

**Notice of Proposed Rulemaking  
Department of Environmental Protection  
Environmental Quality Board  
(25 Pa. Code, Chapter 109)  
(Safe Drinking Water)  
(Chapter 109 – General Update)**

**Preamble**

The Environmental Quality Board (Board) proposes to amend 25 Pa. Code, Chapter 109 (relating to Safe Drinking Water). The amendments include major revisions to the regulation of inorganic chemicals (IOC), synthetic organic chemicals (SOC) and volatile synthetic organic chemicals (VOC); minor revisions to the Filter Backwash Recycling Rule (FBRR), Lead and Copper Rule (LCR), and Radionuclide (RAD) Rule requirements; and other minor revisions to Chapter 109 to retain primary enforcement authority (primacy) and to clarify existing requirements.

This proposal was adopted by the Board at its meeting of \_\_\_\_\_.

**A. Effective Date**

These amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

**B. Contact Persons**

For further information, contact Lisa Daniels, Division of Operations Monitoring and Training, P.O. Box 8467, Rachel Carson State Office Building, Harrisburg, PA 17105-8467, (717) 772-2189, or Marylou Barton, Assistant Counsel, Bureau of Regulatory Counsel, P.O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Information regarding submitting comments on this proposal appears in Section J of this preamble. Persons with a disability may use the AT&T Relay Service by calling 1-800-654-5984 (TDD users) or 1-800-654-5988 (voice users). The proposal is available electronically through the DEP Web site (<http://www.dep.state.pa.us>).

**C. Statutory Authority**

The proposed rulemaking is being made under the authority of Section 4 of the Pennsylvania Safe Drinking Water Act (35 P.S. § 721.4), which grants the Board the authority to adopt rules and regulations governing the provision of drinking water to the public, and Sections 1917-A and 1920-A of the Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20).

## **D. Background and Purpose**

The purpose of the proposed rulemaking package is to amend the Department's Safe Drinking Water regulations to: (1) incorporate necessary federal requirements needed to obtain and/or maintain primacy for the Phase II/IIB/V, Arsenic, Filter Backwash Recycling (FBRR), Lead and Copper (LCR), and Radionuclide (RAD) rules; (2) amend several sections to improve data quality; (3) coordinate efforts with several other drinking water regulatory packages, including Operator Certification and Environmental Laboratory Accreditation; and (4) clarify several existing requirements in order to improve compliance.

### 1. *Revisions to incorporate federal requirements.*

#### a. *Major revisions to IOC, SOC and VOC requirements.*

EPA promulgated the Phase II Rule on January 30, 1991, the Phase IIB Rule on July 1, 1991, the Phase V Rule on July 17, 1992, and the Arsenic Rule on January 22, 2001. These rules established the monitoring requirements for inorganic chemicals (IOC), synthetic organic chemicals (SOC) and volatile synthetic organic chemicals (VOC) for all community and nontransient noncommunity water systems. The Department's IOC/SOC/VOC monitoring and waiver requirements (109.301) are not consistent with the federal rules and are being amended to obtain primacy for the Phase II/IIB/V and Arsenic Rules. The Department must also obtain EPA-approval of its Monitoring Waiver Program guidance.

#### b. *Minor revisions to FBRR.*

EPA promulgated the FBRR on June 8, 2001. The FBRR established additional requirements for surface water systems that recycle spent filter backwash. The Department promulgated final regulations on April 3, 2004. As a condition of primacy, the Department must make minor revisions to the public notification requirements in order to maintain primacy for the FBRR.

#### c. *Minor revisions to LCR.*

Lead and copper reporting requirements for community and nontransient noncommunity water systems (109.1107) are being amended to maintain primacy for the LCR.

#### d. *Minor revisions to RAD.*

Monitoring requirements for bottled, vended, retail and bulk water hauling systems (BVRBs) are being clarified (for those BVRBs that meet the definition of a community or nontransient noncommunity water system) to obtain primacy for the RAD Rule.

2. *Revisions to improve data quality.*

- Quality assurance and quality control requirements for continuous monitoring equipment associated with surface water systems are being amended to clarify the requirements for calibration.
- Amendments to require mandatory electronic reporting will improve data quality, reduce reporting violations, and streamline the reporting process.

Electronic reporting will be accomplished using the Department’s existing secure web application, the Drinking Water Electronic Lab Reporting (DWELR) system. DWELR has been available to water suppliers and labs since 2003. Currently, the Department receives about 70% of its data voluntarily through DWELR. Users can upload data, or enter data using screen entry forms. The DWELR system includes an error detection program that produces error reports. Errors can be corrected immediately or recalled for correction later. This allows users to correct data entry and other errors, thus preventing erroneous MCL or monitoring/reporting violations. Water systems can register for access to view the data that’s submitted for them by submitting entities. This allows water suppliers to monitor the data, so they can notify their lab if data appears to be incorrect or missing. DWELR works within the DEP Greenport environment. For more information about DWELR, please refer to the Department’s web site at <http://www.depweb.state.pa.us/watersupply/cwp/view.asp?a=1251&q=447842> , or contact the Division of Data Systems & Analysis at (717) 787-6744.

The Department is requesting comment on the mandatory electronic reporting requirements found in 109.701(j) for public water systems conducting in-house monitoring under 109.304(c) (i.e., residual disinfectant concentration, pH, turbidity).

It is estimated that the following number of water systems perform monitoring for one or more of the above-mentioned parameters and would be required to either: (1) report the data electronically to the Department, or (2) delegate the reporting to an accredited lab.

<b>Water System Type and Size</b>	<b>Number of Water Systems</b>
<b>Community Water Systems:</b>	
Serving < 501 persons	1,281
Serving 501 – 3,300 persons	505
Serving 3,301 – 10,000 persons	179
Serving > 10,000 persons	145
<b>Noncommunity Water Systems:</b>	
Serving < 501 persons	2,088
Serving 501 – 3,300 persons	299
Serving 3,301 – 10,000 persons	10
Serving > 10,000 persons	1

**Note:** Some of these systems are already reporting electronically to the Department, on a voluntary basis.

3. *Revisions to coordinate efforts with several other drinking water regulatory packages.*

Several associated regulatory packages are in various stages of promulgation. In order to coordinate efforts, the following revisions will be necessary.

- Operator Certification requirements under 109.304, 109.704, 109.1105 and 109.1107.
- Environmental Laboratory Accreditation (Chapter 252) reporting requirements under 109.810.

4. *Revisions to clarify several other requirements.*

- Currently, language that describes how the Department determines compliance with the MCLs has been incorporated by reference. With these amendments, EPA's compliance determination requirements are being added into the text of Chapter 109 in order to better inform the regulated community and improve compliance. Chapter 109 will now be a one-stop-shop in terms of determining whether a water supplier is in compliance with the MCLs.
- Information describing new sources under § 109.503(a)(1)(iii) is being amended to clarify the requirements for new source sampling.
- Requirements under § 109.505(2)(ii) for noncommunity water systems to file a brief description of the system are being amended to clarify that the information shall be filed prior to construction.

In summary, the Board proposes to incorporate these amendments into the Pennsylvania Safe Drinking Water Regulations (25 Pa. Code Chapter 109) in order to obtain primary enforcement authority, pursuant to the Federal SDWA. These regulations must be adopted during 2007, as per a time schedule submitted to EPA.

The draft proposed amendments were submitted for review to the Small Water Systems Technical Assistance Center Advisory Board (TAC) for review and discussion on November 17, 2005. Comments were received from the TAC on January 3, 2006.

### **E. Summary of Regulatory Requirements**

The proposed amendments reflect new federal requirements and will correct minor deficiencies in Chapter 109 to satisfy outstanding issues with EPA and obtain primacy approval for several rules. The amendments also include proposed changes to clarify existing requirements.

#### *§ 109.1 Definitions.*

The definition of "MCL" was amended to delete the language that incorporates by reference the means of determining compliance with the MCLs. EPA's compliance determination language is being added into the text of Chapter 109 (at 109.301 and 109.1102) to improve compliance.

This section was amended to add a definition for “reliably and consistently below the MCL”. This amendment reflects the federal requirements found in 40 CFR § 141.23(c)(8), and §§ 141.24(f)(11)(ii) and (h)(7)(ii).

§ 109.301 *General Monitoring requirements.*

This section was amended to delete the language that incorporates by reference the general monitoring requirements. All monitoring requirements are now specified in the text of Chapter 109.

§ 109.301(1)(i)(A) *Performance monitoring for filtration and disinfection.*

This clause was amended to clarify that filter plants (that do not operate continuously) shall determine and record the turbidity level prior to shutting down the plant.

§ 109.301(1)(i)(B) and (iv)(A) *Performance monitoring for filtration and disinfection.*

These clauses were amended to clarify that calibration of continuous turbidity monitors shall be conducted at least quarterly, using an EPA approved primary standard.

§ 109.301(1)(iv)(B) *Performance monitoring for filtration and disinfection.*

This clause was amended to clarify that failure of continuous recording devices requires manual recording every four hours in lieu of continuous recording.

§ 109.301(2)(i)(B) *Performance monitoring for unfiltered surface water and GUDI.*

This clause was amended to clarify that systems (that do not operate continuously) shall determine and record the turbidity level prior to shutting down the plant.

§ 109.301(2)(i)(C) *Performance monitoring for unfiltered surface water and GUDI.*

This clause was amended to clarify that calibration of continuous turbidity monitors shall be conducted at least quarterly, using an EPA approved primary standard.

§ 109.301(2)(i)(D) *Performance monitoring for unfiltered surface water and GUDI.*

This clause was amended to clarify that failure of continuous recording devices requires manual recording every four hours in lieu of continuous recording.

§ 109.301(3)(iv) *Monitoring requirements for coliforms – compliance determinations.*

This subparagraph was added to incorporate EPA’s method of determining compliance. This amendment reflects the federal requirement found in 40 CFR § 141.63.

§ 109.301(5) *Monitoring requirements for VOCs.*

This paragraph was amended to be consistent with federal monitoring and compliance determination requirements found in 40 CFR § 141.24(f).

§ 109.301(6) *Monitoring requirements for SOCs (pesticides and PCBs).*

This paragraph was amended to be consistent with federal monitoring and compliance determination requirements found in 40 CFR § 141.24(h).

§ 109.301(7) *Monitoring requirements for IOCs.*

This paragraph was amended to be consistent with federal monitoring and compliance determination requirements found in 40 CFR § 141.23.

§ 109.301(8) *Monitoring requirements for public water systems that obtain finished water from another public water system.*

This paragraph was amended to clarify the monitoring requirements for consecutive water systems.

§ 109.301(14) *Monitoring requirements for radionuclides.*

This paragraph was amended to clarify the monitoring requirements for radionuclides.

§ 109.303 *Sampling requirements.*

This section was amended to change “certified” laboratory to “accredited” laboratory, and to correct a typographical error.

§ 109.304 *Analytical requirements.*

This section was amended to clarify which persons may perform the monitoring specified under § 109.304(c).

§ 109.410 *Tier 3 public notice – form, manner and frequency of notice.*

This section was amended to incorporate the federal requirement for issuing public notice in response to reporting and recordkeeping violations of the FBRR. This amendment reflects the federal requirement found in Appendix A to Subpart Q of Part 141, I.A.8.

§ 109.503 *Public water system construction permits.*

This section was amended to clarify the monitoring requirements for new source sampling.

§ 109.504 *Public water system operation permits.*

This section was amended to clarify that water suppliers shall be in compliance with the operator certification requirements prior to receiving an operation permit.

§ 109.505 *Requirements for noncommunity water systems.*

This section was amended to clarify that noncommunity water systems shall file a brief description of the system prior to construction.

§ 109.605 *Minimum treatment design standards.*

This section was amended to be consistent with EPA and clarify that for surface water and GUDI sources, the minimum design standard for viruses is 99.99% removal and/or inactivation. This section also was amended to recognize that some noncommunity water systems may be unable to meet the 99.9% inactivation requirement for *Giardia* due to physical space limitations.

§ 109.701(a)(11) *Noncompliance report.*

This paragraph was added to be consistent with EPA and clarify that a water supplier shall report to the Department, within 48 hours, a failure to comply with the monitoring requirements under Subchapter C.

§ 109.701(i) *Accuracy of data.*

This subsection was added to clarify that water suppliers are responsible for the accurate reporting of self-monitoring data to the Department.

§ 109.701(j) *Electronic reporting.*

This subsection was added to require mandatory electronic reporting by public water systems of self-monitoring data (analyzed under 109.304(c)) to the Department. This amendment will improve the quality of data submitted to the Department and will streamline the reporting process.

§ 109.701(k) *Monitoring plan to determine if a source is directly influenced by surface water.*

This subsection was added to clarify that systems required to conduct monitoring (to determine if a source is directly influenced by surface water) shall develop, submit for approval, and implement a monitoring plan.

§ 109.703 *Facilities operation.*

This section was amended to remove the requirement to achieve a 50% reduction in turbidity before putting a backwashed filter back on line when source water turbidity is less than

1.0 NTU. This requirement is redundant with the individual filter requirements under § 109.701(e).

§ 109.704 *Operator certification.*

This section was amended to be consistent with the Water and Wastewater Systems Operators' Certification Act (63 P.S. §§ 1001-1015.1). The Act requires nontransient noncommunity water systems to have personnel certified to operate and maintain their water system.

§ 109.810(a) *Reporting and notification requirements.*

This subsection was amended to add new mandatory electronic reporting requirements for accredited laboratories. Mandatory electronic reporting will improve the quality of data submitted to the Department and will streamline the reporting process. Electronic reporting will be in lieu of submitting paper copies to the Department.

§ 109.810(b) *Reporting and notification requirements.*

This subsection was amended to clarify that notification is required whenever an MCL, MRDL or TT is exceeded, or a sample result requires the collection of check or confirmation samples.

§ 109.810(c) *Reporting and notification requirements.*

This subsection was added to clarify when a laboratory can assign the responsibility for reporting and notification to another accredited laboratory.

§ 109.1003(d) and (e) *Monitoring requirements.*

These subsections were added to clarify the monitoring requirements for a bulk water hauling or vended water system that is determined to serve at least 25 of the same persons year-round, or at least 25 of the same persons over 6 months per year.

§ 109.1102 *Action levels and treatment technique requirements.*

This section was added to incorporate EPA's method of computing the 90<sup>th</sup> percentile value for lead and copper.

§ 109.1103(e) *Reduced monitoring.*

This section was amended to be consistent with federal monitoring requirements found in 40 CFR § 141.86(c).



§ 109.1103(g) *Sample site location plan.*

This section was amended to clarify that water suppliers shall submit a sample site location plan to the Department.

§ 109.1105 *Permit requirements.*

This section was amended to clarify that noncommunity water systems shall file a brief description of the system prior to construction.

§ 109.1107 *System management responsibilities.*

This section was amended to clarify that water suppliers shall submit a sample site location plan to the Department, and include the sample location when submitting results of all lead and copper tap monitoring.

§ 109.1107(c) *Operator certification.*

This section was amended to delete the requirement that suppliers shall complete Department-sponsored training related to corrosion control treatment prior to initiating operation. This section also was amended to delete the requirement under § 109.1107(c)(2).

**F. Benefits, Costs and Compliance**

**Benefits**

The enhanced monitoring and reporting requirements will improve compliance, streamline reporting, and provide greater assurance that contaminant levels will remain below the MCLs. The revisions also ensure that the Department, the regulated community and the public are better informed to make decisions affecting public health protection.

**Compliance Costs**

The proposed revisions primarily address existing monitoring and reporting requirements. As a result, compliance costs are not expected to substantially increase or decrease.

The mandatory electronic reporting requirements may require some water suppliers (conducting monitoring under 109.304(c)) to either: (1) purchase a computer and internet provider, or (2) pay their accredited lab to report additional data on their behalf.

**Compliance Assistance Plan**

The proposed revisions address monitoring and reporting requirements. As a result, financial assistance should not be necessary.

## **Paperwork Requirements**

The proposed revisions address monitoring and reporting requirements. As a result, some changes to forms, reports and other paperwork are expected. Mandatory electronic reporting requirements are expected to streamline the reporting process and take the place of reporting via paper.

## **G. Pollution Prevention**

Not applicable.

## **H. Sunset Review**

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

## **I. Regulatory Review**

Under Section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on \_\_\_\_\_, the Department submitted a copy of these proposed amendments to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees. In addition to submitting the proposed amendments, the Department has provided IRRC and the Committees with a copy of the detailed regulatory analysis form prepared by the Department. A copy of this material is available to the public upon request.

Under Section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed regulations within 30 days of the close of the public comment period. The comments, recommendations or objections shall specify the regulatory review criteria that have not been met. The Act specifies detailed procedures for review of these issues by the Department, the General Assembly and the Governor prior to final publication of the regulations.

## **J. Public Comments**

**Written Comments** – Interested persons are invited to submit comments, suggestions, or objections regarding the proposed regulation to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 16<sup>th</sup> Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. Comments, suggestions or objections must be received by the Board by \_\_\_\_\_ (within 30 days of publication in the *Pennsylvania Bulletin*). Interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by \_\_\_\_\_ (within 30 days following publication in the *Pennsylvania Bulletin*). The one-page summary will be provided to each member of the

Board in the agenda packet distributed prior to the meeting at which the final regulation will be considered.

**Electronic Comments** – Comments may be submitted electronically to the Board at [RegComments@state.pa.us](mailto:RegComments@state.pa.us) and must also be received by the Board by \_\_\_\_\_. A subject heading of the proposal and a return name and address must be included in each transmission.

**K. Public Hearings**

It is anticipated that public hearings should not be necessary.

BY:

KATHLEEN A. McGINTY  
Chairperson  
Environmental Quality Board