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**Tate, Michele**

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**From:** Quirindongo, Mayra [MQuirindongo@nrdc.org]  
**Sent:** Monday, October 01, 2007 10:46 AM  
**To:** RegComments@state.pa.us  
**Subject:** Proposed rulemaking 25 PA. CODE CH. 109 - Safe Drinking Water

To Whom It May Concern,

Attached please find comments by NRDC and Mountain Watershed Association concerning the proposed general update of 25 Pa. Code Chapter 109 safe drinking water regulations. Thank you for the opportunity to comment on the proposed rulemaking.

Mayra Quirindongo  
Natural Resources Defense Council  
1200 New York Avenue NW, Suite 400  
Washington, DC 20005  
Telephone: (202) 289-2380  
Fax: (202) 289-1060

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**NATURAL RESOURCES DEFENSE COUNCIL**  
**MOUNTAIN WATERSHED ASSOCIATION**

**BY ELECTRONIC MAIL**

September 28, 2007

Pennsylvania Environmental Quality Board  
Rachel Carson State Office Building  
16<sup>th</sup> Floor  
400 Market Street  
Harrisburg, PA 17101-2301

**Re: Proposed Amendments to 25 Pa. Code Chapter 109 Safe Drinking Water Regulations**

To Whom It May Concern:

The undersigned organizations appreciate the opportunity to comment on the proposed rulemaking to amend Chapter 109 safe drinking water regulations.<sup>1</sup> We support this action to bring the requirements of 25 Pa. Code Ch. 109 in line with federal requirements in 40 CFR Part 141. The proposed addition of language describing monitoring requirements and compliance determinations in lieu of the incorporations by reference will make it easier for water systems to comply with regulatory requirements. Furthermore, the addition of language specifying the requirements for obtaining monitoring waivers is a positive development given that current Chapter 109 waiver provisions omit important provisions in the federal rule.

Despite the significant improvement represented by the proposed rule, a number of sections remain where federal requirements have not been fully addressed or where additional clarification is needed. These sections are discussed in greater detail below. These comments do not attempt to discuss every amendment in the proposed rule, but focus primarily on monitoring requirements. These comments are organized as follows: Chapter 109 sections amended in the proposed rulemaking; Chapter 109 sections not amended in the proposed rulemaking; and other federal requirements.

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<sup>1</sup> Pennsylvania Bulletin, Vol. 37, No. 35, September 1, 2007.

## I. Chapter 109 sections amended in the proposed rulemaking

### 25 Pa. Code 109.1. Definitions.

The amendments to the definition of “*MCL - Maximum Contaminant Level*” and the addition of language defining the term “*Reliably and consistently below the MCL*” are appropriate and make this section consistent with federal regulations.

### 25 Pa. Code 109.301. General monitoring requirements.

The proposed changes to sections 109.301(5), 109.301(6), and 109.301(7) describing monitoring requirements for VOCs, SOCs and IOCs, respectively, serve to clarify existing requirements and bring state drinking water regulations closer in line with federal rules, but additional changes are needed to achieve full compliance and to address shortcomings in waiver requirements, as discussed below.

► **Section 109.301(5)(viii) (waivers for VOC monitoring).** Federal regulations establish a duration of two compliance periods (i.e. six years) for VOC monitoring waivers and require that the vulnerability assessment be updated during the first three years the waiver is in effect as a condition of obtaining the remaining three years of the waiver.<sup>2</sup> VOC monitoring waivers under 25 Pa. Code 109.301(5)(viii)(C) are effective for a single three-year compliance period. While the proposed three-year duration of the state waiver is appropriate and should remain unchanged, this section does not explain the procedure for renewal of a waiver, despite affirming that a waiver “may be renewed in each subsequent compliance period.”<sup>3</sup>

The section should be amended to make it clear that a public water supplier is responsible for submitting a renewal application to the Department and that the application must include an updated vulnerability assessment. This change would comply with the federal requirement that the vulnerability assessment must be updated for the waiver to remain effective for another three-year compliance period. Waiver renewals should not be automatic, but contingent on DEP approval of the renewal application.

► **Section 109.301(7)(iii)(D) (waivers for antimony, arsenic, barium, beryllium, cadmium, chromium, fluoride, mercury, nickel, selenium and thallium monitoring).** The proposed amendments to § 109.301(7)(iii)(D)(I) and (II) setting criteria and procedures for the Department to grant waivers would bring these sections into compliance with the federal requirements at 40 CFR 141.23(c)(4).

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<sup>2</sup> 40 CFR 141.24(f)(7).

<sup>3</sup> 25 Pa. Code 109.301(5)(viii)(C).

As stated in the proposed amendments to Chapter 109, previous analytical results and other factors affecting contaminant concentrations such as “changes in groundwater pumping rates, changes in the system’s configuration, changes in the system’s operating procedures or changes in stream flows or characteristics” should be considered as criteria for any DEP decision concerning the granting of a waiver to a water system. As also established in the proposed amendments, waivers should be granted in writing and state the basis for the DEP determination.

While agreeing with these proposed changes to § 109.301(7)(iii)(D), we also recommend that the following additional changes be made:

- a. Section 109.301(7)(iii)(D) should be amended to require the definition of a vulnerability assessment area for antimony, arsenic, barium, beryllium, cadmium, chromium, fluoride, mercury, nickel, selenium and thallium, and
- b. Section 109.301(7)(iii)(D)(I)(b) should be amended to include the presence of industrial or other significant sources of the above-named IOCs within the vulnerability assessment area among the criteria the Department must use in making its determination whether to grant a monitoring waiver.

While these recommended changes to § 109.301(7)(iii)(D) and § 109.301(7)(iii)(D)(I)(b) would set requirements that are not found in 40 CFR 141.23(c)(4), the presence of significant IOC sources within the vulnerability assessment area should be a key element in determining whether a water system qualifies for a monitoring waiver. Sources such as active and abandoned mines and waste disposal sites may cause episodic contamination of drinking water supplies when weather events lead to temporary but significant spikes in contaminant concentrations. These spikes may cause adverse health effects on vulnerable populations, but not necessarily be of enough duration to be detected by infrequent monitoring. To prevent these contamination episodes from remaining undetected, the Department should not grant monitoring waivers to water systems that are susceptible to contamination because of the presence of contaminant sources within their vulnerability area.

The monitoring frequency for antimony, arsenic, barium, beryllium, cadmium, chromium, fluoride, mercury, nickel, selenium and thallium set in § 109.301(7)(iii)(A) (annually for surface water entry points and triennially for groundwater or GUDI entry points) is not burdensome and preventing a water system from obtaining a waiver based on the presence of contaminant sources in the vulnerability assessment area would not impose excessive costs on the system.

► **Section 109.301(7)(v)(A).** There is an apparent error in this section. The sentence “If any one sample would cause the annual average to be exceeded, then the system is out of compliance immediately” should be edited as follows: “If any one sample would cause

the **running** annual average to [be exceeded] exceed the MCL, then the system is out of compliance immediately.”

## II. Chapter 109 sections not amended in the proposed rulemaking

### 25 Pa. Code 109.202 (c)(ii)

This section is not addressed in the proposed rulemaking. However, the *Giardia* inactivation requirements in this section are not consistent with federal requirements. Federal regulations state with reference to public water systems that provide filtration:

“The disinfection treatment must be sufficient to ensure that the total treatment processes of that system achieve at least 99.9 percent (3-log) inactivation and/or removal of *Giardia lamblia* cysts and at least 99.99 percent (4-log) inactivation and/or removal of viruses, as determined by the State.”<sup>4</sup>

However, Chapter 109 regulations currently require that

“the combined total effect of disinfection processes used in a filtration plant shall achieve at least 90% inactivation of *Giardia* cysts and a 99.9% inactivation of viruses...”<sup>5</sup>

Section 109.202 (c)(ii) should be amended to make Chapter 109 *Giardia* and virus inactivation and/or removal requirements consistent with the language in 40 CFR 141(b)(1) by specifying that total treatment processes must achieve at least 99.9 percent inactivation and/or removal of *Giardia lamblia* cysts and at least 99.99 percent inactivation and/or removal of viruses.

### 25 Pa. Code 109.202(e)

Federal regulations require that

“Each public water system must certify annually in writing to the State (using third party or manufacturer's certification) that when acrylamide and epichlorohydrin are used in drinking water systems, **the combination (or product) of dose and monomer level** does not exceed the levels specified...”<sup>6</sup> [emphasis added]

For purposes of clarification, Section 109.202(e) should be amended to include the language “*the combination (or product) of dose and monomer level*”. This would also match the language in Section 109.701(d)(7).

### 25 Pa. Code 109.301(3)

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<sup>4</sup> 40 CFR 141.72(b)(1).

<sup>5</sup> 25 Pa. Code 109.202(c)(ii).

<sup>6</sup> 40 CFR 141.111.

The language in this section stating that

“A system may forego fecal coliform or E. coli testing on a total coliform-positive sample if the system assumes that any total coliform-positive sample is also fecal-coliform positive”

does not comply with the federal regulations, which give the State the discretion to allow a system to forego such testing **“on a case-by-case basis.”**<sup>7</sup> The language in 25 Pa.Code 109.301(3) is a blanket allowance that allows any system to forego further testing for fecal coliform or E. coli on any total coliform-positive sample if it assumes that the sample is also fecal-coliform positive. This section should be amended to require that the determination of whether a system is allowed to forego further testing be made by the State on a case-by-case basis.

### III. Other federal requirements

#### Residual disinfectant concentrations

Pennsylvania safe drinking water regulations do not contain any provision equivalent to the following federal requirement concerning residual disinfectant concentrations:

“The residual disinfectant concentration in the distribution system, measured as total chlorine, combined chlorine, or chlorine dioxide, as specified in §141.74 (a)(2) and (c)(3), cannot be undetectable in more than 5 percent of the samples each month, for any two consecutive months that the system serves water to the public. Water in the distribution system with a heterotrophic bacteria concentration less than or equal to 500/ml, measured as heterotrophic plate count (HPC) as specified in §141.74(a)(1), is deemed to have a detectable disinfectant residual for purposes of determining compliance with this requirement...”<sup>8</sup>

Language equivalent to the above requirements in 40 CFR 141.72(b)(3)(i) should be added to 25 Pa.Code 109.710.

#### Repeat monitoring requirements for groundwater systems

25 Pa.Code 109.301 does not include the following federal requirements for repeat IOC monitoring of groundwater systems:

“For community and non-transient, non-community water systems, the repeat monitoring frequency for groundwater systems shall be quarterly for at least one year following any one sample in which the concentration is  $\geq 50$  percent of the MCL. The State may allow a groundwater system to reduce the sampling frequency to annually after four consecutive quarterly samples are reliably and consistently less than the MCL.”<sup>9</sup>

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<sup>7</sup> 40 CFR 141.21(e)(2).

<sup>8</sup> 40 CFR 141.72(b)(3)(i).

<sup>9</sup> 40 CFR 141.23(d)(2).

While § 109.301 incorporates by reference federal IOC monitoring requirements, language equivalent to the above federal requirements should be specifically stated in this section. Since § 109.301 lays out in detail other federal requirements concerning repeat monitoring and monitoring frequency for IOCs, the omission of the requirements in 40 CFR 141.23(d)(2) is likely to cause confusion.

## **Conclusion**

The proposed rulemaking is an important step forward towards bringing Pennsylvania safe drinking water regulations into compliance with applicable federal rules. However, we urge the Environmental Quality Board to adopt the recommendations outlined in these comments in order to fully incorporate federal regulatory requirements, improve compliance by water suppliers and make Chapter 109 regulations more protective of public health.

Respectfully submitted,

Mayra Quirindongo  
Research Associate  
Natural Resources Defense Council  
1200 New York Ave. NW, Ste. 400  
Washington, DC 20005

Beverly Braverman  
Executive Director  
Mountain Watershed Association  
P.O. Box 408  
Melcroft, PA 15462