements

Our water system recently violated a drinking water standard. Although this was not an emergency, as our customers, you have a right to know what happened, what you should do, and what we did to correct this situation.

We routinely monitor your water for turbidity (cloudiness). This tells us whether we are effectively filtering the water supply. [Insert appropriate description of the violation from instructions.]

What should I do?

- ✓ **You do not need to boil your water or take other actions.** We do not know of any contamination, and none of our testing has shown disease-causing organisms in the drinking water.
- ✓ People with severely compromised immune systems, infants, and some elderly persons may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

What does this mean?

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. If you experience any of these symptoms and they persist, you may want to seek medical advice.

What happened? What was done?

A problem occurred with the treatment system at the water plant. [Describe the reason for high turbidity, corrective actions, and when the system returned or expects to return to compliance.]

For more information, please contact [name of system contact] at [phone number] or [mailing address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

TIER 2 - IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

[System Name] Does/Did Not Meet Treatment Requirements for SWTR Disinfection Treatment

Our water system recently violated a drinking water standard. Although this situation does not require that you take immediate action, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

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

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.
    - People with severely compromised immune systems, infants, and some elderly persons may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

What does this mean?

This situation does not require that you take immediate action. 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.

What happened? What is being done?

[Describe why the violation occurred and corrective action.]

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

For more information, please contact [name of system contact] at [phone number] or [mailing address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for SWTR Disinfection Treatment Notifications-PN207/01

Since surface water treatment disinfection treatment technique violations are included in Tier 2, you must provide Public Notification to persons served as soon as practical but within 30 days after you learn of the violation. Some disinfection problems may be serious. Community systems must use one of the following methods:

- ✓ Hand or direct delivery
- ✓ Mail, as a separate Public Notification or included with the bill

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

- ✓ Posting in conspicuous locations
- ✓ Hand delivery
- ✓ Mail

In addition, you 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 mail, post, or hand deliver, print your Public Notification on letterhead, if available. If you modify the Public Notification, you must leave the mandatory health effects language in ***italics*** unchanged.

Description of the Violation

Choose from the following descriptions of 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 grow 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 Public Notification, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with disinfection treatment technique violations. Use one or more of the following actions, 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.

After Issuing the Public Notification

Make sure to send copies of all Public Notifications and a certification that you have met all the Public Notification requirements to the Rule Specialist at the CDPHE/WQCD within ten days after issuing the Notification.

TIER 2 - IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

[System Name] Water Contains High Levels of Lead

Our water system recently violated a drinking water standard. Even though this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely sample water at consumers' taps for lead. The tests show lead levels in the water above the limit, or "action level", so 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?

Listed below are some steps you can take to reduce your exposure to lead:

- ✓ Call us at the number below to find out how to get your water tested for lead.
- ✓ Find out whether your pipes contain lead or lead solder.
- ✓ Run your water for 15-30 seconds or until it becomes cold before using it for drinking or cooking. This flushes any standing lead from the pipes.
- ✓ Don't cook with or drink water from the hot water tap; lead dissolves more easily into hot water.
- ✓ **Do not boil your water to remove lead.** Excessive boiling makes the lead more concentrated & the lead remains when the water evaporates.

What does this mean?

Typically, lead enters water supplies by leaching from lead or brass pipes and plumbing components. New lead pipes and plumbing components containing lead are no longer allowed for this reason; however, many older homes may contain lead pipes. Your water is more likely to contain high lead levels if water pipes in or leading to your home are made of lead or contain lead solder.

Infants and children who drink water that contains 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 happened? What is being done?
[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, please contact [name of system contact] at [phone number] or [mailing address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for LCR Failure to Install Corrosion Control-PN208/01

(THIS IS APPROPRIATE FOR COMMUNITY AND NON-COMMUNITY PUBLIC WATER SYSTEMS)

Since lead and copper treatment technique violations are included in Tier 2, you must provide Public Notification to persons served as soon as practical but within 30 days after you learn of the violation. You must issue a repeat Public Notification every three months for as long as the violation persists. Community systems must use one of the following methods:

- ✓ Hand or direct delivery
- ✓ Mail, as a separate Public Notification or included with the bill

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

- ✓ Posting in conspicuous locations
- ✓ Hand delivery
- ✓ Mail

In addition, you 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 mail, post, or hand deliver, print your Public Notification on letterhead, if available.

The Public Notification on the reverse is appropriate for hand delivery or mail. However, you may wish to modify it before using it for posting. If you do, you must still include all the required elements and 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 should explain these. Consumers may be more supportive of rate increases or may pressure local authorities to provide funds if they understand the circumstances. This template is written for systems which are required to install corrosion control after exceeding lead action levels. The Lead and Copper Rule requires some large systems to 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 Public Notification, describe corrective actions you are taking. 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 until corrosion control is in place.

If consumers ask for information on testing their water, you should have on hand the names of laboratories consumers can call. 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. For more information on lead, have consumers call the EPA Safe Drinking Water Hotline at 1-800-426-4791 or the National Lead Information Center Hotline 1-800-LEAD-FYI.

After Issuing the Public Notification

Make sure to send the Rule Specialist at the CDPHE/WQCD copies of all Public Notification(s) and a certification that you have met all the Public Notification requirements within ten days after issuing the Public Notification.

DRINKING WATER NOTIFICATION

For Non-Community Water System

Tests show presence of coliform bacteria in water

We routinely monitor for the presence of drinking water contaminants. We took [number] samples during [month]. [Number] of those 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.

People with severely compromised immune systems, infants, and some elderly persons may be at increased risk. These people should seek advice about drinking water from their health care providers.

Steps We Are Taking

[Describe corrective action.]

We will inform you when additional samples show no coliform bacteria. We anticipate resolving the problem within [estimated time frame]. For more information, please contact [name of contact] of [system] at [phone number] or [location/address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being produced by [system name]:
Colorado Public Water System ID#: _____
Date distributed: _____

Instructions for Unresolved Total Coliform Notification – PNNC03/01

THIS IS APPROPRIATE FOR NON-COMMUNITY PUBLIC WATER SYSTEMS

This template is intended for systems where consumers will not need to boil their water or where they will not have the facilities to do so. Since exceeding the total coliform bacteria maximum contaminant level (MCL) is a Tier 2 violation, you must provide Public Notification to persons served as soon as practical but within 30 days after you learn of the violation. **Persistent total coliform problems can pose a serious health risk, and the CDPHE/WQCD may elevate such situations to Tier 1. Check with the CDPHE/WQCD Rule Specialist to make sure you meet all its requirements.** You must issue a repeat Public Notification every three months for as long as the violation persists. Alternative language for systems required to take more than 40 samples a month is provided below.

- ✓ Posting in conspicuous locations
- ✓ Hand delivery
- ✓ Mail

You must also use *another* method reasonably calculated to reach others if they would not be reached by the first method. In addition to the methods above, such methods could include newspapers, e-mail, or delivery to community organizations. Community systems should use the template on page 29.

The language to encourage distribution of the Public Notification is included on this Public Notification; however, if you post this Public Notification, omit the mandatory language to encourage distribution, as it is not needed since posting makes the Public Notification available to everyone who passes by. If you modify the Public Notification, you must leave the health effects language in ***italics*** unchanged. This language is mandatory.

Description of the Violation

The template on the reverse is intended for use by systems taking fewer than 40 samples a month. 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 [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 Public Notification, describe corrective actions you are taking. If you know what is causing the coliform problem, explain this in the Public Notification. Listed below are some steps commonly taken by water systems with total coliform violations. Use one or more of the following actions, 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.

After Issuing the Public Notification

Make sure to send copies of all Public Notification(s) and a certification that you have met all the Public Notification requirements to the Rule Specialist at the CDPHE/WQCD within ten days after issuing the Public Notification. It is a good idea to inform your consumers when the violation has been resolved, especially if you have regular customers.

TIER 3 TEMPLATES

Templates for Tier 3 violations and situations:

- Monitoring Violations PN301/01 for Community Water Systems
- Fluoride SMCL PN302/02
- Monitoring Violations PNNC04/01 for Non-Community Water Systems

Along with the templates are instructions for completing individual sections of the Public Notifications, including the required method of delivery.

The templates are intended to assist the system. No system is required to use the template, but they are required to comply with all the Public Notification Rule requirements, including the delivery methods, general content and mandatory health effects language. Mandatory language on unknown risk for monitoring violations, which must be included exactly as written, is presented in ***italics.*** All the language in the fluoride SMCL template (except the language discussed below) is mandatory.

You must also include the following language in all Public Notifications, where applicable. Use of this language does *not* relieve you of your obligation to take steps reasonably calculated to notify all persons served:

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

TIER 3 - IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for [System Name]

Our water system violated several drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During [compliance period] we ['did not monitor or test' or 'did not complete all monitoring or testing'] for [contaminant(s)] and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

There is nothing you need to do at this time. The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for [this contaminant/these contaminants], how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	When samples were or will be taken
VOCs[1] (example)	1 sample every three years	0	1996-1998	February 1999

What happened? What is being done?

[Describe corrective action.]

For more information, please contact [name of system contact] at [phone number] or [mailing address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is being sent to you by [system name]
Colorado Public Water System ID#: _____
Date: _____

[1]VOCs, also known as volatile organic compounds, are tested by collecting one sample and testing that sample for all the VOCs. VOCs are commonly used in industrial and manufacturing processes. 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, tetrachlorethylene, 1,1,1-trichloroethane, trichloroethylene, toluene, 1,2,4-trichlorobenzene, 1,1-dichloroethylene, 1,1,2-trichloroethane, vinyl chloride, and xylene.

Instructions for Monitoring Violations Annual Notification-PN301/01

Since most monitoring violations are included in Tier 3, you must provide Public Notification to persons served within one year after you learn of the violation. Multiple monitoring violations can be serious.

Community water systems must use one or more of the following methods to deliver the Public Notification to consumers:

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

In addition, you 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 Public Notification, it must remain posted until the violation is resolved. If the violation has been resolved, you must post the Public Notification for at least one week. If you mail, post, or hand deliver, print your Public Notification on letterhead, if available.

The Public Notification on the reverse is appropriate for insertion in an annual water quality report, or the Consumer Confidence Report, as long as Public Notification timing and delivery requirements are met. You may need to modify the template for a Public Notification for individual monitoring 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 on the Public Notification, e.g., in a footnote.

You may need to modify the Public Notification 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 Notification you issued at that time.

Include in your Public Notification the standard language for monitoring and testing procedure violations in ***italics.*** If you modify the Public Notification Template, you may not alter this mandatory language.

Corrective Actions

In your Public Notification, describe corrective actions you took or are taking. Listed below are some steps commonly taken by water systems with monitoring violations. Choose the appropriate language, or develop your own:

- ✓ We have since taken the required samples, as described in the last column of the table above. The samples showed we are meeting drinking water standards.
- ✓ We have since taken the required samples, as described in the last column of the table above. The sample for [contaminant] exceeded the limit. [Describe corrective action; use information from Public Notification prepared for violating the limit.]
- ✓ We plan to take the required samples soon, as described in the last column of the table above.

After Issuing the Public Notification

Make sure to send the Rule Specialist at the CDPHE/WQCD copies of all Public Notification(s) and a certification that you have met all the Public Notification requirements within ten days after issuing the Public Notification.

TIER 3 - IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Elevated Fluoride Levels Detected

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by your community water system [insert system name] has a fluoride concentration of [insert value] mg/L.

Dental fluorosis in its moderate or severe forms, may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine years of age should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/L of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/L of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/L because of this cosmetic dental problem.

For more information, please call [insert name of water system contact] of [insert name of community water system] at [insert phone number]. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

> *Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice is being sent to you by [insert system name].
Colorado Public Water System ID#: CO0_____.

Date distributed: _____

Instructions for Fluoride SMCL Notification-PN302/01—Tier 3 Violation

For any exceedance of the fluoride secondary maximum contaminant level (SMCL), you must provide Public Notification to persons served as soon as practical, but within 12 months after you learn of the exceedance, using the provided mandatory language and filling in the blanks. Because fluoride at levels above the SMCL can permanently discolor children's teeth, you are urged to issue this Public Notification as soon as practical.

If you exceed the MCL of 4 mg/l, you must provide Public Notification within 30 days of learning of the violation.

Community systems must use of the following methods:

- ✓ Hand or direct delivery
- ✓ Mail, as a separate Public Notification or included with the bill

Non-Community systems that monitor for fluoride (federal law does not require non-community systems to monitor) are encouraged to notify their consumers if they exceed the SMCL, especially at water systems serving children.

In addition, you 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 Public Notification, it must remain posted until the exceedance is resolved. If the exceedance has been resolved, you must post the Public Notification for at least one week. If you mail, post, or hand deliver, print your Public Notification on letterhead, if available.

The Public Notification on the reverse is appropriate for insertion in an annual water quality report or the CCR, as long as Public Notification timing and delivery requirements are met, as well as for a separate individual Public Notification. The language on the template is mandatory and may not be modified, although you may add to the Public Notification, as suggested below.

Explaining the Situation

Use the following language, if applicable:

- ✓ Fluoride contamination is rarely due to human activity. Fluoride occurs naturally in some areas and is found in high concentrations in the aquifer in our source water.

If the fluoride levels in the water have returned to below the SMCL, be sure to make this clear in your Public Notification.

Corrective Actions

In your Public Notification, you should describe corrective actions you took or are taking, if any. The bullet below describes one action commonly taken by water systems with fluoride SMCL exceedances. Use this language, or develop your own:

- ✓ We are continuing to monitor fluoride levels. We will inform you if they exceed the limit of 4 mg/l.

After Issuing the Public Notification

Make sure to send the Public Notification Rule Manager at the CDPHE/WQCD copies of all Public Notification(s) and the *Certificate of Delivery Form* that you have met all the Public Notification requirements within ten days after issuing the Public Notification.

Instructions for Monitoring Violation Notification – PNNC04/01

THIS IS APPROPRIATE FOR NON-COMMUNITY PUBLIC WATER SYSTEMS

Since most monitoring violations are included in Tier 3, you must provide Public Notification to persons served within one year after you learn of the violation. Multiple monitoring violations can be serious. Check with the Rule Specialist at the CDPHE/WQCD to make sure you meet the requirements. You must use one of the following methods:

- ✓ Posting in conspicuous locations
- ✓ Hand delivery
- ✓ Mail

In addition, you must use *another* method reasonably calculated to reach others if they would not be reached by the first method. Such methods could include newsletters, e-mail, or delivery to community organizations. The language to encourage distribution of the Public Notification is included on this Public Notification; however, if you post this Public Notification, omit the mandatory language to encourage distribution, as it is not needed since posting makes the Public Notification available to everyone who passes by. Community systems should use the template on page 47.

You must post the Public Notification until the violation is resolved. If the violation has been resolved, you must post the Public Notification for at least one week. If you mail, post, or hand deliver, print your Public Notification on letterhead, if available.

The Public Notification on the reverse is appropriate for an annual Public Notification combining notification for several violations, as well as for Public Notifications for individual violations. This example presents violations in a table; however, you may write out an explanation for each violation if you wish.

You may need to modify the Public Notification 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 Notification you issued at that time.

Include in your Public Notification the standard language for monitoring and testing procedure violations in ***italics.*** If you modify the Public Notification, you may not alter this mandatory language.

Corrective Actions

In your Public Notification describe corrective actions you took or are taking. Listed below are some steps commonly taken by water systems with monitoring violations. Choose the appropriate language, or develop your own:

- ✓ We have since taken the required samples, as described in the last column of the table above. The samples showed we are meeting drinking water standards.

- ✓ We have since taken the required samples, as described in the last column of the table above. The sample for [contaminant] exceeded the limit. [Describe corrective action; use information from Public Notification prepared for violating the limit.]
- ✓ We plan to take the required samples soon, as described in the last column of the table above.

After Issuing the Public Notification

Make sure to send the Rule Specialist at the CDPHE/WQCD copies of all Public Notifications and a certification that you have met all the Public Notification requirements within ten days after issuing the Public Notification.

DRINKING WATER NOTIFICATION

Monitoring requirements not met for [system name]

We violated a drinking water standard. Even though this was not an emergency, as our customers, you have a right to know what happened and what we are doing to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During [compliance period] we ['did not monitor' or 'did not complete all monitoring'] for [contaminant(s)] and therefore cannot be sure of the quality of our drinking water during that time.

What This Means

There is nothing you need to do at this time. The table below lists the contaminant(s) we did not properly test for, how often we are supposed to sample for [it/them], how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	When samples were or will be taken
Coliform (example)	twice per month	1	July 1, July 15, August 1	July 1, August 1

Steps We Are Taking

[Describe corrective action.] For more information, please contact [name of contact] of [system name] at [phone number] or [location/address].

> ***Please share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this Public Notification in a public place or distributing copies by hand or mail.***

This Public Notification is produced by [system name]:
Colorado Public Water System ID#: _____
Date distributed: _____

Appendices A-D

Appendix A Appendix A to Subpart Q of Part 141

Appendix A - Appendix A to Subpart Q of Part 141

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]				
A. Microbiological Contaminants				
1. Total coliform	2	141.63(a)	3	141.21(a)-(e)
2. Fecal coliform/*E. coli*	1	141.63(b)	1, 3[4]	141.21(e)
3. Turbidity MCL	2	141.13(a)	3	141.22
4. Turbidity MCL (average of 2 days' samples >5 NTU)	2, 1[5]	141.13(b)	3	141.22
5. Turbidity (for TT violations resulting from a single exceedance of maximum allowable turbidity level)	2, 1[6]	141.71(a)(2), 141.71(c)(2)(i), 141.73(a)(2) 141.73(b)(2) 141.73(c)(2) 141.73(d) 141.173(a)(2) 141.173(b)	3	141.74(a)(1), 141.74(b)(2), 141.74(c)(1), 141.174
6. Surface Water Treatment Rule violations, other than violations resulting from single exceedance of max. allowable turbidity level (TT)	2	141.70-141.73	3	141.74
7. Interim Enhanced Surface Water Treatment Rule violations, other than violations resulting from single exceedance of max. turbidity level (TT)	2	141.170-141.173[7]	3	141.172 141.174

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. Failure to test for fecal coliform or *E. coli* is a Tier 1 violation if testing is not done after any repeat sample tests positive for coliform. All other total coliform monitoring and testing procedure violations are Tier 3.

5. Systems that violate the turbidity MCL of 5 NTU based on an average of measurements over two consecutive days must initiate consultation with the CDPHE/WQCD within 24 hours after learning of the violation. Based on this consultation, the CDPHE/WQCD may subsequently decide to elevate the violation to Tier 1. If a system is unable to make contact with the CDPHE/WQCD in the 24-hour period, the violation is automatically elevated to Tier 1.

6. Systems with treatment technique violations involving a *single* exceedance of a maximum turbidity limit under the Surface Water Treatment Rule (SWTR) or the Interim Enhanced Surface Water Treatment Rule (IESWTR) are required to initiate consultation with the CDPHE/WQCD within 24 hours after learning of the violation. Based on this consultation, the CDPHE/WQCD may subsequently decide to elevate the violation to Tier 1. If a system is unable to make contact with the CDPHE/WQCD in the 24-hour period, the violation is automatically elevated to Tier 1.

7. Most of the requirements of the Interim Enhanced Surface Water Treatment Rule (63 FR 69477) (§§141.170-141.171, 141.173-141.174) become effective January 1, 2002 for Subpart H systems (surface water systems and ground water systems under the direct influence of surface water) serving at least 10,000 persons. However, §141.172 has some requirements that become effective as soon as April 16, 1999. The Surface Water Treatment Rule remains in effect for systems serving at least 10,000 persons even after 2002; the Interim Enhanced Surface Water Treatment Rule adds additional requirements and does not in many cases supercede the SWTR.

Contaminant	MCL/MRDL/TT Violations[2]		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
B. Inorganic Chemicals (IOCs)				
1. Antimony	2	141.62(b)	3	141.23(a), (c)
2. Arsenic	2	141.62(b)[8]	3	141.23(a), (c)[9]
3. Asbestos (fibers >10 µm)	2	141.62(b)	3	141.23(a)-(b)
4. Barium	2	141.62(b)	3	141.23(a), (c)
5. Beryllium	2	141.62(b)	3	141.23(a), (c)
6. Cadmium	2	141.62(b)	3	141.23(a), (c)
7. Chromium (total)	2	141.62(b)	3	141.23(a), (c)
8. Cyanide	2	141.62(b)	3	141.23(a), (c)
9. Fluoride	2	141.62(b)	3	141.23(a), (c)
10. Mercury (inorganic)	2	141.62(b)	3	141.23(a), (c)
11. Nitrate	1	141.62(b)	1, 3[10]	141.23(a), (d) 141.23(f)(2)
12. Nitrite	1	141.62(b)	1, 3[8]	141.23(a), (e) 141.23(f)(2)
13. Total Nitrate and Nitrite	1	141.62(b)	3	141.23(a)
14. Selenium	2	141.62(b)	3	141.23(a), (c)
15. Thallium	2	141.62(b)	3	141.23(a), (c)
C. Lead and Copper Rule (Action Level for lead is 0.015 mg/L, for copper is 1.3 mg/L)				
1. Lead and Copper Rule (TT)	2	141.80-141.85	3	141.86-141.89
D. Synthetic Organic Chemicals (SOCs)				
1. 2,4-D	2	141.61(c)	3	141.24(h)
2. 2,4,5-TP (Silvex)	2	141.61(c)	3	141.24(h)
3. Alachlor	2	141.61(c)	3	141.24(h)
4. Atrazine	2	141.61(c)	3	141.24(h)
5. Benzo(a)pyrene (PAHs)	2	141.61(c)	3	141.24(h)
6. Carbofuran	2	141.61(c)	3	141.24(h)
7. Chlordane	2	141.61(c)	3	141.24(h)
8. Dalapon	2	141.61(c)	3	141.24(h)
9. Di (2-ethylhexyl) adipate	2	141.61(c)	3	141.24(h)
10. Di (2-ethylhexyl) phthalate	2	141.61(c)	3	141.24(h)
11. Dibromochloropropane	2	141.61(c)	3	141.24(h)
12. Dinoseb	2	141.61(c)	3	141.24(h)
13. Dioxin (2,3,7,8-TCDD)	2	141.61(c)	3	141.24(h)
14. Diquat	2	141.61(c)	3	141.24(h)

8. The arsenic MCL citations are effective January 23, 2006. Until then, the citations are §141.11(b) and §141.23(n).
9. The arsenic Tier 3 violation MCL citations are effective January 23, 2006. Until then, the citation is §141.23(a), (l).
10. Failure to take a confirmation sample within 24 hours for nitrate or nitrite after an initial sample exceeds the MCL is a Tier 1 violation. Other monitoring violations for nitrate are Tier 3.
10. Failure to take a confirmation sample within 24 hours for nitrate or nitrite after an initial sample exceeds the MCL is a Tier 1 violation. Other monitoring violations for nitrate are Tier 3.

Contaminant	MCL/MRDL/TT Violations[2]		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
15. Endothall	2	141.61(c)	3	141.24(h)
16. Endrin	2	141.61(c)	3	141.24(h)
17. Ethylene dibromide	2	141.61(c)	3	141.24(h)
18. Glyphosate	2	141.61(c)	3	141.24(h)
19. Heptachlor	2	141.61(c)	3	141.24(h)
20. Heptachlor epoxide	2	141.61(c)	3	141.24(h)
21. Hexachlorobenzene	2	141.61(c)	3	141.24(h)
22. Hexachlorocyclo-pentadiene	2	141.61(c)	3	141.24(h)
23. Lindane	2	141.61(c)	3	141.24(h)
24. Methoxychlor	2	141.61(c)	3	141.24(h)
25. Oxamyl (Vydate)	2	141.61(c)	3	141.24(h)
26. Pentachlorophenol	2	141.61(c)	3	141.24(h)
27. Picloram	2	141.61(c)	3	141.24(h)
28. Polychlorinated biphenyls (PCBs)	2	141.61(c)	3	141.24(h)
29. Simazine	2	141.61(c)	3	141.24(h)
30. Toxaphene	2	141.61(c)	3	141.24(h)
E. Volatile Organic Chemicals (VOCs)				
1. Benzene	2	141.61(a)	3	141.24(f)
2. Carbon tetrachloride	2	141.61(a)	3	141.24(f)
3. Chlorobenzene (monochlorobenzene)	2	141.61(a)	3	141.24(f)
4. *o*-Dichlorobenzene	2	141.61(a)	3	141.24(f)
5. *p*-Dichlorobenzene	2	141.61(a)	3	141.24(f)
6. 1,2-Dichloroethane	2	141.61(a)	3	141.24(f)
7. 1,1-Dichloroethylene	2	141.61(a)	3	141.24(f)
8. *cis*-1,2-Dichloroethylene	2	141.61(a)	3	141.24(f)
9. *trans*-1,2-Dichloroethylene	2	141.61(a)	3	141.24(f)
10. Dichloromethane	2	141.61(a)	3	141.24(f)
11. 1,2-Dichloropropane	2	141.61(a)	3	141.24(f)
12. Ethylbenzene	2	141.61(a)	3	141.24(f)
13. Styrene	2	141.61(a)	3	141.24(f)
14. Tetrachloroethylene	2	141.61(a)	3	141.24(f)
15. Toluene	2	141.61(a)	3	141.24(f)
16. 1,2,4-Trichlorobenzene	2	141.61(a)	3	141.24(f)
17. 1,1,1-Trichloroethane	2	141.61(a)	3	141.24(f)
18. 1,1,2-Trichloroethane	2	141.61(a)	3	141.24(f)
19. Trichloroethylene	2	141.61(a)	3	141.24(f)

Contaminant	MCL/MRDL/TT Violations[2]		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
3. Combined radium (226 & 228)	2	141.66(b)	3	141.25(a) 141.26(a)
4. Uranium	2 [9]	141.66(e)	3 [10]	141.25(a) 141.26(a)
G. <u>Disinfection Byproducts (DBPs), Byproduct Precursors, Disinfectant Residuals</u>. 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 sets standards for controlling the levels of disinfectants and DBPs in drinking water, including trihalomethanes (THMs) and haloacetic acids (HAAs).[11]				
1. Total trihalomethanes (TTHMs)	2	141.12,[12] 141.64(a)	3	141.30, 141.132(a)-(b)
2. Haloacetic Acids (HAA5)	2	141.64(a)	3	141.132(a)-(b)
3. Bromate	2	141.64(a)	3	141.132(a)-(b)
4. Chlorite	2	141.64(a)	3	141.132(a)-(b)
5. Chlorine (MRDL)	2	141.65(a)	3	141.132(a), (c)
6. Chloramine (MRDL)	2	141.65(a)	3	141.132(a), (c)
7. Chlorine dioxide (MRDL), where any 2 consecutive daily samples at entrance to distribution system only are above MRDL	2	141.65(a), 141.133(c)(3)	2[13], 3	141.132(a), (c) 141.133(c)(2)
8. Chlorine dioxide (MRDL), where sample(s) in distribution system the next day are also above MRDL	1[14]	141.65(a), 141.133(c)(3)	1	141.132(a), (c) 141.133(c)(2)
9. Control of DBP precursors--TOC (TT)	2	141.135(a)-(b)	3	141.132(a), (d)
10. Bench marking and disinfection profiling	N/A	N/A	3	141.172
11. Development of monitoring	N/A	N/A	3	141.132(f)

1[1]. The uranium MCL Tier 2 violation citations are effective December 8, 2003 for all community water systems.

1[2]. The uranium Tier 3 violation citations are effective December 8, 2000 for all community water systems.

1[3]. Subpart H community and non-transient non-community systems serving ≥10,000 must comply with new DBP MCLs, disinfectant MRDLs, and related monitoring requirements beginning January 1, 2002. All other community and non-transient non-community systems must meet the MCLs and MRDLs beginning January 1, 2004. Subpart H transient non-community systems serving 10,000 or more persons and using chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2002. Subpart H transient non-community systems serving fewer than 10,000 persons and using only ground water not under the direct influence of surface water and using chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2004.

1[4]. §141.12 will no longer apply after January 1, 2004.

1[5]. Failure to monitor for chlorine dioxide at the entrance to the distribution system the day after exceeding the MRDL at the entrance to the distribution system is a Tier 2 violation.

1[6]. If any daily sample taken at the entrance to the distribution system exceeds the MRDL for chlorine dioxide and one or more samples taken in the distribution system the next day exceed the MRDL, Tier 1 notification is required. Failure to take the required samples in the distribution system after the MRDL is exceeded at the entry point also triggers Tier 1 notification.

Contaminant	MCL/MRDL/TT Violations[2]		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
plan				
H. Other Treatment Techniques				
1. Acrylamide (TT)	2	141.111	N/A	N/A
2. Epichlorohydrin (TT)	2	141.111	N/A	N/A
II. Unregulated Contaminant Monitoring:[15]				
A. Unregulated contaminants	N/A	N/A	3	141.40
B. Nickel	N/A	N/A	3	141.23(c), (k)
III. Public Notification for Variances and Exemptions:				
A. Operation under a variance or exemption	3	1415, 1416,[16]	N/A	N/A
B. Violation of conditions of a variance or exemption	2	1415, 1416, 142.307[17]	N/A	N/A
IV. Other Situations Requiring Public Notification:				
A. Fluoride secondary maximum contaminant level (SMCL) exceedance	3	143.3	N/A	N/A
B. Exceedance of nitrate MCL for non-community systems, as allowed by CDPHE/WQCD	1	141.11(d)	N/A	N/A
C. Availability of unregulated contaminant monitoring data	3	141.40	N/A	N/A
D. Waterborne disease outbreak	1	141.2, 141.71(c)(2)(ii)	N/A	N/A
E. Other waterborne emergency[18]	1	N/A	N/A	N/A
F. Other situations as determined by primacy agency	1, 2, 3[19]	N/A	N/A	N/A

Appendix A Endnotes

1. MCL-Maximum contaminant level, MRDL – Maximum residual disinfectant level, TT-treatment technique.
2. Failure to test for fecal coliform or *E.coli* is a Tier 1 violation if testing is not done after any repeat sample tests positive for coliform. All other total coliform monitoring and testing procedure violations are Tier 3.
3. Systems that violate the turbidity MCL of 5 NTU based on an average of measurements over two consecutive days must initiate consultation with the CDPHE/WQCD within 24 hours after learning of the violation. Based on this consultation, the CDPHE/WQCD may subsequently decide to elevate the violation to Tier 1. If a system is unable to make contact with the CDPHE/WQCD in this 24 hour period, the violation is automatically elevated to Tier 1.

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17. Some water systems must monitor for certain unregulated contaminants listed in §141.40.

18. This citation refers to §§1415 and 1416 of the Safe Drinking Water Act. §§1415 and 1416 require that "a schedule prescribed for a public water system granted a variance [or exemption] shall require compliance by the system . . ."

19. In addition to §§1415 and 1416 of the Safe Drinking Water Act, 40 CFR 142.307 specifies the items and schedule milestones that must be included in a variance for small systems.

20. Other waterborne emergencies require a Tier 1 public notice under §141.202(a) for situations that do not meet the definition of a waterborne disease outbreak given in 40 CFR 141.2 but that still have the potential to have serious adverse effects on health as a result of short-term exposure. These could include outbreaks not related to treatment deficiencies, as well as situations that have the potential to cause outbreaks, such as failures or significant interruption in water treatment processes, natural disasters that disrupt the water supply or distribution system, chemical spills, or unexpected loading of possible pathogens into the source water.

21. CDPHE/WQCD may place other situations in any tier they believe appropriate, based on threat to public health.

4. Systems with treatment technique violations involving a single exceedance of a maximum turbidity limit under the Surface Water Treatment Rule (SWTR) or the Interim Enhanced Surface Water Treatment Rule (IESWTR) are required to initiate consultation with the CDPHE/WQCD within 24 hours after learning of the violation. Based on this consultation, the CDPHE/WQCD may subsequently decide to elevate the violation to Tier 1. If a system is unable to make contact with the CDPHE/WQCD in the 24 hour period, the violation is automatically elevated to Tier 1.
5. Most of the requirements of the Interim Enhanced Surface Water Treatment Rule (63 FR 69477) (§§141.170-141.171, 141.173-141.174) become effective January 1, 2002 for subpart H systems (surface water systems and ground water systems under the direct influence of surface water) serving at least 10,000 persons. However, §141.172 has some requirements that become effective as soon as April 16, 1999. The Surface Water Treatment Rule remains in effect for systems serving at least 10,000 persons even after 2002; the Interim Enhanced Surface Water Treatment Rule adds additional requirements and does not in many cases supercede the SWTR.
6. The Arsenic MCL citations are effective January 23, 2006. Until then, the citations are §141.11(b) and §141.23(n).
7. The Arsenic Tier 3 violation MCL citations are effective January 23, 2006. Until then the citations are §141.23(a), (1).
8. Failure to take a confirmation sample within 24 hours for nitrate or nitrite after an initial sample exceeds the MCL is a Tier 1 violation. Other monitoring violations for nitrate are Tier 3.
9. Failure to take a confirmation sample within 24 hours for nitrate after an initial sample exceeds the MCL is a Tier 1 violation. Other monitoring violations for nitrate are Tier 3.
10. Subpart H community and non-transient non-community systems serving $10,000 must comply with new DBP MCLs, disinfectant MRDLs, and related monitoring requirements beginning January 1, 2002. All other community and non-transient non-community systems must meet the MCLs and MRDLs beginning January 1, 2004. Subpart H transient non-community systems serving 10,000 or more persons and using chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2002. Subpart H transient community systems serving fewer than 10,000 persons and using only ground water not under the direct influence of surface water and using chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2004. §141.12 will no longer apply after January 1, 2004.
11. Failure to monitor for chlorine dioxide at the entrance to the distribution system the day after exceeding the MRDL at the entrance to the distribution system is a Tier 2 violation.
12. If any daily sample taken at the entrance to the distribution system exceeds the MRDL for chlorine dioxide and one or more samples taken in the distribution system the next day exceed the MRDL, Tier 1 notification is required. Failure to take the required samples in the distribution system after the MRDL is exceeded at the entry point also triggers Tier 1 notification.
13 Some water systems must monitor for certain unregulated contaminants listed in §141.40.
14. This citation refers to §§ 1415 and 1416 of the Safe Drinking Water Act. §§ 1415 and 1416 require that "a schedule prescribed for a public water system granted a variance [or exemption] shall require compliance by the system . . ."
15. In addition to §§ 1415 and 1416 of the Safe Drinking Water Act, 40 CFR 142.307 specifies the items and schedule milestones that must be included in a variance for small systems.
16. Other waterborne emergencies require a Tier 1 public notice under §141.202(a) for situations that do not meet the definition of a waterborne disease outbreak given in 40 CFR 141.2 but that still have the potential to have serious adverse effects on health as a result of short-term exposure. These could include outbreaks not related to treatment deficiencies, as well as situations that have the potential to 6 cause outbreaks, such as failures or significant interruption in water treatment processes, natural disasters that disrupt the water supply or distribution system, chemical spills, or unexpected loading of possible pathogens into the source water.
17. CDPHE/WQCD 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

Appendix B to Subpart Q of 40 CFR Part 141

Contaminant	MCLG[1] mg/L	MCL[2] mg/L	Standard Health Effects Language for Public Notification
National Primary Drinking Water Regulations (NPDWR):			
A. Microbiological Contaminants			
1a. Total coliform	Zero	See footnote[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/*E. coli*	Zero	Zero	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 short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly and people with severely compromised immune systems.
2a. Turbidity (MCL)[4]	None	1 NTU[5]/ 5 NTU	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.
2b. Turbidity (SWTR TT)[6]	None	TT [7]	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.
2c. Turbidity (IESWTR TT)[8]	None	TT	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of

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. There are various regulations that set turbidity standards for different types of systems, including 40 CFR 141.13, the 1989 Surface Water Treatment Rule, and the 1998 Interim Enhanced Surface Water Treatment Rule. The MCL for the monthly turbidity average is 1 NTU; the MCL for the 2-day average is 5 NTU for systems that are required to filter but have not yet installed filtration (40 CFR 141.13).
5. NTU - Nephelometric turbidity unit
6. There are various regulations that set turbidity standards for different types of systems, including 40 CFR 141.13, the 1989 Surface Water Treatment Rule (SWTR), and the 1998 Interim Enhanced Surface Water Treatment Rule (IESWTR). Systems subject to the Surface Water Treatment Rule (both filtered and unfiltered) may not exceed 5 NTU. In addition, in filtered systems, 95 percent of samples each month must not exceed 0.5 NTU in systems using conventional or direct filtration and must not exceed 1 NTU in systems using slow sand or diatomaceous earth filtration or other filtration technologies approved by the CDPHE/WQCD.
7. TT - Treatment technique

Contaminant	MCLG[1] mg/L	MCL[2] mg/L	Standard Health Effects Language for Public Notification
			disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
B. Surface Water Treatment Rule (SWTR) and Interim Enhanced Surface Water Treatment Rule (IESWTR)			
3. *Giardia lamblia* (SWTR/IESWTR) 4. Viruses (SWTR/IESWTR) 5. Heterotrophic plate count (HPC) bacteria[9] (SWTR/IESWTR) 6. Legionella (SWTR/IESWTR) 7. Cryptosporidium (IESWTR)	Zero	TT[10]	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.
C. Inorganic Chemicals (IOCs)			
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[11]	0	0.01	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[12]	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.
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

8. There are various regulations that set turbidity standards for different types of systems, including 40 CFR 141.13, the 1989 Surface Water Treatment Rule (SWTR), and the 1998 Interim Enhanced Surface Water Treatment Rule (IESWTR). For systems subject to the IESWTR (systems serving at least 10,000 people, using surface water or ground water under the direct influence of surface water), that use conventional filtration or direct filtration, after January 1, 2002, the turbidity level of a system's combined filter effluent may not exceed 0.3 NTU in at least 95 percent of monthly measurements, and the turbidity level of a system's combined filter effluent must not exceed 1 NTU at any time. Systems subject to the IESWTR using technologies other than conventional, direct, slow sand, or diatomaceous earth filtration must meet turbidity limits set by the CDPHE/WQCD.

9. The bacteria detected by heterotrophic plate count (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.

10. SWTR and IESWTR treatment technique violations that involve turbidity exceedances may use the health effects language for turbidity instead.

11. These arsenic values are effective January 23, 2006. Until then, the MCL is 0.05 mg/l and there is no MCLG.

12. Millions of fibers per liter

Contaminant	MCLG[1] mg/L	MCL[2] mg/L	Standard Health Effects Language for Public Notification
			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. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth, before they erupt from the gums.
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. Total Nitrate and 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.
D. Lead and Copper Rule			
23. Lead	Zero	TT[13]	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

[13]. Action Level = 0.015 mg/L

Contaminant	MCLG[1] mg/L	MCL[2] mg/L	Standard Health Effects Language for Public Notification
			slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
24. Copper	1.3	TT[14]	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.
E. Synthetic Organic Chemicals (SOCs)			
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, or experience anemia, and 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 and 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) dipate	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

[14]. Action Level = 1.3 mg/L

Contaminant	MCLG[1] mg/L	MCL[2] mg/L	Standard Health Effects Language for Public Notification
			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.
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. Hexachlorocyclo-pentadiene	0.05	0.05	Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL

Contaminant	MCLG[1] mg/L	MCL[2] mg/L	Standard Health Effects Language for Public Notification
			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.
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.
F. Volatile Organic Chemicals (VOCs)			
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.

Contaminant	MCLG[1] mg/L	MCL[2] mg/L	Standard Health Effects Language for Public Notification
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.
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

Contaminant	MCLG[1] mg/L	MCL[2] mg/L	Standard Health Effects Language for Public Notification
			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.
G. Radioactive Contaminants			
76. Beta/photon emitters	Zero	4 mrem/yr[15]	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.
77. Alpha emitters (Gross alpha)	Zero	15 pCi/L[16]	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.
79. Uranium[17]	zero	30 µg/l	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

H. 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 sets standards for controlling the levels of disinfectants and DBPs in drinking water, including trihalomethanes (THMs) and haloacetic acids (HAAs).[18]

[15]. Millirems per year

[16]. Picocuries per liter

[17]. The uranium MCL is effective December 8, 2003 for all community water systems.

[18]. 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 ³10,000 must comply with DBP MCLs and disinfectant maximum residual disinfectant levels (MRDLs) beginning January 1, 2002. All other community and non-transient noncommunity systems must meet the MCLs and MRDLs beginning January 1, 2004. Subpart H transient non-community systems serving 10,000 or more persons and using chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2002. Subpart H transient non-community systems serving fewer than 10,000 persons and systems using only ground water not under the direct influence of surface water and using chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2004.

Contaminant	MCLG[1] mg/L	MCL[2] mg/L	Standard Health Effects Language for Public Notification
80. Total trihalomethanes (TTHMs)	N/A	0.10/ 0.080[19,20]	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.
81. Haloacetic Acids (HAA)	N/A	0.060[21]	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
82. 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 getting cancer.
83. 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 women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.
84. Chlorine	4 (MRDLG)[22]	4.0 (MRDL)[23]	Some people who use 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.
85. Chloramines	4 (MRDLG)	4.0 (MRDL)	Some people who use 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.
86a. Chlorine dioxide, where any 2 consecutive daily samples taken at the entrance to the distribution system are above the MRDL	0.8 (MRDLG)	0.8 (MRDL)	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 women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia. *Add for public notification only*: 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.

19. The MCL of 0.10 mg/l for TTHMs is in effect until January 1, 2002 for Subpart H community water systems serving 10,000 or more. This MCL is in effect until January 1, 2004 for community water systems with a population of 10,000 or more using only ground water not under the direct influence of surface water. After these deadlines, the MCL will be 0.080 mg/l. On January 1, 2004, all systems serving less than 10,000 will have to comply with the new MCL as well.

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

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

22. MRDLG -Maximum residual disinfectant level goal

23. MRDL -Maximum residual disinfectant level

Contaminant	MCLG[1] mg/L	MCL[2] mg/L	Standard Health Effects Language for Public Notification
86b. Chlorine dioxide, where one or more distribution system samples are above the MRDL	0.8 (MRDLG)	0.8 (MRDL)	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 women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia. *Add for public notification only*: 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.
87. Control of DBP precursors (TOC)	None	TT	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
I. Other Treatment Techniques			
88. Acrylamide	Zero	TT	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.
89. Epichlorohydrin	Zero	TT	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.

Appendix B Endnotes

Revision History

Date	Action	FEDERAL REGISTER Citation
24 August 2000	Created tables	65 FR 26024 (4 May 2000) as amended by 65 FR 40520 (30 June 2000)
30 January 2001	1) revised entries for beta/photon, alpha emitters, and combined radium, and added entry for uranium	65 FR 76750 (7 December 2000)
	2) revised entry for arsenic	66 FR 7065 (22 January 2001)

Appendix C: Public Notification Certificate of Delivery Form

The Public Notification Rule requires a Public Water System, within 10 days of completing the Public Notification requirements for the initial Public Notification and any repeat Public Notifications, to submit to the CDPHE/WQCD a certification stating that the water system has fully complied with the Public Notifications regulations.

A Public Water System must include with the certification a representative copy of each type of notice distributed, published, posted, and made available to the persons served by the system and to the media (e.g., newspaper article, press release to TV/radio, mail notices). When systems certify, they are also stating that future requirements for notifying new billing units of the violation or situation will be met.

Please submit the Certification Form to:

CDPHE-WQCD
ATTN: Public Notification Rule Specialist
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Drinking Water Public Notification
Certificate of Delivery Form

PWS NAME: _____

PWSID#: CO0_____

For [*insert violation type*], which occurred on [*insert date*].

The Public Water System indicated above hereby affirms that Public Notification has been provided to consumers in accordance with the delivery, content, and format requirements of this regulation.

Consultation with CDPHE/WQCD [*insert appropriate Rule*] Rule Manager: [*insert Rule Manager's name*], on [*insert date*].

Public Notification distributed by: [*insert method of distribution*] on [*insert date of distribution*].

Signature of owner or legal contact: _____

Date: _____

Phone number: _____

Mailing Address: _____

Appendix D – Foreign Language Translations for Boil Water Requirements

The following page contains a table with translations for acute microbiological contaminant violations language.

The languages with translations are:

1. Spanish
2. French
3. Chinese
4. Korean
5. Vietnamese

Language	Translated Phrases			
English	**"This report contains very important information about your drinking water. Translate it, or speak with someone who understands it."**	**"Boil your water before using"**	**"Don't drink the water"**	**"For parents of infants under six months old, don't use the water for infant formula."**
Spanish	Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.	Hiervan el agua antes de usarla.	No tome el agua.	Padres de familia con bebes de seis meses de edad y menores, no usen el agua para preparar alimentos para bebes.
French	Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quequ'un qui le comprend bien.	Faites premièrement bouillir l'eau avant de l'utiliser.	Ne buvez pas l'eau.	Pour les parents d'enfants agés de moins de six mois, n'utilisez pas l'eau pour reconstituer le lait en poudre pour bébé.
Chinese	此報告包含有關食水之重要訊息。如有不明之處，請向有關人士查詢。	飲用前請先煮沸水。	請勿喝此水。	各位父母：請勿用此水沖調奶粉給六個月或以下之嬰兒飲用。
Korean	에 대한 이 보고는 식수 입니다. 중요한 정보 번역하거나 이것을 번 을 이해 할 수 있는 사람과 이 글을 는 하십시오. 의	이 물을 사용하기 전에 끓여서 쓰십시오.	이 물을 마시면 안됩니다.	월 미만 자녀의 부모 : 67 아의 우유 준비에 이 물을 사용하유 지 마십시오.
Vietnamese	Bản tuồng trình này hướng dẫn nhủng hiểu biết quan trọng liến quan dến nước dùng dễ uống của các bạn. Xin các bạn hảy dịch bản tuồng trình này ra tiếng Việt, hay nói vối người nào hiểu biết bản tuồng trình này.	Phải dun sôi nước truờc khi uống.	Không nên uống nước lấ bất cứ từ nguồn nước não.	Cha mẹ không dược dũng nước lấ dể pha sữa cho các trẻ em sáu tháng tuổi hay nhỏ hơn.