United States **Environmental Protection** Agency

Office of Water 4606

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SEPA

Lead and Copper Rule Minor Revisions Fact Sheet for State Primacy Agencies

We (the EPA) have made minor changes to the Lead and Copper Rule (LCR) that was first published in 1991. These Lead and Copper Rule Minor Revisions (LCRMR) took effect on April 11, 2000. The LCRMR do not change the action levels of 0.015 milligrams per liter (mg/L) for lead and 1.3 mg/L for copper. They also do not affect the Rule's basic requirements to optimize corrosion control and, if appropriate, treat source water, deliver public education, and replace lead service lines. In many cases, the revisions reduce monitoring, reporting, public education, and other requirements.



What Are the Changes to the Lead and Copper Rule?

The minor revisions to the LCR can be organized into 7 broad categories:

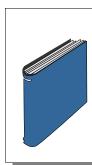
i Demonstration of Optimal Cor	rrosion Control
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Monitoring and System Reporting

Analytical Methods

- **Public Education**
- Lead Service Line Replacement ð
- State Recordkeeping and Reporting ñ
- **Special Primacy Conditions** Ò

In this fact sheet, we have identified in each category the revisions that became effective on April 11, 2000 and must be included in your drinking water regulations for you to maintain primacy. We ask that States submit complete and final primacy revision applications by October, 2001 to ensure timely primacy revision; however, under the regulations, applications are due by January 12, 2002. An extension of up to 2 additional years can be requested. We also identify in each category, provisions that are less stringent than corresponding provisions in the 1991 LCR. You may choose to adopt all or only a portion of these latter changes and the implementation time frame is also your choice. Some States may be unable to allow water systems to take advantage of these provisions until they are adopted into State regulations.



This fact sheet summarizes the minor revisions. For the actual regulatory requirements, refer to:

Federal Register, Vol. 65, No. 8. Drinking Water Regulations; Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for Lead and Copper; Final Rule; (Wed., Jan 12, 2000)

Revisions to Requirements for Demonstrating Optimal Corrosion Control

Revisions Required to Be Implemented Beginning April 11, 2000



- 1. A system that has installed corrosion control treatment but is not required to conduct water quality parameter (WQP) monitoring must continue to:
 - C Properly operate and maintain corrosion control treatment at all times; and
 - C Meet any requirements you deem are needed to ensure this treatment is maintained.

Note: These are not new requirements. They clarify provisions of the 1991 LCR.

- 2. If prior to December 7, 1992, a system has completed treatment steps that are equivalent to those in the LCR, it must:
 - C Routinely monitor for WQPs after you designate optimal water quality parameters (OWQPs) (*unless it serves* # 50,000 people and no longer exceeds an action level); and
 - C Continue lead and copper tap sampling.

Note: These are not new requirements. They clarify provisions of the 1991 LCR.

- 3. A system that demonstrates that the difference between the 90th percentile lead level at the tap and the highest concentration of lead in its source water is < 0.005 mg/L for two, consecutive 6-month periods (*also known as a* (b)(3) system), must:
 - C Collect a round of lead and copper tap samples between October 1, 1997 and September 30, 2000 at the reduced number of sites and continue monitoring every 3 years thereafter;
 - C Not exceed the copper action level after July 12, 2001; and
 - C Begin corrosion control treatment steps if during any round of monitoring:
 - 1 the difference between its 90th lead and source water levels is 0.005 mg/L or more, (*and it serves more than 50,000 people*); or
 - i the system is above the lead action level (*any size system*); or
 - D the system is above the copper action level on or after July 12, 2001 (any size system).

Note: Those systems, serving more than 50,000 people, that are triggered into corrosion control treatment steps (for one of the 3 reasons listed above) must follow the corrosion control treatment schedule for medium-size systems outlined in §141.81(e), beginning with the requirement to complete a corrosion control study. These systems must complete this study within 18 months of the date they were triggered into the corrosion control treatment requirements.

Revisions that You May Not Be Able to Implement Unless You Adopt Them

Definition of a (b)(3) system

If a system's source water lead levels are below the Method Detection Limit and its 90th percentile lead level is # 0.005 mg/L, you can deem the system to be optimized under \$141.81(b)(3) (also known as a (b)(3) system). This system would then be subject to the requirements for (b)(3) systems that are discussed on page 2 of this fact sheet.

Changes in the Procedures for Assessing Compliance with OWQPs

- C Compliance determinations are always based on a 6-month period, regardless of the system's monitoring schedule (e.g., daily, biweekly, semi-annually, annually, triennially) or whether the sample is from an entry point or tap.
- C Daily values are calculated for each WQP at each sampling location and are based on the sampling frequency for that WQP and sampling point. Daily values are calculated even if no sampling has occurred during the 6-month monitoring period being evaluated.
- C An excursion is any "daily value" for a WQP that is below the minimum value or outside the range of OWQPs that you have established for the system.
- C Confirmation samples are no longer used. Systems must report the results of all samples collected during the 6-month period.
- C Systems that have excursions for more than a total of 9 days during a 6-month period are in violation of their OWQP requirements. The 9 days do not need to occur on consecutive days.

For more information on this new OWQP compliance procedure, refer to:

How to Determine Compliance with Optimal Water Quality Parameters as Revised by the Lead and Copper Rule Minor Revisions, February 2001, EPA 815-R-99-019.

Revisions to Monitoring and Reporting Requirements

Revisions Required to Be Implemented Beginning April 11, 2000



- 1. A non-transient non-community water system (NTNCWS) or a community water system (CWS) that does not have enough Tier 1, 2, or 3 sites, must use representative sites to complete its sampling pool. A representative site is one that uses plumbing materials commonly found at other sites to which the system provides water.
- 2. A system on reduced lead and copper tap monitoring must collect from sites that are representative of the ones it has used during standard monitoring.

Note: You can specify where the system must collect these samples.

3. A system on reduced lead and copper tap monitoring must notify you in writing within 60 days of changing its treatment or adding a new source. This requirement also includes:

< (b)(3) systems, or

< systems that have been granted a lead and copper tap 9-year monitoring waiver.

Note: You can require these systems to provide earlier notification or to undertake additional steps to ensure optimal corrosion control treatment is maintained.

4. A system that composites source water samples, must resample if the composite sample is \$ 0.001 mg/L for lead and/or \$ 0.160 mg/L for copper.

Revisions that You May Not Be Able to Implement Unless You Adopt Them

Monitoring Flexibility and Reduced Monitoring

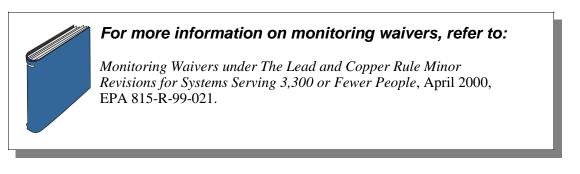
- 1. You may designate months other than June-September in which a system must conduct reduced lead and copper monitoring. This alternate period cannot be longer than 4 consecutive months and must represent a time of normal operation. For a CWS, this alternate period must occur when its lead levels are likely to be highest.
- 2. You can allow an NTNCWS or a CWS that operates 24 hours a day, *such as a prison or hospital*, that does not have enough taps that can supply first-draw lead and copper samples, to collect samples from taps with the longest standing times, *if*:
 - < it collects at least the minimum number of required samples; and
 - < it identifies standing times and locations for any non-first-draw sample.

Note: You can require a system to receive prior approval of its sampling plan or review the plan when the system submits its monitoring results.

Monitoring Flexibility and Reduced Monitoring (continued)

- 3. A system can conduct lead and copper tap monitoring once every 3 years without conducting interim rounds of annual monitoring if its 90th percentile lead and copper levels are # 0.005 mg/l and # 0.65 mg/l, respectively, for two consecutive 6-month monitoring periods. (*This monitoring is also referred to as accelerated reduced lead and copper tap monitoring.*)
- 4. You can grant a 9-year monitoring waiver for lead and/or copper tap monitoring to a system if:
 - < it serves 3,300 or fewer people;
 - < its 90th percentile lead levels are # 0.005 mg/L and/or its 90th percentile copper levels are # 0.65 mg/L; and
 - < it meets plumbing materials criteria that demonstrate the risk from lead and/or copper exposure is negligible.

You must notify the system of your waiver determination in writing, and include the basis of your decision and any conditions for granting the waiver.



- 5. You can invalidate a lead and copper tap water sample if it meets *at least one* of the sample invalidation criteria below and the system provides supporting documentation:
 - < there is laboratory error;
 - < you determine that the sample was taken from an inappropriate site;
 - < the sample was damaged in transit; and/or
 - < you believe the sample was subject to tampering.

Note: You must document your sample invalidation decision and rationale in writing. A system must collect replacement samples, if after the invalidation, it has too few samples to meet the minimum sampling requirements. Replacement samples must be taken at the same locations as the invalidated samples, or if that is not possible, at locations other than those already used for sampling during the monitoring period.

- 6. A ground water system may limit biweekly WQP entry point monitoring to representative locations if it can demonstrate that these sites are representative of water quality conditions throughout its system.
- 7. A system may proceed to triennial WQP tap monitoring without conducting the interim rounds of more frequent monitoring if it is also eligible for accelerated reduced lead and copper tap water monitoring and it meets its OWQPs for two consecutive monitoring periods.
- 8. A system that exceeds an action level may conduct source water monitoring on a reduced schedule if you have determined that source water treatment is unnecessary and the system's source water lead levels are # 0.005 mg/L and source water copper levels are # 0.65 mg/L.

System Reporting Requirements

A system may *no longer be required to:*

- 1. Calculate and report its 90^{th} percentile lead and copper levels *if*:
 - < you have previously notified the system that you will perform this calculation;
 - < the system has provided its sampling results and sampling site information to you by the date you have specified (*before the end of the monitoring period*); and
 - < you have provided the system with the results of the 90th percentile calculation before the end of the monitoring period.

Note: You must allow yourself sufficient time to calculate the 90th percentile levels and report them to the system before the end of the monitoring period. This will allow the system to take any timely follow-up action in the event of an exceedance, such as WQP monitoring.

- 2. Submit certifications that samples were collected using proper sampling procedures.
- 3. Provide justifications if its sampling pool contains Tier 2 or 3 sites or an insufficient number of sites served by LSLs.
- 4. Submit a written request for permission to monitor for lead and copper on a reduced schedule after it meets its OWQPs. However, you still must provide written approval to the system before it can begin reduced monitoring.

Ú Revisions to Analytical Methods for Lead and Copper

Revisions that You May Not Be Able to Implement Unless You Adopt Them

- 1. The laboratory can decrease the time lead or copper samples must remain in their original container after acidification and before the samples can be analyzed from 28 hours to 16 hours.
- 2. Laboratory certification procedures may be changed to conform with changes in the resampling triggers for composite source water samples.

O Revisions to Public Education Requirements

Revisions Required to Be Implemented Beginning April 11, 2000



Systems must report compliance with their public education requirements within 10 days after *each* period in which these tasks were required. This means that systems that are required to deliver public service announcements every 6 months, must submit two letters per year.

Note: You can allow a system to omit resubmitting the list of people and facilities to which it provided public education materials if it certifies that this distribution list has not changed from the previous list it provided to you.

Revisions that You May Not Be Able to Implement Unless You Adopt Them

Mandatory Public Education Language

- 1. You can allow systems to delete references to LSLs in their public education materials if they have no LSLs.
- 2. You can allow CWSs to modify public education language regarding building permit availability and consumer access to these records, if those documents are not available.
- 3. You can allow NTNCWS to use alternative mandatory public education language that is more suited to their type of system. You can also allow special-case CWSs to use the alternative mandatory public education language provided for NTNCWSs.

Definition: A special-case CWS is a system, such as a prison or hospital, whose residents cannot make their own plumbing improvements and are not billed separately for water.

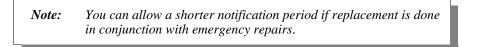
Distribution of Public Education Materials

- 1. A CWS that serves 3,300 or fewer people can:
 - C Omit the requirement to provide public service announcements to radio and TV stations.
 - C Omit newspaper notification. (CWSs serving 501-3,300 people must have your prior approval.)
 - C Limit distribution of pamphlets to facilities serving primarily pregnant women and children, unless you require a broader distribution. (*CWSs serving 501-3,300 people must have your prior approval.*)
- 2. CWSs can mail public education materials separately from their bill.
- 3. NTNCWS can use internal e-mail systems instead of using printed materials to distribute public education materials, as long as this achieves at least the same coverage.
- 4. You can allow special-case CWSs to use the NTNCWS public education delivery requirements.

U Lead Service Line Replacement Requirements

Revisions Required to Be Implemented Beginning April 11, 2000

- 1. A system that is required to replace LSLs must:
 - C Replace the part of the LSL that it owns and keep records that document what portions of all LSLs it owns; and
 - C Make an offer to the property owner to replace the privately-owned portion of the LSL.
- 2. A system that does not replace the entire LSL up to the building inlet (*i.e.*, *partial replacement*), must do **all** of the following:
 - C Notify residents at least 45 days before partial replacement that lead levels may increase temporarily following the replacement and provide guidance on the measures they can take to minimize exposure to lead.



- C Collect at the system's expense a post-replacement sample that is representative of the lead content of water in the service line within 72 hours of completing the partial LSL replacement.
- C Notify residents of analytical results by mail or posting within 3 business days of receiving the results.
- C Submit to you, the results of LSL samples following partial LSL replacement. You can eliminate the requirement to report these sample results and/or require other information.



For more information on partial lead service line notification and reporting requirements, refer to:

Notification and Reporting Requirements for Partial Lead Service Line Replacement under the Lead and Copper Rule, April 2000, EPA 815-R-99-022.



${ m \acute{V}}$ State Recordkeeping and Reporting Requirements

State Reporting Requirements

The LCRMR require you to report the following information to EPA:

- C All 90th percentile lead levels for large and medium systems, and those 90th percentile lead levels above the action level for small systems;
- C All 90th percentile levels above the copper action level for all system sizes;
- C A more streamlined LSL replacement milestone;
- C A milestone which indicates that a system has been deemed to optimize corrosion control; and
- C A milestone which indicates that a system has completed all necessary and applicable treatment steps (*i.e.*, *optimization of corrosion control, source water treatment, LSL replacement*).

The LCRMR specify the schedule for implementing the new reporting requirements.

- C You have the option of continuing to report the old LCR requirements until January 11, 2002.
- C You *must* only report in accordance with the new LCRMR requirements by January 12, 2002.

State Recordkeeping Requirements

The LCRMR add recordkeeping requirements that correspond to new decisions that you make pertaining to.

- C Additional actions required to maintain optimal corrosion control by systems on reduced lead and copper tap monitoring that change treatment or add a new source of water;
- C Content of written public education materials and/or the distribution of these materials;
- C Use of non-first draw samples at systems that operate 24 hours a day;
- C Sampling locations for systems subject to reduced monitoring;
- C Alternative sample collection periods for systems subject to reduced monitoring;
- C Small system monitoring waivers, waiver recertifications, and waiver revocations;
- C Representative entry point locations at ground water systems;
- C Submission of information to demonstrate partial LSL replacement compliance; and
- C Resubmission of detailed documentation demonstrating completion of public education requirements.

The LCRMR add three new primacy considerations.

- C You must specify how you will determine compliance with OWQPs when multiple samples are collected per day at the same sampling location, *if you choose to use a method other than averaging*.
- C You must specify how you will verify the completion of partial LSL replacement activities.
- C If you plan to designate an alternative reduced lead and copper tap monitoring period for CWSs (*one other than June September*), you must indicate how you will determine an alternate period that represents a time of normal operation when lead levels are likely to be their highest.