

**Aqua Pennsylvania Detailed Comments to  
[ 25 PA. CODE CH. 109 ]  
Safe Drinking Water; Revised Total Coliform Rule  
[ 45 Pa.B. 5943 ]**

**General Comments:**

Aqua Pennsylvania, Inc. (Aqua) appreciates the opportunity to provide comments about the above referenced proposed rulemaking. Aqua staff provided technical expertise to the American Water Works Association (AWWA) and the National Association of Water Companies (NAWC), two organizations that were signature parties to the Federal Advisory Committee (FACA) and the resultant Agreement-in-Principle (AIP) which lays the foundation for the federal Revised Total Coliform Rule (RTCR). We believe the federal RTCR is a significant step forward in the protection of public health. We are pleased to see that the Pennsylvania Department of Environmental Protection (DEP) is essentially adopting the well-discussed and reasonable rule framework set forth in the FACA AIP.

However, Aqua notes that the federal rule framework left many opportunities for states to define elements within the RTCR. The DEP proposal does not clearly spell out how DEP intends to define many of these elements, most notably, the content of assessment and corrective action forms. It is assumed many will be yet defined through state guidance, rather than through the established rulemaking process. This is very concerning to us. In recent years, the DEP's Bureau of Safe Drinking Water - Central Office (BSDW-CO) has appeared to drift further away from the practice of collaborating with the water industry professionals within the state in developing regulations and related guidance. Furthermore, although guidance documents "are not an adjudication or a regulation", too often, DEP has enforced policies and guidance that were developed without public participation as though they were equal.

A result of this disengagement can be seen in the proliferation of administrative violations and public notices in Pennsylvania. While we believe Pennsylvanians' can be proud of the drinking water quality across the state, one would not believe that based on the overuse of public notifications eroding the trust of our citizens. While we appreciate DEP's recent stakeholder meetings on the minimum disinfectant residual issue and welcome DEP's recent initiative to improve public participation and transparency through a new on-line engagement system, this can only be realized if the BSDW-CO allows proposed policies, guidance documents, and "clarification" of compliance regulations (such as the so called "Use it or Lose it" policy) to be properly vetted with the public and the water industry professionals in the state.

Thus, while Aqua is pleased to see much of the federal rule framework embodied in this proposal, there is still concern with the realization that this rule can effectively become adversely modified through the subsequent guidance document(s) and internal DEP implementation policy development. Therefore, in keeping with the stated commitment of DEP Secretary John Quigley to transparency and integrity, we strongly urge DEP to engage in a collegial and transparent process for the development of all policies and guidance documents related to the RTCR, and subsequent drinking water regulations, "clarifications" of regulations, policies and guidance.

**Background and Purpose Section (Section D)**

In this section of the Preamble, DEP includes “the lack of a disinfection residual” as a sanitary defect, referencing the EPA RTRC Assessment and Corrective Action Manual. However, the referenced manual does not identify lack of disinfection residual alone as being a pathway for contamination, which is the requirement for a sanitary defect. Aqua recommends that this inaccurate language be corrected or deleted.

### **Alternative Repeat Sample Locations**

Consistent with the TAC recommendation, Aqua believes that alternative sites should be allowed when selecting repeat sample locations. Having specific repeat/check sample locations identified in advance for each routine TCR site ignores the practical realities of collecting bacteriological samples in many water systems. Having alternative check sample locations provides the flexibility that water systems need to adequately comply with the RTRC.

Because no two water systems are exactly alike, the Revised Total Coliform Rule should allow a range of options to account for those variations and for the possibility of unusual circumstances that might affect compliance sampling.

Justifications for allowing flexibility include two major themes; logistics and hydraulics:

#### **Logistics**

- **Specific conditions on a given day.** Things change. Because most TCR samples are negative for coliform bacteria, chances are high that check samples would be needed infrequently at a given location. Plans that were made initially might have changed in the months or years since they were developed.
- **Access to sample location.** In the case of distribution system samples, many of the coliform samples are collected on private property. Unlike municipal water systems, Aqua is a private water company, without special access to public buildings such as libraries, fire houses, police stations, etc. In systems with little or no commercial structures, water samples are often collected at private homes. This makes for the possibility of complicated access to the home or hose bib at a private residence.
- Homes are sold and agreements with a homeowner may not be known to a new homeowner.
- Treatment, such as a softener or filter, could be installed a homeowner.
- Plumbing fixtures or pipe within the premise could be changed without the knowledge of the water system. Although treatment devices and/or plumbing modification has the potential to affect coliform samples, homeowners are under no obligation to inform the water utility.

#### **Hydraulic flow considerations**

- Because of the dynamic nature of water distribution systems, flow in a given pipe is not always consistent. The filling or draining of storage tanks, valve operations, main breaks, maintenance of valves, use of hydrants, alternate water

sources and flow rates, etc. all affect the flow of water in a given length of pipe. What is considered “upstream” one day may actually be “downstream” on another day or set of conditions. A distribution sample point near a tee might flow one way on a given day, and the other the next. The water system needs the flexibility in check sample locations to allow for the possibility of changing conditions.

- Some of the hydraulic features to be considered are under the control of the water system. However, for a larger utility, coordination between departments may be relevant so that routine maintenance or inspection does not alter flow in the area of check sample locations.
- Some hydraulic features, such as the operation of storage tanks and pressure zones, may have a direct impact on the collection of repeat samples. Tanks that are draining during a certain time of the day may be filling while check samples are being collected. Being locked into fixed check sample sites would not allow the flexibility that is needed to collect appropriate repeat samples.

These provisions for alternative repeat sample locations should extend to systems of all sizes- not just for systems serving greater than 9,999 people.

### **Use of Standard Operating Procedure for Selection of Repeat Sample Locations**

A requirement for the use of only fixed repeat sample sites ignores the practical realities of water system operation. Having alternative methods to define repeat sample locations provides the flexibility that water systems need to adequately comply with the RTCR. Justifications for allowing flexibility include two major themes: logistics and hydraulics. An SOP approach represents a scenario that best demonstrates an ability to seek pathways for contamination. Reliance only on fixed repeat sample locations would ignore the possibility of variation in operations and/or customer base.

It has been Aqua’s experience that the predefined locations are rarely available the day they are needed. Utilizing an SOP for identifying repeat sample locations as they are needed reduces the burden of identifying and maintaining fixed repeat sample locations for all sample points. Most locations are not likely to ever require a set of repeat samples. While Aqua has historically defined repeat locations, we have found that more often than not, we had to follow the criteria below to identify a new point. This is particularly true for samples in a residential community where most people are at work during the day.

Aqua recommends that the Department allow the use of an SOP to assist with the selection of sample locations, including repeat sample locations that are supposed to represent a “pathway for contamination.” Such an SOP developed by the water system would allow staff to use their professional judgement to determine appropriate sample sites for repeat samples. For example, water utility personnel could consider the following items when confronted with the need for collecting check samples.

### **Criteria for Selection of Repeat Sample Locations**

- Site-specific information from sample person in the field

- Confirmation that site is a customer and is on an appropriate length of pipe relative to the Total Coliform positive site.
- Configuration of pipes after review of GIS / plate book
- Confirmation that the customer has been contacted and has approved collection of sample(s)
- Information on treatment within site; do not select sites with any type of treatment within the premise (filter, softener, etc.)
- Direction of flow / hydraulics of system in the area
- Proximity to dead end(s)
- Proximity to storage tank(s)
- Pressure zone(s)
- Access to potential sites
- Sanitary conditions of site and tap.
- Preference for single tap served by cold water only; preference to avoid blended taps (hot & cold water flowing through the same spigot)
- Avoid leaky faucet.
- Preference to avoid outside hose bibs

### **Qualifications for Submitting Alternative Sample Locations**

The Department requested comment on whether alternative repeat monitoring locations must be submitted under the signature of either a certified operator or professional engineer.

Aqua recommends that the Department allow for flexibility by not requiring that either a certified operator or PE must sign a submittal to DEP. Although Aqua is blessed with many certified operators and a number of Professional Engineers on staff, the same is not true for all water systems. Many smaller water systems may not have access to such personnel on a daily basis. Aqua recommends that the Department allow qualified people to submit plans for alternative sample locations but not require specific accreditation, such as being a certified operator or PE.

Aqua has had many meetings to discuss the RTCR and distribution system issues over the last few years. While people attending those meetings have a variety of backgrounds and areas of expertise, some of the people that are most knowledgeable about these systems do not hold either a PE or operator license.

Although the possibility of allowing a person that is “acceptable to the Department” or by “competent personnel” may make it more difficult for DEP to implement, that provision appears to be consistent with existing rules and/or guidance.

### **Electronic Submission of Level 1 and Level 2 Assessments**

In general, Aqua supports the concept of electronic reporting. The assessment forms will need to be uploaded in a convenient format. This format or DEP form needs to be accessible to a wide variety of water systems as well as to appropriate personnel within DEP. However, we have questions with the intent of the electronic reporting. The Department should provide an explanation as to the purpose of electronic reporting. Is

the purpose to provide easy upload for the water systems, easy review by the regional offices, or to provide public information available to anyone?

Aqua feels that the Level 1 and 2 assessments should not be made publically available since there are likely to be security-sensitive topics detailed in the assessments. Our feeling is that the assessments should be made available to anyone in the Department that needs to know the content. The Department should then have the ability to review, critique, and document that the assessment took place within the prescribed time frame.

Details of the assessment, however, should remain confidential and would not be made generally available. For security reasons, it is important that exact locations of valves, size of pipes, sample locations, pressure zones, well stations, interconnects, production facilities and monitoring schedules would remain out of the public domain.

### **Public Notices**

As mentioned in our General Comments, Aqua is concerned with the overuse of Public Notices in Pennsylvania for issues that are not in themselves a public health threat. These notices are apparently meant to be punitive to water systems, but they result in the erosion of trust by consumers in the drinking water quality. This erosion of trust is not just limited to a few water systems, but to the entire drinking water community, including the regulatory agencies. An example is here in this proposal: §109.409(a)(3) is requiring a Tier 2 (30 day) Public Notice for a failure to report a single occurrence of a positive *E.coli* result within 1 hour to the state. A single occurrence of an *E.coli* result, absent a preceding or subsequent total coliform result *is not* a Safe Drinking Water Act violation. DEP is requiring water systems to inform the state within 1 hour of an event that is not a violation, with no explanation of why it is necessary. What is DEP going to do with this information other than tell the utility what it is already required to be doing? This has the potential to distract the water system from its own investigation and follow up. In addition, this could result in public notices that erode the public's confidence in their water supply. By contrast, the federal rule allows for notification by the end of the day. We recommend DEP follow the federal requirements for *E.coli* notification.