GUIDANCE AND FREQUENTLY ASKED QUESTIONS

LEAD AND COPPER RULE REVISIONS

SEPTEMBER 2024

LEAD AND COPPER RULES
Abbreviations / Key Terms

AL – Action Level

ANSI – American National Standards Institute

BSDW – Bureau of Safe Drinking Water

CWS – Community Water System

GRR – Galvanized Requiring Replacement

LSL – Lead service line

LCR – Lead and Copper Rule

LCRR – Lead and Coper Rule Revisions

NTNC – Non-Transient Non-Community Water Systems

OFA – Office of Financial Assistance

PWS – Public Water System

SL – Service Line

TL – Trigger level

U.S. EPA – United States Environmental Protection Agency

OVERVIEW

DISCLAIMER: This document is intended to provide answers to questions that may arise regarding developing a lead service line inventory in community and non-transient non-community water systems. This document is non-regulatory and for guidance only. Nothing in this document supersedes any statutory or regulatory requirements or permit provisions for public water systems.

The United States Environmental Protection Agency (U.S. EPA) issued revisions to the federal Lead and Copper Rule (LCR), on January 15, 2021. In November 2023, the U.S. EPA released the Lead and Copper Rule Improvements (LCRI) which proposes to push back and replace many of the requirements of the LCRR except for three requirements. A list of these requirements and further guidance is provided below.

FREQUENTLY ASKED QUESTIONS

1. What requirements of the LCRR does the EPA propose to keep starting October 16, 2024?

- All community and non-transient non-community public water supply systems must comply with the LCRR. Water systems must develop an inventory to identify service line materials connected to the public water systems (PWSs) by **October 16, 2024**.
- Community and non-transient non-community water systems with one or more lead, galvanized requiring replacement, or lead status unknown service line(s) must submit a lead service line replacement plan.
- Community water systems must submit a list of licensed schools and childcare facilities served by their systems.

2. When is the initial service line inventory due and how do I submit it?

The inventory is due no later than October 16, 2024. Please submit the inventory via email to ndep.lead@ndep.nv.gov and cehleringer@ndep.nv.gov. If the file is too large to submit via email or it must be submitted via mail, please contact the emails listed above for more information.

- If the system is under Northern Nevada Public Health (NNPH), please submit the inventory to Latricia Lord at LLord@nnph.org.

3. What service line materials must be identified in the Lead Service Line Inventory?

- Lead service lines.
- Non-lead service lines.
- Galvanized Steel Requiring Replacement (GRR).
- Lead status unknown.

4. What is the regulatory history on lead free in Nevada?

June 19, 1986: Congress enacted the Safe Drinking Water Act Amendment of 1986, which prohibited the use of pipe, solder, or flux in PWSs that is not "lead free", defined "lead free", and that plumbing must be "lead free".

- "Lead free" was defined as solders and flux may not contain more than 0.2 percent lead, and the pipes and pipe fittings may not contain more than 8.0 percent lead.

March 22, 1989: Nevada public water system regulations require plumbing installed in water supplies to comply with the 1986 SDWA amendments for "lead free" and updated compliance from the 1982 to the 1988 edition of the Uniform Plumbing Code (NAC 445.412).

June 26, 1989: Nevada law approved to require updated requirements from the 1985 to the 1988 edition of the Uniform Plumbing Code for any construction, alteration or change in the use of a building (NRS 444.350).

October 1, 1989: NRS 444.350 Uniform Plumbing Code law effective (NRS 218D.330).

January 4, 2014: The Reduction of Lead in Drinking Water Act went into effect nationally. This amendment to the Safe Drinking Water Act introduced a new definition of "lead free" in 40 CFR § 143.12. "Lead free" means:

- Not containing more than 0.2 percent lead when used with respect to solder and flux; and

- Not more than a weighted average of 0.25% lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.

5. What is the date after which any construction is assumed to be "lead-free"?

- In the State of Nevada, any construction **after 9/30/1989** was required by State law to not contain lead.
- Homes or other service connections with water lines installed after **9/30/1989** may be assumed to have no lead service lines, unless the PWS is aware of installations that did not comply with State law.
- A PWS can determine if a local ordinance banned the use of lead in plumbing construction at an earlier date. Documents referring to an earlier ordinance or building code may be used instead of the Nevada law ban of **10/01/1989**.

6. Where is lead likely to be found in plumbing materials?

- Homes or other service connections built **before 10/01/1989** are more likely to have lead pipes, fittings, fixtures, and/or lead solder.
- Although a home may be legally "lead-free," before 2014, solder once may have contained up to 0.2% lead; pipes, plumbing materials, and chrome and brass faucets may have had up to 8% lead.

7. Do PWSs need to maintain records on lead solder?

- Lead solder alone does not qualify the line as a lead service line.
- It is still necessary for PWSs to document lead solder when records exist to identify the sampling pool (e.g., Lead Sample Plan, tiering).

8. Will NDEP allow the water system to use "non-lead" designation for any pipe greater than 2" diameter?

- Yes, pipes greater than 2 inches in diameter may be assumed non-lead regardless of construction year, unless the PWS is aware of pipes in their system that are greater than 2 inches and contain lead.




9. Will NDEP validate service line inventory records produced by PWSs?

- No, PWSs need to verify their own records. The PWS may decide what types of records they are willing to accept as legally defensible.

10. How much field verification is needed to validate staff interviews?

- Historical knowledge is useful for prioritizing field verifications, but physical verification will likely be necessary to confirm historical knowledge and document the materials.

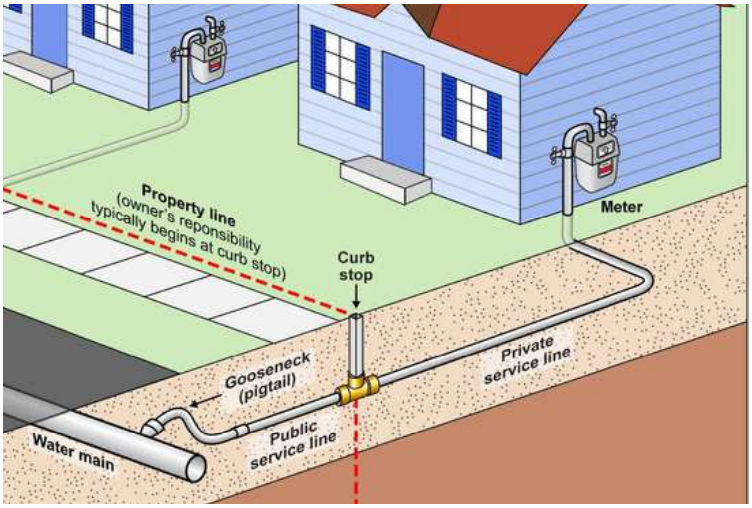
- If a record exists (e.g., plumbers' receipt, building permit record, title company record), visual inspection may not be needed.

11. What methods may PWSs use to determine the materials of the service line?

- Homeowner photographs with test results (e.g., magnet, scratch test, lead test)
- Lead test kits
- Scratch test
- Potholing
- Hydrovaccing
- Plumbing records
- Other methods will be considered on a case-by-case basis

12. How many locations must be verified on the private side of the service line?

- The PWS must verify enough locations on the service line as needed to ensure the inventory is accurate and legally defensible.
- If using a visual inspection, verify at least one private side location downstream of the connection to the PWS (e.g., on the private side of the meter or the private side of the curb stop).



13. What is a pigtail? Does a pigtail qualify the line as lead? Should lead pigtails be replaced?

- A pigtail (also called "gooseneck") is a flexible connector sometimes used to connect the saddle on the main to the horizontal service line. They can also be inside a home connecting to an appliance (e.g., water fountain, water heater, fridge). Before poly flex hose was available, these were commonly made of flexible metal (e.g., lead) that would not pinch off when bent.
- Pigtails/goosenecks are not considered part of the service line. If the pigtail/gooseneck is made of lead, but the remainder of the service line has no lead or galvanized steel, the line should be listed as "non-lead." However, a note should be made on the inventory.
- Lead pigtails/goosenecks should be replaced during routine maintenance.

14. How does a water system document galvanized steel water distribution lines downstream of confirmed lead distribution lines?

- Galvanized steel water distribution lines that are downstream of confirmed lead distribution lines or may have historically been downstream of lead are considered Galvanized Requiring Replacement (GRR) and must be replaced.
- Galvanized steel water distribution lines upstream from known lead distribution lines do not have to be replaced.

15. May sampling be used to determine the service line materials?

- Sampling may only be used to determine a lead service line but not to determine a non-lead service line.

16. Will NDEP review and approve predictive modeling and emerging methods used to develop an inventory?

- These types of tools for developing an inventory will be considered on a case-by-case basis.
- They will need to be robust and legally defensible.
- If after submittal and approval a determined non-lead service line is determined to be a lead service line, the whole method will need to be reviewed and physical verification of other non-lead service lines will be necessary.

17. How does the PWS address "unknown" service lines in the initial LSL inventory?

- If the material of construction of a water service line cannot be verified during the initial inventory, the service line should be identified as "unknown".
- The PWS should rank the water connections by how likely it may contain lead.
- The PWS should also notify the property resident and homeowner annually that the service line may contain lead.

18. Does the inventory need to be publicly accessible?

- Yes, the service line inventory must be made publicly accessible by October 16, 2024. Systems serving over 50,000 people must make their inventory available online.

- The inventory must include a location identifier, such as a street address, block, intersection, or landmark, associated with each lead service line and galvanized requiring replacement service line. Water systems may, but are not required to, include a locational identifier for lead status unknown service lines or list the exact address of each service line.

19. What do I do if I have no lead, GRR, or unknows in my inventory?

- All community and non-transient non-community NTNC water systems must submit the full inventory to BSDW (or NNPH if under them) regardless of having all non-lead service lines.

- However, in lieu of making the service line inventory publicly accessible, the system may provide a statement declaring that the distribution system has no lead or GRR service lines and a general description of the methods used to make this determination.

20. What are the rules regarding NTNC water systems?

- NTNC water systems traditionally are connected directly to the source and do not contain service lines. Examples include schools and private businesses.

- NTNC water systems will need to inventory all piping from the source to the building inlet. Please see the 'Developing and Maintaining a Service Line Inventory: Small Entity Compliance Guide' on the U.S. EPA Lead and Copper Rule Implementation Tools website.

21. What are the public education requirements if a system's inventory has any lead, GRR, or unknown service lines?

- Any system that has any lead, GRR, or unknows service lines in their initial inventory must provide public notice to customers serviced by these service lines within 30 days of submitting the initial service line inventory and then annually until the line is replaced or identified as non-lead. New customers must be notified at time-of-service initiation.

- The language requirements of these notifications differ depending on the classification. Please review these requirements in the LCRR 40 CFR 141.85(e) or contact BSDW.

- For further guidance and public education templates, please see the EPA Lead and Copper Implementation Tools webpage.

22. What do I do if I have a lead action level exceedance (ALE) starting October 16, 2024?

- Starting October 16, 2024, a lead ALE will require a Tier 1 public notice (PN). The PN must be provided to all persons served by the water systems as soon as practicable, but no later than 24 hours after the system has learned of a lead ALE.

- Further guidance and PN templates are available on the NDEP and EPA websites.

23. Is funding available to develop the inventory and replace lead service lines?

- U.S. EPA is harmonizing regulatory requirements with unprecedented funding through President Biden's Bipartisan Infrastructure Law to make rapid progress on removing harmful lead from America's drinking water.

- U.S. EPA will provide funding to states to help pay for utility service line inventory development and replacement of lead service lines to qualifying PWSs. U.S. EPA funding will go to the State of Nevada's financial assistance programs, including loan and grant funding. Please reach out to the Bureau of Safe Drinking Water (BSDW) or Office of Financial Assistance (OFA) for more information.

24. How can I calculate my 90th percentile if I'm required to collect five samples or less?

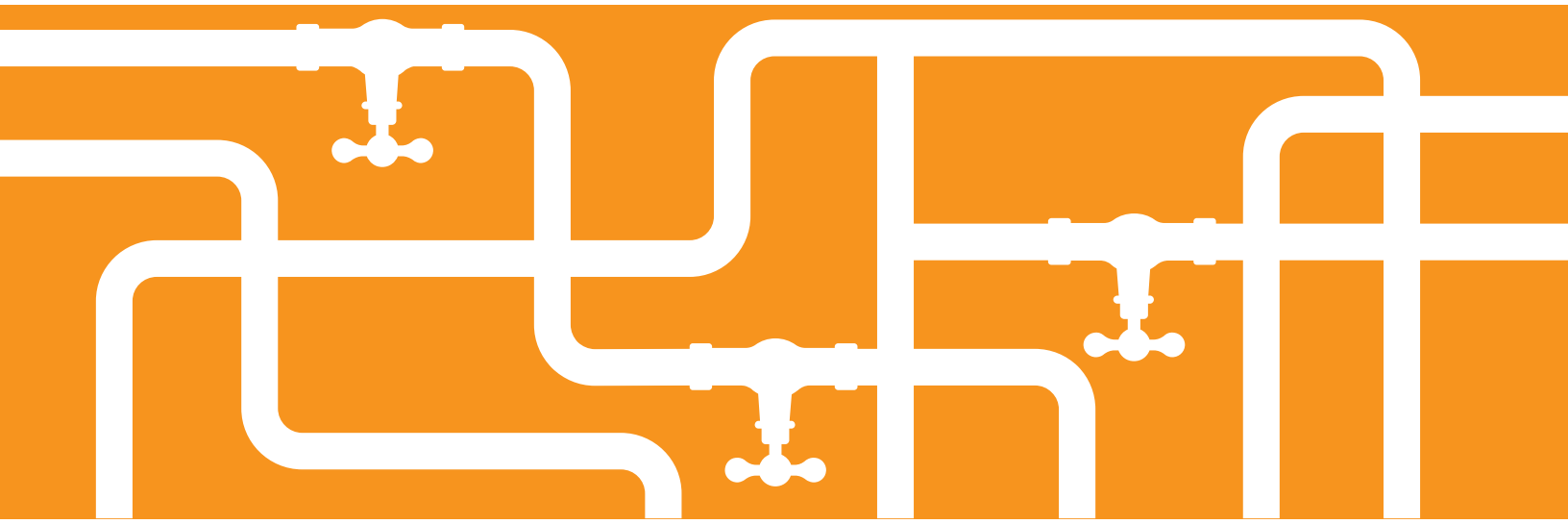
1. Place lead or copper results in ascending order.
2. Take the average of the 4th and 5th highest sample. This is the 90th percentile level.
3. Compare the 90th percentile level against the lead or copper action level. If your 90th percentile value is higher than 0.015 mg/L, an exceedance has occurred.

(*Spreadsheet calculator provided below)*

25. How can I calculate my 90th percentile if I'm required to collect five samples or less?

1. Place results in order from lowest to highest value.
2. Assign each sample a number 1 -10.
3. Multiply the total number of samples by 0.9.
4. Compare the 90th percentile level to the action level. If your 90th percentile value is higher than 0.015 mg/L for lead and/or 1.3 mg/L for copper, you have an exceedance.

(*Spreadsheet calculator provided below)*



GENERAL RESOURCES

Inventory Template (NDEP)

Lead and Copper Rule Main Page (NDEP/BSDW)

Revised Lead and Copper Rule Main Page (U.S. EPA)

Lead and Copper Rule Overview (U.S. EPA)

Guidance for Developing and Maintaining a Service Line Inventory (U.S EPA)

90th Percentile Calculator (U.S. EPA)

NDEP

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