Tier 1 Public Notification Templates



**DISTRIBUTE WITHIN 24 HOURS**

KENTUCKY DIVISION OF WATER CONTACTS:

**Emergency Line:** 1-800-928-2380 **or** 502-564-2380

**General Line:** 502-564-3410

**Email:** DrinkingWaterCompliance@ky.gov

Tier 1 Notices

Tier 1 notices must be issued for the following violations or situations:

* **Total coliform MCL violations where fecal coliform or *E. coli*** are present, or failure to test for fecal coliform or *E. coli* when any repeat sample tests positive for coliform (sometimes referred to as an acute violation of the Total Coliform Rule).
* **Nitrate, nitrite, or total nitrate and nitrite MCL** violations, or failure to take a confirmation sample for nitrate or nitrite within 24 hours after learning that an initial sample exceeded the MCL.
* Exceedance of the **nitrate MCL by non-community water systems** that have been granted permission by the Kentucky Division of Water (DOW) to continue to exceed the MCL of 10 mg/L, although they must not exceed 20 mg/L.
* **Chlorine dioxide MRDL** violations when one or more of the samples **taken in the distribution system** exceeded the MRDL on the day after a chlorine dioxide measurement taken at the entrance to the distribution system exceeded the MRDL, or when required samples are not taken in the distribution system.
* **Turbidity**, *if elevated to Tier 1 by DOW*
* **Treatment technique violations** resulting from a single exceedance of turbidity limits, *if elevated to Tier 1 by DOW*, or if consultation does not occur within 24 hours of the violation
* The occurrence of a **waterborne disease outbreak or other waterborne emergency** such as a treatment failure, chemical spill or overfeed, sewage spill, or natural disaster.
* Detection of ***E. coli,* enterococci, or coliphage** in a ground water source sample.
* **Other violations or situations** which could cause serious health effects, **as determined by DOW**.
* Exceedance of the **Action Level** for lead as specified in § 141.80(c).

# GENERAL INSTRUCTIONS FOR ALL TIER 1 PUBLIC NOTIFICATIONS

## DISTRIBUTION

A water system must use one or more of the following primary methods to deliver the notice to **all consumers** served: [40 CFR 141.202(c)]

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

Additional methods may be used as a secondary method of distribution (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), to provide notice in a manner reasonably calculated to reach all persons served within 24 hours.

## MANDATORY LANGUAGE

**Mandatory language on health effects (**[**from Appendix B to Subpart Q**](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-141#Appendix-B-to-Subpart-Q-of-Part-141) **of the SDWA) must be included as written (with blanks filled in). These are in italics within each notice template.**

The following language must be included in all notices, where applicable [40 CFR 141.205(d)]. 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 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.*

## ALTERNATIVE SOURCES OF WATER

If you are selling or providing bottled water, your notice 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 US Food and Drug Administration (FDA) and/or state bottled water safety standards.

## REPEAT NOTICES

If this is a repeat notice (as required by DOW), 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 our system’s failure to take a confirmation sample following high nitrate level on CLICK TO ADD DATE. Since that time we have taken a confirmation sample on CLICK TO ADD DATE that also resulted in a high nitrate level. We are currently monitoring the nitrate concentration PROVIDE SAMPLING TIME FRAME I.E. EVERY 3 MONTHS. Seasonal fluctuations in nitrate concentrations have been observed, due to nitrates contained in fertilizer. It appears that high nitrates occur during the later summer and fall. Note that prior to PROVIDE YEAR we were meeting drinking water standards for nitrate.

## CORRECTIVE ACTIONS

In your notice, describe corrective actions you took, or are taking, along with an estimated time of returning to compliance.

## AFTER ISSUING THE NOTICE

**A complete Public Notice Package will contain:**

* A completed and signed [Public Notice Certification](https://eec.ky.gov/Environmental-Protection/Water/Drinking/DWProfessionals/ComplianceDocuments/PN%20Certification%201.1.pdf)
* A copy of the public notice that was directly delivered to consumers
* A description of Good Faith Efforts used to distribute the PN to all affected customers, including a list of secondary delivery methods as needed
* A list of locations of public postings, if that method is used

Send a complete Public Notice Package to Kentucky Division of Water **within ten (10) days** after you issue the notice [40 CFR 141.31(d)]. The Public Notice Package can be submitted electronically on the [KOG eForm website](https://dep.gateway.ky.gov/eForms/Account/Home.aspx) using eForm 169 (Drinking Water Information and Data Submittal form) or emailed to DrinkingWaterCompliance@ky.gov.

You should notify health professionals in the area of the violation. People 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.

It is also a good idea to issue a “problem corrected” notice when the violation is resolved. See **Template 1-6.**

**See** [**References and Definitions**](#_References_and_Definitions) **for further clarification on acronyms and references within the templates.**

# Templates

The pages that follow contain templates for **Tier 1 violations or situations**. Along with each template are brief instructions on the required method of delivery and how to utilize the template.

To navigate to a template press CTRL and click on the name below:

[TEMPLATE 1-1 - Instructions for Nitrate MCL Exceedance Notice](#_TEMPLATE_1-1_-)

[TEMPLATE 1-1A - Instructions for Spanish Nitrate MCL Exceedance Notice](#_TEMPLATE_1-1A_-)

[TEMPLATE 1-2 - Instructions for Nitrate Failure to Take a Confirmation Sample Notice](#_TEMPLATE_1-2_-)

[TEMPLATE 1-3 - Instructions for Non-community PWSs Allowed Up to 20 mg/L Nitrate Notice](#_TEMPLATE_1-3_-)

[TEMPLATE 1-4 - Instructions for E. coli Notice](#_TEMPLATE_1-4_-)

[TEMPLATE 1-4A - Instructions for Spanish E. coli Notice](#_TEMPLATE_1-4A_)

[TEMPLATE 1-5 - Instructions for Waterborne Disease Outbreak Notice](#_TEMPLATE_1-5_-)

[TEMPLATE 1-6 - Instructions for “Problem Corrected” Notice](#_TEMPLATE_1-6_-)

[TEMPLATE 1-7 - Instructions for IESWTR or LT1ESWTR CFE Maximum Turbidity Exceedance, or Turbidity Single Exceedance as Tier 1 Notice](#_TEMPLATE_1-7_-)

[TEMPLATE 1-8 - Instructions for Stage 1 DBPR Chlorine Dioxide MRDL (Tier 1) Notice](#_TEMPLATE_1-8_-)

[TEMPLATE 1-9 - Instructions for GWR Fecal Indicator-Positive Source Sample Notice](#_Instructions_for_GWR_1)

[TEMPLATE 1-10 - Instructions for Lead Action Level Exceedance](#_TEMPLATE_1-10_-)

# TEMPLATE 1-1 - Instructions for Nitrate MCL Exceedance Notice

TEMPLATE ON NEXT PAGE

Since exceeding the nitrate maximum contaminant level is a Tier 1 violation, you must provide public notice to persons served as soon as practical but no more than 24 hours from learning of the violation [40 CFR 141.202(b)]. During this time period you **must** also contact DOW. You should also coordinate with your local health department. **This template is also applicable to nitrite and total nitrate and nitrite violations just be sure to adjust language accordingly.**

The following notice provides suggested public notice content and format and is appropriate for hand delivery or for publication in a newspaper. Click on the red text to modify it for your water system/scenario. If you wish to modify it before using it for a radio or TV broadcast, you must still include all required PN elements from 40 CFR 141.205(a) and leave the mandatory language unchanged (see below).

**Additional information regarding delivery, mandatory language, corrective actions, and after issuing the notices can be found** [**here.**](#_General_Instructions_for)

**INSERT WATER SYSTEM NAME**’**water has high levels of nitrate**

DRINKING WATER WARNING

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

On CLICK TO ENTER DATE, we received notice that the sample collected on CLICK TO ENTER DATE showed nitrate levels of LEVEL DETECTED + 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.

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.

WHAT SHOULD you DO? WHAT DOES THIS MEAN?

* **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 cannot 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 IS BEING DONE?

DESCRIBE CORRECTIVE ACTIONS AND WHEN THE SYSTEM EXPECTS TO RETURN TO COMPLIANCE

For more information, please contact NAME OF WATER SYSTEM CONTACT at PHONE NUMBER or MAILING/EMAIL ADDRESS.

*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 NAME OF WATER SYSTEM. KY Water System ID#: KY PWSID. Date distributed: CLICK TO ADD DATE.

# TEMPLATE 1-1A - Instructions for Spanish Nitrate MCL Exceedance Notice

 TEMPLATE ON NEXT PAGE

The following template is a **Spanish translation** of Template 1-1 for nitrate. All the instructions of Template 1-1 apply. This template is an exact translation of the English template, so if you need to modify the English templates, you should modify this template accordingly. Schools or universities may be able to provide low cost translations. See [Chapter 4](https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1006ROA.txt) of EPA’s Revised Public Notification Handbook for suggestions on creating effective multilingual notices.

**Additional information regarding delivery, mandatory language, corrective actions, and after issuing the notices can be found** [**here.**](#_General_Instructions_for)

**Agua del sistema INSERT WATER SYSTEM NAME tiene altos niveles de nitratos**

AVISO SOBRE SU AGUA POTABLE

NO DAR DE BEBER ESTA AGUA A BEBES MENORES DE 6 MESES DE EDAD NI USARLA PARA HACER LECHE DE FORMULA

Recibimos un aviso el CLICK TO ENTER DATE que la muestra tomada el CLICK TO ENTER DATE SAMPLE WAS TAKEN demuestra una concentracion de nitrato de LEVEL DETECTED + UNITS. Este nivel está por encima de la norma, o nivel máximo de contaminación (NMC) de 10 mg/L. Nitratos en agua potable puede generar serios problemas de salud para bebés menores de seis (6) meses de edad.

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.

¿QUÉ DEBO HACER? ¿QUÉ ES LA SIGNIFICA DE ESTE?

* **NO LE DE ESTA AGUA A BEBES.** ***Bebés 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 bebés 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 bebés 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 SE ESTÁ HACIÉNDO AL RESPECTO?

DESCRIBE CORRECTIVE ACTIONS AND WHEN THE SYSTEM EXPECTS TO RETURN TO COMPLIANCE IN SPANISH

Para mayor información, favor contactar a NAME OF WATER SYSTEM CONTACT al teléfono PHONE NUMBER o escribiendo a MAILING/EMAIL 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 WATER SYSTEM NAME. KY Numero de Identificación : KY PWSID #. Fecha de distribución:CLICK TO ADD DATE OF DISTRIBUTION.

# TEMPLATE 1-2 - Instructions for Nitrate Failure to Take a Confirmation Sample Notice

TEMPLATE ON NEXT PAGE

Since failure to take a confirmation sample for nitrate within 24 hours after learning that an initial sample exceeded the MCL is a Tier 1 violation, you must provide public notice to persons served as soon as practical but no more than 24 hours from learning of the violation [40 CFR 141.202(b)]. During this time period you **must** also contact DOW. You should also coordinate with your local health department. This template is also applicable to nitrite and total nitrate and nitrite violations.

The following notice provides suggested public notice content and format and is appropriate for hand delivery or for publication in a newspaper. Click on the red text to modify it for your water system/scenario. If you wish to modify it before using it for a radio or TV broadcast, you must still include all required PN elements from 40 CFR 141.205(a) and leave the mandatory language unchanged (see below).

**Additional information regarding delivery, mandatory language, corrective actions, and after issuing the notices can be found** [**here.**](#_General_Instructions_for)

**INSERT WATER SYSTEM NAME** **did not take a confirmation sample to determine if the water has high levels of nitrate**

DRINKING WATER WARNING

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

*We are required to monitor your drinking water for nitrate 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* CHOOSE AN ITEM FROM LIST *for nitrate and therefore cannot be sure of the quality of your drinking water during that time.*

On CLICK TO ADD DATE, we received notice that the sample collected on CLICK TO ADD DATE showed nitrate levels above the nitrate standard, or maximum contaminant level (MCL), of 10 mg/L. We were required to take a confirmation sample within 24 hours. We did not complete the required confirmation sample monitoring. Nitrate in drinking water is a serious health concern for infants less than six months old.

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.

WHAT SHOULD YOU DO? WHAT DOES THIS MEAN?

* **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 IS BEING DONE?

DESCRIBE THE CORRECTIVE ACTIONS AND WHEN THE SYSTEM EXPECTS TO RETURN TO COMPLIANCEAfter receiving the results of our first sample, we failed to collect a second sample within 24 hours to confirm the results of the first sample. We have since collected the second sample and are waiting for the results.

For more information, please contact NAME OF WATER SYSTEM CONTACT at PHONE NUMBER or MAILING/EMAIL ADDRESS.

*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 NAME OF WATER SYSTEM. KY Water System ID#: KY PWSID #. Date distributed:CLICK TO ADD DATE.

# TEMPLATE 1-3 - Instructions for Non-community PWSs Allowed Up to 20 mg/L Nitrate Notice

 Template on Next Page

Non-community water systems that have received approval by DOW to exceed the nitrate maximum contaminant level of 10 mg/L but no more than 20 mg/L are required to provide Tier 1 notification. **You do not incur a violation but are still required to provide public notice to persons served as soon as practical but no more than 24 hours from learning of the situation** [40 CFR 141.202(b)].

The following notice provides suggested public notice content and format and is appropriate for hand delivery or for publication in a newspaper. Click on the red text to modify it for your water system/scenario. If you wish to modify it before using it for a radio or TV broadcast, you must still include all required PN elements from 40 CFR 141.205(a) and leave the mandatory language unchanged (see below).

**As long as nitrate levels exceed 10 mg/L, continuous posting of this notice is a requirement [40 CFR 141.209(b)].**

**Additional information regarding delivery, mandatory language, corrective actions, and after issuing the notices can be found** [**here.**](#_General_Instructions_for)

**INSERT NAME OF WATER SYSTEM**’**water has high levels of nitrate**

DRINKING WATER WARNING

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

Water sample results show nitrate levels of LEVEL DETECTED + 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.

We have been given permission by Kentucky Division of Water to provide water in excess of the standard as long as:

* Nitrate levels do not exceed 20 mg/L.
* The water is not made available to children under six (6) months of age.
* We continuously post this notice meeting all public notice requirements.
* Local and state health officers are notified annually.
* No adverse health effects result.

WHAT SHOULD YOU DO? WHAT DOES THIS MEAN?

* **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.

For more information, please contact NAME OF WATER SYSTEM CONTACT at PHONE NUMBER or MAILING/EMAIL ADDRESS.

*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 NAME OF WATER SYSTEM. KY Water System ID#: KY PWSID #. Date distributed: CLICK TO ADD DATE.

# TEMPLATE 1-4 - Instructions for *E. coli* Notice

 TEMPLATE ON NEXT PAGE

Since exceeding the *E. coli* maximum contaminant level is a Tier 1 violation, you must provide public notice to persons served as soon as practical but no more than 24 hours from learning of the violation [40 CFR 141.202(b)]. During this time, you **must** also contact DOW. You should also coordinate with your local health department. **You may also have to modify the template if you also have high nitrate levels or other coliform MCL violations**.

The following notice provides suggested public notice content and format and is appropriate for hand delivery or for publication in a newspaper. **Click on the** red text **to modify it for your water system/scenario.** If you wish to modify it before using it for a radio or TV broadcast, you must still include all required PN elements from 40 CFR 141.205(a) and leave the mandatory language unchanged (see below).

**Additional information regarding delivery, mandatory language, corrective actions, and after issuing the notices can be found** [**here.**](#_General_Instructions_for)

***E. coli* present in the INSERT NAME OF WATER SYSTEM’s water**

DRINKING WATER WARNING

BOIL YOUR WATER BEFORE USING

*E. coli* bacteria was found in the water supply on CLICK TO ADD DATE. These bacteria can make you sick, and are a particular concern for people with weakened immune systems.

Bacterial contamination can occur when increased run-off enters the drinking water source (for example, following heavy rains). It can also happen due to a break in the distribution system (pipes) or a failure in the water treatment process.

WHAT SHOULD YOU DO? WHAT DOES THIS MEAN?

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

WHAT IS BEING DONE?

DESCRIBE CORRECTIVE ACTIONS We will inform you when tests show no bacteria and you no longer need to boil your water. We anticipate resolving the problem within PROVIDE ESTIMATED TIME FRAME TO RETURN TO COMPLIANCE.

For more information, please contact NAME OF WATER SYSTEM CONTACT at PHONE NUMBER or MAILING/EMAIL 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 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 NAME OF WATER SYSTEM. KY Water System ID#: KY PWSID #. Date distributed: CLICK TO ADD DATE.

# TEMPLATE 1-4A - Instructions for Spanish *E. coli* Notice

TEMPLATE ON NEXT PAGE

The following template is a Spanish translation of Template 1-4 for *E. coli*. All the instructions of Template 1-4 apply. This template is an exact translation of the English template, so if you need to modify the English templates, you should modify this template accordingly. Schools or universities may be able to provide low cost translations. See [Chapter 4](https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1006ROA.txt) of EPA’s Revised Public Notification Handbook for suggestions on creating effective multilingual notices.

**Additional information regarding delivery, mandatory language, corrective actions, and after issuing the notices can be found** [**here.**](#_General_Instructions_for)

***E. coli* presente en el Agua del Sistema INSERT NAME OF WATER SYSTEM**

AVISO SOBRE SU AGUA POTABLE

HIERVAN EL AGUA ANTES DE USARLA

*E. coli* fueron encontradas en su servicio de agua el dia CLICK TO ADD DATE. Estas bacterias pueden enfermarle, y son especialmente peligrosas para personas con las defensas bajas o sistemas imunológicos débiles.

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.

¿QUÉ DEBO HACER? ¿QUÉ ES LA SIGNIFICA DE ESTE?

* **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.
* *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 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 SE ESTÁ HACIÉNDO AL RESPECTO?

DESCRIBE THE CORRECTIVE ACTIONS 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 CLICK TO ADD EXPECTED DATE OF RESOLUTION.

Para mayor información, favor contactar a NAME OF WATER SYSTEM CONTACT al teléfono PHONE NUMBER o escribiendo a MAILING/EMAIL 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 NAME OF WATER SYSTEM. KY Numero de Identificación : KY PWSID #. Fecha de distribución: CLICK TO ADD DATE.

# TEMPLATE 1-5 - Instructions for Waterborne Disease Outbreak Notice

TEMPLATE ON NEXT PAGE

Since a waterborne disease outbreak is a Tier 1 situation, you must provide public notice to persons served as soon as practical but no more than 24 hours from learning of the situation [40 CFR 141.202(b)]. You must also contact DOW during this time. You should coordinate with your local health department as well. **You must also issue a public notice 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 DOW for more direction. *More information on waterborne disease outbreaks and emergencies is available from the Centers for Disease Control and Prevention* [*here*](https://www.cdc.gov/healthywater/emergency/pdf/waterborne-disease-outbreak-toolkit-h.pdf)*, or call 1-800-232-4636.*

The following notice provides suggested public notice content and format and is appropriate for hand delivery or for publication in a newspaper. **Click on the** red text **to modify it for your water system/scenario.** If you wish to modify it before using it for a radio or TV broadcast, you must still include all required PN elements from 40 CFR 141.205(a) and leave the mandatory language unchanged (see below).

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

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

**DESCRIBING THE OUTBREAK**

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.

**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.

**Additional information regarding delivery, mandatory language, corrective actions, and after issuing the notices can be found** [**here.**](#_General_Instructions_for)

**Disease-causing organisms have entered INSERT NAME OF WATER SYSTEM** **water supply.**

DRINKING WATER WARNING

BOIL YOUR WATER BEFORE USING

These organisms are causing illness in people served by NAME OF WATER SYSTEM. We learned of a waterborne disease outbreak from AGENCY NAME on CLICK TO ADD DATE.

WHAT SHOULD YOU DO? WHAT DOES THIS MEAN?

* **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 WATER BOURNE DISEASE If you experience one or more of these symptoms and they persist, contact your doctor.
* If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about this drinking water.

WHAT IS BEING DONE?

DESCRIBE THE CORRECTIVE ACTIONS 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 WATER SYSTEM CONTACT at PHONE NUMBER or MAILING/EMAIL 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 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 NAME OF WATER SYSTEM. KY Water System ID#: KY PWSID #. Date distributed: CLICK TO ADD DATE.

# TEMPLATE 1-6 - Instructions for “Problem Corrected” Notice

TEMPLATE ON NEXT PAGE

It is a good idea to issue a notice when a serious violation or situation has been resolved. Although EPA regulations do not require such notices, DOW may require you to issue one. You should coordinate with your local health department as well. Below are some recommended methods for a “problem corrected” notice.

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

**Additional information regarding delivery, mandatory language, corrective actions, and after issuing the notices can be found** [**here.**](#_General_Instructions_for)

Customers of **NAME OF WATER SYSTEM** were notified on **CLICK TO ADD DATE** of a problem with our drinking water and were advised to **DESCRIBE THE RECOMMENDED ACTIONS**.. We are pleased to report that the problem has been corrected and that it is no longer necessary to **DESCRIBE THE RECOMMENDED ACTIONS**. We apologize for any inconvenience and thank you for your patience.

DRINKING WATER PROBLEM CORRECTED

**PROVIDE FURTHER DETAILS, IF NECESSARY**

For more information, please contact NAME OF WATER SYSTEM CONTACT at PHONE NUMBER or MAILING/EMAIL ADDRESS.

*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 NAME OF WATER SYSTEM. KY Water System ID#: KY PWSID #. Date distributed: CLICK TO ADD DATE

# TEMPLATE 1-7 - Instructions for IESWTR or LT1ESWTR CFE Maximum Turbidity Exceedance, or Turbidity Single Exceedance as Tier 1 Notice

Template on Next Page

If DOW has designated this turbidity single exceedance as a Tier 1 violation [40 CFR 141.202(a)], you must provide public notice to persons served within 24 hours after it has been designated Tier 1 [40 CFR 141.202(b)]. Turbidity violations are Tier 2 by default, but may frequently be elevated to Tier 1 by DOW. In addition, violations are automatically elevated if you are unable to consult DOW within 24 hours. **In such cases, you must issue a notice within the next 24 hours.** You may elevate the violation to Tier 1 yourself as well. You should also coordinate with your local health department. One or both agencies should tell you whether to instruct consumers to boil water.

The following notice provides suggested public notice content and format and is appropriate for hand delivery or for publication in a newspaper. **Click on the** red text **to modify it for your water system/scenario.** If you wish to modify it before using it for a radio or TV broadcast, you must still include all required PN elements from 40 CFR 141.205(a) and leave the mandatory language unchanged (see below).

SOURCE OF THE PROBLEM

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

**Additional information regarding delivery, mandatory language, corrective actions, and after issuing the notices can be found** [**here.**](#_General_Instructions_for)

**INSERT NAME OF WATER SYSTEM has high turbidity levels**

DRINKING WATER WARNING

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 CLICK TO ADD DATE showed turbidity levels of LEVEL DETECTED turbidity units. This is above the standard of STANDARD LEVEL 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? What does this mean?

* **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.
* *Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.*
* The symptoms above 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 from their health care providers about drinking this water.

What is being done?

DESCRIBE CORRECTIVE ACTIONS 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. We anticipate resolving the problem within ESTIMATED TIME FRAME.

For more information, please contact NAME OF WATER SYSTEM CONTACT at PHONE NUMBER or MAILING/EMAIL 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 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 NAME OF WATER SYSTEM. KY Water System ID#: KY PWSID #. Date distributed: CLICK TO ADD DATE

# TEMPLATE 1-8 - Instructions for Stage 1 DBPR Chlorine Dioxide MRDL (Tier 1) Notice

Template on Next Page

If a system exceeds the chlorine dioxide MRDL when one or more of the samples taken in the distribution system on the day after exceeding the MRDL at the entrance to the distribution system or if a system does not take required samples in the distribution system, Tier 1 notification is required. You **must** provide public notice to persons served as soon as practical but no more than 24 hours from learning of the violation [40 CFR 141.202(b)]. (Exceeding the chlorine dioxide MRDL at the entry point to the distribution system only, requires Tier 2 notification; modify this template or Template 2-3 to create a Tier 2 notice.) You **must** also contact DOW within 24 hours of learning of the violation or situation. You should also coordinate with your local health department.

The following notice provides suggested public notice content and format and is appropriate for hand delivery or for publication in a newspaper. **Click on the** red text **to modify it for your water system/scenario.** If you wish to modify it before using it for a radio or TV broadcast, you must still include all required PN elements from 40 CFR 141.205(a) and leave the mandatory language unchanged (see below).

Population at Risk

The language on the template 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 the water is safe to drink. If your consumers have questions, encourage them to err on the side of caution.

**Additional information regarding delivery, mandatory language, corrective actions, and after issuing the notices can be found** [**here.**](#_General_Instructions_for)

PREGNANT WOMEN AND YOUNG CHILDREN SHOULD NOT DRINK THE WATER

DRINKING WATER WARNING

On CLICK TO ADD DATE, we received notice that the sample collected on CLICK TO ADD DATE showed chlorine dioxide levels of LEVEL DETECTED AND UNITS. This is above the standard, or maximum residual disinfectant level (MRDL) of 0.8 mg/L. 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.

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.

What should I do? What does this mean?

* **DO NOT USE THIS WATER IF YOU ARE PREGNANT OR GIVE IT TO YOUNG CHILDREN.** Bottled water should be used until further notice. \*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 is being done?

DESCRIBE CORRECTIVE ACTIONS AND EXPECTED DATE OF RETURN TO COMPLIANCE

For more information, please contact NAME OF WATER SYSTEM CONTACT at PHONE NUMBER or MAILING/EMAIL ADDRESS.

*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 NAME OF WATER SYSTEM. KY Water System ID#: KY PWSID#. Date distributed: CLICK TO ADD DATE

# TEMPLATE 1-9 - Instructions for GWR Fecal Indicator-Positive Source Sample Notice

 Template on Next Page

Since detection of a fecal indicator (*E. coli*, enterococci or coliphage) in a ground water source sample is a situation requiring Tier 1 notice, you must provide public notice to persons served as soon as practical but no more than 24 hours from learning of the violation [40 CFR 141.202(b)]. During this time, you must also contact DOW. You should also coordinate with your local health department.

The following notice provides suggested public notice content and format and is appropriate for hand delivery or for publication in a newspaper. **Click on the** red text **to modify it for your water system/scenario.** If you wish to modify it before using it for a radio or TV broadcast, you must still include all required PN elements from 40 CFR 141.205(a) and leave the mandatory language unchanged (see below).

**Additional information regarding delivery, mandatory language, corrective actions, and after issuing the notices can be found** [**here.**](#_General_Instructions_for)

**INSERT WATER SYSTEM NAME’s WATER SOURCE** **Tested Positive for Fecal Indicator**

DRINKING WATER WARNING

BOIL YOUR WATER BEFORE USING

Our water system recently detected a fecal indicator PROVIDE NAME OF CONTAMINANT (see definition below) in WATER SOURCE. As our customers, you have a right to know what happened and what we are doing to correct this situation. On CLICK TO ADD DATE, we collected a sample from WATER SOURCE. The sample tested positive for NAME OF CONTAMINANT.

What should I do? What does this mean?

* **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 indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health 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.*
* 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 from their health care providers about drinking this water.

What is being done?

DESCRIBE CORRECTIVE ACTIONS We will inform you when tests show no NAME OF CONTAMINANT and you no longer need to boil your water. We anticipate resolving the problem within PROVIDE ESTIMATED TIME FRAME TO RETURN TO COMPLIANCE.

For more information, please contact NAME OF WATER SYSTEM CONTACT at PHONE NUMBER or MAILING/EMAIL 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 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 NAME OF WATER SYSTEM. KY Water System ID#: KY PWSID#. Date distributed: CLICK TO ADD DATE

# TEMPLATE 1-10 - Instructions for Lead Action Level Exceedance

 Template on Next Page

With the Lead and Copper Rule Revision in 2021, action level exceedances of the 90th percentile concentration of lead (10 ppb) require a Tier 1 public notification pursuant to 40 CFR 141.85. For Tier 1 notices for a lead action level exceedance, public water systems must provide a copy of any Tier 1 notice to the Administrator and the head of the primacy agency as soon as practicable, but not later than 24 hours after the public water system learns of the violation or exceedance.

In addition to this public notice, there are public education requirements that must be met in accordance with § 141.85(a) and (b)

The following notice provides suggested public notice content in a format that is appropriate for hand delivery or for publication in a newspaper. **Click on the** red text **to modify it for your water system/scenario.** If you wish to modify it before using it for a radio or TV broadcast, you must still include all ten required PN elements from 40 CFR 141.205(a) and leave the mandatory language unchanged (see below).

**Additional information regarding delivery, mandatory language, corrective actions, and after issuing the notices can be found** [**here.**](#_General_Instructions_for)

**INSERT WATER SYSTEM NAME found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children.**

DRINKING WATER WARNING

**Please read this information closely to see what you can do to reduce lead in your drinking water.**

Health effects of lead

*Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.*

Sources of lead

Lead is a naturally occurring metal that can cause negative health effects. People are exposed to lead by eating lead paint chips, ingesting contaminated food or water, and/or by breathing in lead dust. The most common sources of lead in drinking water are lead pipes, faucets, and plumbing fixtures. Household plumbing fixtures, welding solder, and pipe fittings made prior to 1986 may also contain lead.

steps to reduce exposure to lead in drinking water

1. **Let the water run** before using it for drinking or cooking. If you have a lead service line, let the water run for 3-5 minutes. If you do not have a lead service line, let the water run for 30-60 seconds. The more time water has been sitting in your pipes, the more lead it may contain.
2. **Use cold water** for drinking, making food, and making baby formula. Hot water releases more lead from pipes than cold water. Boiling water does not reduce lead levels and may actually increase them.
3. **Treat your water** or find an alternative source if a test shows your water has high levels of lead after you let the water run.
4. CDC recommends **testing blood for lead exposure**. There are often no apparent symptoms when a child is exposed to lead. Because of this, a blood test is the best way to determine if a child has been exposed to lead.

**EXPLAIN WHY THERE ARE ELEVATED LEVELS OF LEAD IN THE SYSTEM'S DRINKING WATER (IF KNOWN) AND WHAT THE WATER SYSTEM IS DOING TO REDUCE THE LEAD LEVELS IN HOMES/BUILDINGS IN THIS AREA.**

For more information, please contact NAME OF WATER SYSTEM CONTACT at PHONE NUMBER or MAILING/EMAIL ADDRESS. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at www.epa.gov/lead or contact your health care provider.

Information on lead service lines

**DISCUSS OPPORTUNITIES TO REPLACE LEAD SERVICE LINES AND EXPLAIN HOW TO ACCESS THE SERVICE LINE INVENTORY SO THE CONSUMER CAN FIND OUT IF THEY HAVE A LEAD SERVICE LINE. INCLUDE FINANCING INFORMATION, IF APPLICABLE.**

Water systems are required to replace its portion of the service line and we would like to coordinate our replacement efforts to reduce your exposure. We will notify you prior to any replacement work. **TELL CONSUMERS HOW TO GET THEIR WATER TESTED.**

*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 NAME OF WATER SYSTEM. KY Water System ID#: KY PWSID#. Date distributed: CLICK TO ADD DATE

# References and Definitions

For guidance in communicating with non-English speaking/reading members of your community, reference **Chapter 4** in the [Revised Public Notification Handbook (epa.gov)](https://urldefense.com/v3/__https%3A/nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1006ROA.txt__;!!Db6frn15oIvDD3UI!z6jE05DMdC8kLt6UUfoTs5jKsuog_lr0mNcs9BxknKRBxdHOc7IpPBcaEclBnaU8pjsG$). Reference Chapter 5 for more information about Tier 1 public notifications.

To review the 10 required elements of a Public Notice, here is [the EPA Quick Reference Guide](https://eec.ky.gov/Environmental-Protection/Water/Drinking/DWProfessionals/ComplianceDocuments/Public%20Notification%20Quick%20Reference.pdf).

Acronym Definitions:

**CFE –** combined filter effluent

**DBPR –** Disinfectants and Disinfection Byproducts Rule

**DOW** – Kentucky Division of Water

**GWR –** Groundwater Rule

**HAA5 –** Haloacetic acids

**IESWTR –** Interim Enhanced Surface Water Treatment Rule

**LT1ESWTR –** Long Term 1 Enhanced Surface Water Treatment Rule

**LT2ESWTR –** Long Term 2 Enhanced Surface Water Treatment Rule

**MCL –** maximum contaminant level

**MRDL –** maximum residual disinfectant level

**PWS –** public water system

**SMCL –** secondary maximum contaminant level

**SWTR –** Surface Water Treatment Rule

**TCR –** Total Coliform Rule

**TTHM –** Total Trihalomethanes