

**Notice of Proposed Rulemaking
Department of Environmental Protection
Environmental Quality Board
(25 Pa. Code, Chapter 109)
(Safe Drinking Water)
(Lead and Copper Rule Short Term Revisions)**

Preamble

The Environmental Quality Board (Board) proposes to amend 25 Pa. Code, Chapter 109 (relating to Safe Drinking Water). The amendments will provide for increased protection against, and consumer awareness of, exposure to lead in public water systems. The Lead and Copper Rule Short Term Revisions build upon the existing Lead and Copper Rule and strengthens implementation of the monitoring, public education, customer awareness, and lead service line replacement provisions.

This proposal was adopted by the Board at its meeting of _____(date)_____.

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 Barry Greenawald, Chief, Division of Operations Monitoring and Training, P.O. Box 8467, Rachel Carson State Office Building, Harrisburg, PA 17105-8467, (717) 772-4018, 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 Department of Environmental Protection (DEP) website (<http://www.depweb.state.pa.us>).

C. Statutory Authority

This 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. §§ 510-7 and 510-20).

D. Background and Purpose

This proposed rulemaking will amend the existing Lead and Copper Rule (LCR). The LCR was published in the PA Bulletin as final rulemaking on December 24, 1994. The primary

goal of the LCR is to reduce lead and copper levels at consumers' taps, thereby reducing the health risks associated with lead and copper. The pervasiveness of lead contamination in public drinking water systems is well documented. Lead (and copper) leach into the drinking water from solder, pipes and fixtures. The severity of contamination depends on the amount of lead (or copper) in the distribution system and the consumers' home plumbing, and the corrosiveness of the water. The original LCR established comprehensive monitoring requirements for lead and copper at the consumer's tap and treatment technique requirements for optimal corrosion control which include public education and lead service line replacement.

The proposed amendments will incorporate the provisions of the Federal *Lead and Copper Rule: Short Term Regulatory Revisions* that was promulgated by the United States Environmental Protection Agency (EPA) on October 10, 2007. This proposed rulemaking package will amend the Department's Safe Drinking Water Regulations as follows:

1. Clarify the definition of "tap" for lead and copper sampling to be a tap that provides water for drinking.
2. Rescind the provision that allows water systems to remain on a reduced monitoring frequency if either the lead or copper action level is exceeded. Water systems must meet both water quality parameter ranges and the lead and copper action levels to remain on a reduced monitoring schedule. *Please note that this is more stringent than the federal regulation - EPA allows systems to exceed copper and remain on a reduced frequency.*
3. Require water suppliers to provide a "consumer tap notice" to consumers whose taps are sampled. This notice must include the lead results for the tap that was sampled, an explanation of the health effects of lead and a list of steps consumers can take to reduce exposure to lead in drinking water.
4. Revise the public education and Consumer Confidence Report (CCR) provisions (with respect to lead) to clarify the mandatory language, expand delivery requirements and require an informational statement in all CCRs.
5. Require water systems to reevaluate lead service lines (LSL) previously deemed "replaced" through testing if the system resumes a LSL replacement program.

The draft proposed amendments were submitted to the Small Water Systems Technical Assistance Center Advisory Board (TAC) for review and discussion on August 21, 2008. The TAC Board provided comments on three of the proposed rulemaking provisions.

Specifically, TAC commented on the number of sample sites required by the LCR stating, "The requirement to have a minimum of five sample sites does not make sense. ...Taking a minimum of five samples for statistical validity is not a correct assumption." The existing LCR requires a minimum of five samples for small systems serving less than 100 people because there is a high degree of variability in lead and copper levels between and within systems as well as between individual taps. Given the high degree of variability in lead and copper levels, collection of too few samples can result in false conclusions regarding the need for treatment. As a result, a sufficient number of samples is required in order to be confident that the measured lead levels are accurately assessed. Increased sampling helps improve the likelihood that the true need for treatment is accurately characterized. EPA believes the number of samples

required in the LCR sufficiently accounts for the variability in lead and copper levels and reflects system-wide contaminant level distributions. The number of samples also takes into account the cost of sampling, and EPA believes the numbers of samples required are reasonable and implementable.

In the Federal *Lead and Copper Rule: Short Term Regulatory Revisions*, EPA again maintains that systems must take a minimum of five samples in order to adequately capture the variability of lead levels. However, the Federal *Lead and Copper Rule: Short Term Regulatory Revisions* also allows States the discretion to allow systems with fewer than five taps for human consumption to collect one sample per tap. Under this option, the compliance value is the sample with the highest test result (rather than the result from the 90th sample). EPA's intent is that only systems that have fewer than five taps be allowed to collect fewer than five samples. Additionally, the water system must submit a written request and the State must approve the request in writing or by on-site verification. One consequence of reducing the minimum number of samples could be that systems whose 90th % values are currently in compliance with the lead and copper action levels may exceed either (or both) action levels if fewer than five sites were sampled. These systems would then be faced with additional monitoring and treatment installation and operation costs.

It is more cost effective for small systems to take five samples than to chance exceeding an action level and be required to install and operate corrosion control or source water treatment based on a smaller pool of samples. Therefore, DEP is choosing not to implement this option and will continue to require a minimum of five samples.

TAC also commented on the public education delivery requirements contained in this rulemaking as they relate to contacting local or county health agencies and any other organizations identified by these local health agencies. This proposed rulemaking requires that, as part of a public education program, systems must contact local public health agencies, such as the County or State Health Department, even if the agency is outside of the water system's service area. TAC's comment states, "...The water systems should only have to contact those individuals on the list that are in the system's service area." It should be noted that DEP regulations must be at least as stringent as the corresponding EPA requirements. The public education delivery requirements in this proposed rulemaking are consistent with, but no more stringent than, the federal requirements.

To assist public water systems in identifying the local health agencies they must contact as part of a public education program, included below is a list of the PA Department of Health District Offices and the individual County Health Departments. This list will also be provided in guidance.

PA Department of Health District Offices

Southeast District

Berks, Delaware, Lancaster,
Montgomery, Philadelphia, Schuylkill
442 Reading State Office Building
625 Cherry Street
Reading, PA 19602
Phone: 610-378-4352

Southcentral District

Adams, Bedford, Blair, Cumberland,
Dauphin, Franklin, Fulton,
Huntingdon, Juniata, Lebanon Mifflin,
Perry, York
30 Kline Plaza
Harrisburg, PA 17104
Phone: 717-787-8092

Southwest District

Armstrong, Beaver, Butler, Cambria,
Fayette, Greene, Indiana, Somerset,
Washington, Westmoreland
514 Pittsburgh State Office Building
300 Liberty Avenue
Pittsburgh, PA 15222
Phone: 412-565-5101

Northeast District

Carbon, Lackawanna, Lehigh,
Luzerne, Monroe, Northampton,
Pike, Susquehanna, Wayne, Wyoming
665 Carey Avenue, Suite 5
Wilkes Barre, PA 18706-5485
Phone: 570-826-2062

Northcentral District

Bradford, Centre, Clinton, Columbia,
Lycoming, Montour, Northumberland,
Potter, Snyder, Sullivan, Tioga,
Union
Water Tower Square, Suite 109
1000 Commerce Park Drive
Williamsport, PA 17701-5475
Phone: 570-327-3400

Northwest District

Cameron, Clarion, Clearfield,
Crawford, Elk, Forest, Jefferson,
Lawrence, McKean, Mercer,
Venango, Warren
19 McQuiston Drive
Jackson Center, PA 16133
Phone: 724-662-6068

County Health Department (CHD) Offices

Allegheny CHD

Public Drinking Water Program
Frank B. Clack Health Center
3901 Penn Avenue, Building 5
Pittsburgh, PA 15224-1318
Phone: 412-578-8047

Chester CHD

Government Services Center
601 Westtown Road, Suite 090
PO Box 2747
West Chester, PA 19380-0990
Phone: 610-344-6225

Bucks CHD

Public Drinking Water Program
1282 Almshouse Road
Doylestown, PA 18901
Phone: 215-345-3318

Erie CHD

606 West 2nd Street
Erie, PA 16507
Phone: 814-451-6700

TAC commented on the requirement for consumer tap notice, requesting suggested language for the content of the notice. EPA has already developed guidance for the public

education requirements, and the language provided by EPA for the lead health effects and steps consumers can take to reduce exposure in the public education materials may also be used for the consumer tap notices.

E. Summary of Regulatory Requirements

§ 109.1102(b) *Treatment technique requirement for corrosion control.*

Paragraph 1 is reformatted. Subparagraph (ii) is split to create clause A and subparagraph (iv) becomes clause (B) in subparagraph (ii). § 109.1102(b)(1)(ii) clarifies that a system with optimized corrosion control treatment must conduct monitoring at least once every 3 years.

Paragraph 2 is amended with language that is consistent with the federal rule. § 109.1102(b)(2)(ii) clarifies that the compliance deadlines for corrosion control treatment installation are based on the end of the monitoring period in which an action level was exceeded.

§ 109.1103(a)(3) *Initial source water monitoring.*

This paragraph is amended to be consistent with the federal deadline to conduct source water monitoring found in 40 CFR § 141.88(b).

§ 109.1103(b)(4) *Special Monitoring.*

Paragraph 4 is amended to be consistent with the federal rule and to clarify that systems that must resume corrosion control treatment installation activities resume compliance activities from the point where treatment installation was discontinued.

§ 109.1103(c)(3) *Source water monitoring.*

This paragraph is amended to be consistent with the federal deadline to conduct source water monitoring found in 40 CFR § 141.88(b).

§ 109.1103(d) *Monitoring after performance requirements are established.*

This subsection is amended to be consistent with the federal monitoring requirements found in 40 CFR § 141.87(d).

§ 109.1103(d)(3) *Source water monitoring.*

Paragraph 3 is amended to be consistent with the federal deadline to conduct source water monitoring found in 40 CFR § 141.88(b).

§ 109.1103(e)(1)(i)(B) and (i)(C) *Annual lead and copper tap monitoring.*

Clause B is revised to clarify that a water system that has installed corrosion control treatment must meet both the lead and copper action levels during follow-up monitoring to qualify for a reduced annual monitoring frequency. This clause is further amended to delete the requirement that water systems request reduced annual monitoring. These revisions are to be consistent with the federal rule, but DEP is more stringent than the federal rule in requiring that both action levels be met to qualify for a reduced monitoring frequency. This is more protective of public health. However, water suppliers that meet both the lead and copper action levels in addition to maintaining the range of water quality parameter values will automatically be granted a reduced annual monitoring frequency. The federal rule requires that only the lead action level be met before water suppliers may request a reduced monitoring frequency.

Clause C is amended to be consistent with the federal monitoring requirements found in 40 CFR § 141.86(d)(4)(ii).

§ 109.1103(e)(1)(ii)(B) *Triennial lead and copper tap monitoring.*

Clause B is revised to clarify that a water system that has installed corrosion control treatment must meet both the lead and copper action levels during reduced annual monitoring to qualify for a triennial monitoring frequency. This clause is further amended to delete the requirement that water systems request this reduced monitoring. These revisions are to be consistent with the federal rule, but DEP is more stringent than the federal rule in requiring that both action levels be met to qualify for a triennial monitoring frequency. This is more protective of public health. However, water suppliers that meet both the lead and copper action levels in addition to maintaining the range of water quality parameter values will automatically be granted a triennial monitoring frequency. The federal rule requires that only the lead action level be met before water suppliers may request reduced triennial monitoring.

§ 109.1103(e)(1)(iii) *Request for reduced monitoring.*

This subparagraph is deleted because water systems will no longer need to request reduced monitoring. For systems that have installed corrosion control treatment, reduced monitoring will be automatically granted once the system meets both the lead and copper action levels and maintains the range of values for water quality parameters during follow-up or reduced annual monitoring.

§ 109.1103(e)(1)(iv) *Sample sites and timing.*

This subparagraph is re-numbered to replace the deleted subparagraph (iii) and revised to be consistent with the federal rule.

§ 109.1103(e)(1)(v) *Reduced lead and copper tap monitoring revocation.*

This subparagraph is deleted because it is moved to new paragraph (3).

§ 109.1103(e)(2)(i) *Reduced sites.*

This subparagraph is revised to correct the citation for entry point water quality parameter monitoring. The current citation references the water quality parameter monitoring required during follow-up monitoring after construction or modification of corrosion control treatment facilities; the correct reference should be the water quality parameter monitoring required after performance requirements are established.

§ 109.1103(e)(2)(ii)(A) and (ii)(B) *Reduced water quality parameter monitoring..*

Clause A is amended to be consistent with the federal monitoring requirements found in 40 CFR § 141.87(e)(2)(i) and to correct the citation for entry point water quality parameter monitoring. The current citation references the water quality parameter monitoring required during follow-up monitoring after construction or modification of corrosion control treatment facilities; the correct reference should be the water quality parameter monitoring required after performance requirements are established.

Clause B is amended to be consistent with the federal rule and to clarify that triennial monitoring is required during specific years at 3-year intervals.

§ 109.1103(e)(2)(iii) – (2)(v) *Reduced water quality parameter monitoring revocation.*

These subparagraphs are deleted because they are moved to new paragraph (3).

§ 109.1103(e)(3) *Reduced monitoring revocation.*

This paragraph is added to combine subparagraphs § 109.1103(e)(1)(v) and § 109.1103(e)(2)(iii) – (2)(v) for ease of reference and to clarify the compliance requirements when reduced monitoring is revoked. The language has also been amended to be consistent with the federal rule and to clarify that the compliance activities are required if either action level is exceeded. DEP is more stringent than the federal rule in requiring that both action levels be met to remain on a reduced monitoring frequency, but this is consistent with the criteria to qualify for a reduced tap monitoring frequency in § 109.1103(e)(1) and is more protective of public health.

§ 109.1103(g)(2) *Lead and copper tap sample site selection.*

Paragraph 2 is reformatted to clarify site selection requirements for both community and nontransient, noncommunity water systems. Text has been added to the new subparagraph (iii) to clarify how sampling must be done when the system has fewer than five taps. Text has also been added to the new subparagraph (iv) to clarify when a system may use non-first draw

samples. The additional text is added to be consistent with federal language found in 40 CFR § 141.86(c).

§ 109.1103(k)(4)(i) *Monitoring frequency for systems with waivers.*

This subparagraph is amended to be consistent with the federal rule and to clarify that monitoring is required during specific years at 9-year intervals.

§ 109.1104(a) *Public education program.*

This subsection is amended to be consistent with the federal public education content requirements found in 40 CFR § 141.85(a) and the federal public education delivery requirements found in 40 CFR § 141.85(b).

§ 109.1104(b) *Notification of results.*

This subsection is amended to be consistent with the federal requirements for notification of results found in 40 CFR § 141.85(d).

§ 109.1104(c) *Public notification requirements.*

This subsection is renumbered.

§ 109.1107(a)(3)(i) *Corrosion control treatment reporting requirements.*

This subparagraph is amended to correct a typographical error.

§ 109.1107(a)(5) *Consumer notice of lead tap monitoring results reporting requirements.*

This paragraph is amended to incorporate the federal reporting requirements found in 40 CFR § 141.90(f)(3).

§ 109.1107(a)(6) *Lead service line replacement reporting.*

This paragraph is renumbered.

§ 109.1107(a)(7) *Record maintenance.*

This paragraph is renumbered.

§ 109.1107(d)(1) *Initiation of lead service line replacement.*

This paragraph is amended to incorporate the federal lead service line replacement requirements found in 40 CFR § 141.84(b)(1).

§ 109.1107(d)(6) *Resumption of lead service line replacement.*

This paragraph is added to incorporate the federal lead service line replacement requirements found in 40 CFR § 141.84(b)(2).

F. Benefits, Costs and Compliance

Benefits

The intent of this rulemaking is to improve implementation of the lead and copper regulations by clarifying monitoring requirements, improving customer awareness and modifying lead service line “test-out” procedures. The increase in the administrative activities resulting from these revisions will generate new information which may prompt public water systems to take measures to further abate lead and copper exposure and thus reduce the associated risk, resulting in additional health benefits to consumers.

Because the precise impact of these revisions on the behavior of individual consumers and public water systems is not known, EPA has not quantified the changes in associated health benefits for these revisions. However, the overall benefits from the LCR will increase as a result of the indirect effects of these revisions on public water systems and individual consumers.

Compliance Costs

Some of the cost increases estimated by EPA will not apply to public water systems in Pennsylvania because this Commonwealth already implements similar provisions under the existing LCR. However, there are four provisions of the *Lead and Copper Rule: Short Term Regulatory Revisions* included in this rulemaking that are likely to increase costs for public water systems in Pennsylvania:

1. Return to routine monitoring frequency if an action level is exceeded (larger systems will have higher costs because more samples are required than for the smaller systems)
2. Consumer tap notice requirements
3. Public Education content and delivery requirements
4. Consumer Confidence Report content requirements

The number of systems in Pennsylvania affected by this proposed rulemaking is based on the total number of community and nontransient, noncommunity water systems as well as LCR monitoring information from 2007. Not all systems will need to implement each provision each year, so the number of systems likely to be affected by each provision and an average cost per system have been estimated. There is an additional one-time, up-front cost for reviewing,

training and implementing the LCRSTR that will be incurred by all water systems affected by this rulemaking. The cost estimates per system for each of these provisions are based on costs estimated by EPA for public water systems nationwide.

The direct annual costs to implement each of these provisions for Pennsylvania’s public water systems, based on estimates from EPA, are as follows.

Provision #	No. of Systems Affected	Annual Cost/System	Total Annual Costs
1	140	(up to) \$2,930	\$410,200
2	3228	\$20	\$64,560
3	107	(average of) \$134.47	\$14,388
4	2078	\$6.79	\$14,110
Total			\$503,258

The one-time, up front cost for public water systems is estimated to be \$152.33 for each of the 3,228 public water systems, for a total cost of \$491,721.

For this Commonwealth, there are costs associated with oversight and costs to state-owned public water systems. Of the 3,228 public water systems affected by this rulemaking, 42 (or 1.3%) are state-owned facilities, so 1.3% of the public water system costs detailed above could be incurred by this Commonwealth if all 42 systems implement all of these provisions each year. The details for the Commonwealth costs are as follows:

	One-Time Cost	Annual Costs	Total
Oversight Costs	\$28,948	\$5,404	\$34,352
State-Owned Water Systems Costs	\$6,393	\$6,543	\$12,936
Total	\$35,341	\$11,947	\$47,288

Compliance Assistance Plan

The proposed revisions clarify and strengthen existing regulation. As a result, financial assistance should not be necessary.

The Bureau of Water Standards and Facility Regulation has staff dedicated to providing both training and outreach support services to public water system operators. The DEP Internet site contains the *Drinking Water and Wastewater Treatment System Operator Information Center*, which provides a bulletin board of timely, useful information for treatment plant operators. Additionally, DEP staff will provide educational, technical and compliance assistance through newsletters, guidance documents, training sessions and surveillance activities.

Paperwork Requirements

The requirements of the existing Lead and Copper Rule include monitoring, reporting, public education and public notice. The only additional requirement of the *Lead and Copper*

Rule: Short Term Regulatory Revisions is for water suppliers to provide a notice of the monitoring results to those consumers whose taps were sampled and a certification to DEP that this notice was delivered.

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, 16th 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 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 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 and must also be received by the Board within 30 days of publication

in the *Pennsylvania Bulletin*. A subject heading of the proposal and a return name and address must be included in each transmission.

BY:

JOHN HANGER
Chairman
Environmental Quality Board