# Lead and Copper Rule: Action Level Exceedances

Wyoming Rural Water Association Mini Conference

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July 21, 2025

## Disclaimer

*The views expressed in this presentation are those of the author(s) and do not necessarily reflect the views or policies of the U.S. Environmental Protection Agency.*

## Presentation Outline

- Lead and Copper Rule Overview
- What is an Action Level Exceedance (ALE)?
- I have an ALE, now what?
  - Public Outreach
  - Water Quality Parameters
  - Lead and Copper Sampling
  - Recommendation Forms
- What's next?
- Summary
- Resources

## Rule Overview

- The Lead and Copper Rule (LCR) was originally published in 1991 with minor revisions in 2000, and 2004, and "short-term" revisions in 2007
- Protect public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity.
- Applies to Community (CWS) & Non-transient Non-community (NTNC) Public Water Systems (PWS)
- This presentation will not cover any of the *future* Lead and Copper Rule Revisions (LCRR) & Lead and Copper Rule Improvements (LCRI)

## Rule Overview

The LCR is a treatment technique regulation

- Action Levels (AL) rather than Maximum Contaminant Levels (MCL):
  - Lead (Pb) = 0.015 mg/L (15 µg/L)
  - Copper (Cu) = 1.3 mg/L
- Getting an Action Level Exceedance (ALE) is NOT a violation, but failure to complete required follow up steps IS a violation

Health Effects of Lead: *There is NO Safe Level of Lead (The MCLG is zero)*

**Children**: Behavior and learning problems, slowed growth, hearing problems, Lower IQ and hyperactivity, and anemia.

**Adults**: Cardiovascular effects, increased blood pressure and incidence of hypertension, decreased kidney function, and reproductive problems.

**Pregnant Women:** Reduced growth of the fetus and premature birth.

Health Effects of Copper: **Copper is an essential micronutrient (MCLG is 1.3)**

High levels can cause nausea, vomiting, diarrhea, and stomach cramps, especially in infants, or those with liver disease

Chronic Exposure to high levels can cause Liver Disease

## What is an ALE?

- An Action Level Exceedance occurs when the 90$^{th}$ percentile is greater than the Action Level.
- To calculate if you have an ALE, take your samples and line them up highest to lowest. Put simply:
  - For 5 samples, average the highest two results
  - For 10 samples, use the 2$^{nd}$ highest result
  - For 20 samples, use the 3$^{rd}$ highest result,
  - For 30 samples, use the 4$^{th}$ highest result, and so on
  - For a different number of samples (for instance 7), the calculation is more complicated. You can use the tool on our website to calculate.

## I have an ALE, now what?

CALL ME! 303-312-6876
"I did, but you didn't answer!!"
Leave a message, and then
EMAIL ME!
Ransom.Chelsea@epa.gov

If you don't get an automatic reply via email I am working and will get back to you as soon as I can!
If you get an automatic reply, reach out to the contact listed

EPA

## Post-ALE steps outline

| Public Outreach (lead only) | Water Quality Parameters (WQPs) | Lead and Copper Sampling | Recommendation Forms |
|---|---|---|---|
| Tier 1 Public Notice | At Entry Point to Distribution System | Lead and copper EPTDS | Optimal Corrosion Control Treatment |
| Public Education | At taps | 6-month routine LCR monitoring | Source Water Treatment |

EPA

# Public Outreach Overview (Lead only)


1. Tier 1 Public Notice
   a. Content
   b. Delivery
   c. Certification
2. Public Education
   a. Content
   b. Delivery
   c. Certification

# Public Outreach Overview (Lead Only)

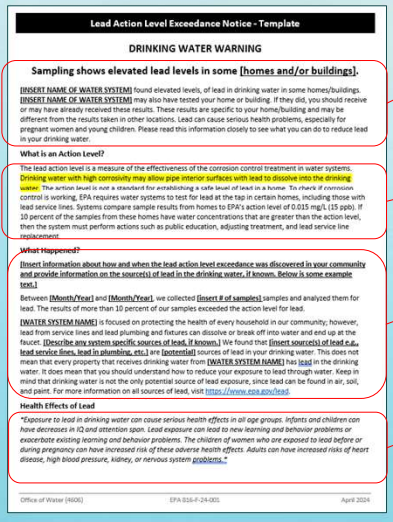
Tier 1 Public Notice (PN) (NEW)

- Must be distributed within 24 hours
- Distribution:
  - MUST REACH ALL CONSUMERS
  - Broadcast media, hand delivery, posting, another method approved in writing by EPA.
- No EPA approval required prior to distribution
- Public Notice Rule CFR 141.202(a)
- If this deadline is not met – violation, and EPA will issue the PN on the system's behalf

Public Education (PE)

- Must be distributed 60 days after the end of the monitoring period
  - Aug. 29 for Jan – June MP
  - Nov. 29 for Jun – Sept MP
  - Mar. 1 for Jul – Dec MP
- Distribution
  - Must reach all consumers like Tier 1 PN
  - Must also be delivered to other entities
  - Quarterly statements with bill
- EPA approval required prior to distribution
- Lead and Copper Rule CFR 141.85
- If deadlines are not met, violation, EPA will not perform on system's behalf

# Tier 1 Lead Public Notice - Content



**Lead Action Level Exceedance Notice - Template**

**DRINKING WATER WARNING**

**Sampling shows elevated lead levels in some [homes and/or buildings].**

[INSERT NAME OF WATER SYSTEM] found elevated levels, of lead in drinking water in some homes/buildings. [INSERT NAME OF WATER SYSTEM] may also have tested your home or building. If they did, you should receive or may have already received these results. These results are specific to your home/building and may be different from the results taken in other locations. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

**What is an Action Level?**

The lead action level is a measure of the effectiveness of the corrosion control treatment in water systems. Drinking water with high corrosivity may allow pipe interior surfaces with lead to dissolve into the drinking water. The action level is not a standard for establishing a safe level of lead in a home. To check if corrosion control is working, EPA requires water systems to test for lead at the tap in certain homes, including those with lead service lines. Systems compare sample results from homes to EPA's action level of 0.015 mg/L (15 ppb). If 10 percent of the samples from these homes have water concentrations that are greater than the action level, then the system must perform actions such as public education, adjusting treatment, and lead service line replacement.

**What Happened?**

**[Insert information about how and when the lead action level exceedance was discovered in your community and provide information on the source(s) of lead in the drinking water, if known. Below is some example text.]**

Between [Month/Year] and [Month/Year], we collected [insert # of samples] samples and analyzed them for lead. The results of more than 10 percent of our samples exceeded the action level for lead.

[WATER SYSTEM NAME] is focused on protecting the health of every household in our community; however, lead from service lines and lead plumbing and fixtures can dissolve or break off into water and end up at the faucet. [Describe any system specific sources of lead, if known.] We found that [insert source(s) of lead e.g., lead service lines, lead in plumbing, etc.] are [potential] sources of lead in your drinking water. This does not mean that every property that receives drinking water from [WATER SYSTEM NAME] has lead in the drinking water. It does mean that you should understand how to reduce your exposure to lead through water. Keep in mind that drinking water is not the only potential source of lead exposure, since lead can be found in air, soil, and paint. For more information on all sources of lead, visit https://www.epa.gov/lead.

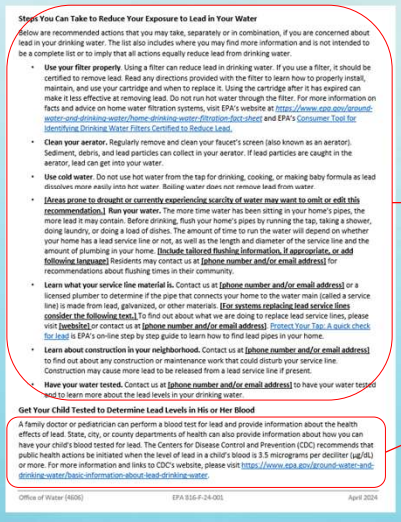
**Health Effects of Lead**

*"Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems."*

Office of Water (4606) EPA 816-F-24-001 April 2024

- Elevated lead in some homes/buildings
- Describing what an Action Level is.
- Describes the violation
- Health Effects language required as is

# Tier 1 Lead Public Notice – Content, continued



**Steps You Can Take to Reduce Your Exposure to Lead in Your Water**

Below are recommended actions that you may take, separately or in combination, if you are concerned about lead in your drinking water. The list also includes where you may find more information and is not intended to be a complete list or to imply that all actions equally reduce lead from drinking water.

- **Use your filter properly.** Using a filter can reduce lead in drinking water. If you use a filter, it should be certified to remove lead. Read any directions provided with the filter to learn how to properly install, maintain, and use your cartridge and when to replace it. Using the cartridge after it has expired can make it less effective at removing lead. Do not run hot water through the filter. For more information on facts and advice on home water filtration systems, visit EPA's website at https://www.epa.gov/ground-water-and-drinking-water/home-drinking-water-filtration-fact-sheet and EPA's Consumer Tool for Identifying Drinking Water Filters Certified to Reduce Lead.
- **Clean your aerator.** Regularly remove and clean your faucet's screen (also known as an aerator). Sediment, debris, and lead particles can collect in your aerator. If lead particles are caught in the aerator, lead can get into your water.
- **Use cold water.** Do not use hot water from the tap for drinking, cooking, or making baby formula as lead dissolves more easily into hot water. Boiling water does not remove lead from water.
- **[Areas prone to drought or currently experiencing scarcity of water may want to omit or edit this recommendation.] Run your water.** The more time water has been sitting in your home's pipes, the more lead it may contain. Before drinking, flush your home's pipes by running the tap, taking a shower, doing laundry, or doing a load of dishes. The amount of time to run the water will depend on whether your home has a lead service line or not, as well as the length and diameter of the service line and the amount of plumbing in your home. **[Include tailored flushing information, if appropriate, or add following language]** Residents may contact us at **[phone number and/or email address]** for recommendations about flushing times in their community.
- **Learn what your service line material is.** Contact us at **[phone number and/or email address]** or a licensed plumber to determine if the pipe that connects your home to the water main (called a service line) is made from lead, galvanized, or other materials. **[For systems replacing lead service lines consider the following text.]** To find out about what we are doing to replace lead service lines, please visit **[website]** or contact us at **[phone number and/or email address]**. Protect Your Tap: A quick check for lead is EPA's on-line step by step guide to learn how to find lead pipes in your home.
- **Learn about construction in your neighborhood.** Contact us at **[phone number and/or email address]** to find out about any construction or maintenance work that could disturb your service line. Construction may cause more lead to be released from a lead service line if present.
- **Have your water tested.** Contact us at **[phone number and/or email address]** to have your water tested and to learn more about the lead levels in your drinking water.

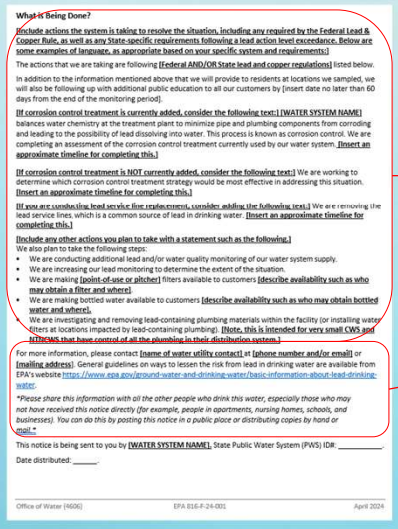
**Get Your Child Tested to Determine Lead Levels in His or Her Blood**

A family doctor or pediatrician can perform a blood test for lead and provide information about the health effects of lead. State, city, or county departments of health can also provide information about how you can have your child's blood tested for lead. The Centers for Disease Control and Prevention (CDC) recommends that public health actions be initiated when the level of lead in a child's blood is 3.5 micrograms per deciliter (µg/dL) or more. For more information and links to CDC's website, please visit https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

Office of Water (4606) EPA 816-F-24-001 April 2024

- Steps you can take to reduce exposure to lead in water
- Child blood test recommendation

# Tier 1 Lead Public Notice – Content, continued



**What is Being Done?**

**[Include actions the system is taking to resolve the situation, including any required by the Federal Lead & Copper Rule, as well as any State-specific requirements following a lead action level exceedance. Below are some examples of language, as appropriate based on your specific system and requirements:]**

The actions that we are taking are following **[Federal AND/OR State lead and copper regulations]** listed below.

In addition to the information mentioned above that we will provide to residents at locations we sampled, we will also be following up with additional public education to all our customers by [insert date no later than 60 days from the end of the monitoring period].

**[If corrosion control treatment is currently added, consider the following text:] [WATER SYSTEM NAME]** balances water chemistry at the treatment plant to minimize pipe and plumbing components from corroding and leading to the possibility of lead dissolving into water. This process is known as corrosion control. We are completing an assessment of the corrosion control treatment currently used by our water system. **[Insert an approximate timeline for completing this.]**

**[If corrosion control treatment is NOT currently added, consider the following text:]** We are working to determine which corrosion control treatment strategy would be most effective in addressing this situation. **[Insert an approximate timeline for completing this.]**

**[If you are conducting lead service line replacement, consider adding the following text.]** We are removing the lead service lines, which is a common source of lead in drinking water. **[Insert an approximate timeline for completing this.]**

**[Include any other actions you plan to take with a statement such as the following.]**
We also plan to take the following steps:

- We are conducting additional lead and/or water quality monitoring of our water system supply.
- We are increasing our lead monitoring to determine the extent of the situation.
- We are making **[point-of-use or pitcher]** filters available to customers **[describe availability such as who may obtain a filter and where]**.
- We are making bottled water available to customers **[describe availability such as who may obtain bottled water and where].**
- We are investigating and removing lead-containing plumbing materials within the facility (or installing water filters at locations impacted by lead-containing plumbing). **[Note, this is intended for very small CWS and NTNCWS that have control of all the plumbing in their distribution system.]**

For more information, please contact **[name of water utility contact]** at **[phone number and/or email]** or **[mailing address]**. General guidelines on ways to lessen the risk from lead in drinking water are available from EPA's website https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

**Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.**

This notice is being sent to you by **[WATER SYSTEM NAME]**. State Public Water System (PWS) ID#: _____.

Date distributed: _____.

Office of Water (4606) EPA 816-F-24-001 April 2024

What is being done

For more information and contact. Request to share. Required language must be used as is.

# Tier 1 Lead Public Notice - Delivery

Must provide the notice to reach all persons served by water system.

Use one or more of the following methods:

- Broadcast Media (Radio/Television)
- Posting Conspicuous Locations
- Hand Delivery
- Another Delivery Method

  (must be approved, in writing, by EPA)

# Tier 1 Lead Public Notice - Certification

**Certification of Tier 1 Lead Action Level Exceedance Public Notification**

PWS Name: _____

PWS ID: _____

Date/Time system learned of lead ALE: _____

The public water system indicated above hereby affirms that public notice has been provided to consumers in accordance with the delivery, content and format requirements and deadlines in 40 CFR 141.201 and 141.202.

- ☐ Consultation with state on: _____
- ☐ Notice Distributed by: _____ (method) on _____ (date/time)
- ☐ Content – include a copy of Public Notice

Signature_____Date_____

# Lead Public Education – Content Requirements

- Public Education information MUST be in a certain order with all topics covered
- Italicized language may not be changed except where in brackets
- Any additional information must be consistent with suggested language and in plain language understood by public

# Lead Public Education - Content

**IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER**

***[Name of water system]*** *found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this notice closely to see what you can do to reduce lead in your drinking water.*

**Health Effects of Lead**

*Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.*

Public Education MUST start with this text – cannot be changed

141.85(a)(1)(i) & (ii)

# Lead Public Education – Content, continued

"Sources of lead" comes next

- This text is not italicized so can be modified, but certain elements must remain
  - Explain what lead is
  - Explain possible sources of lead in drinking water and how lead enters drinking water. Include information on home/building plumbing materials and service lines that may contain lead
  - Discuss other important sources of lead exposure in addition to drinking water (e.g. paint)

**Sources of Lead**

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. Other main sources of lead exposure are lead-based paint and lead-contaminated dust or soil, and some plumbing materials. Lead can also be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the workplace and exposure from certain hobbies (lead can be carried on clothing or shoes). Lead is found in some toys, some playground equipment, and some children's metal jewelry.

Brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows pipes, fittings, and fixtures with up to .25 percent weighted average of lead to be identified as "lead-free."

[Insert utility specific information describing your community's source water – e.g. "The water from XX Reservoir does not contain lead" or "Community X does not have any lead in its source water or lead water mains in the street."] When water is in contact with pipes [or service lines] or plumbing that contains lead for several hours, the lead may enter drinking water. Homes built before 1988 are more likely to have lead pipes or lead solder.

EPA estimates that up to 20 percent of a person's potential exposure to lead may come from drinking water. Infants who consume mostly formula mixed with lead-containing water can receive 40 to 60 percent of their exposure to lead from drinking water.

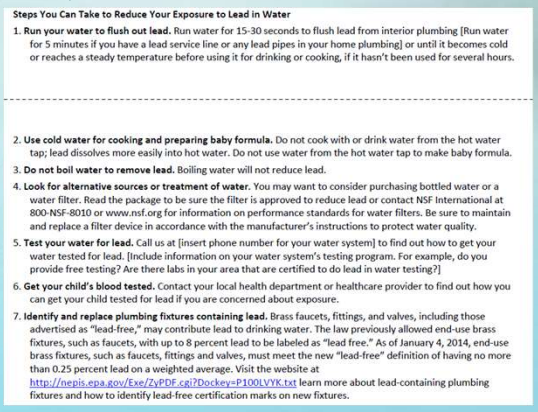
Don't forget about other sources of lead such as lead paint, lead dust, and lead in soil. Wash your children's hands and toys often as they can come into contact with dirt and dust containing lead.

141.85(a)(1)(iii)

# Public Education – Content, continued

"Steps You Can Take…" comes next

- This text is not italicized so can be modified, but certain elements must remain
  - Encourage running water to flush out lead
  - Explain concerns using hot water and caution against use of hot water in preparing formula
  - Explain that boiling water does not reduce lead levels
  - Discuss other options consumers can take to reduce exposure to lead in water (e.g. filter or other source)
  - Suggest parents have their child's blood tested for lead



**Steps You Can Take to Reduce Your Exposure to Lead in Water**

1. **Run your water to flush out lead.** Run water for 15-30 seconds to flush lead from interior plumbing [Run water for 5 minutes if you have a lead service line or any lead pipes in your home plumbing] or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours.
2. **Use cold water for cooking and preparing baby formula.** Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.
3. **Do not boil water to remove lead.** Boiling water will not reduce lead.
4. **Look for alternative sources or treatment of water.** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or www.nsf.org for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.
5. **Test your water for lead.** Call us at [insert phone number for your water system] to find out how to get your water tested for lead. [Include information on your water system's testing program. For example, do you provide free testing? Are there labs in your area that are certified to do lead in water testing?]
6. **Get your child's blood tested.** Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.
7. **Identify and replace plumbing fixtures containing lead.** Brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law previously allowed end-use brass fixtures, such as faucets, with up to 8 percent lead to be labeled as "lead free." As of January 4, 2014, end-use brass fixtures, such as faucets, fittings and valves, must meet the new "lead-free" definition of having no more than 0.25 percent lead on a weighted average. Visit the website at http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100LVYK.txt learn more about lead-containing plumbing fixtures and how to identify lead-free certification marks on new fixtures.

141.85(a)(1)(iv)

# Lead Public Education – Content, continued

- Explain why there are elevated levels of lead in the drinking water and what you are doing to reduce lead levels in homes/buildings in the area
- Your opportunity to let your consumers know all the additional sampling, and LSLI work you've done.

**What Happened? What is Being Done?**

[Insert information about how and when the exceedance was discovered in your community and provide information on the source(s) of lead in the drinking water, if known.]

[Insert information about what your system is doing to reduce lead levels in homes in your community.]

[Insert information about lead service lines in your community, how a consumer can find out if they have a lead service line, what your water system is doing to replace lead service lines, etc.]
[Insert information about the history of lead levels in tap water samples in your community. For example, have they declined substantially over time? Have they been low and risen recently? Is there a known reason for any lead level changes?]

141.85(a)(1)(v)

# Lead Public Education- Content, continued

"For more information" section in italics so cannot be changed except to insert your phone number and website.

**For More Information**
*Call us at* [Insert Number] *or visit our website at* [insert website here]. *For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at* ***www.epa.gov/lead*** *or contact your health care provider.*

141.85(a)(1)(vi)

# Lead Public Education – Content, continued

- Additional CWS requirements:
  - Must tell consumers how to get their water tested
  - Must discuss lead in plumbing components and the difference between low lead and lead free
- Additional requirements for all systems:
  - Must offer to sample the tap water of any customer who requests it.
  - System is not required to pay for collecting or analyzing the sample, nor is the system required to collect and analyze the sample itself.

141.85(a)(2)

# Lead Public Education – Delivery

Community Water Systems must:

1. Deliver the PE we just discussed to all customers
2. Contact the local public health agencies directly by phone or in person (even if they are not in your service area) and deliver the PE
   - If the public health agency provides a list of organizations serving target populations, you must deliver the PE to them even if they are outside the service area
3. Deliver PE to the following located within your service area (if applicable)
   A. Public and private schools or school boards
   B. Women, Infants and Children (WIC) and Head Start programs
   C. Public and Private hospitals and medical clinics
   D. Pediatricians
   E. Family Planning Clinics
   F. Local Welfare agencies

# Lead Public Education – Delivery, continued

Community Water Systems must:

4. Make a good faith effort to locate and deliver PE to the following:
   A. Licensed Childcare Centers
   B. Public and Private Preschools
   C. OBGYNs and Midwives
5. Post PE to your website if the population is greater than 100,000
6. Submit a press release to newspaper, television and radio stations
   - This requirement can be waived for systems serving fewer than 3,300 people if every household was served a PE notice
7. In addition, system must implement at least three of the following activities (1 if the system population is less than 3,300):

a. Public service announcements
b. Paid advertisements
c. Public area information displays
d. Emails to customers
e. public meetings
f. household deliveries
g. targeted individual customer contact
h. distribution to all multi-family homes & institutions

## Lead Public Education – Delivery, continued

Community Water Systems must:

8. Provide the following statement exactly as written, (except the text in brackets must include system specific information) in every bill, no less than quarterly*, until samples come back below AL

> *[INSERT NAME OF WATER SYSTEM] found high levels of lead in drinking water in some homes. Lead can cause serious health problems. For more information please call [INSERTNAME OF WATER SYSTEM] [or visit (INSERT YOUR WEB SITE HERE)].*

Note: If you cannot place the information in the water bill, EPA can allow a separate mailing of public education materials to customers.

* The first quarter deadline is calculated from the initial PE due date. If your ALE is during the June to September monitoring period, your initial PE is due end of November, and your first quarterly statement would be due 3 months after that, or February 28.


## Lead Public Education – Delivery, continued

- Non-Transient Non-Community Water Systems must:
  1. Post the PE in a public place or common area in each of the buildings served by the system
  2. Distribute the PE to each person served by the water system (email can be used in lieu of printed materials as long as it has the same coverage)

# Lead Public Education – Certifications – Part 1

- 6 parts to the certification! Submit them all!

**Part 1: Delivery of Public Education to all persons served by the water system(s), including consecutive systems for further distribution.**

I _____ certify that the attached public education was issued
(PWS Operator/Responsible Party)

From _____ to _____
(Date) (Date)

The attached notice was issued by _____
(Method(s) of delivery)

Signature _____ Date _____

# Lead Public Education – Certifications – Part 2

**Part 2: Contacting Local Public Health Agencies**

I _____ certify that the following public health agencies were notified:
(PWS Operator/Responsible Party)

Name of Agency: _____ on _____ by _____
(Date) (Method of delivery)

Name of Agency: _____ on _____ by _____
(Date) (Method of delivery)

Name of Agency: _____ on _____ by _____
(Date) (Method of delivery)

Name of Agency: _____ on _____ by _____
(Date) (Method of delivery)

Name of Agency: _____ on _____ by _____
(Date) (Method of delivery)

Signature _____ Date _____

# Lead Public Education – Certifications – Part 3

**Part 3: Delivery of Public Education to community organizations, including schools and school boards, WIC and head start programs, public and private hospitals and medical clinics, pediatricians, family planning clinics, local welfare agencies, licensed childcare centers, public and private preschools, obstetricians-gynecologists and midwives.**

I _____ certify that the following facilities were notified:
(PWS Operator/Responsible Party)

| Name of Organization or Facility | Date of Notification | Method of Delivery |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Signature _____ Date _____

# Lead Public Education – Certifications – Part 4

**Part 4: Monthly (no less than quarterly) PE Distribution Requirements**

The PWS must continue to include the information in italics below in the water/utility bill every billing cycle, but no less than quarterly, while the system exceeds the lead action level.

*[Insert name of water system] found high levels of lead in drinking water in some homes. Lead can cause serious health problems. For more information please call [insert name of water system] or visit [insert your website here].*

I _____ certify that the above statement was issued via water/utility
(PWS Operator/Responsible Party)

bill to every consumer on _____
(Date)

This notice was issued by _____
(Method(s) of delivery)

Signature _____ Date _____

# Lead Public Education – Certifications – Part 5

**Part 5: Press Release**

I _____ certify that the attached public education was issued
(PWS Operator/Responsible Party)

As a press release to: _____ on _____
(newspaper, TV, or radio station) (Date)

Signature _____ Date _____

*Note: Press release may be waived if population is less than 3,300*

# Lead Public Education – Certifications – Part 6

**Part 6: Delivery of Public Education as a Public Service Announcement**

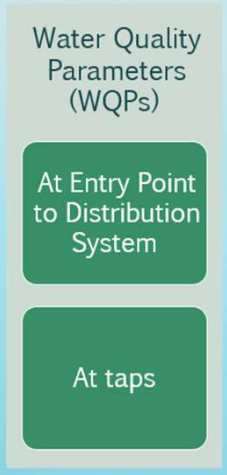
I _____ certify that the following three public service announcements (one for
(PWS Operator/Responsible Party)

systems serving less than 3,300 people) were implemented. If any extra announcements were implemented, list them in the extra rows below.

| Number | Name of Organization or Facility | Date of Notification | Method of Delivery |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| | | | |
| | | | |
| | | | |

Signature _____ Date _____

# Water Quality Parameters Overview




1. When and Where
2. How Many
3. What to analyze for
4. Exception

# Initial Water Quality Parameters – When and Where?

- When: 6 months from the beginning of the monitoring period:
  - June 30 for the January – June monitoring period
  - November 30 for the June – September (annual and triennial) monitoring period
  - December 31 for the July to December monitoring period
- Where: Entry Point to Distribution System (EPTDS)
  - Must be collected from locations representative of each source after treatment.
  - If there is more than one source and the sources are combined before treatment, must be collected during normal operating conditions
- Where: Tap Samples
  - Must be representative of water quality throughout the distribution system
    - Taking into account population served, sources of water, treatment methods, seasonal variability
    - Not required to be conducted at taps targeted for routine LCR sampling, but may be convenient.

# Initial Water Quality Parameters – How Many?

| Population | Number of tap locations |
|---|---|
| Greater than 100,000 | 25 |
| 10,001 – 100,000 | 10 |
| 3,301 – 10,000 | 3 |
| 501 – 3,300 | 2 |
| 500 or fewer | 1 |

**2 samples must be collected at each tap and each EPTDS. They may not be collected on the same day.**

Therefore, if your population is 5,000, and you have one EPTDS, you must collect samples from 3 taps on 2 different days for a total of 6 tap samples, and you must collect 2 samples from 1 EPTDS, for a total of 2 EPTDS samples. This is a total of 8 WQP samples for this hypothetical system.

# Initial Water Quality Parameters – What?

- pH (measured in field)
- Temperature (measured in field)
- Alkalinity
- Calcium
- Conductivity
- Orthophosphate (when a phosphate-based corrosion inhibitor is used)
- Silica (when a silicate-based inhibitor is used)

Unlike lead and copper samples, you may analyze these at your own lab, as long as you use an EPA approved method.

Be sure to flush the line you're sampling from so you're not getting water that was stagnant in the fixture or building.

## Water Quality Parameters – Exception

If your system already has Optimal Corrosion Control Treatment installed, your sampling requirements will look different – please reach out to me to get further guidance!

## Lead and Copper Sampling Overview

## EPTDS Lead and Copper Sampling

- Collect one lead and copper sample from the EPTDS
  - This is the same location you collected the WQPs from
- Deadline: 6 months after the end of the monitoring period:
  - December 31 for the January – June monitoring period
  - March 31 for the June – September (annual, triennial) monitoring period
  - June 30 for the July – December monitoring period.
  - We recommend collecting this sample when you collect one of your EPTDS WQP samples so you don't forget!
- Important: Flush the line you're sampling from to be sure the sample is representative of the source.
- If this isn't your first ALE, you may be on reduced source water monitoring – look for a letter from EPA explaining next steps.

## Routine LCR Sampling

- System is placed on a standard 6-month routine LCR monitoring schedule.
  - If your population served is greater than 101, the number of required samples will double.
  - Reach out to Bolor to discuss if your sampling plan needs modification

Bolor Bertelmann
Routine LCR Compliance Rule Manager
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# Recommendation Forms Overview


# Optimal Corrosion Control Treatment Recommendation Form

Can I recommend no treatment?


- Due 6 months after the end of
  - – June monitoring period
  - h 31 for the June – September ual, triennial) monitoring period
  - 30 for the July – December toring period.
- d be based on your WQPs l as any other data you ave
- be one of the following:
  - inity and pH adjustment
  - Calcium hardness adjustment
  - Phosphate or silicate-based corrosion inhibitor

## SOurce Water Treatment (SOWT) Recommendation Form

- This is typically no treatment
  - Region 8 typically doesn't have elevated lead and copper in source water.
- Fill out the form with the EPTDS lead and copper results and sign and send it to us.

## What's next?

- Public Education
  - Continue the monthly statement with the bill and send the certification until your next round of samples come back below the AL.
- EPTDS Lead and Copper & Source Water Treatment
  - EPA will either approve or deny your SOWT recommendation.
  - If EPA determines no *source water* treatment is required, you will be granted reduced EPTDS lead and copper monitoring
  - Reduced monitoring is annual for surface water (and GUIDI) systems and triennial (following the SMF) for GW systems.

    * Monitoring is only required during the monitoring period in which another ALE is incurred

## What's Next?

- System is placed on a 6-month routine LCR monitoring schedule.
  - Depending on population, the number of required samples may double.
  - Reach out to Bolor to discuss if your sampling plan needs modification
- WQPs
  - No further testing required unless EPA requests it or another ALE is incurred
- If the next round of sampling comes back below the lead AL, public education can stop
- If the subsequent round of sampling comes back below both ALs, steps to OCCT can stop and you will be notified via letter
- If any future round of sampling comes back above the AL, all of these requirements must be fulfilled again.

## Summary

### Lead ALE

- CALL EPA ASAP
- Be prepared to complete your Tier 1 PN within 24 hours
- Collect your WQPs ASAP
- Prepare your PE for EPA review
- Distribute PE once reviewed
- Collect your EPTDS LC samples
- Submit your recommendation forms
- Collect your next round of routine samples

### Copper ALE

- Collect your WQPs ASAP
- Collect your EPTDS LC samples
- Submit your recommendation forms
- Collect your next round of routine samples

Getting an ALE is not a violation – failure to complete follow up actions will result in violations

## Resources

- 90th percentile calculator https://www.epa.gov/region8-waterops/lead-and-copper-rule-90th-percentile-calculator
- Tier 1 Public Notice https://www.epa.gov/region8-waterops/lcr-lead-action-level-exceedance-template
- Public Education for CWS https://www.epa.gov/region8-waterops/lead-and-copper-rule-public-education-materials-community-water-systems
- Public Education for NTNCWS https://www.epa.gov/region8-waterops/lead-and-copper-rule-public-education-materials-non-transient-non-community-ntnc
- OCCT and SOWT Recommendation forms will be attached to the Action Level Exceedance letter and are not on our website.

## Questions?

Chelsea Ransom

Lead and Copper Action Level Exceedance Rule Manager

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