



Lead and Copper Rule Revisions Guidance Document

INTRODUCTION:

The Lead and Copper Rule Revisions (LCRR) were effective on December 16, 2021. Listed below are some of the key points that all Community and Non-Transient Non-Community water systems shall prepare for to meet the requirements of the LCRR.

- Develop a service line inventory. This inventory must include information on both the water system owned and customer owned parts of the service lines. This inventory must be completed and submitted to the Office of Drinking Water (ODW) by October 16, 2024.
- Service line inventories must be made available to the public.
- PWSs that identify lead service lines as part of their inventory creation must create a lead service line replacement plan.
- PWSs that identify lead service lines must revise their sampling plans and sampling protocols.
- PWSs that serve schools and childcare facilities are to create a sampling plan to test 20% of Elementary schools and childcare facilities that they serve on an annual basis.
- PWSs must review their Corrosion Control Treatment and reoptimize if necessary. This must be done if the PWSs 90th percentile results indicate that the trigger level is exceeded.

SERVICE LINE INVENTORY:

All Community and Non-Transient Non-Community water systems must develop an inventory to identify the materials of service lines connected to their water distribution system.

The first step in creating a lead service line inventory is to understand the definition of a lead service line. The following is ODW's working definition of a lead service line:

"Lead service line" means any lead-containing pipe, tubing, fittings, curb stops, connectors, valves, water meters connecting a water main to a building inlet or other service line appurtenances to the first shutoff valve but no further than two feet inside the premises. These are the components that shall be removed as part of full Lead Service Line Removal (LSLR). Lead service line includes any galvanized iron or steel pipe (that is currently or has previously been downstream of known lead service line components).

The U.S. Environmental Protection Agency (EPA) released two guidance documents to assist public water systems to develop and maintain a service line inventory and an inventory template on August 4, 2022. These documents can be found at [Revised Lead and Copper Rule | US EPA](#). ODW has reviewed these documents and would like to highlight the following:

- Public Water Systems (PWSs) must develop an initial lead service line inventory by **October 16, 2024**.
- Inventories must have material information for the entire service line. This includes both the water system owned and customer owned parts of the service line.



- Inventories must include information on any lead or galvanized iron/steel service lines as identified.
- Inventories must have verifiable information regarding service line materials. PWSs must review all available sources to identify service line materials. Sources may include Historical PWS records, distribution system maps, meter installation records, site inspection records, plumbing inspection records and permits, test pits, vacuum or mechanical excavation, information gathered during normal PWS operation, Predictive Modelling, or homeowner surveys. ODW approval is required for any method not specified herein.
- PWSs must update inventories as lead service lines are replaced.
- PWSs must provide inventory updates to ODW periodically. ODW encourages PWSs to provide updated inventories in real-time or as soon as possible. This will enable ODW to keep its public facing website updated.
- ODW will not require PWSs who have only non-lead service lines (Water system owned or Customer owned) to provide ongoing inventory updates. However, if any of these PWSs finds Lead within their distribution system at a later time, ODW will require an updated inventory to be submitted.
- ODW will not accept an initial inventory from any PWS that lists all its service lines or > 25% of its service lines as "Lead Status Unknown".

SERVICE LINE CATEGORIES (Water system owned or Customer owned): Inventories must be categorized as follows:

- Lead: if the service line meets Delaware's definition of Lead Service Line
- Galvanized Requiring Replacement (GRR): if the service line is currently or was previously downstream of a known lead service line or lead components. If the PWS is unable to confirm that this line is or was downstream of a known lead service line or lead components – it must presume that there was an upstream lead service line and classify it as a GRR.
- Non-Lead: if the service line is validated as not to be lead or galvanized requiring replacement. Generally, this category is to be used when the PWS identifies the service line materials to be made of Copper or Plastic. Determination must be through an evidence-based record, method, or technique.
- Lead Status Unknown: if the service line material makeup is unknown due to lack of information, records, or the ability to perform a physical verification. *ODW recommends that PWSs conduct on-site investigations to reduce the number of unknowns as soon as possible.*

ADDITIONAL ACTIONS:

- PWSs should engage with their customers throughout the inventory creation/lead service line replacement process. Building partnerships via customer engagement/involvement will assist with information gathering for the customer owned part of the service line.
- PWSs should develop revised standard operating procedures for sampling and creation of new sample plans.
- PWSs should install dependable means to provide proactive and timely communications to their customers and ODW on matters relating to lead sampling results and lead service line replacements.



- ODW requires PWSs to ensure that 100% of samples collected as part of the LCRR requirement to come from identified Lead Service Line sites.
- Sampling the first liter is OK for homes without Lead Service Lines. Fifth liter samples are to be collected for homes with LSLs to ensure that the water being tested is not from the internal plumbing and is from the service line. This will reliably capture the LSLs lead risk. Practices such as line flushing, and aerator cleaning/removal are not allowed. Samples are to be collected in a wide-mouth jar to improve accuracy.
- Trigger level – PWSs must sample annually when the trigger level is exceeded.
- LCRR requires PWSs to test the drinking water that they supply in 20% of elementary schools and childcare facilities each year. They must test secondary schools for a testing cycle of five years if requested. PWSs must conduct sampling if requested by any of these facilities in the future (especially if these facilities had plumbing installed prior to January 1, 2014). Analysis results must be provided to the school with educational materials and PWSs must provide the same to ODW.
- After LSLR – PWSs must provide a six-month supply of pitcher filters/cartridges to affected customers within 24 hours post replacement.
- After LSLR – PWSs must collect water samples for Lead analysis within three to six months of replacement.
- Contact ODW if you need technical assistance or the DWSRF program if you need financial assistance for the creation of your initial lead service line inventory. Contact the Office of Engineering for any assistance on matters relating to engineering.

CONTACT INFORMATION:

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