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Environmental Quality Board  
P.O. Box 8477  
Harrisburg, PA, 17105-8477

**RE: 25 PA Code, Chapter 109 Safe Drinking Water; General Update and Fees**

To Whom It May Concern,

Attached are comments by Aqua Pennsylvania (Aqua PA) to the Environmental Quality Board pertaining to the proposed changes to 25 PA Code, Chapter 109 Safe Drinking Water; General Update and Fees. Aqua PA supports PADEP's efforts to improve drinking water. However, there are several components of the proposed changes and fees that, if not properly addressed, could increase the risk and costs to our customers statewide. The most significant of these impacts to our systems and customers include over \$400,000 in increased fees, inadvertent taking of approved water sources and allocations, unclear monitoring requirements potentially leading to violations, and reduction in available source waters resulting in potentially increased risks during emergency situations.

Please contact me at [cscrockett@aquaamerica.com](mailto:cscrockett@aquaamerica.com) or 610-645-4207 if you have any questions regarding Aqua Pennsylvania's comments.

Sincerely,



Christopher S. Crockett, Ph.D., P.E.  
Chief Environmental Officer

cc: M. Lucca, President - Aqua Pennsylvania

L. Daniels, Deputy Secretary - PADEP  
**AQUA PA COMMENTS ON CHAPTER 109 REVISIONS (09/21/17)**

Aqua PA's (Aqua) comments on the new PADEP Chapter 109 proposed revisions (August 2017) are focused on six concerns. These include the following:

- Fees (109.1401)
- Monitoring of ALL entry points annually (109.301(11)(ii))
- Monitoring of ALL sources at all Entry Points (109.303(a)(4))
- Comprehensive Monitoring Plan (109.717)
- Filter Turbidity Measurement (109.202(c)(1)(i)(A)(V), 109.701(a)(2))
- Source Water Assessments, Sanitary Surveys, and Program Approvals (109.705, 109.713)

All of the items above have a significant impact on Aqua's operations and its customers. The following explains the impacts in more detail.

**Fees (109.1401):** Aqua objects to the proposed fee structure. The proposed fee structure would result in over \$400,000 in annual fees in addition to fees that Aqua already pays now. Aqua recommends that a more reasonable fee structure be adopted that is in accordance with the Safe Drinking Water Act. The Safe Drinking Water Act requires fees to be commensurate with the service provided. PADEP has provided no explanation or analysis as to how it would provide an additional \$400,000 in service to Aqua on an annual basis. Until PADEP can clearly account for its Aqua-related services, the fees being proposed are arbitrary, capricious, and not commensurate with the service provided violating federal law.

The current system creates an unfair and unequal burden on water suppliers owning and operating multiple water systems. For example, the City of Philadelphia operates one system serving 1.4 million people and would be charged approximately \$40,000 under the proposed fee structure while Aqua PA serving the same number of customers would be required to pay \$400,000 or ten times the amount for a similar amount of customers. Therefore, Aqua recommends that if an annual fee is adopted, there be a cap placed on the fees for organizations that own and operate more than 10 PWS's in PA to no more than \$150,000 annually.

As a regulated utility, Aqua cannot automatically pass through the costs of these additional fees to its customers. These fees will undergo scrutiny and be reviewed for reasonableness in Aqua's next rate base case. In addition, the proposed fee increases for construction permits (minor and major) will result in more costs to Aqua's customers estimated at about \$150,000 annually. As discussed above, we recommend that a more reasonable fee structure be adopted that is in accordance with the Safe Drinking Water Act which requires fees to be commensurate with service provided. The adoption of this fee structure will place financial burden on Aqua until such time as the Public Utility Commission has adopted such change and approved language allowing utilities to recover these costs.

**Monitoring of ALL entry points annually (109.301(11)(ii)), Monitoring of ALL sources at all Entry Points (109.303(a)(4)), and Comprehensive Monitoring Plan (109.717):**

These three sections are highly intertwined and we've compiled our comments on them together. Aqua supports the concept of monitoring all active sources to ensure public is receiving water that is safe to drink. However, the proposed language is vague and will create more questions; won't address PADEPs concerns and create greater risks.

1. **Time to comply:** The changes in these sections have significant impacts on water utilities. If any version of this provision is adopted it needs to give water suppliers at least one year from the effective date to prepare in advance of its effective implementation date. As with our comments on fees above, additional sampling will result in additional cost to Aqua which must also be passed along to our customers. Recovery of these fees can only be recovered through a rate case. In addition, the comprehensive monitoring plans are significant and a year to develop them is needed.
2. **Source Status:** Aqua recommends that this regulation support existing regulatory status of sources with existing Basin Commissions and with Water Allocation regulations. This includes allowing sources to be kept in reserve status.
3. **Requiring Annual operation of all sources and entry points is not feasible and increases risk:** This provision appears to dictate to water suppliers how to operate their system and would force systems to supply water through an entry point annually for a particular source that is not in regular use. This seems to overreach the goal of representing sources in routine compliance monitoring and begins to dictate operation of the system.

There are many reasons why a source is not used in a given year. Water suppliers might have sources that were taken off-line due to the need for treatment or aesthetic issues. Some of these sources might be needed in the future, but a water supplier might not want to invest the capital at this time and do not intend to operate them until improvements have been made. They might also want to avoid the use of a particular source due to aesthetic issues except during periods of drought. Requiring annual operation is not feasible in that it eliminates the water supplier's ability to balance capital investment as well as provide the best quality water.

This approach would force systems to abandon reserve or backup sources and thus increase risk to respond to extreme events. It is clear from the recent spill events that having backup capabilities are critical to preventing a major public health impact. PADEP's use of this provision is counter to lessons learned and actually increases public risk during extreme events.

Aqua proposes that DEP refine the definitions of the following 3 categories (proposed language in Appendix A). Routine compliance monitoring would be required for all entry points that operated within a given calendar year.

- a. **Permanent Sources:** Aqua recommends that any non-emergency source which provides water to the distribution system in a calendar year be designated a permanent source and that it be represented in routine compliance monitoring. The water supplier's strategy to represent all permanent sources which provide water in a calendar year is to

be detailed in the comprehensive monitoring plan. To ensure that entry point samples are representative of all sources that provide water, the water supplier must outline in their comprehensive plan how they will document whether an entry point (or sources at entry point) provided water into the distribution system.

- b. **Emergency Sources:** On page 4998 of the preamble, there is discussion where the department anticipates that “emergency” designation can be kept for purchased water if select criteria are met. Aqua supports this concept. We have many emergency interconnections with other surface water suppliers. This water receives monitoring on the water supplier’s side and does not pose the same level of risk that an unmonitored source poses.
- c. **Reserve:** On page 4998 of the preamble, it states that on a case-by-case basis the department anticipates allowing sources to be retained without routine monitoring if these sources have special permit conditions which define the actions (including monitoring) required to bring the source back into service. Aqua supports this concept as we have many sources that are not used annually.  
We recommend that it be managed through “reserve” status category and the comprehensive monitoring plans. DEP could require that sources with a “Reserve” status require review prior to being brought online. This could include at a minimum, updating the comprehensive monitoring plan.
- d. **“Consistent” Blending Ratio:**
  - i. This term is confusing. For example, does DEP expect two sources to blend at 40%/60% at all times? Would additional monitoring be required if the sources were blended at 30%/70% ratio or does that fall within what is considered consistent? Aqua recommends that language in 109.303(a)(4) be simplified and focus on the intent only. Some additional language should be added to 109.717 to clarify how all sources are to be represented during monitoring (see Appendix A).
  - ii. **Monitoring raw source water vs. combined treated Water:** Aqua recommends flexibility be established to allow sampling of individual raw water sources for blended entry points as part of the comprehensive monitoring plan. For example, this data could be compared to the entry point sample to determine if there are any significant variations relevant to the entry point. The records would be maintained by the water system and reviewed by DEP upon request.
- e. **Normal Operating Conditions:** Aqua agrees with DEP on page 4998 of the proposed regulation that system specific scenarios will be able to be addressed in the system’s comprehensive monitoring plan. Aqua assumes that the intent is to allow water suppliers to define normal operating conditions in their comprehensive monitoring plan and that monitoring should focus on representing those situations (provided all sources utilized are represented).
- f. **Additional Entry Point Monitoring Data:** As the proposed regulation is written, there will be entry points where more than one entry point sample will be reported for a given monitoring period. Aqua requests clarification on how this data will be managed by DEP and/or how PADWIS will track the influence of a given source on an entry point result.

- g. **Example monitoring scenarios:** Here are two scenarios which utilize the language proposed in Appendix A of our comments.
- i. **Groundwater entrypoint (4 sources):** Three permanent and one reserve source. Supply is managed through a clear well.
    - 1. **Normal operating condition – 2 Permanent Sources:** When the clear well reaches a minimum level, two of the permanent wells turn on at their rated flow. There are times when a well is out of service, but that is not considered normal operating conditions. Therefore, annual monitoring for these sources occurs when both are online and can be captured with a single sample.
    - 2. **Third Permanent source:** This source is not needed every year. Each year it is not in use, it is documented. If the well needs to be turned on, the comprehensive monitoring plan is consulted. For example, if no monitoring has occurred for this location in the previous year, the raw water is run to waste to collect a sample for all applicable parameters. Water would be blended as needed to ensure that the entry point remains in compliance with regulatory limits. An entry point sample would be collected after this source was brought online. It would count as an extra entry point sample for the monitoring period.
    - 3. **Reserve source:** Should this source ever be needed, a review of the monitoring data will be conducted and an updated comprehensive monitoring plan would be proposed to DEP. The source will not go on-line until approval is received from DEP.
  - ii. **Surfacewater entrypoint (3 sources):** All sources are regularly in use. The blended ratios of these sources vary. The comprehensive monitoring plan defines the range of normal operating conditions (source one is 10-30%, most typically 20%, source two is 20-70%, most typically 30%, and source 3 is 30-70%, most typically 50%). For this type of situation, the water supplier could establish in their comprehensive monitoring plan that raw water samples would be collected at the same time as the entry point sample. These source results are compared to the entry point result to see if there is a significant difference.

**Filter Turbidity Measurements (109.202(c)(1)(i)(A)(V), 109.701(a)(2)**

Aqua strongly disagrees with the proposed changes in turbidity measurement. The change from 0.3 NTU to 0.30 NTU represents a significant change in how turbidity is measured. There is no peer reviewed published data showing that the current approved online turbidity measurement systems can reliably provide measurements to support two significant digits for compliance. In fact, using the Standard Methods methodology regarding significant figures does not support two significant digits. EPA currently defines the turbidity measurements as 0.3 and 1 NTU and does not use two significant digits. PADEP should follow the federal requirements as they are sufficient.

**109.705 and 109.713 Source Water & Sanitary Survey Related Comments**

Aqua requests that DEP refer to concerns submitted by TAC in their 11/14/2014 letter regarding Source Water Assessments and Sanitary Surveys. Specifically, Aqua has concerns about section 109.705 (iii) which appears to require water suppliers to update their source water assessments annually for every source as part of their sanitary survey. This is not the practice in prior PADEP guidance nor does it match with AWWA standards which suggest every 3 to 5 years. This would create an undue burden and water suppliers should be given the opportunity to use alternative methods to accomplish this instead of the method dictated in the proposed language. It has been Aqua's experience that source water related issues in PA and nationally related to accidents and spills, are due to facilities or activities that have been occurring for long periods of time upstream. The water supplier should be allowed to update their source water assessments for surface water systems no less than every 3 to 5 years and potentially longer for wellhead areas. Water suppliers should be given the chance to tailor their needs for an assessment update and submit the schedule to PADEP.

In the proposed language PADEP does not define "actual or probable sources of contamination". PADEP should use language in Chapter 109 that is the same language and definitions used in Source Water Assessments and its Source Water Protection Program and Planning documents since 1996.

**Appendix A:** Proposed language related to entry point monitoring to represent all sources used.

**109.301(11)(ii)** Replace language in proposed rule with the language below:

A comprehensive monitoring plan shall be developed as per 109.717. The intent of this plan is to ensure that routine compliance monitoring at the entry point represents all sources that operate in a given calendar year.

**109.303(a)(4)**: Modify language in proposed rule as below (additional text is *underlined, in italics, and purple* and text to be deleted is ~~crossed-out and purple~~):

Samples for determining compliance with MCLs for organic contaminants listed by the EPA under 40 CFR 141.61 (relating to maximum contaminant levels for organic contaminants) [ and ], inorganic contaminants listed by the EPA under 40 CFR 141.62 (relating to maximum contaminant levels (MCLs) for inorganic contaminants), radionuclide contaminants listed by the EPA under 40 CFR 141.66 (relating to maximum contaminant levels for radionuclides) and with the special monitoring requirements for unregulated contaminants under § 109.302(f) (relating to special monitoring requirements) shall be taken at each entry point to the distribution system which is representative of each source *that provided water to the distribution system during the monitoring period* after an application of treatment during periods of normal operating conditions. [ If a system draws water from more than one source and the sources are combined prior to distribution, the system shall sample at the entry point where the water is representative of combined sources being used during normal operating conditions. ] If a system draws water from more than one source and the sources are combined prior to distribution, the system shall sample at the entry point during periods of normal operating conditions when water is representative of all sources being used, *as defined in the comprehensive monitoring plan*. ~~If sources are blended at a consistent ratio prior to the entry point, a blended sample may be taken to determine compliance. If sources are not blended at a consistent ratio or if sources are alternated prior to the entry point, more than one sample shall be taken to ensure that the samples are representative of all sources.~~

**§ 109.717. Comprehensive monitoring plan.** Modify language in proposed rule as below (additional text is *underlined, in italics, and purple* and text to be deleted is ~~crossed-out and purple~~):

(a) *Beginning \_\_\_\_\_ (Editors note: the blank refers to 1 year after the effective date of the adoption of this proposed rulemaking.)*, a community or nontransient noncommunity water supplier shall develop a comprehensive monitoring plan to assure that all sources and entry points are included in routine compliance monitoring at the entry points and within the distribution system. The plan must contain at least all of the following:

- (1) A list of all sources and associated treatment plants and entry points. This list must also include purchased interconnections. *Each entry point and source shall be assigned to one of the following categories:*

(i) Permanent: Routine compliance monitoring at the entry point must represent water from all sources used in a calendar year. For sources not used in a calendar year, the water supplier must document that the source did not provide water to the distribution system. The comprehensive monitoring plan must include the steps taken for monitoring permanent sources which did not provide water to the distribution system in the previous calendar year.

(ii) Emergency: Purchased water sources used for emergencies only. Plan to define how use is reviewed and documented.

(iii) Reserve: Sources not in use where they cannot be quickly brought into service. No monitoring is required while the source is in "reserve". Its status may not be changed to "permanent" without a review by the Department of an updated comprehensive monitoring plan which defines the required monitoring.

(2) A schematic of all sources and associated treatment plants and entry points, purchased interconnections and the relative locations of the points of entry into the distribution system.

(3) For each entry point, a description of normal operating conditions system operations, including whether the entry point provides water continuously, whether each source provides water continuously, whether sources are alternated or blended ~~and on what cycle or blending ratio, and whether the blending ratio is consistent.~~ For blended sources, include a description of the blending ratio range during normal operating conditions.

(4) A description of how all sources and entry points are included in routine compliance monitoring. This includes the following as applicable:

(i) a statement that reserve sources will not be brought online without working with DEP to define what monitoring is required.

(ii) a description of monitoring to be done to ensure permanent sources are monitored within each calendar year they are operated as well as how monitoring is to be defined for sources which were not online in the previous calendar year.

(iii) a description of how monitoring will take the normal operating conditions blended ratios into account.

(b) The plan must include the sample siting plans and monitoring plans required under other sections of this chapter, including the total coliform sample siting plan required under § 109.701(a)(5) (relating to reporting and recordkeeping), the monitoring plan for disinfectants, DBPs and DBP precursors required under § 109.701(g), the lead and copper sample site location plan required under § 109.1107(a)(1) (relating to system management responsibilities) and the source water sampling plan required under § 109.1202(h) (relating to monitoring requirements).

(c) The water supplier shall review and update the plan at least annually and as necessary to reflect changes to facilities or operations. The date of each update must be recorded on the plan.

(d) The water supplier shall submit the initial plan. The water supplier shall review the plan annually and submit an updated plan to the Department, if revisions are made. These plans are subject to Department review and revision.