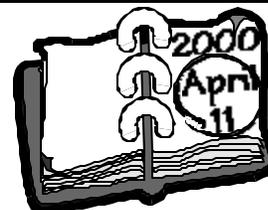




Lead and Copper Rule Minor Revisions

Fact Sheet for Large Water System Owners and Operators

The U.S. Environmental Protection Agency (EPA) has made minor changes to the Lead and Copper Rule (LCR), which was first published in 1991. These



minor revisions (*also known as the Lead and Copper Rule Minor Revisions or LCRMR*) take effect on April 11, 2000. They reduce many monitoring and reporting requirements, and promote consistent national implementation by clarifying some of the original requirements that were intended by EPA. They do not change the LCR's action levels of 0.015 milligrams per liter (mg/L) for lead and 1.3 mg/L for copper or its Maximum Contaminant Level Goals of 0 mg/L for lead and 1.3 mg/L for copper. The revisions do not affect the LCR's basic requirements to optimize corrosion control and, if appropriate, treat source water, educate the public, and replace lead service lines.

What Are the Changes to the Lead and Copper Rule?

The changes brought about by the LCRMR fall into four broad categories:

- î Demonstrating optimal corrosion control
- í Monitoring and reporting
- î Public education
- î Lead service line replacement

In this fact sheet, we have identified for each category 1) the revisions that you must begin complying with on April 11, 2000 and 2) the revisions that you cannot implement unless and until they are adopted by your State and incorporated into your State's drinking water regulations. **Check with your State Primacy Agency to determine when and if provisions that depend on State adoption can be implemented in your State.**



***This fact sheet summarizes your requirements.
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

You Must Begin Complying with These Requirements on April 11, 2000



Procedure Under The Original Lead and Copper Rule of 1991

The LCR does not specifically state the continuing monitoring requirements if you are deemed to have optimized corrosion control under §141.81(b)(2) (*also known as a (b)(2) system*).

Definition: A (b)(2) system is one that has completed treatment steps that are equivalent to those described in the 1991 LCR prior to December 7, 1992.



Procedure Under The Lead and Copper Rule Minor Revisions

The LCRMV clarify that if you are a (b)(2) system, you must:

- C routinely monitor for water quality parameters (WQPs) after your State designates optimal water quality parameters (OWQPs); and
- C continue lead and copper tap and WQP sampling.

The LCR is unclear on the continuing monitoring requirements if you are deemed to have optimized corrosion control under §141.81(b)(3) (*also known as a (b)(3) system*).

Definition: A (b)(3) system is one that can show that the difference between the 90th percentile lead level at the tap and the highest lead concentration in its source water is less than 0.005 milligrams per liter (mg/L) for two consecutive 6-month periods.

The LCRMR clarify that if you are a (b)(3) system, but are not required to conduct WQP monitoring, you must continue to properly operate and maintain corrosion control treatment at all times.

- If you are a (b)(3) system, LCRMR also require you to:
- C collect a round of lead and copper samples from the taps at the reduced number of sites between October 1, 1997 and September 30, 2000 and continue monitoring every 3 years thereafter.
 - C not exceed the copper action level after July 12, 2001
 - C begin taking corrosion control treatment steps if during any round of monitoring:
 - I the difference between your 90th percentile lead level at the tap and the lead level in your source water is 0.005 mg/L or higher, or
 - I you exceed the lead action level, or
 - D you exceed the copper action level on or after April 11, 2000.

Note: If you must begin corrosion control treatment for any of the 3 reasons listed above, you must follow the schedule for medium-size systems outlined in §141.81(e) beginning with the requirement to complete a corrosion control study. Please refer to the table below for more detail.

Water System Corrosion Control Treatment (CCT) Schedule under §141.81(e)	
Requirement	Deadline
Conduct Corrosion Control Study	18 months after being triggered into CCT requirements
Install CCT	Within 24 months after State designates CCT
Conduct follow-up lead and copper tap and WQP monitoring	Within 30 months after State designates CCT

Revisions That Depend on State Adoption

Definition of a (b)(3) system



Procedure Under The Original Lead and Copper Rule of 1991

The State cannot deem that you are optimized under §141.81(b)(3) if your source water lead levels are below the Method Detection Limit and your 90th percentile lead level at the tap is ≤ 0.005 mg/L.



Procedure Under The Lead and Copper Rule Minor Revisions

If your source water lead levels are below the Method Detection Limit (of 0.005 mg/L) and your 90th percentile lead level at the tap is ≤ 0.005 mg/L, the State may determine that you are a (b)(3) system. You 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 Optimal Water Quality Parameters (OWQPs)

Daily values are not used to determine compliance.

You are out of compliance if at any time the results of any WQP sample are below the minimum value or outside the range of values designated by the State.

You are allowed to take a confirmation sample within 3 days of the original sample. If you collect a confirmation sample, the results of the original sample and the confirmation sample are averaged to determine compliance.

“Daily values” are now used to determine compliance. Daily values are the sample results for each WQP and are calculated for each WQP at each sampling location. They are based on the sampling frequency for that WQP and sampling point.

You are only out of compliance if you have an “excursion” for more than a total of 9 days during a 6-month period. An excursion is any “daily value” for a WQP that is below the minimum value or outside the range of OWQPs set by the State.

Compliance determinations are always based on a 6-month period, regardless of your monitoring schedule (e.g., daily, biweekly, semi-annually, annually, triennially) or whether the sample is from an entry point or tap.

Confirmation samples are no longer used. You must report the results of all samples collected during the 6-month period.



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, January 2000, EPA 815-R-99-019.

Revisions to Monitoring and Reporting Requirements

You Must Begin Complying with these Requirements on April 11, 2000



Procedure Under The Original Lead and Copper Rule of 1991

The LCR is unclear that if you do not have enough "high-risk" sites (i.e., Tier 1, 2, or 3 sites) that you are still required to collect the minimum number of tap samples.

The LCR does not specify which sites to use for reduced lead and copper tap monitoring.

The LCR does not require you to notify your State if you change your treatment or add a new source.

If you composite your source water samples, you must take the samples again if the composite sample's levels are >0.001 mg/L for lead, or >0.001 mg/L or >0.020 mg/L (depending on the analytical method) for copper.



Procedure Under The Lead and Copper Rule Minor Revisions

If you do not have enough Tier 1, 2, or 3 sites, you must use representative sites to meet minimum sampling requirements. A site is representative if its plumbing is similar to that of other sites in your system.

If you are on reduced lead and copper tap monitoring (i.e., less frequently than every 6 months), you must collect from sites that are representative of the ones you used during standard monitoring. *(Your State may specify where to collect these samples.)*

If you are on reduced lead and copper tap monitoring, you must notify your State in writing no later than 60 days after changing treatment or adding a new source. You are also subject to this requirement if you are deemed to have optimized corrosion control under §141.81(b)(3). Your State may require that you provide earlier notification or undertake additional steps to ensure that optimal corrosion control treatment is maintained.

The resampling trigger for composite samples has been revised to >0.001 mg/L for lead and ≥ 0.160 mg/L for copper.

Revisions That Depend on State Adoption

Monitoring Requirements



Procedure Under The Original Lead and Copper Rule of 1991

You are required to conduct reduced lead and copper monitoring only during the months of June to September.



Procedure Under The Lead and Copper Rule Minor Revisions

Your State may allow you to conduct reduced lead and copper monitoring during months other than June to September.

Revisions That Depend on State Adoption

You are required to collect first-draw lead and copper samples, regardless of whether you have enough taps that can supply first-draw samples.

If you are either a non-transient non-community water system (NTNCWS), or a community water system (CWS) that operates 24 hours a day, *such as a prison or hospital*, and you do not have enough taps that can supply first-draw lead and copper samples, your State may allow you to collect samples from the taps that have the longest standing times.

Monitoring Requirements (Continued)



Procedure Under The Original Lead and Copper Rule of 1991

You are required to conduct 3 consecutive years of monitoring before reducing your monitoring frequency to once every 3 years (triennial).

Sample invalidation is not allowed.

You are required to take WQP samples at all of your entry points.

Before being allowed to conduct triennial WQP tap monitoring, you must be in compliance with your OWQPs for four consecutive years.



Procedure Under The Lead and Copper Rule Minor Revisions

You can reduce your lead and copper tap water monitoring to once every 3 years after monitoring for only two consecutive 6-month monitoring periods if your 90th percentile levels are #0.005 mg/L for lead and #0.65 mg/L for copper. (*This is also known as accelerated reduced monitoring*).

You can ask your State to invalidate lead and copper tap water samples if the samples meet **at least one** of the criteria below and you provide documentation that supports your request:

- There is a laboratory error.
- The sample was damaged in transit.
- The State determines that the sample was taken from an inappropriate site.
- The State believes the sample was subject to tampering.

Note: *If you do not have enough valid samples after the State invalidates your sample(s), you must collect enough replacement samples to meet the minimum sampling requirements.*

You may limit biweekly WQP entry point monitoring to representative locations if:

- C you are a ground water system; and
- C you can demonstrate to the State that these sites are representative of water quality conditions in your system.

You may proceed to triennial WQP tap monitoring more rapidly than before if you are also eligible for accelerated reduced lead and copper tap water monitoring and you are in compliance with your OWQPs.

Revisions That Depend on State Adoption

If you exceed an action level but are not required to install source water treatment, you are not allowed to reduce your source water monitoring.

You may conduct source water monitoring once every 9 years if you exceed an action level, **and if:**

- C your source water levels are #0.005 mg/L for lead and #0.65 mg/L for copper; and
- C your State has determined that source water treatment is unnecessary.

Reporting Requirements



Procedure Under The Original Lead and Copper Rule of 1991

You are always required to calculate and report your 90th percentile lead and copper levels to your State.

You are required to certify that you followed proper sampling procedures or that homeowners collected samples after receiving proper instructions.

You are required to provide justifications if your sampling pool contains Tier 2 or Tier 3 sites or an insufficient number of sites served by lead service lines (LSLs).

You are required to request in writing your State's permission to monitor for lead and copper on a reduced schedule after you meet your OWQPs.



Procedure Under The Lead and Copper Rule Minor Revisions

You may no longer be required to calculate and report your 90th percentile lead and copper levels if:

- C your State has notified you that it will perform this calculation;
- C you provided your sampling results and sampling site information by the State-specified date, and
- C your State gave you the results of the 90th percentile calculation before the end of the monitoring period.

You are no longer required to submit these certifications.

You are no longer required to provide these justifications.

You are no longer required to provide a written request for reduced lead and copper tap monitoring, but you still must **receive written approval** from your State before you can begin reduced monitoring.



Revisions to Public Education Requirements

You Must Begin Complying with These Requirements on April 11, 2000



Procedure Under The Original Lead and Copper Rule of 1991



Procedure Under The Lead and Copper Rule Minor Revisions

You are required to submit a letter to the State demonstrating that you met your public education requirements. This letter is due by December 31 of the year in which you must perform public education.

As part of your annual compliance letter, you were required to provide a list of newspapers, radio stations, TV stations, and organizations to which you provided public education during the year.

You must submit a letter to the State demonstrating that you met your public education requirements within 10 days after *each* period in which these tasks were required. This means that if you are required to deliver public service announcements (PSAs) every 6 months, you must submit two letters per year.

Your State may allow you to forego resubmitting the list of organizations and facilities to which you provided public education materials if you certify that this list is no different than the previous distribution list you provided to the State.

Revisions That Depend on State Adoption



Procedure Under The Original Lead and Copper Rule of 1991



Procedure Under The Lead and Copper Rule Minor Revisions

Mandatory Public Education Language

You are required to include information about LSLs, even if your system has no LSLs.

You are not allowed to modify language regarding the availability of building permits and consumer access to these records.

All CWSs and NTNCWSs are required to use the same language provided by EPA.

You can delete references to LSLs in your public education materials if you have no LSLs and you obtain approval from your State.

If you are a CWS, you can modify public education language regarding building permit availability and consumer access to these records, if those documents are not available. You must have permission from your State to modify this language.

If you are a NTNCWS, you may use alternative mandatory public education language that is more suited to your type of system. (*Your State may require you to obtain approval.*)

If you are a certain type of CWS, such as a prison or hospital, whose residents cannot make their own plumbing improvements and are not billed separately for water, you can use the alternative mandatory public education language provided for NTNCWSs. (*Your State may require you to obtain approval.*)

Distribution of Public Education Materials

You are required to enclose your public education materials in the customers' regular water bills.

If you are a CWS, you can mail public education materials separately from your bill.

Revisions That Depend on State Adoption

If you are an NTNCWS, you can only post information and distribute pamphlets; you cannot use e-mail to distribute public education information.

All CWSs are required to:

- C Insert notices in the water bill
- C Submit information to newspapers
- C Distribute pamphlets
- C Broadcast information via TV and radio

If you are an NTNCWS, you may 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.

If you are a certain type of CWS, such as a prison or hospital, whose residents cannot make their own plumbing improvements and are not billed separately for water, you may follow the NTNCWS public education delivery requirements. (*Your State may require you to obtain approval.*)

Revisions to Lead Service Line Replacement Requirements

You Must Begin Complying with These Requirements on April 11, 2000*



Procedure Under The Original Lead and Copper Rule of 1991

There is no specific required deadline to provide notification of partial replacement. Partial replacement occurs when you do not replace the entire LSL up to the building inlet.

For each resident served by a partially replaced line, you must offer to collect and analyze a *first-flush tap sample*, after you complete the partial replacement. This sample will be collected at the tap of each resident that accepts your offer.

If resident(s) accept your offer, you must collect the sample(s) and report results to the resident(s) within 14 days following the partial line replacement.

You must report the sample results to residents.

You are not required to report any information to the State that demonstrates that you met your partial LSL requirements.

The 1991 rule does not specify how to notify users that you are replacing a portion of a line and of the sample results.



Procedure Under The Lead and Copper Rule Minor Revisions

You must 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. If your line replacement is in conjunction with emergency repairs, however, your State may allow a shorter time frame for this notification.

You must collect at your expense **one** representative service line sample for each replaced LSL within 72 hours of removing the line. You are not required to collect samples for each affected resident.

You must collect the sample within 72 hours of completing the partial replacement and report the results within 3 business days of receiving the results.

You must report to the building owner(s) and the resident(s) served by the partially replaced line.

You must submit these monitoring results to the State within the first 10 days of the month following that in which you receive the results. The LCRMR give States the option to modify reporting requirements, however, so you need to check with your State to be sure of your specific requirements.

You must notify residents by mail. For multi-family dwellings, however, you can post the notification in a conspicuous common-use area of the building.

*The LCRMR require you to offer to replace, at the building owner's expense, the portion of the LSL owned by the building owner, unless this is prohibited by local law.



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, January 2000, EPA 815-R-99-022.

Where Can I Obtain More Information About the LCRMR?



K State or EPA Regional Office K

You can contact the EPA Region responsible for implementing the Safe Drinking Water Act for your systems. A list of contacts in each EPA Regional office is provided on the next page.

N Other Guidance Documents N

Lead and Copper Rule: Compliance Dates, January 2000, EPA 815-R-99-020. This document helps you understand when you must begin complying with the new requirements of the LCRMR. This guidance contains a discussion of each of the important changes made to the 1991 Rule by the LCRMR by major rule section (i.e., §141.81, §141.82, §§141.84-141.90, and §141.43), and identifies when you must begin complying with the new requirements. It also contains an appendix which compares the rule language of the LCR against the minor revisions.



You can obtain any of the guidance documents listed in this fact sheet from the Safe Drinking Water Hotline, the Water Resource Center (202-260-7786 or e-mail at center.water.resource@epa.gov), or the Office of Ground Water and Drinking Water web page at www.epa.gov/safewater/standards.html.



G Safe Drinking Water Hotline G

You can call the **SAFE DRINKING WATER HOTLINE** at 1-800-426-4791. It is open Monday through Friday, 9:00 a.m. to 5:30 p.m., ET, excluding Federal holidays. The Hotline can provide you with a list of other documents that pertain to the LCR and to the minor revisions.

EPA Regional Offices

EPA Region 1

Associate Director for Drinking Water Policy
One Congress Street
Suite 1100
Boston, MA 02114-2023
(617) 918-1571



Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont

EPA Region 2

Water Programs Branch
290 Broadway
New York, NY 10007-1866
(212) 637-3826



New Jersey, New York, Puerto Rico, Virgin Islands

EPA Region 3

Drinking Water Branch
1650 Arch Street
Philadelphia, PA 19103-2029
(800) 438-2474 (Customer Service Hotline)



Delaware, Maryland, Pennsylvania, Virginia, West Virginia, District of Columbia

EPA Region 4

Ground Water/Drinking Water Branch
61 Forsyth Street, S.W.
Atlanta, GA 30303-3415
(404) 562-9424



Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

EPA Region 6

Source Water Protection Branch
1445 Ross Avenue
Dallas, TX 75202
(214) 665-7150



Arkansas, Louisiana, New Mexico, Oklahoma, Texas

EPA Region 7

Drinking Water Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7032



Iowa, Kansas, Missouri, Nebraska

EPA Region 8

Municipal Systems Unit
999 18th Street
Denver, CO 80202
(303) 312-7021



Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

EPA Region 9

Drinking Water Office
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-1843



Arizona, California, Hawaii, Nevada, American Samoa, Guam, Commonwealth of the Northern Mariana Islands

EPA Region 5

Safe Drinking Water Branch
77 West Jackson Boulevard
Chicago, IL 60604
(800) 621-8431



*Illinois, Indiana, Michigan, Minnesota, Ohio,
Wisconsin*

EPA Region 10

Drinking Water Unit
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-1890



Alaska, Idaho, Oregon, Washington