

# Regulatory Analysis Form

(Completed by Promulgating Agency)



# IRRC

Independent Regulatory Review Commission

## SECTION I: PROFILE

(1) Agency

Department of Environmental Protection

(2) Agency Number: 35

Identification Number: 7-437

IRRC Number: 2790

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(3) Short Title

Lead and Copper Rule Short Term Revisions (LCRSTR)

(4) PA Code Cite

25 Pa. Code, Chapter 109

(5) Agency Contacts (List Telephone Number, Address, Fax Number and Email Address):

Primary Contact: Michele Tate, 772-4768, [mtate@state.pa.us](mailto:mtate@state.pa.us), 717-783-8926

Secondary Contact: Duke Adams, 783-8727, [ranadams@state.pa.us](mailto:ranadams@state.pa.us), 717-783-8926

(6) Primary Contact for Public Comments (List Telephone Number, Address, Fax Number and Email Address) – Complete if different from #5:

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

(7) Type of Rulemaking (check applicable box):

- Proposed Regulation
- Final Regulation
- Final Omitted Regulation
- Emergency Certification Regulation;
  - Certification by the Governor
  - Certification by the Attorney General

## Regulatory Analysis Form

(8) Briefly explain the regulation in clear and non-technical language. (100 words or less)

This final-form regulation will strengthen implementation of the existing LCR as follows:

- Clarifies the terms “tap” & that the minimum number of samples required for small systems is 5.
- Rescinds the provision for remaining on reduced monitoring if either action level is exceeded.
- Requires water suppliers to provide a “consumer tap notice” that includes the results of the lead testing to consumers whose taps are sampled.
- Revises the public education and Consumer Confidence Report provisions.
- Requires water systems to reevaluate lead service lines previously deemed “replaced” through testing if the system resumes a replacement program.

(9) Include a schedule for review of the regulation including:

- |   |                         |
|---|-------------------------|
| A. The date by which the agency must receive public comments:                               | <u>October 26, 2009</u> |
| B. The date or dates on which public meetings or hearings will be held:                     | <u>N/A</u>              |
| C. The expected date of promulgation of the proposed regulation as a final-form regulation: | <u>February, 2011</u>   |
| D. The expected effective date of the final-form regulation:                                | <u>February, 2011</u>   |
| E. The date by which compliance with the final-form regulation will be required:            | <u>February, 2011</u>   |
| F. The date by which required permits, licenses or other approvals must be obtained:        | <u>N/A</u>              |

(10) Provide the schedule for continual review of the regulation.

The amendments will be reviewed in accordance with the Sunset Review Schedule published by the Department.

## SECTION II: STATEMENT OF NEED

(11) State the statutory authority for the regulation and any relevant state or federal court decisions.

The Pennsylvania Safe Drinking Water Act, 35 P.S. § 721.4(a), and sections 1917-A and 1920-A of the Administrative Code of 1929, 71 P.S. §§ 510-7 and 510-20(b).

## Regulatory Analysis Form

(12) Is the regulation mandated by any federal or state law or court order, or federal regulation? If yes, cite the specific law, case or regulation, and any deadlines for action.

Yes. Section 1413 of the Federal Safe Drinking Water Act, 42 U.S.C. § 300g-2a, requires that, in order for the state to retain primary enforcement authority (primacy), the state must adopt drinking water regulations that are "no less stringent than" the national primary drinking water regulations not later than 2 years after the date on which the regulations are promulgated by the United States Environmental Protection Agency (EPA), or must ask EPA for an extension of up to 2 years. The federal drinking water primacy regulations at 40 CFR § 142.12(a) also require the state to adopt all new and revised national primary drinking water regulations contained in 40 CFR Part 141 in order to retain primacy. Furthermore, Section 4(a) of the Pennsylvania Safe Drinking Water Act, 35 P.S. § 721.4(a), requires the Environmental Quality Board to adopt maximum contaminant levels and treatment technique requirements no less stringent than those promulgated under the federal act for all contaminants regulated under the national primary and secondary drinking water regulations. Also Section 5(a) of the state Act, 35 P.S. § 721.5(a), requires the Department to adopt and implement a public water supply program which includes those program elements necessary to assume state primary enforcement responsibility under the federal act.

EPA promulgated the Federal Lead and Copper Rule: Short Term Regulatory Revisions (LCRSTRR) on October 10, 2007. Pennsylvania applied for, and was granted, a 2-year extension. Therefore, Pennsylvania must adopt regulations implementing the federal rule by October 10, 2011. Failure to do so may result in Pennsylvania losing primacy.

(13) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.

This regulation is intended to further protect public health, particularly children, from exposure to lead in drinking water because it enhances implementation of the existing Lead and Copper Rule (LCR) in the areas of monitoring, customer awareness, and lead service line replacement. This is a federal rule that must be adopted to retain primacy of the Safe Drinking Water Program.

These amendments will affect 3,226 public water systems which serve a total population of over 11.2 million Pennsylvanians. These 11.2 million people will benefit from a continued reduction in health risks associated with lead contamination.

(14) If scientific data, studies, references are used to justify this regulation, please submit material with the regulatory package. Please provide full citation and/or links to internet source.

N/A

(15) Describe who will be adversely affected by the regulation. (Quantify the adverse effect as completely as possible and approximate the number of people who will be adversely affected.)

These amendments are not expected to produce any adverse impacts.

## Regulatory Analysis Form

(16) List the persons, groups or entities that will be required to comply with the regulation. Approximate the number of people who will be required to comply.

The final-form regulation will affect about 2,069 community water systems and about 1,157 nontransient noncommunity water systems in Pennsylvania.

### SECTION III: COST AND IMPACT ANALYSIS

(17) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures which may be required.

This final-form regulation will result in increased costs to public water systems. These costs will be both as a one-time, up-front cost as well as additional annual costs.

EPA has estimated the one-time, up front cost to be \$11 million nationwide (Federal Register Volume 72, No. 195, Section IV.K), which will result in an initial estimated cost of \$491,417 to Pennsylvania public water systems. The costs include reviewing, training and implementing the new provisions. It should be noted that this initial cost estimate also includes the costs for systems with fewer than five taps to request permission to only sample at the available taps, should states allow that option. Pennsylvania has chosen *NOT* to implement this option (and continue to require a minimum of five samples), so this initial cost will be lower than estimated.

There is a wide variability in the annual costs because not all systems will need to implement each provision each year. The number of systems likely to be affected by each provision and an average annual cost have been estimated and are detailed below.

<u>Provision</u>	<u>No. of Systems Affected</u>	<u>Annual Cost</u>
A. Revert to routine monitoring if exceed lead or copper action level	140	(up to) \$410,200
B. Issue Consumer Tap Notices	3,226	\$64,520
C. Implement Public Education	107	\$14,388
D. Include language in Consumer Confidence Report	2,069	\$14,049

## Regulatory Analysis Form

(18) Provide a specific estimate of the costs and/or savings to local governments associated with compliance, including any legal, accounting or consulting procedures which may be required.

These amendments will affect about 3,226 public water systems in Pennsylvania. Of these systems, 887 (or 27 %) are owned by local governments (under the form of municipalities or water authorities). The local governments that own these systems will incur an estimated initial cost of \$132,682. If all 887 water systems implement all the provisions of the LCRSTRR each year, the estimated annual cost will be \$135,880.

For the estimates given above and for the purposes of the table in question (20) on the following page, the local government costs are costs for compliance with the LCRSTRR provisions. That is, local government is considered in this analysis to be a part of the regulated community, not the regulating community. Therefore, the estimates provided above are a part of the estimates provided in question (17).

(19) Provide a specific estimate of the costs and/or savings to state government associated with the implementation of the regulation, including any legal, accounting or consulting procedures which may be required.

There are costs associated with oversight and costs to state-owned public water systems. The oversight costs are based on EPA estimates of state costs nationwide (Federal Register Volume 72, No. 195, Section IV). Of the 3,226 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 in question (17) 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:

	<u>Initial Cost</u>	<u>Annual Costs</u>
Oversight Costs	\$28,948	\$5,404
*State-owned Water System Costs	\$6,388	\$6,543

\*The agencies responsible for the State-owned water systems affected by this rule are: DPW, DCNR, Dept. of Corrections, and the State System of Higher Education.

## Regulatory Analysis Form

(20) In the table below, provide an estimate of the fiscal savings and cost associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

	Current FY Year	FY +1 Year	FY +2 Year	FY +3 Year	FY +4 Year	FY +5 Year
<b>SAVINGS:</b>	\$	\$	\$	\$	\$	\$
<b>Regulated Community</b>	0	0	0	0	0	0
<b>Local Government</b>	0	0	0	0	0	0
<b>State Government</b>	0	0	0	0	0	0
<b>Total Savings</b>	0	0	0	0	0	0
	Current FY Year	FY +1 Year	FY +2 Year	FY +3 Year	FY +4 Year	FY +5 Year
<b>COSTS:</b>	\$	\$	\$	\$	\$	\$
<b>Regulated Community</b>	994,574	503,157	503,157	503,157	503,157	503,157
<b>Local Government*</b>	268,562	135,880	135,880	135,880	135,880	135,880
<b>State Government*</b>	35,336	11,947	11,947	11,947	11,947	11,947
<b>Total Costs (see *Notes)</b>	1,023,522*	508,561*	508,561*	508,561*	508,561*	508,561*
<b>REVENUE LOSSES:</b>	\$	\$	\$	\$	\$	\$
<b>Regulated Community</b>	0	0	0	0	0	0
<b>Local Government</b>	0	0	0	0	0	0
<b>State Government</b>	0	0	0	0	0	0
<b>Total Revenue Losses</b>	0	0	0	0	0	0

**\*Notes:**

- The provisions of the LCRSTRR will not affect all systems every year, but for the purposes of the table above, the one-time costs are included in the current year and all affected systems are assumed to implement all provisions each year.
- "Local Government" in this analysis is the regulated community, not regulating agencies so the costs under local government are a portion of the costs identified for the regulated community.
- State Government in this analysis includes the portion of the costs identified for the regulated community for state-owned water systems as well as the State's oversight costs.

The cost estimates were derived from the nationwide estimated costs compiled and published by the EPA in the Preamble of the *Federal Lead and Copper Rule Short Term Regulatory Revisions* (Federal Register, Vol. 72, No. 195). Pennsylvania's costs are based on a national average cost per system multiplied by the number of Pennsylvania systems likely to be affected. The number of systems in Pennsylvania affected by this final-form rulemaking is based on the total number of community and nontransient, noncommunity water systems as well as LCR monitoring information from 2007, which is the most recent year that these systems would have conducted monitoring.

## Regulatory Analysis Form

There are 4 provisions of these amendments that are likely to cause additional costs to 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

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 LCRSTRR that will be incurred by all water systems affected by this rulemaking.

The direct annual costs to implement each of these provisions for Pennsylvania's public water systems are as follows:

Provision#	No. of Systems Affected	Annual Cost/System	Total Annual Costs
1	140	(up to) \$2,930	\$410,200
2	3,226	\$20	\$64,520
3	107	\$134.47 (avg.)	\$14,388
4	2,069	\$6.79	\$14,049
Total			\$503,157

The one-time, up front cost for public water systems is estimated to be \$152.33 for each of the 3,226 public water systems, for a total cost of \$491,417.

For this Commonwealth, there are costs associated with oversight and costs to state-owned public water systems. Of the 3,226 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 Cost	Total
Oversight Costs	\$28,948	\$5,404	34,352\$
State-Owned Water System Costs	\$6,388	6,543\$	\$12,931
Total	\$35,336	\$11,947	\$47,283

The numbers and percentages of Pennsylvania public water systems that are "Local Government" and "State-Owned" are derived from the Safe Drinking Water Program's PADWIS data system.

## Regulatory Analysis Form

(20a) Provide the past three year expenditure history for programs affected by the regulation.

Program	2007-2008	2008-2009	2009-2010	2010-2011
<b>Environmental Protection Operations</b> (# 161-10381)	\$98,574,000	\$98,544,000	\$84,218,000	\$79,344,000
<b>Environmental Program Management</b> (# 161-10382)	\$39,685,000	\$37,664,000	\$31,100,000	\$29,357,000

(21) Explain how the benefits of the regulation outweigh the adverse effects and costs.

The Lead and Copper Rule (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 intent of this final-form rulemaking is to improve implementation of the LCR 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. Therefore, 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.

These amendments are not expected to produce any adverse effects.

(22) Describe the communications with and input from the public in the development and drafting of the regulation. List the persons and/or groups who were involved, if applicable.

The draft final-form rulemaking was submitted to the Small Water Systems Technical Assistance Center Advisory Board (TAC) for review and discussion on June 18, 2010. TAC's only comment was a statement of support for the rulemaking.

(23) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.

No alternative regulatory schemes were considered. This is a federal rule that must be adopted to retain primacy of the Safe Drinking Water Program.

## Regulatory Analysis Form

(24) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulation.

Yes.

This final-form regulation contains one provision that is more stringent than the federal standards and only involves systems with corrosion control treatment (CCT) that are on a reduced monitoring frequency. Under both rules, if these systems exceed the lead action level without exceeding the copper action level they are required to resume a 6-month monitoring frequency for both parameters. However, under the federal rule, if these systems exceed the copper action level without exceeding the lead action level, they are allowed to remain on a reduced monitoring frequency. Under the state rule, if these systems exceed the copper action level without exceeding the lead action level, they are required to resume a 6-month monitoring frequency for both parameters. Lead and copper in drinking water is usually the result of corrosion of household plumbing. Water suppliers treat for lead and copper using passivation, meaning they change the water chemistry to reduce the solubility of lead or copper. Treatment options for lead are often different than those for copper. When water suppliers tweak treatment to reduce the levels of one parameter, they may actually increase the levels of the other parameter. Additionally, treatment for other regulated contaminants will often cause simultaneous compliance issues with corrosion control treatment. Therefore, a lead or copper action level exceedance is a good indication that the treatment system is not operating effectively and should be re-evaluated to determine whether the current treatment system is the most appropriate.

(25) How does the regulation compare with those of other states? Will the regulation put Pennsylvania at a competitive disadvantage with other states?

The Federal *Lead and Copper Rule: Short Term Regulatory Revisions* will need to be either adopted, or complied with, by all of the other 49 states. Therefore, these amendments will not put Pennsylvania at a competitive disadvantage with any other state.

(26) Will the regulation affect existing or proposed regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

This final-form regulation will be incorporated into the existing language of 25 Pa Code Chapter 109. Other than this incorporation, the proposed amendments should not affect any existing or proposed regulations of DEP, or any other state agency.

(27) Submit a statement of legal, accounting or consulting procedures and additional reporting, record keeping, or other paperwork including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.

The requirements of the LCRSTR include monitoring, reporting, public education, a consumer tap notice and public notice, so some changes to forms, reports and other paperwork are expected. Existing forms for reporting monitoring data will be used, but there will be some additional paperwork for the consumer tap notices and public education as a result of this rulemaking. The reporting requirements of this rulemaking are no more stringent than the federal requirements.

## Regulatory Analysis Form

(28) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

This final-form regulation should have no effects on one particular group relative to another since it will apply to most of Pennsylvania's population. However, the Safe Drinking Water Program is prepared to develop special provisions, or provide special services, to accommodate any such group as the need arises.

FACE SHEET  
FOR FILING DOCUMENTS  
WITH THE LEGISLATIVE REFERENCE  
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(Pursuant to Commonwealth Documents Law)

DO NOT WRITE IN THIS SPACE

Copy below is hereby approved as to form and legality.  
Attorney General

By: \_\_\_\_\_  
(Deputy Attorney General)

DATE OF APPROVAL

Check if applicable  
Copy not approved. Objections attached.

Copy below is hereby certified to be true and  
correct copy of a document issued, prescribed or  
promulgated by:

DEPARTMENT OF ENVIRONMENTAL  
PROTECTION  
ENVIRONMENTAL QUALITY BOARD

(AGENCY)

DOCUMENT/FISCAL NOTE NO. 7-437

DATE OF ADOPTION September 21, 2010

BY John Hanger

TITLE JOHN HANGER  
CHAIRMAN

EXECUTIVE OFFICER CHAIRMAN OR SECRETARY

Copy below is hereby approved as to form and legality  
Executive or Independent Agencies

BY Andrew C. Clark  
DATE OF APPROVAL SEP 22 2010

(Deputy General Counsel)  
(~~Chief Counsel - Independent Agency~~)  
(~~Strike inapplicable title~~)

Check if applicable. No Attorney General Approval  
or objection within 30 days after submission.

NOTICE OF FINAL RULEMAKING

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
ENVIRONMENTAL QUALITY BOARD

LEAD AND COPPER SHORT TERM REVISIONS

25 Pa. Code, Chapter 109

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

**Order**

The Environmental Quality Board (Board) by this Order amends 25 Pa. Code, Chapter 109 (relating to Safe Drinking Water). The amendments incorporate provisions of the federal *Lead and Copper Rule: Short Term Regulatory Revisions* to retain primary enforcement authority (primacy). These 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 strengthen implementation of the monitoring, public education, customer awareness, and lead service line replacement provisions.

This order was adopted by the Board at its meeting of September 21, 2010.

**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, Chief, Division of Operations Monitoring and Training, P.O. Box 8467, Rachel Carson State Office Building, Harrisburg, PA 17105-8467, (717) 772-4018, or William Cumings, Assistant Counsel, Bureau of Regulatory Counsel, P.O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. 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 final-form rulemaking is available electronically through the Department of Environmental Protection (DEP) website (<http://www.depweb.state.pa.us>).

**C. Statutory Authority**

This final-form 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 final-form rulemaking will amend the existing Lead and Copper Rule (LCR) set forth in 25 Pa. Code §§ 109.1101-109.1107. The LCR was published in the *Pennsylvania 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.

These 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 (72 FR 57781). This final-form rulemaking 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.
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.

One provision of the expanded delivery requirements for a public education program is that water suppliers are required to contact the local public health agency even if the agency is located outside of the water system's service area. The local public health agency is the local board or department of public health that has jurisdiction over the water system's service area. To assist public water systems in identifying the local public health agencies that they must contact as part of a public education program, included below is a list of the individual County Health Departments and the PA Department of Health District Offices.

#### **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  
P.O. Box 2747  
West Chester, PA 19380-0990  
Phone: 610-344-6225

##### *Bucks CHD*

1282 Almshouse Road  
Doylestown, PA 18901  
Phone: 215-345-3318

##### *Erie CHD*

606 West 2<sup>nd</sup> Street  
Erie, PA 16507  
Phone: 814-451-6700

## County Health Department (CHD) Offices (cont.)

### *Montgomery CHD*

Human Services Building  
P.O. Box 311  
1430 DeKalb St.  
Norristown, PA 19404  
Phone: 610-278-5117

### *Philadelphia CHD*

1101 Market St.  
Philadelphia, PA 19107  
Phone: 215-685-5670

## 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

### *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

### *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

### *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

### *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

### *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

The draft final-form rulemaking was submitted to the Small Water Systems Technical Assistance Center Advisory Board (TAC) for review and discussion on June 18, 2010. TAC's only comment was to support the final-form rulemaking.

### **E. Summary of Changes to the Proposed Rulemaking**

Although no comments were received during the official public comment period, the Independent Regulatory Review Commission (IRRC) did comment on the proposed rulemaking. IRRC requested additional justification for the provision that is more stringent and clarification on the term "local public health agency" and the requirement for water systems to contact organizations outside the water system's service area.

Lead and copper in drinking water is usually the result of corrosion of household plumbing. Treatment options for lead are often different than those for copper. When water suppliers adjust treatment to reduce the levels of one parameter, they may actually increase the levels of the other parameter. Additionally, treatment for other regulated contaminants will often cause simultaneous compliance issues with corrosion control treatment. Therefore, a lead or copper action level exceedance is a good indication that the treatment system is not operating effectively and should be re-evaluated to determine whether the current treatment system is the most appropriate. Additional lead and copper monitoring will ensure that any adjustments made to the treatment system will not adversely affect lead and copper levels in the water.

The public education delivery requirements are consistent with, and no more stringent than, the federal provisions of the *Lead and Copper Rule Short Term Revisions* (LCRSTR). The U.S. Environmental Protection Agency (EPA) believes that the local health agencies play an important role in making sure consumers who are most vulnerable receive the information they need to reduce their exposure to lead in drinking water, so if the local public health agency can identify organizations that potentially serve target populations, then a water system should deliver public education materials to this organization even if it is not within the water system's service area. Additional language has been added to clarify the term "local public health agency" and the county and State Health Department offices have been identified in Section D.

Below is a list of the specific changes that were made to the proposed rulemaking.

§ 109.1103(d)(2) *Water quality parameter performance monitoring.*

This paragraph was amended to correct a cross-reference.

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

This paragraph was amended to correct a cross-reference.

§ 109.1103(e)(1)(ii)(B)(I)

This subclause was amended to clarify that 3 consecutive years of monitoring is required to qualify for a reduced triennial frequency. This phrase was inadvertently deleted during proposed rulemaking.

§ 109.1103(e)(1)(iii) *Sample site and timing.*

This subparagraph was amended to clarify that the Department will approve an alternate 4-month sampling period in writing for systems on a reduced monitoring frequency that do not operate during the period June 1-September 30.

§ 109.1103(e)(3)(ii)(A)

Subclauses (I) and (II) were amended to be consistent with the Legislative Reference Bureau's language rules.

§ 109.1103(g)(2)(iii) *Site selection for community and nontransient noncommunity water systems that have fewer than five taps.*

This subparagraph was amended for clarity.

§ 109.1103(g)(2)(iv) *Site selection for community and nontransient noncommunity facilities that operate continuously.*

This subparagraph was amended in response to a comment from the Independent Regulatory Review Commission (IRRC) to clarify where non-first-draw samples should be collected and that the Department must approve, in writing, non-first-draw sample sites.

§ 109.1104(a)(2)(i)(B) and (D)

These clauses were amended in response to a comment from IRRC and to clarify the public education delivery requirements to local health departments.

§ 109.1104(a)(2)(i)(J)(III)

This subclause was amended to be consistent with the Legislative Reference Bureau's language rules.

§ 109.1104(b)(1) *Content.*

Subparagraph (v) was added to be consistent with the federal provisions found in 40 CFR § 141.85(d)(3).

§ 109.1104(b)(3) *Delivery.*

This paragraph was amended to be consistent with the Legislative Reference Bureau's language rules.

§ 109.1107(a)(1)(i)

This subparagraph was edited because it references language that was deleted in a 2002 rulemaking and is no longer necessary.

## **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 LCRSTR 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.

<b>Provision #</b>	<b>No. of Systems Affected</b>	<b>Annual Cost/System</b>	<b>Total Annual Costs</b>
1	140	(up to) \$2,930	\$410,200
2	3,226	\$20	\$64,520
3	107	(average of) \$134.47	\$14,388
4	2,069	\$6.79	\$14,049
Total			\$503,157

The one-time, up front cost for public water systems is estimated to be \$152.33 for each of the 3,226 public water systems, for a total cost of \$491,417.

For this Commonwealth, there are costs associated with oversight and costs to state-owned public water systems. Of the 3,226 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:

	<b>One-Time Cost</b>	<b>Annual Costs</b>	<b>Total</b>
<b>Oversight Costs</b>	\$28,948	\$5,404	\$34,352
<b>State-Owned Water Systems Costs</b>	\$6,388	\$6,543	\$12,931
<b>Total</b>	\$35,336	\$11,947	\$47,283

### **Compliance Assistance Plan**

The proposed revisions clarify and strengthen existing regulations. 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 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. 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.

### **H. Regulatory Review**

Under Section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a), on September 9, 2009, 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(c) of the Regulatory Review Act, IRRC and the Committees were provided with copies of the comments received during the public comment period, as well as other documents when requested. In preparing these final-form regulations, the Department has considered all comments from IRRC, the Committees and the public.

Under section 5.1(j.2) of the Regulatory Review Act (71 P.S. 745.5a(j.2)), on \_\_\_\_\_, 2010, this final-form rulemaking was deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on \_\_\_\_\_, 2010, and approved the final-form rulemaking.

### **I. Findings of the Board**

The Board finds that:

- (1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and regulations promulgated thereunder at *1 Pennsylvania Code* §§ 7.1 and 7.2 (relating to notice of proposed rulemaking required; and adoption of regulations).
- (2) A public comment period was provided as required by law, and all comments were considered.
- (3) These regulations do not enlarge the purpose of the proposals published at 39 *Pa.B.* 5581 (September 26, 2009).
- (4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

### **J. Order of the Board**

The Board, acting under the authorizing statutes, orders that:

- (a) The regulations of the Department of Environmental Protection, *25 Pennsylvania Code*, Chapter 109, are amended to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.
- (b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.
- (c) The Chairperson of the Board shall submit this order and Annex A to the Independent Regulatory Review Commission and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act.

(d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.

(e) This order shall take effect immediately.

BY:

JOHN HANGER  
Chairperson  
Environmental Quality Board



Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART 1. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE II. WATER RESOURCES

CHAPTER 109. SAFE DRINKING WATER

Subchapter K. LEAD AND COPPER

§ 109.1102. Action levels and treatment technique requirements.

\* \* \* \* \*

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

(1) *Optimal corrosion control treatment.* A community water system or nontransient noncommunity water system shall provide optimal corrosion control treatment which minimizes the lead and copper concentrations at users' taps while ensuring that the treatment does not cause the system to violate a primary MCL. Water systems deemed to have optimized corrosion control treatment under this subsection shall operate in compliance with Department designated water quality parameters and continue to conduct lead and copper tap monitoring. A system may achieve optimal corrosion control treatment in one of the following ways:

\* \* \* \* \*

(ii) A water system is deemed to have optimized corrosion control if the system demonstrates to the Department that for two consecutive 6-month monitoring periods conducted in accordance with § 109.1103 that the system does not exceed a lead or copper action level and the difference between the 90th percentile tap water lead level and the highest source water lead concentration is less than 0.005 mg/L, which is the Practical Quantitation Level for lead.

(A) To make this demonstration, the system shall collect one sample for lead from each entry point during a monitoring period prior to initiation of construction or modification of corrosion control treatment facilities. If the system thereafter exceeds an action level during a monitoring period, the system shall complete applicable compliance activities under paragraph (2). The Department may require a system to repeat compliance activities previously completed when the Department determines that this is necessary for the system to achieve optimal corrosion control treatment.

(B) A water system deemed to have optimized corrosion control in accordance with this subparagraph shall continue monitoring for lead and copper at the tap no less frequently than once every 3-calendar years using the reduced number of sites specified in § 109.1103(e), and collecting the samples at times and locations specified in § 109.1103(e)(1)(iii).

\* \* \* \* \*

**[(iv) Any water system deemed to have optimized corrosion control in accordance with this subsection shall continue monitoring for lead and copper at the tap no less frequently than once every 3-calendar years using the reduced number of sites specified in § 109.1103(e), and collecting the samples at times and locations specified in § 109.1103(e)(iv).]**

(2) *Corrosion control treatment compliance schedule.* A system shall comply with the following schedule unless the system achieves optimal corrosion control treatment under paragraph (1)(i) or (ii) prior to initiation of construction or modification of corrosion control treatment facilities.

\* \* \* \* \*

(ii) A large water system triggered into corrosion control because it is no longer deemed to have optimized corrosion control under **[subsection (b)(1)] paragraph (1)**, or any medium or small water system that exceeds an action level shall:

(A) Submit a corrosion control treatment feasibility study that complies with paragraph (3) within 18 months of **[exceeding] the end of the monitoring period in which the action level was exceeded.**

(B) Submit a permit application or otherwise comply with the permit application requirements under § 109.1105(b) for construction or modification of corrosion control treatment facilities within 30 months of **[exceeding] the end of the monitoring period in which the action level was exceeded.**

(C) Initiate construction or modification of corrosion control treatment facilities within 48 months of **[exceeding] the end of the monitoring period in which the action level was exceeded.**

(D) Complete construction or modification of corrosion control treatment facilities and begin operation of these facilities within 60 months of **[exceeding] the end of the monitoring period in which the action level was exceeded.**

(E) Submit a request for Department designation of optimal corrosion control treatment performance requirements within 30 days of the end of the second follow-up monitoring period required under § 109.1103(c)(1)(ii) following completion of construction or modification of corrosion control treatment facilities.

\* \* \* \* \*

§ 109.1103. Monitoring requirements.

(a) *Initial monitoring.*

\* \* \* \* \*

(3) *Initial source water monitoring.* A system which exceeds either the lead or copper action level shall collect one source water sample from each entry point within 6 months after the **[exceedance] end of the monitoring period in which the action level was exceeded**. Monitoring is required only for the parameter for which the action level was exceeded.

(b) *Special lead and copper tap monitoring.*

\* \* \* \* \*

(4) If a medium or small water system exceeds an action level during a monitoring period after discontinuing compliance activities under paragraph (3), the system shall **[recommence completion of] complete** the applicable compliance activities under § 109.1102(b)(2). **[The Department may require a system to repeat compliance activities previously completed or undertake additional activities when the Department determines that the action is necessary to properly comply with corrosion control treatment requirements.]**

\* \* \* \* \*

(c) *Follow-up monitoring after construction or modification of corrosion control treatment facilities.* A system which completes construction or modification of corrosion control treatment facilities in accordance with § 109.1102(b)(2) shall conduct the applicable monitoring specified in this subsection. A system which exceeds the lead action level after construction or modification of corrosion control treatment facilities shall begin lead service line replacement in accordance with § 109.1107(d) (relating to system management responsibilities).

\* \* \* \* \*

(3) *Source water monitoring.* A system which installs source water treatment under § 109.1102(b)(4) shall monitor the source water at source water treatment entry points for the parameters for which the source water treatment was installed. The system shall monitor source water during the two consecutive 6-month monitoring periods specified in paragraph (1). Other systems which exceed either the lead or copper action level while conducting lead and copper tap monitoring in accordance with paragraph (1) shall collect one source water sample from each entry point within 6 months after the **[exceedance] end of the monitoring period in which the action level was exceeded** for the parameters exceeding the action level.

(d) *Monitoring after performance requirements are established.* A system shall conduct the applicable monitoring under this subsection beginning no later than the next 6-month monitoring period **that begins on January 1 or July 1** following the Department's designation of optimal corrosion control treatment water quality parameter performance requirements under § 109.1102(b)(5) or source water performance requirements under § 109.1102(b)(4).

\* \* \* \* \*

(2) *Water quality parameter performance monitoring.* A system shall measure the applicable water quality parameters specified in subsection (c)(2)(iii) in the distribution system during each monitoring period at the number of sites specified in subsection (a)(2)(ii) and at each entry point at least once every 2 weeks. The results of this monitoring will be used by the Department in determining compliance with the water quality parameter performance requirements established under § 109.1102(b)(5). A system that is not in compliance with the water quality parameter performance requirements established under § 109.1102(b)(5) shall provide public notification in accordance with § 109.1104[(b)(2)] **(c)(2)**.

\* \* \* \* \*

(3) *Source water monitoring.* A system which is conducting lead and copper tap monitoring in accordance with paragraph (1) shall monitor for the parameters exceeding the action level at each entry point within 6 months of the **end of the monitoring period in which the** action level **[exceedance] was exceeded**. For systems which have installed source water treatment, the results of this monitoring will be used by the Department in determining compliance with source water treatment performance requirements established under § 109.1102(b)(4). The Department may require additional source water monitoring if the Department determines that the additional monitoring is necessary to assure compliance with the source water treatment performance requirements. A system that is not in compliance with the source water treatment performance requirements established under § 109.1102(b)(4) shall provide public notification in accordance with § 109.1104[(b)(2)] **(c)(2)**.

(e) *Reduced monitoring.*

(1) *Reduced lead and copper tap monitoring.* A system conducting reduced lead and copper tap monitoring shall collect one sample from the number of sample sites listed in the following column.

<i>System size (# of people served)</i>	<i># of Sample Sites</i>
> 100,000...	50
10,001 to 100,000...	30
3,301 to 10,000...	20
501 to 3,300...	10
500 or fewer...	5

(i) *Annual lead and copper tap monitoring.*

\* \* \* \* \*

(B) A system that **[maintains the range of values for the optimal corrosion control treatment water quality parameter performance requirements specified by the Department under § 109.1102(b)(5) during each of two consecutive 6-month monitoring periods in accordance with subsection (d)(2)] has installed or**

modified corrosion control treatment facilities in accordance with § 109.1102(b)(2) may [request that the Department allow the system to] reduce the number of lead and copper sample sites and reduce the frequency of monitoring to once per year [and reduce the number of lead and copper sample sites.] if the following conditions are met:

(I) The system does not exceed the lead and copper action levels during each of two consecutive 6-month monitoring periods.

(II) The system maintains the range of values for the optimal corrosion control treatment water quality parameter performance requirements specified by the Department under § 109.1102(b)(5) during each of two consecutive 6-month monitoring periods in accordance with subsection (d)(2).

(C) Annual monitoring shall begin during the calendar year immediately following the end of the second consecutive 6-month monitoring period.

(ii) *Triennial lead and copper tap monitoring.*

\* \* \* \* \*

(B) A system that [maintains the range of values for optimal corrosion control treatment water quality parameter performance requirements specified by the Department under § 109.1102(b)(5) during 3 consecutive years of monitoring] has installed or modified corrosion control treatment facilities in accordance with § 109.1102(b)(2) may [request that the Department allow the system to] reduce the frequency of monitoring from annually to once every 3 years[.] if the following conditions are met:

(I) The system does not exceed the lead and copper action levels during 3 CONSECUTIVE YEARS OF 6-month or annual monitoring.

(II) The systems maintains the range of values for the optimal corrosion control treatment water quality parameter performance requirements specified by the Department under § 109.1102(b)(5) during 3 consecutive years of monitoring.

\* \* \* \* \*

(iii) *[Request for reduced monitoring.* A system requesting reduced lead and copper tap monitoring under subparagraph (i)(B) or (ii)(B) shall submit that request on forms acceptable to the Department. The request shall include a summary of lead and copper tap and water quality parameter monitoring results and the results shall demonstrate that the system qualifies for reduced monitoring. The Department will review the information submitted and notify the water supplier of its decision and the basis for that decision.

(iv)] *Sample sites and timing.* A system that reduces the number of sample sites and frequency of sampling shall collect samples from sample sites included in the pool of

targeted sampling sites identified in subsection (g)(2). Systems sampling annually or less frequently shall conduct the lead and copper tap sampling between June 1 and September 30. The Department may approve, **IN WRITING**, a different period for conducting lead and copper tap monitoring sampling for systems **[collecting a reduced number of samples] on annual or less frequent monitoring**. The period may be no longer than 4 consecutive months and shall represent a time of normal operation when the highest levels of lead are most likely to occur.

***[(v) Reduced lead and copper tap monitoring revocation.***

**(A) A large water system authorized to conduct reduced lead and copper tap monitoring that fails to operate within the range of performance requirements for the water quality parameters specified by the Department under § 109.1102(b)(5) on more than any 9 days in a 6-month period shall resume lead and copper tap sampling in accordance with subsection (d)(1).**

**(B) A small or medium water system authorized to conduct reduced lead and copper tap monitoring that exceeds either the lead or copper action level shall comply with the following:**

**(I) The water supplier shall conduct water quality parameter monitoring during the monitoring period in which the action level is exceeded.**

**(-a-) If the system has installed corrosion control treatment in compliance with § 109.1102(b)(2), water quality parameter monitoring shall be conducted in accordance with subsection (c)(2). If the results of this monitoring indicate that the system failed to operate within the range of performance requirements for the water quality parameters specified by the Department under § 109.1102(b)(5) on more than any 9 days in a 6-month period, the water supplier shall resume lead and copper tap sampling in accordance with subsection (d)(1).**

**(-b-) If the system has not installed corrosion control treatment, water quality parameter monitoring shall be conducted in accordance with subsection (a)(2) and the system shall conduct corrosion control treatment activities in accordance with § 109.1102(b)(1)(i).**

**(II) The water supplier shall conduct source water monitoring in accordance with subsection (a)(3).**

**(III) If the lead action level is exceeded, the water supplier shall conduct a public education program in accordance with § 109.1104(a).]**

**(2) *Reduced water quality parameter monitoring for large water systems.*** A large water system conducting reduced water quality parameter monitoring shall collect two sets of distribution samples from the following reduced number of sample sites. The sets of samples shall be collected from the same sample sites on different days and analyzed for the applicable water quality parameters.

<i>System size</i> <i>(# of people served)</i>	<i># of Sample Sites</i>
> 100,000...	10
50,001 to 100,000...	7

(i) *Reduced sites.* A large water system that maintains the range of values for water quality parameter performance requirements reflecting optimal corrosion control treatment specified by the Department under § 109.1102(b)(5) during each of two consecutive 6-month monitoring periods conducted in accordance with subsection (d)(2) may collect distribution samples from the reduced number of sites during subsequent 6-month monitoring periods until the system qualifies for reduced frequency under subparagraph (ii). The system shall continue monitoring at each entry point as specified in subsection [(c)(2)(iii)(B)] **(d)(2)**.

(ii) *Reduced water quality parameter monitoring.*

(A) A large water system that maintains the range of values for water quality parameter performance requirements reflecting optimal corrosion control treatment specified by the Department under § 109.1102(b)(5) during 3 consecutive years of monitoring at the reduced number of sites under subparagraph (i) may reduce the frequency with which it collects sets of water quality parameter distribution samples from every 6 months to annually. **Annual monitoring begins during the next calendar year.** A system conducting annual sampling shall collect these sets of samples evenly throughout the year to reflect seasonal variability. The system shall continue monitoring at each entry point as specified in subsection [(c)(2)(iii)(B)] **(d)(2)**.

(B) A large water system may reduce the frequency with which it collects tap water samples for applicable water quality parameters specified in § 109.1102(b)(5) to every 3 years if it demonstrates during two consecutive monitoring periods that its tap water lead level at the 90th percentile is less than or equal to the PQL for lead of 0.005 mg/L, that its tap water copper level at the 90th percentile is less than or equal to 0.65 mg/L, and that it also has maintained the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the Department under § 109.1102(b)(5). **Triennial monitoring shall be conducted during the last year of each 3-year compliance period—for example 1998, 2001, 2004 and so forth.**

[(iii) *Reduced water quality parameter monitoring revocation.* A large water system subject to reduced water quality parameter monitoring that fails to operate within the range of performance requirements for the water quality parameters specified by the Department under § 109.1102(b)(5) on more than any 9 days in any 6-month period shall resume water quality parameter distribution sampling in accordance with the number and frequency requirements specified in subsection (d)(2).

(iv) A large system may resume annual monitoring for water quality parameters at the tap at the reduced number of sites specified in subsection (e)(2) after it has

completed two subsequent consecutive 6-month rounds of monitoring that meet the criteria of subsection (e)(2)(i).

(v) A large system may resume triennial monitoring for water quality parameters at the tap at the reduced number of sites specified in subsection (e)(2) after it demonstrates through subsequent rounds of monitoring that it meets the criteria of subsection (e)(2)(ii).]

**(3) Reduced monitoring revocation.**

**(i) Reduced monitoring revocation for large water systems. A large water system authorized to conduct reduced monitoring under this subsection that fails to meet the lead or copper action level during any 4-month monitoring period or that fails to operate within the range of performance requirements for the water quality parameters specified by the Department under § 109.1102(b)(5) on more than any 9 days in a 6-month period shall comply with the following:**

**(A) The water supplier shall resume lead and copper tap monitoring in accordance with subsection (d)(1).**

**(B) The water supplier shall resume water quality parameter distribution sampling in accordance with the number and frequency requirements specified in subsection (d)(2).**

**(I) A large system may resume annual monitoring for water quality parameters at the tap at the reduced number of sites specified in paragraph (2) after it has completed two subsequent consecutive 6-month rounds of monitoring that meet the criteria of paragraph (2)(i).**

**(II) A large system may resume triennial monitoring for water quality parameters at the tap at the reduced number of sites specified in paragraph (2) after it demonstrates through subsequent rounds of monitoring that it meets the criteria of paragraph (2)(ii).**

**(C) The water supplier shall conduct source water monitoring in accordance with subsection (d)(3). Monitoring is required only for the parameter for which the action level was exceeded. For systems on annual or less frequent monitoring, the end of the monitoring period is September 30 of the calendar year in which sampling occurs, or, if the Department has designated an alternate monitoring period, the end of the monitoring period is the last day of the 4-month period in which sampling occurs.**

**(ii) Reduced monitoring revocation for small or medium water systems. A small or medium water system authorized to conduct reduced lead and copper tap monitoring under this subsection that fails to meet the lead or copper action level during any 4-month monitoring period, or a small or medium system that has installed corrosion control treatment in compliance with § 109.1102(b)(2) and that fails to operate within the range of performance requirements for the water quality parameters specified by the Department under § 109.1102(b)(5) on more than any 9 days in a 6-month period, shall comply with the following:**

**(A) The water supplier shall conduct water quality parameter monitoring during the monitoring period in which the action level is exceeded. The start of the 6-month monitoring period for the water quality parameter monitoring required under this clause must coincide with the start of the annual or triennial tap monitoring period in which the action level was exceeded.**

**(I) If the system has installed corrosion control treatment in compliance with § 109.1102(b)(2), water quality parameter monitoring [must] SHALL be conducted in accordance with subsection (c)(2).**

**(II) If the system has not installed corrosion control treatment, water quality parameter monitoring [must] SHALL be conducted in accordance with subsection (a)(2) and the system shall conduct corrosion control treatment activities in accordance with § 109.1102(b)(1)(i).**

**(B) The water supplier shall collect one source water sample from each entry point within 6 months of the end of the monitoring period in which the action level was exceeded. Monitoring is required only for the parameter for which the action level was exceeded. For systems on annual or less frequent monitoring, the end of the monitoring period is September 30 of the calendar year in which sampling occurs, or, if the Department has designated an alternate monitoring period, the end of the monitoring period is the last day of the 4-month period in which sampling occurs.**

**(C) If a system has installed corrosion control treatment in compliance with § 109.1102(b)(2), the water supplier shall resume lead and copper tap monitoring in accordance with subsection (d)(1).**

\* \* \* \* \*

(g) *Sample site location plan.* The water supplier shall complete a sample site location plan which includes a materials evaluation of the distribution system, lead and copper tap sample site locations, water quality parameter sample site locations, and certification that proper sampling procedures are used. The water supplier shall complete the steps in paragraphs (1)—(3) by the applicable date for commencement of lead and copper tap monitoring under subsection (a)(1) and the step in paragraph (4) following completion of the monitoring. The water supplier shall keep the sample site location plan on record and submit the plan to the Department in accordance with § 109.1107(a)(1).

\* \* \* \* \*

(2) *Lead and copper tap sample site selection.* Lead and copper tap sampling sites are classified as tier 1, tier 2 or tier 3. Tier 1 sites are the highest priority sample sites.

\* \* \* \* \*

(ii) *Site selection for nontransient noncommunity water systems.*

**(A) The water supplier shall select all tier 1 sample site locations, if possible. A nontransient noncommunity water system with an insufficient number of tier 1**

sampling sites shall complete its sampling pool with sampling sites that contain copper pipes with lead solder installed before 1983. If additional sites are needed to complete the sampling pool, the system shall use representative sites throughout the distribution system in which the plumbing materials used at the site would be commonly found at other sites served by the system.

**[(A)] (B)** Tier 1 sampling sites **[shall] must** consist of buildings that have one or more of the following:

- (I) Copper pipes with lead solder installed after 1982.
- (II) Lead pipes.
- (III) Lead service line.

**[(B) If a nontransient noncommunity water system or a community water system that meets the criteria of § 109.1104(a)(2)(i)(E) contains a fewer number of buildings than the required number of sampling sites, the water supplier shall sample from different taps within a representative number of buildings. The taps shall be those most commonly used for drinking and the samples shall be taken on different days. If the system has an insufficient number of these taps to take each sample from a different tap, the water supplier may apply to the Department, in writing, to substitute non-first-draw samples. Those systems shall collect as many first-draw samples from appropriate taps as possible and identify sampling times and locations that would likely result in the longest standing time for the remaining sites. Non-first-draw samples must be 1-liter in volume and collected from an interior tap that is typically used to provide drinking water.]**

(iii) *[Sample sites with lead service lines. A system that has a distribution system containing lead service lines shall draw 50% of the samples it collects during each monitoring period from sites that contain lead pipes or copper pipes with lead solder, and 50% of those samples from sites served by a lead service line. If a water system cannot identify a sufficient number of sampling sites served by a lead service line, the system shall collect first draw samples from each site identified as being served by a lead service line.]*

**Site selection for community and nontransient noncommunity water systems that have fewer than five taps. A system that has fewer than five taps that can be used for drinking WATER that meet the sample site criteria specified in this paragraph shall collect at least one sample from each tap and then collect additional samples from those taps on different days during the monitoring period to meet the required number of sites.**

(iv) *[Sample sites with point-of-use or point-of-entry devices. Samples may not be taken from taps that have point-of-use or sites that have point-of-entry treatment devices designed to remove inorganic contaminants.]*

**Site selection for community and nontransient noncommunity facilities that operate continuously. A community water system meeting the conditions in**

§ 109.1104(a)(2)(i)(I) (relating to public education and notification), or a nontransient noncommunity water system, that operates continuously AND that has an insufficient number of taps commonly used for drinking WATER to take each first-draw sample from a different tap, may apply to the Department, in writing, to substitute non-first-draw samples. [These] UPON APPROVAL BY THE DEPARTMENT IN WRITING, THESE systems shall collect as many first-draw samples AS POSSIBLE from [appropriate] taps THAT CAN BE USED FOR DRINKING WATER THAT MEET THE SAMPLE SITE CRITERIA SPECIFIED IN THIS PARAGRAPH [as possible and identify sampling times and locations that would likely result in the longest standing time for the remaining sites]. THE REMAINING SAMPLES SHALL BE COLLECTED AT THE TIMES AND FROM THE SITES IDENTIFIED WITH THE LONGEST STANDING TIMES. Non-first-draw samples must be 1-liter in volume and collected from an interior tap that is typically used to provide water for human consumption.

(v) Sample sites with lead service lines. A system that has a distribution system containing lead service lines shall draw 50% of the samples it collects during each monitoring period from sites that contain lead pipes or copper pipes with lead solder, and 50% of those samples from sites served by a lead service line. If a water system cannot identify a sufficient number of sampling sites served by a lead service line, the system shall collect first draw samples from each site identified as being served by a lead service line.

(vi) Sample sites with point-of-use or point-of-entry devices. Samples may not be taken from taps that have point-of-use or sites that have point-of-entry treatment devices designed to remove inorganic contaminants.

\* \* \* \* \*

(h) *Sample collection methods.*

(1) *Lead and copper tap samples.* Tap samples for lead and copper collected in accordance with this subchapter, with the exception of lead service line samples collected under § 109.1107(d)(3) and tap monitoring samples collected under § 109.1103(g)(2)(ii)(B), shall be first-draw samples and the following sample collection methods shall be used:

\* \* \* \* \*

(ii) First-draw samples from residential housing shall be collected from the cold water kitchen tap or bathroom sink tap. First-draw samples from a nonresidential building shall be collected at an interior tap from which water is typically drawn for **consumption drinking**.

\* \* \* \* \*

(k) *Monitoring waivers for small systems.* **[Any] A** small system that meets the criteria of this subsection may apply to the Department to reduce the frequency of monitoring for lead and copper under this section to once every 9 years if it meets all of the materials criteria specified in **[subsection (k)] paragraph (1)** and all of the monitoring criteria specified in **[subsection (k)] paragraph (2)**. A system that meets the criteria in **[subsection (k)] paragraphs (1) and (2) only**

for lead, or only for copper, may apply to the Department for a waiver to reduce the frequency of tap water monitoring to once every 9 years for that contaminant only.

\* \* \* \* \*

(4) *Monitoring frequency for systems with waivers.*

(i) A system shall conduct tap water monitoring for the contaminant waived in accordance with subsection (e)(1)(iv) at the reduced number of sites identified in subsection (e) at least once every 9 years and provide the materials certification specified in paragraph (1) for the contaminants waived along with the monitoring results.

**Monitoring shall be conducted during the last year of each 9-year compliance cycle—for example 2010, 2019, 2028 and so forth.**

\* \* \* \* \*

§ 109.1104. **Public education and notification.**

(a) *Public education program.* The water supplier for a system that exceeds the lead action level based on tap monitoring conducted under § 109.1103 (relating to monitoring requirements) shall implement a public education program in accordance with this section. The public education program **[will] must** remain in effect until the system qualifies for discontinuation under paragraph (3).

(1) *Content.* The water supplier shall include mandatory language established by the EPA under 40 CFR 141.85 (relating to public education and supplemental monitoring requirements), which is incorporated by reference, in all of the printed and broadcast materials distributed through the lead public education program. Additional information presented by a system **[shall] must** be consistent with the information specified in this section and be in plain English that can be understood by laypersons. If appropriate or as designated by the Department, public education materials **[shall] must** be bilingual or multilingual. Systems may delete information pertaining to lead service lines, upon approval by the Department, if no lead service lines exist in the system's service area.

(i) ***[Mandatory language for newspapers and water bill inserts.*** The community water supplier shall include the information contained in 40 CFR 141.85(a) in all printed material submitted to newspapers and inserted with customers' water bills. In addition to the water bill insert, the water supplier shall provide the following alert on the water bill itself in large print:

**“Some homes in this community have elevated lead levels in their drinking water. Lead can pose a significant risk to your health. Please read the enclosed notice for further information.”**

**If a water supplier is unable to include the alert verbatim on the water bill because of insufficient space on the bill, the water supplier may request, and the Department may allow, a minor wording change so long as the content remains essentially unaffected. Public education language in 40 CFR 141.85(a)(1)(iv)(B)(5) and (D)(2)**

may be modified regarding building permit record availability and consumer access to these records, upon approval by the Department.]

**Content of written materials.** Community water suppliers and nontransient noncommunity water suppliers shall include the mandatory language and other content requirements established under 40 CFR 141.85(a)(1) and (2) (relating to content of written public education materials), which is incorporated by reference.

(ii) [*Mandatory language for pamphlets and brochures.* The water supplier shall include the information contained in 40 CFR 141.85(a)(1)(ii) and (iv) in all pamphlets or brochures printed and distributed in accordance with this section.]

**Information for non-English-speaking populations.** For each non-English-speaking group that exceeds 10% of the residents for systems serving at least 1,000 people or 100 residents for systems serving less than 1,000 people, and speak the same language other than English, the written materials must contain information in the appropriate languages regarding the importance of the materials or contain a telephone number or address where persons served may contact the water system to obtain a translated copy of the materials or to request assistance in the appropriate language.

(iii) [*Mandatory language for public service announcements.* The water supplier shall include the information contained in 40 CFR 141.85(b) in public service announcements submitted for broadcast.]

**Submission of written materials.** Water systems shall submit copies of all written public education materials to the Department prior to delivery.

[(iv) *Mandatory language for nontransient noncommunity water systems.* The water supplier for a nontransient noncommunity water system shall include either the information contained in 40 CFR 141.85(a)(1), or the information contained in 40 CFR 141.85(a)(2), in public education materials printed and distributed in accordance with this section.]

(2) *Delivery.*

(i) *Community water system requirements.* Within 60 days after **[exceeding] the end of the monitoring period in which** the lead action level **was exceeded**, unless it is already repeating public education tasks under **this** subsection **[(a)]**, the water supplier for a community water system shall deliver the public education materials to its customers in accordance with clauses (A)—**[(D)] (G)**. The water supplier shall repeat the tasks contained in clauses (A)—**[(C)] (D) and (H)** every 12 months, and in clause **[(D)] (G)** every 6 months for as long as the system exceeds the lead action level. **For systems that are required to conduct monitoring annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which sampling occurs, or, if the Department has designated an alternate monitoring period, the end of the monitoring period is the last day of the 4-month period in which sampling occurs.**

(A) The water supplier shall [insert notices with and include the alert on each customer's water bill containing the information in paragraph (1)(i). If the billing cycle or billing form prevents distribution of this notice within 60 days of the lead action level exceedance, the water supplier may deliver the information required in paragraph (1) within 60 days of the lead action level exceedance in one of the following ways:] deliver printed materials meeting the content requirements of paragraph (1) to all bill paying customers.

[**(I)** A separate direct mailing.

[**(II)** Hand delivery.]

(B) The water supplier shall [submit the information in paragraph (1)(i) to the editorial departments of the major daily and weekly newspapers circulated throughout the community] deliver education materials meeting the content requirements of paragraph (1) to THE local [public health agencies, such as the county or State Health Department, even if they are not located within the water system's service area] BOARD OR DEPARTMENT OF PUBLIC HEALTH THAT HAS JURISDICTION OVER THE WATER SYSTEM'S SERVICE AREA, along with an informational notice that encourages distribution to all the potentially affected consumers. The water supplier shall contact the local [public health agencies] BOARD OR DEPARTMENT OF PUBLIC HEALTH directly by phone or in person. The local [public health agencies] BOARD OR DEPARTMENT OF PUBLIC HEALTH may provide a specific list of additional community based organizations serving target populations which may include organizations outside the service area of the water system. If a list is provided, the water supplier shall deliver education materials that meet the content requirements of paragraph (1) to all the organizations on the list.

(C) The water supplier shall deliver [pamphlets or brochures, or both, that contain the information in paragraph (1)(ii) to facilities and organizations, including the following] education materials meeting the content requirements of paragraph (1) to the organizations listed in subclauses (I)–(VI) that are located within the water system's service area, along with an informational notice that encourages distribution to all the organization's potentially affected customers or water system's users:

(I) Public and private schools or local school boards, or both.

(II) [City or county health department.

(III)] Women, Infants, and Children or Head Start Programs whenever available.

(IV)] (III) Public and private hospitals and medical clinics.

(V)] (IV) Pediatricians.

(VI)] (V) Family planning clinics.

(VII)] (VI) Local welfare agencies.

(D) The water supplier shall [submit a public service announcement which includes the information in paragraph (1)(iii) to at least five of the radio and television stations with the largest audiences that broadcast to the community served by the water system.] make a good faith effort to locate the following organizations within the water system's service area and deliver education materials meeting the content requirements of paragraph (1) to them along with an informational notice that encourages distribution to all the organization's potentially affected customers or users. The good faith effort to contact at-risk customers [may] MUST include requesting a specific contact list of the organizations in subclauses (I)–(III) from the local [public health agencies even if the agencies are not located within the water system's service area] BOARD OR DEPARTMENT OF PUBLIC HEALTH THAT HAS JURISDICTION OVER THE WATER SYSTEM'S SERVICE AREA:

(I) Licensed childcare centers.

(II) Public and private preschools.

(III) Obstetricians-gynecologists and midwives.

(E) [A community water system may apply to the Department, in writing, to use the text specified in 40 CFR 141.85(a)(2) in lieu of the text in 40 CFR 141.85(a)(1), and to perform the tasks listed under subparagraph (ii)(A) in lieu of the tasks under clauses (A)—(D) if:]

The water supplier shall provide information on or in each water bill at least quarterly. The message on the water bill must include the following statement exactly as written except for the text in brackets for which the water system must include system-specific information:

*(Editor's Note: The text in capital letters & brackets is to indicate that the water supplier needs to insert their own information to replace this text.)*

“[INSERT WATER SYSTEM NAME] found high levels of lead in drinking water in some homes. Lead can cause serious health problems. For more information please call [INSERT WATER SYSTEM NAME] (or visit [INSERT WEB SITE ADDRESS]).”

(I) The system is a facility, such as a prison or a hospital, where the population served is not capable of or is prevented from making improvements to the plumbing or installing point-of-use treatment devices.

(II) The system provides water as part of the cost of services provided and does not charge for water consumption.]

(F) [A community water system serving 3,300 or fewer persons may omit the task contained in clause (D) if notices containing the information required under paragraph (1) are distributed to every household served by the system at least once during each calendar year the system exceeds the lead action level.]

The water supplier shall post education materials meeting the content requirements of paragraph (1) on the water system's Web site if the system serves a population greater than 100,000 for as long as the systems exceeds the lead action level.

(G) The water supplier shall submit a press release to newspaper, radio and television stations.

(H) In addition to the requirements of clauses (A)–(F), community water suppliers shall implement at least 3 activities from the categories listed in subclauses (I)–(IX). The educational content and selection of these activities shall be determined in consultation with the Department.

(I) Public service announcements.

(II) Paid advertisements.

(III) Public area information displays.

(IV) E-mails to customers.

(V) Public meetings.

(VI) Household deliveries.

(VII) Targeted individual customer contact.

(VIII) Direct distribution of education materials to all multifamily homes and institutions.

(IX) Other methods approved by the Department.

(I) A community water system may apply to the Department, in writing, to omit the text required in 40 CFR 141.85(a)(2) and to perform the tasks listed under subparagraph (ii) in lieu of the tasks under clauses (A)–(H) if the following apply:

(I) The system is a facility, such as a prison or a hospital, where the population served is not capable of or is prevented from making improvements to the plumbing or installing point-of-use treatment devices.

(II) The system provides water as part of the cost of services provided and does not charge for water consumption.

(J) A community water system serving 3,300 or fewer persons may modify its public education program as follows:

(I) The system may limit distribution of public education materials required under clauses (B) and (C) to facilities and organizations served by the system that are most likely to be visited by pregnant women and children.

(II) The system may omit the task in clause (G) if notices meeting the content requirements of paragraph (1) are distributed to every household served by the system.

**(III) The system [must] SHALL implement at least one of the tasks specified in clause (H).**

(ii) *Nontransient noncommunity water system requirements.* Within 60 days after **[exceeding] the end of the monitoring period in which** the lead action level **was exceeded**, the water supplier for a nontransient noncommunity water system shall deliver the public education materials contained in paragraph (1)[(iv)] to its consumers, unless it is already repeating public education tasks under this subsection. **For systems that are required to conduct monitoring annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which sampling occurs, or, if the Department has designated an alternate monitoring period, the end of the monitoring period is the last day of the 4-month period in which sampling occurs.**

\* \* \* \* \*

(iii) *Extension of the 60-day delivery deadline.* **Water systems may request an extension of the 60-day delivery deadline, but the water system must receive written approval from the Department prior to the 60-day deadline.**

(3) *Discontinuation of public education program.* A water supplier may discontinue **[implementation of its public education program] delivery of public education materials** if the system does not exceed the lead action level during the most recent 6-month monitoring period conducted under § 109.1103. The system shall resume public education in accordance with this section if it exceeds the lead action level at any time during a future monitoring period.

(4) *Notification of customer monitoring.* A water supplier that fails to meet the lead action level on the basis of tap monitoring conducted in accordance with § 109.1103 shall provide information regarding laboratories certified by the Department for lead and copper testing to any customer who requests it.

(b) **Notification of results.** **Water systems shall deliver a consumer tap notice of lead tap water monitoring results to persons served by the water at sites that are sampled under § 109.1103.**

**(1) Content.** **The consumer notice must include the following:**

- (i) The results of lead tap water monitoring for the tap that was sampled.**
- (ii) An explanation of the health effects of lead.**
- (iii) A list of steps consumers can take to reduce exposure to lead in drinking water.**
- (iv) Contact information for the water system.**

**(v) THE MAXIMUM CONTAMINANT LEVEL GOAL AND THE ACTION LEVEL FOR LEAD AND THE DEFINITIONS FOR THESE TWO TERMS SPECIFIED BY EPA IN 40 CFR 141.153(c) (RELATING TO CONTENT OF THE REPORTS).**

(2) Timing. Water systems shall provide the consumer notice within 30 days after the system learns of the tap monitoring results.

(3) Delivery. The consumer notice [must] SHALL be delivered to persons served at the tap that was sampled either by mail or by another method approved by the Department. The system shall provide notice to all persons served by the tap that was sampled, including consumers who do not receive water bills.

(c) Public notification requirements. \*\*\*

\* \* \* \* \*

§ 109.1107. System management responsibilities.

(a) *Reporting and recordkeeping.* Systems shall comply with the following requirements and otherwise comply with § 109.701 (relating to reporting and recordkeeping):

(1) *Sample site location plan.* The system shall prepare a sample site location plan in accordance with § 109.1103(g) (relating to monitoring requirements), maintain the plan on record and submit the plan to the Department prior to conducting initial lead and copper tap monitoring or upon request. The water supplier shall update the following information in the plan within the first 10 days following the end of each applicable monitoring period:

**(Editor's Note: This subparagraph referenced language that was deleted in a 2002 rulemaking and is no longer necessary.)**

(i) Selection of different lead and copper tap sample sites from sites sampled during previous monitoring periods ~~and corresponding site selection justification required under § 109.1103(g)(2)(v)~~.

\* \* \* \* \*

(3) *Corrosion control treatment reporting requirements.*

(i) A water supplier demonstrating optimal corrosion control treatment under § 109.1102(b)(1)(ii) (relating to action levels and treatment technique requirements) shall submit information in writing sufficient for the Department to evaluate and determine whether optimal treatment has been achieved. [281961] **(Editor's Note: This number is an unknown reference or typographical error.)**

\* \* \* \* \*

(5) Consumer notice of lead tap monitoring results reporting requirements. The water supplier shall submit to the Department within 3 months of the end of the monitoring period in which lead tap monitoring was conducted a sample copy of the consumer notice of lead tap monitoring results along with a certification that the notices were distributed in accordance with § 109.1104(b).

(6) Lead service line replacement reporting. \*\*\*

[(6)] (7) Record maintenance. \*\*\*

\* \* \* \* \*

(d) *Lead service line replacement.*

(1) *Initiation of lead service line replacement.* A system that exceeds the lead action level when conducting lead and copper tap monitoring in accordance with § 109.1103(c)(1) or (d)(1) after construction or modification of corrosion control treatment facilities shall initiate lead service line replacement. The first year of lead service line replacement begins [with the next 6-month monitoring period following the action level exceedance] on the first day following the end of the monitoring period in which the action level was exceeded. If monitoring is required annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which sampling occurred. If the Department has designated an alternate monitoring period in writing, the end of the monitoring period is the last day of the designated alternate monitoring period.

\* \* \* \* \*

(5) *Discontinuation of lead service line replacement.* A water supplier may cease replacing lead service lines if the system meets the lead action level during two consecutive 6-month monitoring periods when conducting lead and copper tap monitoring. Thereafter, if the system exceeds the lead action level, the water supplier shall recommence replacing lead service lines in accordance with paragraph [(2)] (6).

(6) Resumption of lead service line replacement. Water systems that resume a lead service line replacement program shall update their lead service line inventory to include those sites that were previously excluded under paragraph (3). Systems shall divide the updated number of remaining lead service lines by the number of remaining years in the replacement program to determine the number that must be replaced each year. If the system has completed a 15-year lead service line replacement program, the Department will determine a schedule for replacing or retesting lead service lines that were previously tested out under the replacement program (when the system re-exceeds the lead action level).



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COMMENT AND RESPONSE DOCUMENT  
for the  
LEAD & COPPER RULE SHORT-TERM REVISIONS (LCRSTR)

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**List of Commentators**

1. Independent Regulatory Review Commission (IRRC)  
333 Market Street, 14<sup>th</sup> Floor  
Harrisburg, PA 17101

## LEAD & COPPER RULE SHORT-TERM REVISIONS COMMENTS AND RESPONSES

### Section 109.1103. Monitoring requirements. - Need; Fiscal impact; Clarity

#### 1. **Comment:** *Subsection (e) - Reduced monitoring.*

The Preamble to the proposed rulemaking states that certain provisions of § 109.1103(e) are more stringent than the Federal rule on which this proposal is based. The specific provisions are: §§ 109.1103(e)(1)(i)(B) and (C); 109.1103(e)(1)(ii)(B); and 109.1103(e)(3). The Board has explained that these provisions are more protective of the public health than the Federal rule. We ask the Board to explain why the Federal rule is not sufficient to protect the health of the citizens of this Commonwealth.

In addition, a commentator has questioned if these provisions increase the cost for compliance for public water systems. We ask the Board to quantify the costs associated with the provisions that are more stringent than the Federal rule. (1)

#### **Response:**

The one provision more stringent than the federal provisions involves systems with corrosion control treatment (CCT) that are on a reduced monitoring frequency. Under both rules, if these systems exceed the lead action level without exceeding the copper action level they are required to resume a 6-month monitoring frequency for both parameters. However, under the federal rule, if these systems exceed the copper action level without exceeding the lead action level, they are allowed to remain on a reduced monitoring frequency. Under the state rule, if these systems exceed the copper action level without exceeding the lead action level, they are required to resume a 6-month monitoring frequency for both parameters. 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. Lead and copper in drinking water is usually the result of corrosion of household plumbing which often contains levels of both lead and copper. Water suppliers treat for lead and copper using passivation, meaning they change the water chemistry to reduce the solubility of lead or copper. Treatment options for lead are often different than those for copper. When water suppliers tweak treatment to reduce the levels of one parameter, they may actually increase the levels of the other parameter. Additionally, treatment for other regulated contaminants will often cause simultaneous compliance issues with corrosion control treatment. Therefore, a lead or copper action level exceedance is a good indication that the treatment system is not operating effectively and should be re-evaluated to determine whether the current treatment system is the most appropriate.

There will be some additional costs associated with this provision. Resuming routine monitoring from a reduced annual or triennial frequency will require, at a minimum, 2 consecutive rounds of monitoring every 6 months at the initial number of sampling locations. The number of additional samples required varies and is based on the population served. Cost estimates are based on data from the 2007 monitoring period. In 2007, there were 2,948 water systems on a reduced monitoring frequency. Of these, 54 systems (2%) that have installed corrosion control treatment exceeded the copper action level without exceeding the lead action level. Over half of these 54 systems serve less than 500 people. Because so few systems are likely to be affected by this provision and because the costs will vary significantly, a range of increased costs has been estimated and is shown in the table on the next page. The total additional cost is based on an average cost of \$36 for a lead and copper sample analysis.

Additional Monitoring Costs Incurred by a PWS with CCT Where the Action Level for Copper Only Is Exceeded						
Estimate of No. PWSs Affected (2%)	PWS Population					
	≤ 100	101-500	501-3,300	3,301-10,000	10,000-100,000	> 100,000
54	15	21	17	1	0	0
No. of Additional Samples	5	15	30	60	90	150
Increased Costs	\$180	\$540	\$1,080	\$2,160	\$3,240	\$5,400

Based on these estimates, each of the 54 systems would have incurred additional monitoring costs ranging from \$180 - \$2,160 for the purpose of ensuring that CCT treatment for either parameter was not compromised.

2. **Comment:** *Subsection (g) - Sample site location plan.*

Subsection (g)(2)(iv) pertains to site selection for community and nontransient noncommunity facilities that operate continuously. The second sentence of this subsection states the following: "These systems shall collect **as many first-draw samples from appropriate taps as possible** and identify sampling times and locations that **would likely** result in the longest standing time for the remaining sites." (Emphasis added.) This sentence is vague because it does not establish a binding norm that could be evenly applied to all members of the regulated community and enforced by the Department of Environmental Protection in a uniform manner. We recommend that the sentence be amended to provide more definite parameters for testing. (1)

**Response:**

The language has been edited for clarity, so § 109.1103(g)(2)(iv) will state:

"A community water system meeting the conditions in clause 109.1104(a)(2)(i)(I), or a nontransient noncommunity water system, that operates continuously and that has an insufficient number of taps commonly used for drinking to take each first-draw sample from a different tap, may apply to the Department in writing, to substitute non-first-draw samples. Upon approval by the Department, in writing, these systems shall collect as many first-draw samples from taps that can be used for drinking that meet the sample site criteria specified in this paragraph as possible. The remaining samples must be collected at the times and from the sites identified with the longest standing times. Non-first-draw samples must be 1-liter in volume and collected from an interior tap that is typically used to provide water for human consumption."

Under § 109.1107(a)(1), a public water system is required to prepare and submit a LCR sample site location plan prior to conducting initial monitoring and update the plan if any changes are made to sampling locations. If a system wishes to substitute non-first draw samples as specified in § 109.1103(g)(2)(iv), the sample site location plan will be the mechanism with which the system applies to the Department in writing. The Department will then respond in writing to the water supplier if the alternate sampling locations are approved.

**Section 109.1104. Public education and notification. - Implementation procedures; Need; Clarity.**

**3. Comment: Subsection (a)(2)(i)(B)**

This subsection pertains to the delivery of education materials. It is being amended to read as follows:

“The water supplier shall deliver education materials meeting the content requirements of paragraph (1) to local public health agencies, such as the county or State Health Department, even if they are not located within the water system's service area, along with an informational notice that encourages distribution to all the potentially affected consumers. The water supplier shall contact the local public health agencies directly by phone or in person. The local public health agencies may provide a specific list of additional community based organizations serving target populations which may include organizations outside the service area of the water system. If a list is provided, the water supplier shall deliver education materials that meet the content requirements of paragraph (1) to all the organizations on the list.”

We have three concerns. First, the term "local public health agencies" is unclear. We recognize that the Preamble to the rulemaking lists the agencies that must be contacted and that additional guidance will be provided by the Department. However, as noted above, regulations establish binding norms and also have the full force and effect of law. We recommend that the term either be defined or that the final-form regulation include a reference to a specific guidance document that lists the agencies that must be contacted. This term also appears in Subsection (a)(2)(i)(D).

Second, what is the need for contacting local public health agencies, even if they are not located with the water system's service area? This requirement also appears in Subsection (a)(2)(i)(D).

Third, we find the third and fourth sentence of this subsection to be problematic. Under these sentences, the Board is delegating its rulemaking authority to local public health agencies and members of the regulated community will be required to comply with the additional requirements. This approach does not establish a binding norm that could be applied evenly to the regulated community. If the Board believes that other community based organizations should be contacted, those organizations should be listed in the guidance document. (1)

**Response:**

This language is consistent with, and no more stringent than, the federal language found in 40 CFR 141.85(b)(2)(ii). The following excerpts from the federal preamble explain EPA's rationale:

“In recognition of the importance of distributing information to the at-risk populations (e.g., pregnant women, infants, and young children) on the hazards of lead and how one can protect themselves from exposure to lead, EPA has added additional organizations (e.g., licensed childcare facilities, obstetricians-gynecologists and midwives, and preschools) to the list of organizations a water system must contact when a lead action level exceedance occurs to ensure that the information reaches all potential bill paying and non-bill paying customers. This is based on NDWAC's recommendation. ...EPA recognizes that the local health agencies play an important role in ensuring that consumers who are most vulnerable receive critical information on how one can reduce their exposure to lead. ...EPA believes the additional activities required in the rule following a lead action level exceedance ...will appropriately bring the seriousness of lead exposure to the attention of consumers.” (72 F.R. 57792)

“EPA believes that the local health agencies play an important role in making sure consumers who are most vulnerable receive the information they need to reduce their exposure to lead in

drinking water. However, EPA cannot mandate that health departments generate and provide contact information for the new organizations and is not assuming that local health agencies will have the contact information readily available in all cases. ...EPA believes that if the local public health agency can identify organizations that potentially serve target populations, then a water system should deliver public education materials to this organization even if it is not within the water system's service area. EPA believes there could also be instances where an individual does not reside within the system's service area but is served by the water system in another capacity (e.g., a child lives in another county but spends a large part of their day at a child care facility that is served by a water system with a lead action level exceedance)." (72 F. R. 57793)

To clarify the term "local public health agencies," the language has been amended to read as follows:

"The water supplier shall deliver education materials meeting the content requirements of paragraph (1) to the local **board or department of public health that has jurisdiction over the water system's service area**, along with an informational notice that encourages distribution to all the potentially affected consumers. The water supplier shall contact the local board or department of public health directly by phone or in person. The local board or department of public health may provide a specific list of additional community based organizations serving target populations which may include organizations outside the service area of the water system. If a list is provided, the water supplier shall deliver education materials that meet the content requirements of paragraph (1) to all the organizations on the list." (Emphasis added)

The Department is not delegating any rulemaking authority to another agency. As stated above, local health departments play an important role in ensuring consumers who are not regular consumers receive information on reducing their exposure to lead in drinking water. All water systems required to conduct a public education program because of a lead action level exceedance are required to contact the local health department via the telephone or in-person to request assistance in identifying the consumers who are most at-risk from exposure to lead in the drinking water and in distributing the public education materials. DEP is not mandating that the local public health agency provide a list of additional organizations or ensure that the water supplier provide education materials to these organizations. However, if a list of organizations is provided by the local health department, DEP will ensure that the public water system deliver the education materials as required. Under § 109.1104(a)(1)(iii) water systems are required to submit copies of public education materials prior to delivery; under § 109.1107(a)(4), public water systems conducting a public education program are required to submit a written certification that they have complied with the public education requirements.

#### 4. **Comment:** *Subsection (a)(2)(i)(D)*

This subsection requires water suppliers to make a good faith effort to reach certain organizations. It states that the good faith effort "may" include requesting information from a local public health agency. The use of the word "may" is problematic because it is nonregulatory language which indicates that this provision is optional. It is inappropriate to include optional provisions in a regulation. If the Board believes this provision is necessary, it should change the word "may" to "shall." If it is not necessary, the provision should be deleted from the regulation. (1)

#### **Response:**

The term "may" has been changed to "must."





# pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

POLICY OFFICE

October 1, 2010

Mr. Kim Kaufman, Executive Director  
Independent Regulatory Review Commission  
14th Floor  
333 Market Street  
Harrisburg, PA 17120

Re: Final-Form Rulemaking – Adhesives, Sealants, Primers and Solvents (#7-428)  
Final-Form Rulemaking – Lead and Copper Short Term Revisions (#7-437)  
Final-Form Rulemaking – Flat Wood Paneling Surface Coating Operations (#7-447)

Dear Mr. Kaufman:

Pursuant to Section 5.1(a) of the Regulatory Review Act, please find enclosed copies of three final-form rulemakings for review and comment by the Independent Regulatory Review Commission. The Environmental Quality Board (EQB) approved these final-form rulemakings at its September 21, 2010, meeting.

The first final rulemaking enclosed, the **Adhesives, Sealants, Primers and Solvents** final rulemaking, adds volatile organic compound (VOC) emission limits for the use and application of 37 categories of products that are currently unregulated in this Commonwealth, including adhesives, sealants, adhesive primers, sealant primers, and adhesive or sealant products applied to particular substrates. The rulemaking also includes requirements for the use of surface preparation solvents and cleanup solvents. The emission limitations included in the rulemaking will apply to the industrial and commercial use of the products, as well as their use by facility owners and operators as a part of a manufacturing process. As such, owners and operators of facilities that use or apply these products will be subject to the regulations, as well as any person who sells, supplies, offers for sale or manufactures for sale for use in this Commonwealth an adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent or cleanup solvents. A person who uses these products or applies for compensation in this Commonwealth to use these products will also be required to comply with the provisions in this rulemaking. This would include plumbers, roofers, window and automotive glass installers, home builders and remodelers, construction companies, landscapers, boat builders, ceramic tile installers and vinyl flooring installers.

The rulemaking, once implemented, is expected to reduce VOC emissions in Pennsylvania by approximately 7,957 tons per year. The additional VOC emission reductions that will occur as a result of the rulemaking are reasonably necessary as a part of the Commonwealth's strategy to achieve and maintain the 8-hour ozone national ambient air quality standard throughout the Commonwealth. The provisions contained in the rulemaking are modeled after control measures recommended by the Ozone Transport Commission in its 2006 Model Rule for adhesives,



sealants and primers. To provide flexibility, the rulemaking allows owners and operators that use noncompliant products to use add-on air pollution controls as a compliance alternative in lieu of the use of compliant products. Upon finalization of the rulemaking, the regulations will be submitted to the EPA as a revision to the Commonwealth's State Implementation Plan (SIP).

The proposed rulemaking was adopted by the Board on December 16, 2008, and the proposal was published in the *Pennsylvania Bulletin* on April 4, 2009, with provision for a 66-day public comment period and three public hearings. The Board received public comments from 12 commentators and the Independent Regulatory Review Commission (IRRC). As a result of comments received, the Department made several changes at final-form rulemaking. In order to provide a reasonable compliance date that allows for implementation of the rule's requirements, the compliance date included in the proposed regulations has been amended to January 1, 2012, in the final-form rulemaking. As such, the Department has also amended the final-form rulemaking to require compliance with the VOC content limits for single-ply roofing membrane products by January 1, 2012. At proposed rulemaking, a transitional period was provided, at the request of the ethylene propylene diene monomer (EPDM) industry, to allow the industry adequate time to field test new VOC-compliant adhesive formulations used in the construction of singly-ply roofing membrane. Because of the new compliance date included in the final-form rulemaking, a transitional or phased-in compliance period for the EPDM industry is not included in the final regulations, as the Department believes the January 1, 2012, compliance date provides the EPDM roofing manufacturers and Pennsylvania roofing contractors with adequate time to develop VOC-compliant products and perfect the application practices that will be effective on a year-round basis. In addition to these changes, the Department made modifications to clarify the sell-through and use-through provisions in the rulemaking. At final rulemaking, the Department has clarified in § 130.702(b) that noncomplying products manufactured on and after the amended compliance date of January 1, 2012, may not be used or applied for compensation in the Commonwealth. The Department also amended the final-form rulemaking to add §§ 130.707 and 130.708 to allow the sell-through of non-complying product manufactured before January 1, 2012, if the product container or package displays the date on which the product was manufactured.

The Department consulted with Air Quality Technical Advisory Committee (AQTAC) about the final-form rulemaking on November 18, 2009, and February 18, 2010. The AQTAC unanimously concurred with the Department's recommendation to seek Board approval of the final-form rulemaking. The Department also consulted with the Citizens Advisory Council (CAC) on December 16, 2009, and the Small Business Compliance Advisory Committee (SBCAC) on July 28, 2010. The CAC and SBCAC concurred with the Department's recommendation that the final-form amendments be moved to the Board for formal action.

The second final rulemaking enclosed, **Lead and Copper Rule Short Term Revisions**, amends the Lead and Copper provisions of the Department's Safe Drinking Water regulations to incorporate changes promulgated by the U.S. Environmental Protection Agency (EPA) on October 10, 2007, to the Federal Lead and Copper Rule: Short Term Regulatory Revisions. The PA Safe Drinking Water Act obligates the Department to maintain primacy for the Safe Drinking Water program. As such, the Department is required to incorporate federal requirements to maintain primary enforcement authority for the Lead and Copper Rule (LCR).



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 rulemaking amends several provisions of the current LCR to strengthen implementation of existing requirements regarding monitoring, treatment processes, public education, customer awareness and lead service line replacement. The final-form rulemaking will affect 3,226 public water systems which serve a total population of over 11.2 million Pennsylvanians. One provision of the rulemaking is more stringent than federal requirements. Under federal regulations, a system that exceeds regulatory thresholds for copper may request reduced monitoring. However, in PA, water systems must meet both the lead and copper regulatory levels in order to be eligible for a reduced monitoring schedule.

The proposed rulemaking was adopted by the Board on June 16, 2009, and was published for public comment in the September 26, 2009, edition of the *Pennsylvania Bulletin*. The Board did not receive any public comments on the proposal during the 30-day public comment period; however, the Independent Regulatory Review Commission (IRRC) provided comments to the Board on the rulemaking. In their comments, IRRC questioned the justification for including a provision in the rulemaking that is more stringent than federal requirements. IRRC also requested clarity on several provisions it felt were unclear including requirements pertaining to the delivery of education materials by water suppliers to local public health agencies. The Department amended the rulemaking to address areas where further clarification was warranted.

The draft final-form rulemaking was submitted to the Small Water Systems Technical Assistance Center Advisory Board (TAC) for review and discussion on June 18, 2010. TAC commented that it understood the amendments in the rulemaking are needed to ensure continued primacy of the program and provided its support of the final-form rulemaking.

The third final rulemaking enclosed, **Flat Wood Paneling Surface Coating Processes**, amends 25 *Pa Code*, Chapters 121 and 129 to establish VOC emission limits from the use and application of inks, coatings, adhesives and cleaning materials in flat wood paneling surface coating processes. The emission limits and other requirements of the final-form amendments apply to the owner and operator of a flat wood paneling surface coating operation with actual VOC emissions equal to or greater than 15 pounds per day, including related cleaning activities, before consideration of controls. In Pennsylvania, 10 flat wood paneling surface coating facilities, which collectively emitted 248 tons of VOC emissions in 2009, may potentially be subject to the requirements in the final-form rulemaking.

Federal statutory or regulatory limits do not exist for VOC emissions from flat wood paneling surface coating operations; however, the Clean Air Act and its implementing regulations require that SIPs for nonattainment areas must include "reasonably available control measures," including "reasonable available control technology" (RACT) for sources of emissions. The Clean Air Act further requires that for moderate ozone nonattainment areas, states must revise their SIP to include RACT for sources of VOC emissions covered by a Control Techniques Guideline (CTG) document issued by the EPA prior to the area's date of attainment. The Department reviewed the recommendations included in the 2006 CTG for flat wood paneling coatings and has determined that the measures are appropriate to be implemented in the Commonwealth as RACT for emissions from inks, coatings, adhesives and cleaning materials used in flat wood



paneling surface coating processes; therefore, the final-form rulemaking adopts the emission limits and other requirements of EPA's 2006 CTG for flat wood paneling coatings. Adoption of the VOC emission requirements in the rulemaking is part of the Commonwealth's strategy, in concert with other Ozone Transport Region (OTR) jurisdictions, to further reduce the transport of VOC ozone precursors and ground-level ozone throughout the Ozone Transport Region and to attain and maintain the 8-hour ozone national ambient air quality standard. The regulation, when adopted by the Board as a final-form rulemaking, will be submitted to the EPA as a revision to the SIP.

The proposed rulemaking was adopted by the Board on September 15, 2009, and published for public comment in the *Pennsylvania Bulletin* on October 17, 2009, where provision for a 66-day public comment period and three public hearings were advertised. Public comments were received from one commentator, CraftMaster Manufacturing, Inc. IRRC also provided comments on the rulemaking. As a result of comments received, several changes are included in the final-form rulemaking. Under § 129.52c(c), a new subparagraph (ii) was added in response to comments from CraftMaster Manufacturing, Inc., who suggested that VOC emission limits in the rulemaking should be applicable to an entire surface coating operation or category of flat wood paneling product processed on a surface coating operation and that limits be based on a weighted-average of all coatings applied rather than limits for each individual coating. As a result of this comment, a new subparagraph (ii) was added to § 129.52c(c) which allows for calculating a daily weighted-average VOC content for all materials used within a single surface coating process line. In response to guidance from EPA, an equation to calculate the weighted average is also included in the final regulations. At final-form rulemaking, additional changes were also made, including amending the compliance date of the regulations from January 1, 2011 to January 1, 2012, based on the anticipated publication date of the final-form rulemaking. To ensure clarity, additional terms and definitions were also added to the final regulations and, in response to comments, modifications were made to recordkeeping and reporting requirements.

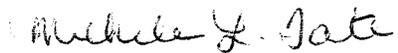
The EPA estimates that implementation of the recommended control options for flat wood paneling surface coating processes will result in additional reductions of VOC emissions of approximately 20% for interior flat wood paneling coating operations and 80% for exterior siding operations. The costs of complying with the final-form requirements include the cost of using alternative product formulations, including low VOC-content or water-based inks, coating and adhesives, and low VOC-content or water-based cleanup solvent products, or the costs of using add-on controls. It is important to emphasize that the final-form rulemaking does not require the installation of an add-on control device to meet the VOC emission limitations in the rulemaking. As a result, facility owners and operators may select the most cost-effective compliance option for their surface coating operations.

The final-form rulemaking was discussed with AQTAC on June 17, 2010. The AQTAC concurred with the Department's recommendation to present the final-form amendments to the Board for approval for publication as a final regulation. The Department also consulted with the CAC and the SBCAC on July 28, 2010. Neither the CAC nor the SBCAC had concerns with the final-form rulemaking.



The Department will provide assistance as necessary to facilitate the Commission's review of these final-form rulemakings under Section 5.1(e) of the Regulatory Review Act. Please contact me at the number above if you have any questions or need additional information.

Sincerely,

A handwritten signature in cursive script that reads "Michele L. Tate".

Michele L. Tate  
Regulatory Coordinator

Enclosures





**TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO  
 THE REGULATORY REVIEW ACT**

I.D. NUMBER: 7- 437

SUBJECT: *Lead and Copper Short Term Revisions*

AGENCY: DEPARTMENT OF ENVIRONMENTAL PROTECTION

**TYPE OF REGULATION**

- Proposed Regulation
- Final Regulation
- Final Regulation with Notice of Proposed Rulemaking Omitted
- 120-day Emergency Certification of the Attorney General
- 120-day Emergency Certification of the Governor
- Delivery of Tolled Regulation
  - a.  With Revisions
  - b.  Without Revisions

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**FILING OF REGULATION**

**DATE**

**SIGNATURE**

**DESIGNATION**

10-1-10      *D Newton*

Majority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY  
*Rep. Camille George*

10/1/10      *Jessica R. Guyer*

Minority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY

10/1/10      *D. Castelli*

Majority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY  
*senator mary Jo white*

10-1-10      *A. Reparczyk*

Minority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY

10/1/10      *K Cooper*

INDEPENDENT REGULATORY REVIEW COMMISSION

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ATTORNEY GENERAL (for Final Omitted only)

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LEGISLATIVE REFERENCE BUREAU (for Proposed only)

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