The Environmental Protection Agency (EPA) has revised the 1989 Total Coliform Rule (TCR), a national primary drinking water regulation (NPDWR). The purpose of the 1989 TCR is to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbial contamination. EPA anticipates greater public health protection under the revised requirements, which are based on recommendations by a federal advisory committee and the agency’s consideration of public comments. The final Revised Total Coliform Rule (RTCR):

- Requires public water systems that are vulnerable to microbial contamination to identify and fix problems; and
- Establishes criteria for public water systems to qualify for and stay on reduced monitoring, which could reduce water system burden and provide incentives for better system operation.

The 1989 TCR remains effective until March 31, 2016. PWSs and primacy agencies must comply with the requirements of the RTCR beginning April 1, 2016.

Questions and Answers

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Where can I find the revisions?

What are the basic requirements of the 1989 TCR?
The TCR (published in 1989) is the only microbial drinking water regulation that applies to all public water systems (PWSs). Systems are required to meet legal limits (i.e., Maximum
Contaminant Levels (MCL) for total coliforms, including fecal coliforms, as determined by regular monitoring. The 1989 TCR specifies the frequency and timing of the microbial testing by water systems based on population served. The rule also requires public notification as indicated by monitoring results.

**Why did EPA decide to revise the 1989 TCR?**
The Safe Drinking Water Act, as amended, requires EPA to review and revise, as appropriate, each NPDWR not less often than every six years. The outcome of the review of the 1989 TCR determined that there was an opportunity to reduce implementation burden and to improve rule effectiveness, and that revising the rule offered an opportunity for greater public health protection against waterborne pathogens in the public drinking water distribution systems.

**How have monitoring frequencies changed?**
While retaining the basic monitoring requirements of the 1989 TCR, the RTCR links monitoring frequency to water quality and system performance by:

- Providing criteria that well-operated small systems must meet to qualify and stay on reduced monitoring;
- Requiring increased monitoring for high-risk small systems with unacceptable compliance history; and
- Requiring some new monitoring requirements for seasonal systems such as campgrounds and some state and national parks.

**How has the standard for total coliforms changed?**
The final RTCR establishes a health goal (Maximum Contaminant Level Goal, or MCLG) and an MCL for *E. coli* and eliminates the MCLG and MCL for total coliforms, replacing it with a treatment technique for coliforms that requires assessment and corrective action.

- The revised rule is establishing an MCLG of 0 for *E. coli*, a more specific indicator of fecal contamination and potential harmful pathogens than total coliform. EPA has removed the 1989 MCLG and MCL for total coliform. Many of the organisms detected by total coliform methods are not of fecal origin and do not have any direct public health implication. The “acute” total coliform MCL violation under the 1989 TCR has been maintained as the MCL for *E. coli* under the RTCR.
- Under the new treatment technique for coliforms, total coliforms serve as an indicator of a potential pathway of contamination into the distribution system. A PWS that exceeds a specified frequency of total coliform occurrence must conduct an assessment to determine if any sanitary defects exist and, if found, correct them. In addition, under the new treatment technique requirements, a PWS that incurs an *E. coli* MCL violation must conduct an assessment and correct any sanitary defects found.

**How has the public notification requirement changed?**
The revised rule is eliminating monthly public notification requirements based only on the presence of total coliforms. Total coliforms in the distribution system may indicate a potential pathway for contamination but in and of themselves do not indicate a health threat. Instead, the RTCR requires public notification when an *E. coli* MCL violation occurs, indicating a potential health threat, or when a PWS fails to conduct the required assessment and corrective action.
How did EPA identify the changes to the 1989 TCR?
EPA established a federal advisory committee called the Total Coliform Rule Distribution System Advisory Committee in 2007 to recommend revisions to the 1989 TCR. The advisory committee was comprised of a balanced panel of 15 key stakeholder organizations, including EPA, states and tribal representatives, utility associations, and advocacy groups for environment, public health, epidemiology, and consumers. The advisory committee signed an Agreement in Principle (AIP) outlining its recommendations in 2008. In July 2010, EPA proposed a rule that was consistent with the AIP and gave the public an opportunity to review and comment on the proposed rule. EPA considered the comments it received on the proposed rule in finalizing the RTCR.

Who will be affected by the RTCR?
The entities potentially affected by this final rule are PWSs that are classified as community water systems (e.g., systems that provide water to year-round residents in places like homes or apartment buildings) or non-community water systems (e.g., systems that provide water to people in locations such as schools, office buildings, restaurants, etc.); state primacy agencies; and local and tribal governments. As with the 1989 TCR, the RTCR will impact approximately 154,000 PWSs. These water systems serve approximately 307 million individuals.

How much will the RTCR cost public water systems and consumers?
The estimated net incremental cost of the RTCR is $14 million annually. This represents total increased costs relative to the 1989 TCR provisions. PWSs are estimated to incur approximately 90 percent of the revised rule’s net annualized present value costs. States/primacy agencies incur the remaining costs.

When do public water systems and primacy agencies need to comply with the RTCR?
PWSs and primacy agencies must comply with the requirements of the RTCR beginning April 1, 2016.

How can I get more information?
For additional information about the rule, please visit the EPA Total Coliform Rule Web site, http://water.epa.gov/lawsregs/rulesregs/sdwa/tcr/regulation.cfm.

You may also visit the EPA Drinking Water Web site at www.water.epa.gov/drink or contact the Safe Drinking Water Hotline at 1-800-426-4791, for more information about the rule or for general information on drinking water. Local or international calls can reach the Hotline at 703-412-3330. The Safe Drinking Water Hotline is open Monday through Friday, excluding legal holidays, from 10:00 a.m. to 4:00 p.m. Eastern time.