



WATER DIVISION *POLICY AND PROCEDURES*

NUMBER: WD-03-019

SUBJECT: LEAD AND COPPER RULE IMPLEMENTATION

EFFECTIVE DATE: AUGUST 4, 2003

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ISSUE:

The federal Lead and Copper Rule and the minor revisions in Title 40 of the Code of Federal Regulations, §§141.80 to 141.91, include implementation requirements on the states. Since the Water Division (WD) does not write regulations to govern itself, the federal requirements on the states are incorporated into this policy to be followed by staff when implementing the Lead and Copper Rule.

AUTHORITY:

Authority to promulgate rules is under the Safe Drinking Water Act, 1976 PA 399, as amended (Act 399) §325.1005. Administrative rules promulgated under Act 399 cover corrosion control treatment, source water treatment, and lead service line replacement under R 325.10604f (Rule 604f), and monitoring under R 325.10710a (Rule 710a). Additionally, authority to dictate monitoring requirements is under R 325.10732, authority to require reporting of results of analyses is under R 325.10734, authority to require approval of plans and specifications prior to constructing changes that affect treatment is under R 325.11309, and authority to require reports as necessary is under R 325.11505.

POLICY:

1. Corrosion control treatment steps, Rule 604f(2)

- A. Deemed optimized, Rule 604f(2)(b)(ii): If a system has demonstrated that it has conducted activities equivalent to corrosion control steps, then the WD may consider the system optimized. The WD shall provide the system with written notice explaining the basis for its decision and shall specify the water quality control parameters (WQCP) representing optimal corrosion control.
- B. Repeating Corrosion Control Treatment Steps, Rule 604f(2)(c): If the WD requires a small or medium-size system to repeat corrosion control treatment steps that were previously completed, the WD shall notify the system in writing and explain the basis for the decision.
- C. Treatment Steps and Deadlines for Small and Medium-Size Systems, Rule 604f(2)(e): Within 12 months after a system exceeds the lead or copper action level (AL), the WD may require the supplier to perform corrosion control studies. However, if the WD does not require the supplier to perform corrosion control studies, the WD shall specify optimal corrosion control treatment (OCCT) within 18 months after a medium-size system exceeds the AL and 24 months after a small system exceeds the AL.

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If a system has performed corrosion control studies, the WD shall designate the OCCT within six months after completion of the study. After the system has installed OCCT and completed follow-up tap sampling, the WD shall review the system's installation of treatment. If follow-up sampling at the taps exceeded the AL, then the WD shall designate optimal WQCP within six months after the completion of the follow-up sampling. If follow-up sampling at the taps was at or below the AL, then the supply is not required to sample for WQCPs.

2. Corrosion control treatment requirements, Rule 604f(3)

- A. Designation of OCCT, Rule 604f(3)(d)(i): The department will either approve the corrosion control treatment option recommended by the supplier or will designate alternative treatment. Suppliers of large systems that exceed the lead or copper AL shall determine OCCT through demonstration testing. Suppliers of medium-sized and small systems that exceed the lead or copper AL will determine optimal corrosion control through a desktop evaluation, such as the desktop evaluation on form 141.C of the Environmental Protection Agency's Lead and Copper Guidance Manual Volume II – Corrosion Control Treatment, dated September 1992. The desktop evaluation may be accompanied by the results from a full scale corrosion control treatment study.

The WD shall notify the system in writing of its decision on OCCT and explain the basis for the determination.

- B. WD Review of Treatment and Specification of Optimal WQCP, Rule 604f(3)(e): After the supplier installs and operates corrosion control treatment, the WD shall evaluate the results of all lead and copper tap samples and WQCP samples submitted by the system and determine whether the system has properly installed and operated the OCCT. Upon reviewing the results of tap water and WQCP monitoring by the system, both before and after the system installs OCCT, the WD shall designate all of the following to reflect OCCT for the system:

- A minimum value or a range of values for pH measured at each entry point to the distribution system.
- If a corrosion inhibitor is used, a minimum concentration or a range of concentrations for the inhibitor, measured at each entry point to the distribution system, that the WD determines is necessary to form a passivating film on the interior walls of the pipes of the distribution system.
- If alkalinity is adjusted as part of OCCT, a minimum concentration or a range of concentrations for alkalinity, measured at each entry point to the distribution system.

The WD may designate values for additional WQCP determined by the WD to reflect optimal corrosion control for the system. The WD shall notify the system in writing of these determinations and explain the basis for its decisions.

- C. Modification of WD Treatment Decisions, Rule 604f(3)(g): The department may modify its OCCT determination based on its own initiative or in response to a system's proposal to modify existing treatment or WQCP ranges under Rule 604f(3)(g). Each revised determination shall

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be made in writing, set forth the new treatment requirements, explain the basis for the decision, and provide an implementation schedule for completing the treatment modifications.

3. Source water treatment requirements, Rule 604f(4)

- A. Deadlines for Completing Source Water Treatment Steps, Rule 604f(4)(a): Within six months after the supplier submits a treatment recommendation (due to lead or copper AL exceedances), the WD shall make a determination regarding source water treatment. Within six months after the system completes follow-up tap and source water monitoring, the WD shall review the system's installation and operation of source water treatment and specify maximum permissible source water levels.
- B. Determining Source Water Treatment, Rule 604f(4)(b)(i): After a supplier submits to the WD the source water treatment recommendation, the WD shall complete an evaluation of the results of all source water samples submitted by the supplier to determine whether source water treatment is necessary to minimize lead or copper levels in water delivered to users' taps. The WD shall notify the system in writing of its determination and set forth the basis for its determination.
- C. Specify Maximum Permissible Source Water Levels, Rule 604f(4)(b)(iii): After the system installs and operates the source water treatment, the WD shall review the source water samples taken by the system both before and after the system installs source water treatment, and determine whether the system has properly installed and operated the source water treatment designated by the WD. Based on its review, the WD shall designate the maximum permissible lead and copper concentrations for finished water entering the distribution system. The levels shall reflect the contaminant removal capability of the treatment properly operated and maintained. The WD shall notify the system in writing and explain the basis for its decision.
- D. Modifications of State Treatment Decisions, Rule 604f(4)(b)(v): The WD may modify its source water treatment or maximum permissible lead and copper concentration determination. The WD's revised determination shall be made in writing, shall set forth the new treatment requirements, shall explain the basis for its decision, and shall provide an implementation schedule for completing the treatment modifications.

4. Lead Service Line Replacement, Rule 604f(5)

The WD shall require a supplier to replace lead service lines on a shorter schedule than required by the rules, taking into account the number of lead service lines in the system, where a shorter replacement schedule is feasible. The WD shall make this determination in writing and notify the supplier of its finding within six months after the system is triggered into lead service line replacement based on monitoring referenced in Rule 710a(4)(b).

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5. Monitoring requirements for lead and copper in tap water, Rule 710a

- A. Systems With Fewer Than Five Sites, Rule 710a(3): A supplier shall collect at least one sample per site. If the system has less than the required number of sampling sites, the supplier shall collect one sample from each available site as defined in Rule 710a(1)(c) to (g).

- B. Reduced Monitoring, Rule 710a(4)(d)(ii) and (iii): Systems that maintained the range of values for WQCP reflecting OCCT may reduce monitoring at a reduced number of sites with written approval from the department. The decision of the WD will be based on monitoring, treatment, and other relevant information submitted by the water system in accordance with Rule 710d. The WD shall review, and where appropriate, revise its determination when the system submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.

- C. Designating Alternative Period for Sample Collection, Rule 710a(4)(d)(iv)(A): The department may approve a different period for conducting the lead and copper tap sampling. The WD will determine on a case-by-case basis whether an alternative sampling period is appropriate.

PROCEDURE:

Responsibility

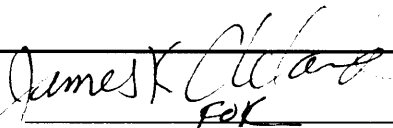
Field Operations Section staff for community water supplies; Groundwater Section, Noncommunity Unit staff and local health departments for noncommunity water supplies.

Action

- 1. Follow the procedures outlined in this policy.

- 2. This policy supercedes the "Lead/Copper Rule Implementation" procedure memo, signed by Sheryl Topliff, dated February 25, 1993.

APPROVED: _____


Richard A. Powers, Chief
Water Division

DATE: August 4, 2003