

**Maryland General Assembly
Department of Legislative Services**

**Proposed Regulations
Department of the Environment**
(DLS Control No. 16-041)

Overview and Legal and Fiscal Impact

These regulations conform State regulations to the Revised Total Coliform Rule (RTCR) promulgated by the U.S. Environmental Protection Agency (EPA) under the federal Safe Drinking Water Act. The regulations also make a minor revision to the monitoring requirements under the Stage 2 Disinfection Byproduct Rule.

The regulations present no legal issues of concern.

Federal fund expenditures for the department increase by \$171,222 annually, likely beginning in fiscal 2017, to hire staff and implement the regulations. Expenditures for local and State agencies that run public water systems increase by \$18 to \$1,453 per water system, depending on the system. Revenues increase for local agencies that have delegation agreements with the department to implement regulations for transient noncommunity water systems (TNCWS).

Regulations of COMAR Affected

Department of the Environment:

Regulation of Water Supply, Sewage Disposal, and Solid Waste:

Quality of Drinking Water in Maryland:

COMAR 26.04.01.01, .01-1, .03, .04, .10-.11-2, .15-2, .19, .20, .20-2, and .21

Legal Analysis

Background

Under the federal Safe Drinking Water Act, EPA sets standards and treatment requirements for public water supplies, but may delegate primary implementation and enforcement authority to states that have regulations at least as stringent as the national standards. Accordingly, the Maryland Department of the Environment has primary oversight responsibility for public water systems in the State.

EPA published the Total Coliform Rule (TCR), a national primary drinking water regulation, in 1990. Although generally not harmful to humans, total coliforms are considered to be an indicator of other pathogens in drinking water that can potentially cause health problems and, therefore, are used to determine the adequacy of water treatment and the integrity of distribution systems.

After conducting a required periodic review and completing an extensive process to revise the TCR, EPA published the RTCR in the *Federal Register* on February 13, 2013, and additional minor corrections on February 26, 2014. The RTCR sampling, assessment, corrective action, and reporting requirements differ significantly from the TCR requirements. According to the department, implementation of the RTCR will increase public health protection by taking a “find and fix” approach and reducing the potential pathways through which fecal contamination can enter the drinking water distribution system.

Unless a state has set an earlier effective date, public water systems must comply with the RTCR requirements beginning April 1, 2016. Maryland has not set an earlier date and these regulations reflect the federal implementation timeframe. Please see the *Special Notes* section below for further discussion of this issue.

Summary of Regulations

These regulations conform State regulations governing drinking water quality to the RTCR. To comply with the RTCR implementation time frame, the regulations distinguish between existing requirements that apply through March 31, 2016 and new requirements that apply beginning April 1, 2016.

The regulations eliminate specific drinking water standards for total coliform bacteria and fecal coliform bacteria, establish a maximum contaminant level (MCL) for *E. coli*, specify treatment techniques, and increase monitoring and reporting requirements. The regulations also define relevant terms and update the references to several documents incorporated by reference to add the RTCR. In addition, the regulations make a minor revision to the monitoring requirements under the Stage 2 Disinfection Byproduct Rule. A more detailed description of significant new or revised provisions follows.

Variance and Exemption Prohibitions

Regulation .03 prohibits the Secretary of the Environment or the Secretary’s designee from issuing a certain variance from the MCL or treatment technique requirements for specified microbial contaminants. In addition, Regulations .03 and .04 prohibit the granting of a variance or an exemption from the MCL for *E. coli*, respectively.

Maximum Contaminant Level for *E. coli*

Regulations .10F and .11-4J specify when a public water system is in violation of the maximum contaminant level (MCL) for *E. coli*. A supplier of water must determine compliance with the MCL for *E. coli* for each month in which it is required to monitor for total coliforms.

Achieving Compliance and Monitoring Requirements

Regulation .10H establishes the best technology, treatment techniques, or other means for achieving compliance.

New Regulation .11-4 requires public water systems to have samples analyzed by certified laboratories for the presence of total coliforms and E. coli, but specifies that a determination of density is not required. Among other things, the regulation specifies the standard sample volume, frequency of sample collection, maximum time between collection and test initiation, analytical methods, bases for invalidation of samples, and RTCR violation categories.

Each drinking water supplier must develop a written sample siting plan for total coliform samples that is subject to review by the Secretary or the Secretary's designee. The plan must identify routine and repeat sampling sites, include a sample collection schedule, and ensure that samples are representative of water throughout the distribution system. To facilitate the transition to the RTCR, the regulation requires public water systems to continue to monitor under existing total coliform monitoring schedules except under specified conditions.

Although the regulation specifies different monitoring frequency requirements for various types and sizes of water systems, all suppliers must comply with specified repeat monitoring requirements following any total coliform-positive sample. In addition, each total coliform-positive routine sample must be analyzed for E. coli and the supplier must notify the Secretary or the Secretary's designee if E. coli are present. A supplier must also use the monitoring results to determine whether any coliform treatment technique triggers have been exceeded and, if so, complete the applicable Level 1 or Level 2 assessment.

Reporting and Public Notice Requirements

Under Regulation .19, a supplier must notify the Secretary or the Secretary's designee when the supplier learns of an E. coli MCL violation or is notified of an E. coli-positive routine sample. A supplier that has violated the treatment technique for coliforms or failed to comply with a coliform monitoring requirement must report the violation to the Secretary or the Secretary's designee within specified time periods and must notify the public in accordance with subpart Q of 40 CFR § 141. In addition, prior to serving water to the public, a seasonal system must certify that it has complied with an approved start-up procedure.

Under Regulations .11-4 and .19, a supplier that is required to conduct an assessment must submit a specified assessment report to the Secretary or the Secretary's designee within 30 days. The Secretary or the Secretary's designee must determine whether the supplier has identified a likely cause and, if so, establish that the supplier has corrected the problem or included an acceptable schedule for correcting the problem. If the corrections are not completed when the report is submitted, the supplier must notify the Secretary or the Secretary's designee when each corrective action is completed.

Record Keeping

Regulation .21 adds a requirement that a public water supplier maintain any required assessment form and documentation of certain corrective actions for at least five years after completion of the assessment or corrective action. A supplier must also maintain a record of any

repeat sample taken under an extension of the 24-hour period generally allowed for collecting repeat samples when a total coliform-positive sample is found.

Timing of Disinfection Byproduct Sampling

Finally, Regulation 15-2.I.(3)(g)(i) alters the specified time period that applies when increased monitoring of certain disinfectant byproducts is required. Samples will be taken every 90 days and the sample period will include the peak historical month for the water system.

Legal Issues

The regulations present no legal issues of concern.

Statutory Authority and Legislative Intent

The department cites Title 9, Subtitles 2 and 4 of the Environment Article as statutory authority for the regulations. Subtitle 2 broadly describes the department's responsibilities with respect to water, ice, and sanitary facilities. Subtitle 4 establishes the broad authority of the department to adopt and enforce drinking water standards in the State, consistent with federal requirements.

More specifically, § 9-220 requires the Secretary to order certain corrective action under certain conditions, including when a public water supply system is not producing reasonable results from a sanitary viewpoint, is a menace to health or comfort, or is causing a nuisance. Section 9-252 authorizes the Secretary to, among other things, adopt and enforce regulations to prevent or correct pollution of the waters of the State; require any public water supply system to be operated in a manner that will protect public health and comfort; and order the alteration, extension, or replacement of any public water supply system. Section 9-255 requires the department and the Department of Natural Resources to each make any test of water or wastewater that it considers necessary to determine the adequacy of performance of a water supply system, sewerage system, or industrial wastewater treatment plant. Section 9-257 authorizes the Secretary, on a finding that water or ice from any source is or is likely to become dangerous to health, to order the installation of any work, device, or other remedial measure to sufficiently and practicably remedy the conditions. Section 9-261 requires any sanitary district or person who supplies water to the public to keep any record the Secretary requires and make the record available to the Secretary on request. This section also authorizes a representative of the Secretary, in order to determine compliance with any regulation, to enter any building, structure, or land and collect samples, records, and information.

Section 9-402 establishes the State's primary enforcement responsibility for drinking water standards under the federal Safe Drinking Water Act. Section 9-404 authorizes the Secretary to, among other things, adopt regulations necessary or appropriate to carry out the Secretary's functions that relate to drinking water. Section 9-405 authorizes the Secretary to, on receipt of information that a dangerous contaminant is present in or likely to enter a public water system, take any action necessary to protect the health of individuals whose health is or would be endangered. Section 9-407 requires the Secretary to adopt and enforce State drinking water

regulations and to adopt and implement adequate procedures for enforcement, including monitoring and inspection procedures. The enforcement procedures must comply with all rules and regulations adopted by the EPA administrator. Section 9-408 requires, with specified exceptions, that the State primary drinking water regulations apply to every public water system in the State. Section 9-409 allows the Secretary to authorize variances or exemptions from the regulations under certain conditions and only if not less stringent than federal law. Under § 9-410, each supplier must provide specified notices to the department and to the persons served by the system whenever the system fails to comply with certain requirements or is subject to a certain variance or exemption. The Secretary must adopt regulations to establish the notice standards and procedures.

This authority is correct and complete. The regulations comply with the legislative intent of the law.

Technical Corrections and Special Notes

Please note that the Department of Legislative Services contacted the department regarding the multiple references to new requirements beginning April 1, 2016, which is almost three months before the earliest date these regulations can take effect. The department advised that public water systems must comply with the federal requirements as of April 1, 2016, even though the State regulations are not yet in effect. The department further advised that EPA approved an extension agreement, under which the updated State regulations must be submitted to EPA by February 2017. Until the department has full authority under these regulations, the department may not enforce the new provisions and any necessary enforcement action would be taken by EPA. In the meantime, the department is continuing to advise and assist public water systems on compliance with the RTCR.

In addition, the department has been notified that Regulation .15-2 should be added to the list of proposed amended regulations in the Notice of Proposed Action.

Fiscal Analysis

Federal fund expenditures for the department increase by \$171,222 annually, likely beginning in fiscal 2017, to hire staff and implement the regulations. Expenditures for local and State agencies that run public water systems increase by \$18 to \$1,453 per water system, depending on the system. Revenues increase for local agencies that have delegation agreements with the department to implement regulations for transient noncommunity water systems (TNCWS).

Agency Estimate of Projected Fiscal Impact

The department estimates that federal fund expenditures increase by \$171,222 annually, likely beginning in fiscal 2017, to hire three full-time regular natural resource planners to enforce and implement the regulations, including (1) conducting additional monitoring and annual site visits; (2) conducting outreach to assist public water system owners and operators with implementation and compliance; and (3) reviewing and approving revised sample siting plans.

This estimate also includes increased costs associated with delegation agreements with 17 counties to implement the Revised Total Coliform Rule. Although the actual hiring date for the new employees is unclear, the department advises that it will not hire new staff until fiscal 2017, at the earliest. To the extent that the employees are hired later, those expenditures are deferred. The department further advises that local revenues increase for the 17 local health departments that have signed delegation agreements with the department to implement the regulations for TNCWSs. The Department of Legislative Services concurs.

The department also advises that there are 207 community water systems, 163 nontransient noncommunity water systems, and 101 TNCWSs that are largely owned and operated by local governments. The cost to implement the regulations varies by the type of system and the number of individuals served by each system. Initial implementation costs range from \$18 to \$1,453 per system. The total combined costs for all local governments is estimated at \$76,250. This estimate includes costs related to the revision of sample siting plans, training operators for new requirements, and fulfilling additional reporting requirements. Finally, the department advises that there are 100 State-owned public water systems. The majority of these systems serve small populations and, as such, implementation for State-owned systems has a minimal impact on State expenditures. The Department of Legislative Services concurs.

Impact on Budget

Federal fund expenditures increase by \$171,222 annually, beginning in fiscal 2017 at the earliest.

Agency Estimate of Projected Small Business Impact

The department advises that the regulations have minimal or no economic impact on small businesses in the State. The Department of Legislative Services concurs. The public water systems that are owned and operated by small businesses are small systems that serve populations of 500 or fewer consumers. As such, costs for small businesses to implement the regulations range from \$18 to \$80 per system.

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