

Comments of the Independent Regulatory Review Commission



Environmental Quality Board Regulation #7-520 (IRRC #3136)

Disinfection Requirements Rule

May 19, 2016

We submit for your consideration the following comments on the proposed rulemaking published in the February 20, 2016 *Pennsylvania Bulletin*. Our comments are based on criteria in Section 5.2 of the Regulatory Review Act (71 P.S. § 745.5b). Section 5.1(a) of the Regulatory Review Act (71 P.S. § 745.5a(a)) directs the Environmental Quality Board (EQB) to respond to all comments received from us or any other source.

1. Effective date of rulemaking. – Implementation procedures.

Commentators request that EQB defer the effective date of the rulemaking to at least 6 months to 24 months after final promulgation. They state that additional time is needed for capital improvements, proper budgeting, planning, and training. Some commentators suggest adding a provision that would allow water systems to make requests for extended compliance schedules under certain circumstances. We acknowledge that EQB is specifically seeking input on when certain provisions of the rulemaking should become effective. We ask the EQB to continue to work with the regulated community to develop a schedule for implementing this rule that adequately protects the health, safety and welfare of the public, while at the same time, minimizing the fiscal impact it will have on water systems.

Subchapter B. MCLs, MRDLs or TREATMENT TECHNIQUE REQUIREMENTS

2. Section 109.202. State MCLs, MRDLs and treatment technique requirements. – Fiscal impact; Reasonableness; Need.

EQB is proposing to amend Section 109.202(c)(1)(ii) to clarify the existing minimum residual disinfectant level at the entry point by adding a zero to the minimum level (0.20 mg/L). EQB explains that 0.20 mg/L is needed to ensure an adequate disinfectant residual in the water entering the distribution system and that the level of sensitivity is consistent with other Department of Environmental Protection (DEP) values. The Small Water Systems Technical Advisory Center (TAC) to DEP recommended the minimum entry point residual remain at 0.2 mg/L because water systems using strip chart recorders may not be able to record data to two decimal places and would need to upgrade to supervisory control and data acquisition (SCADA) systems. Commentators are in agreement with the TAC and question whether DEP's estimate to upgrade to electronic recording devices of \$1,500 per system includes costs for installation and

connection to SCADA systems. In the final-form Preamble and RAF, EQB should provide specific estimates of all the costs associated with compliance and an explanation of how the estimates were derived. In addition, we ask EQB to explain why it believes the costs associated with this provision outweigh the potential benefits it may produce.

Subchapter C. MONITORING REQUIREMENTS

3. Section 109.301. General monitoring requirements. – Reasonableness; Fiscal impact.

This section sets forth performance monitoring requirements for public water suppliers. Section 109.301(1)(i)(D)(II) requires a public water supplier to monitor the disinfectant residual at representative locations in the distribution system at least once per week. Commentators believe the additional residual monitoring from once a month to once a week will increase operating costs for small water systems. They recommend monitoring at the same frequency and schedule as the Revised Total Coliform Rule (RTCR). In the Preamble to the final-form regulation, EQB should explain the reasonableness of requiring weekly monitoring, and how the potential benefits outweigh any costs associated with it.

Subchapter G. SYSTEM MANAGEMENT RESPONSIBILITIES

4. Section 109.710. Disinfectant residual in the distribution system. – Reasonableness; Protection of the public health, safety and welfare; Fiscal impact; and Implementation procedures.

Minimum disinfectant residual

EQB is proposing to increase the minimum residual in the distribution system to 0.2 mg/L free or total chlorine from the current level 0.02 mg/L. EQB explains that the distribution systems remain a source of contamination that has yet to be fully addressed and that the existing 0.02 mg/L is inadequate to protect against microbial growth within the distribution system. Despite the data provided in the Preamble by the EQB, commentators remain unclear as to which public health concern the EQB is addressing by raising the residual limit in the distribution system. Commentators also expressed concern that the new residual standard would likely increase the formation of disinfection byproducts (DBPs) which have known health risks. In the Preamble to the final-form regulation, EQB should explain what specific public health issue is being addressed by the proposed disinfectant residual that is not currently being handled by the RTCR or isn't a premise plumbing concern. EQB should also explain what measures exist to safeguard against increases in DBPs.

Costs

The fiscal analysis provided in the RAF indicates that the total estimated cost to the regulated community is \$823,500. The regulated community believes DEP has overestimated the number of water suppliers that would be in compliance with the proposed residual and has underestimated capital and operational costs. For example, Philadelphia Water estimated \$25 million dollars in capital costs and \$2.5 million dollars in annual operating and maintenance

costs. The Borough of Carlisle estimates capital costs ranging from \$115,000 to \$190,000 to potentially comply with a 0.2 mg/L free chlorine requirement. As EQB develops the final-form regulation, we ask that they reach out to the regulated community to gain a better understanding of the potential costs associated with the new requirements and to include those revised costs in the RAF submitted with regulatory package.

Tier 2 Public Notification

Subparagraph (c)(3) requires water utilities to issue a Tier 2 public notification for all results not meeting the proposed 0.2 mg/L minimum limitation. Several municipal water authorities have stated that because no known health risks have been identified in the proposed rulemaking, requiring water utilities to issue Tier 2 public notices for failing to meet 0.2 mg/L will erode public confidence in water quality. Commentators disagree that the proposed minimum disinfectant residual is practical and achievable. They believe additional notifications could lead to overuse of public notifications. In the Preamble to the final-form rulemaking, we ask EQB to explain why public notification is needed when the minimum disinfectant residual is not maintained in the distribution system and why the benefits of such a notice outweigh any potential costs associated with such notice.

Heterotrophic plate count (HPC)

EQB is proposing to delete Subsection (b) which requires a public water system that uses surface water or groundwater under direct influence of surface water (GUDI) sources or obtains finished water from another permitted public water system using the surface water or GUDI to collect Heterotrophic Plate Count (HPC) measurements. TAC recommends retaining HPC monitoring as an alternative compliance criteria. Supporters view it as a tool that can alert operators to a problem before sample locations actually present with a positive Total Coliform or *E.coli* sample. They argue removing this provision may weaken public health protections. Others remarked that HPC is allowed under the federal regulations and retaining it will reduce the number of instances where public notice is required. We note that the EQB has asked for comments with references to studies, reports or data comparing whether HPC less than 500 provides the same level of public health protection as a disinfectant residual of 0.2mg/L. In the Preamble to the final-form rulemaking, we ask the EQB to explain its rationale for removing this provision. We will consider EQB's response to comments and any changes made to this subsection in our review of the final-form regulation to determine whether it is in the public interest.

Subchapter J. BOTTLED WATER AND VENDED WATER SYSTEMS, RETAIL WATER FACILITIES AND BULK WATER HAULING SYSTEMS.

5. Section 109.1003. Monitoring requirements. – Reasonableness; Clarity; Possible conflict with other statutes or existing regulations.

Section 109.1003(a)(1)(xiv) requires that bottled, bulk and retail water systems that use or purchase water from a system that uses surface water or GUDI sources must also meet the

minimum distribution system disinfection residual requirements. EQB states these revisions are in response to the United State Environmental Protection Agency's (EPA) comments to obtain primacy for Long Term 2 Enhanced Surface Water Treatment Rule. Water dispensing unit (WDU) operators commented that adding the HPC test alongside the Total Coliform test is duplicative and adds unnecessary costs. They further point out the drinking water standard for HPC is geared toward public water systems treating non-potable surface water or GUDI and that it should not apply to WDUs which receive already treated municipal water. We ask EQB to explain in the RAF and Preamble of the final-form regulation the reasonableness of requiring water dispensing units to meet the same disinfection residual requirements as public water systems.

The EPA submitted comments that identify several instances where the Bottled Water and Vended Water Systems, Retail Water Facilities and Bulk Water Hauling Systems (BVRB) monitoring provisions are inconsistent with federal regulations and must be changed to obtain primacy. The EPA also seeks clarification on the BVRB entry point residual. We will review the EQB's response to the EPA's comments and any changes made to this section in our review of the final-form rulemaking to determine whether it is in the public interest.