TITLE 10 -- DEPARTMENT OF NATURAL RESOURCES
DIVISION 60 – SAFE DRINKING WATER COMMISSION
Chapter 8 – Public Notification

PROPOSED AMENDMENT

10 CSR 60-8.010 Public Notification of Conditions Affecting a Public Water Supply. The commission is amending subsections (2)(A), (3)(B) and (11)(A).

PURPOSE: This amendment adds Revised Total Coliform Rule (RTCR) requirements to Tier 1 and Tier 2 public notice as applicable. Tier 1 notice is required for violation of the E. coli maximum contaminant level (MCL). Tier 2 public notice must be repeated every three months for RTCR MCL and treatment technique violations as long as the violation or situation persists.

(2) Tier 1 Public Notice.

(A) Violation Categories and Other Situations Requiring a Tier 1 Public Notice.

1. Tier 1 public notice is required for violations or other situations with significant potential to have serious adverse effects on human health as a result of short-term exposure.

2. Specific violations and other situations requiring Tier 1 notice include:

A. Violation of the MCL for total coliforms when fecal coliform or *E. coli* are present in the water distribution system **as specified in 10 CSR 60-4.020 (7)(B) until March 31, 2016**, *[or]*when the water system fails to test for fecal coliforms or *E. coli* when any repeat sample tests positive for coliform **as specified in 10 CSR 60-4.020(5)(A) until March 31, 2016**; **or violation of the MCL for *E. coli* as specified in 10 CSR 60-4.020(7)(C) beginning April 1, 2016;**

B. Violation of the MCL for nitrate, nitrite, or total nitrate and nitrite, or when the water system fails to take a confirmation sample within twenty-four (24) hours of the system's receipt of the first sample showing an exceedance of the nitrate or nitrite MCL;

C. Exceedance of the nitrate MCL by non-community water systems where permitted by the department to exceed the MCL;

D. Violation of the MRDL for chlorine dioxide, when one (1) 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 when the water system does not take the required samples in the distribution system;

E. Violation of the maximum turbidity level where the sample results exceed five (5) nephelometric turbidity units (NTU);

F. Violation of a treatment technique requirement pursuant to 10 CSR 60-4.050 resulting from a single exceedance of the maximum allowable turbidity limit, where the department determines after consultation that the violation has significant potential to have serious adverse effects on human health or where the system fails to consult with the department within twenty-four (24) hours after the system learns of the violation;

G. Occurrence of a waterborne disease outbreak or other waterborne emergency (such as 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);

H. Detection of *E. coli*, enterococci, or coliphage in source water samples as specified in 10 CSR 60-4.025(3)(A) and 10 CSR 60-4.025(3)(B); and

I. Other violations or situations with significant potential to have serious adverse effects on human health as a result of short-term exposure, as determined by the department either in regulation or on a case-by-case basis.

(3) Tier 2 Public Notice.

(B) Timing of Tier 2 Public Notice.

1. Public water systems must provide the public notice as soon as possible, but not later than thirty (30) days after the system learns of the violation. If the public notice is posted, the notice must remain in place for as long as the violation or situation persists, but in no case for less than seven (7) days, even if the violation or situation is resolved. The department may, in appropriate circumstances, allow additional time for the initial notice of up to three (3) months from the date the system learns of the violation. The department will not grant an extension to the thirty (30)-day deadline for any unresolved violation or provide across-the-board extensions for other violations or situations requiring a Tier 2 public notice. Extensions granted by the department will be in writing.

2. The public water system must repeat the notice every three (3) months as long as the violation or situation persists, unless the department determines that appropriate circumstances warrant a different repeat notice frequency. In no circumstance may the repeat notice be given less frequently than once per year. The department will not allow less frequent repeat notice for an MCL violation pursuant to 10 CSR 60-4.020 **or 10 CSR 60-4.022** or a treatment technique violation pursuant to 10 CSR 60-4.050 **or 10 CSR 60-4.052**. The department will not allow across-the-board reductions in the repeat notice frequency for other ongoing violations requiring a Tier 2 repeat notice. The department's determinations allowing repeat notices to be given less frequently than once every three (3) months will be in writing.

3. For violations of the maximum turbidity level and for violations of the treatment technique requirements pursuant to 10 CSR 60-4.050 resulting from a single exceedance of the maximum allowable turbidity limit, public water systems must consult with the department as soon as practical but no later than twenty-four (24) hours after the public water system learns of the violation to determine whether a Tier 1 public notice is required to protect public health. When consultation does not take place within the twenty-four (24)-hour period, the water system must distribute a Tier 1 notice of the violation within the next twenty-four (24) hours (that is, no later than forty-eight (48) hours after the system learns of the violation).

(C) Form and Manner of Tier 2 Public Notice. Public water systems must provide the initial public notice and any repeat notices in a form and manner reasonably calculated to reach persons served in the required time period. The form and manner of the public notice may vary based on the specific situation and type of water system but must at a minimum meet the following requirements:

1. Unless directed otherwise by the department in writing, community water systems must provide notice by:

A. Mail or other direct delivery to each customer receiving a bill and to other service connections to which water is delivered by the public water system; and

B. Any other method reasonably calculated to reach other persons regularly served by the system, if they would not normally be reached by mail or direct delivery. Such persons may include those who do not pay water bills or do not have service connection

addresses ([for example]**e.g.**, house renters, apartment dwellers, university students, nursing home patients, prison inmates, etc.). These other methods may include: Publication in a local newspaper or newsletter; delivery of multiple copies for distribution by customers that provide their drinking water to others; posting in public places served by the system or on the Internet; or delivery to community organizations.

2. Unless directed otherwise by the department in writing, non-community water systems must provide notice by:

A. Posting the notice in conspicuous locations throughout the distribution system frequented by persons served by the system, or by mail or direct delivery to each customer and service connection (where known); and

B. Any other method reasonably calculated to reach other persons served by the system if they would not normally be reached by posting in a conspicuous location, mail, or direct delivery. Such persons include those served who may not see a posted notice because the posted notice is not in a location they routinely pass by. These other methods may include: Publication in a local newspaper or newsletter distributed to customers; use of e-mail to notify employees or students; or delivery of multiple copies in central locations ([for example]**e.g.**, community centers).

(4) Tier 3 Public Notice.

(A) Violation Categories and Other Situations Requiring a Tier 3 Public Notice.

1. Tier 3 public notice is required for all other violations and situations not included in Tier 1 and Tier 2.

2. Specific violations and other situations requiring Tier 3 public notice include:

A. Monitoring violations or failure to comply with a testing procedure, except where a Tier 1 notice is specifically required or where the department determines that a Tier 2 notice is required, for the following: microbiological contaminants; inorganic contaminants (IOCs); synthetic organic contaminants (SOCs); volatile organic contaminants (VOCs); radiological contaminants; disinfection byproducts, byproduct precursors, and disinfectant residuals; treatment techniques for lead, and copper. Specific exceptions are listed under sections (2) and (3) of this rule;

B. Operation under a variance or exemption;

C. Exceedance of the fluoride SMCL; *[and]*

D. Reporting and recordkeeping violations under 10 CSR 60-4.022, 10 CSR 60-7.010(12) and 10 CSR 60-9.010(4)-(5); and

*[D]***E.** Other violations or situations determined by the department either in regulation or on a case-by-case basis.

(11) Standard Health Effects Language for Public Notification.

(A) Microbiological Contaminants.

1. Total Coliform. **Until March 31, 2016,** "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." **Beginning April 1, 2016, "Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms**

indicating the need to look for potential problems in the water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments."

2. *[Fecal coliform/]**E. coli*.** **Until March 31, 2016,** "Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these waters 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. **Beginning April 1, 2016, "*E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems."**

3. Fecal indicators under the Ground Water Rule (*E. coli*, enterococci, coliphage). "Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these waters 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."

4. Treatment technique violations under the Ground Water Rule. "Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches."

5. Revised Total Coliform Rule Treatment Technique violations for Coliform Assessment and/or Corrective Action. "Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that are found.

[THE SYSTEM MUST USE THE FOLLOWING APPLICABLESENTENCES.]

We failed to conduct the required assessment.

We failed to correct all identified sanitary defects that were found during the assessment(s)."

6. Revised Total Coliform Rule Treatment Technique violations for *E. coli* Assessment and/or Corrective Action. "*E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We violated the standard for *E. coli*, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct a detailed assessment to identify problems and to correct any problems that are found.

[THE SYSTEM MUST USE THE FOLLOWING APPLICABLESENTENCES.]

We failed to conduct the required assessment.

We failed to correct all identified sanitary defects that were found during the assessment that we conducted."

7. Revised Total Coliform Rule Seasonal System Treatment Technique violations. When this violation includes the failure to monitor for total coliforms or *E. coli* prior to serving water to the public, the mandatory language found at 10 CSR 60-8.010(5)(D)2. must be used. When this violation includes failure to complete other actions, the appropriate elements found in 10 CSR 60-8.010(5)(A) to describe the violation must be used.

*[5]***8.** Turbidity. "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."

AUTHORITY: section 640.100, RSMo Supp. 2009. Original rule filed May 4, 1979, effective Sept. 14, 1979. Amended: Filed April 14, 1981, effective Oct. 11, 1981. Amended: Filed Aug. 4, 1987, effective Jan. 1, 1988. Rescinded and readopted: Filed June 2, 1988, effective Aug. 31, 1988. Amended: Filed Dec. 4, 1990, effective July 8, 1991. Amended: Filed March 31, 1991, effective Dec. 3, 1992. Amended: Filed Aug. 4, 1992, effective May 6, 1993. Amended: Filed May 4, 1993, effective Jan. 13, 1994. Amended: Filed Feb. 1, 1996, effective Oct. 30, 1996. Amended: Filed Dec. 15, 1999, effective Sept. 1, 2000. Rescinded and readopted: Filed March 17, 2003, effective Nov. 30, 2003. Amended: Filed Feb. 27, 2009, effective Oct. 30, 2009. Amended: Filed April 14, 2010, effective Dec. 30, 2010. Amended: Filed Aug. 17, 2015.*

*Original authority: 640.100, RSMo 1939, amended 1978, 1981, 1982, 1988, 1989, 1992, 1993, 1995, 1996, 1998, 1999, 2002, 2006.

PUBLIC ENTITY COSTS: This amendment is anticipated to cost state agencies and political subdivisions less than $500 in the aggregate.

PRIVATE ENTTY COSTS: This amendment is anticipated to cost private entities less than $500 in the aggregate.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Department of Natural Resources Public Drinking Water Branch will hold a public hearing on this proposed rule at 10:00 a.m. on October16, 2015 at the Lewis and Clark State Office Building, 1101 Riverside Drive, Jefferson City, Missouri. Any interested person may comment during the public hearing in support of or in opposition to the proposed rule. Written comments postmarked or received by October 19, 2015 will also be accepted. Written comments must be mailed to: Scott Weckenborg, MDNR Public Drinking Water Branch, P.O. Box 176, Jefferson City, MO 65102, or hand-delivered to the Lewis and Clark State Office Building, 1101 Riverside Drive, Jefferson City, Missouri.