



Lead and Copper Rule Revisions Material Inventory



Introduction

The Lead and Copper Rule Revisions (LCRR), which was published in the Federal Register on January 15, 2021 with an effective date of December 16, 2021, requires that **all community and non-transient non-community** public water systems (PWS), regardless of size or other water system characteristics, to develop service line inventory that identifies materials used to construct and repair **all service lines** connected to the public water distribution system. The initial material inventory must be submitted to the Department by the compliance date of **October 16, 2024**.

In addition, the LCRR requires the submittal of a lead service line replacement (LSLR) plan, LSLR goal rate plan for systems serving > 10,000 people, compliance sampling site plan, a list of schools and childcare facilities served by the PWS, and routine inventory updates. The LCRR requires PWS to replace any lead gooseneck, pigtail, or connector it owns when encountered during planned or unplanned water system infrastructure work and to offer replacement of a customer-owned lead gooseneck, pigtail, or connector. The LCRR requires PWS to conduct LSLR when exceeding the lead trigger level of 10 ppb or action level of 15 ppb.

The United States Environmental Protection Agency (EPA) may make change to all LCRR requirements, except the initial inventory requirements, through the Lead and Copper Rule Improvements (LCRI) to improve health protections and improve implementation of the rule to ensure that it prevents adverse health effects of lead to the extent feasible. EPA plans to release the LCRI before October 16, 2024.

The CTDPH LCRR material inventory template is developed to help PWS comply with the LCRR requirements, including to determine specific requirements on LSLR, to conduct customer and property owner notification, to identify schools and childcare facilities, to select compliance tap sampling sites, and to meet the inventory update requirements. Maintaining a comprehensive and accurate material inventory will assist PWS to facilitate compliance with the LCRR, improve LSLR program efficiency, select proper compliance tap sampling sites, provide greater public health protection, and may assist PWS in obtaining federal and state financial assistance to support the inventory development, LSLR program, and lead gooseneck, connector, or pigtail replacement. PWS are encouraged to seek financial assistance from federal and state agencies, such as the Drinking Water State Revolving Fund (DWSRF), Water Infrastructure Improvements for the Nation Act (WIIN) grants, etc. to support the cost for the replacement of lead service line and lead gooseneck or connector, including the completion of the inventory of lead service line and lead goosenecks, pigtails, or connectors.

Inventory Submission Deadlines:

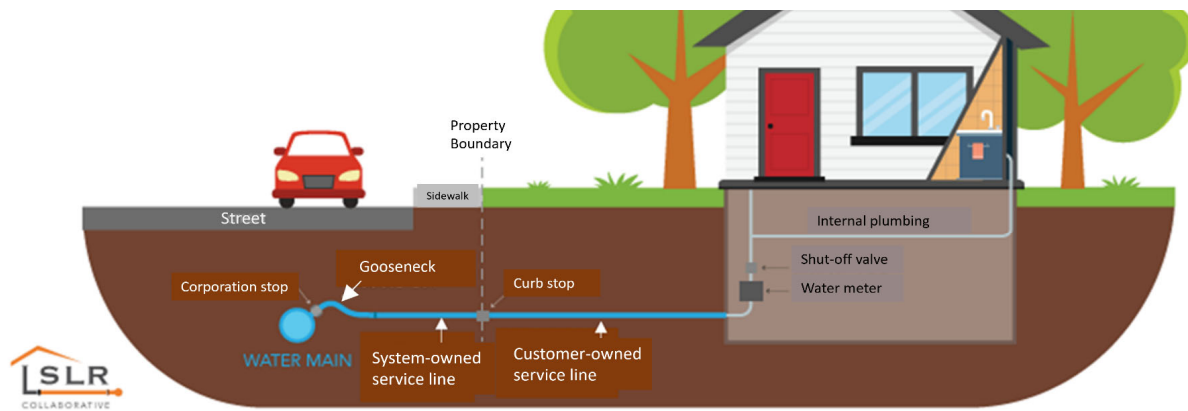
Initial Material Inventory:	October 16, 2024 All CWS and NTNC PWS regardless of the service line material composition.
Material Inventory Updates:*	30 days after the Annual or Triennial lead tap sampling monitoring period end
	*PWS on semi-annual monitoring are required to submit the inventory update annually. PWS that have demonstrated the absence of lead, galvanized requiring replacement (GRR), or unknown service lines by October 16, 2024 with their initial inventory are not required to provide an inventory update. However, if any LSL or GRR service line are found subsequently, PWS must notify the DWS within 30 days and prepare an updated inventory on a schedule established by the DWS.

Material Inventory Requirements

The LCRR requires PWS to identify in the material inventory not only the lead service lines (LSLs), but also galvanized service lines, service lines whose material composition is unknown, and service lines of known materials. All community water systems (CWS) and non-transient non-community (NTNC) PWS must develop a material inventory to meet the following requirements:

- 1 The material inventory must include all service lines connected to the public water distribution system, including service lines for fire protection and to vacant or abandoned buildings, regardless of ownership status (e.g. where service line ownership is shared, the inventory must include both system-owned and the customer-owned portions of the service line.)









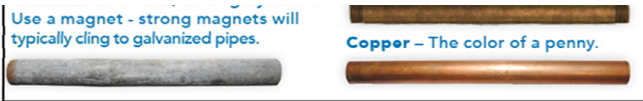
- 2 A water system must use any information on lead and galvanized iron or steel that has been identified when conducting the inventory of service lines in its distribution system for the initial inventory.
- 3 The water system must review the following sources of information to identify service line materials for the initial inventory. The water system may also use other sources of information not listed, if approved by the State. It is strongly recommended that the PWS identify the connector, gooseneck, or pigtail materials and the internal plumbing materials during the information review process to facilitate compliance with other requirements of the LCRR.
 - i All construction information/records, plumbing codes, permits, and existing records or other documentation that indicate the service line materials used to connect structures to the distribution system.
 - ii All water system records, including distribution system maps and drawings, historical records on each service connection, meter installation and maintenance records, historical capital improvement or master plans, and standard operating procedures.
 - iii All inspection reports and records of the distribution system that indicate the material composition of the service connections that connect a structure to the distribution system. (i.e. building inspection, where possible, by customer or system).
 - iv Any resource, information, or identification method provided or required by the State to assess service line materials.
- 4 Each service line, or portion of the service line where ownership is split, must be categorized in the materials classification:
 - i Lead, where any portion of the service line is made of lead.
 - ii Galvanized requiring replacement (GRR), where a galvanized service line is or was at any time downstream of a lead service line or is currently downstream of a "Lead Status Unknown" service line.
 - iii Non-lead, or if known, the actual material such as copper or plastic.
 - iv Lead status unknown, or unknown, where the service line material is not known

Where full service lines are made up of multiple materials, the full service lines are classified based on any portion containing lead, GRR, or lead status unknown materials for purposes of LSLR and outreach. See the "Classifying Service Lines" worksheet for guidance on classification. The CTDPH material inventory template is built to automatically classify the full service line materials using the PWS inputted system-owned and customer-owned service line materials. Note that service lines containing lead, GRR, or lead status unknown materials are required to be replaced as part of the LCRR LSLR requirements.

Water systems must notify all persons served by the water system at the service connection with a lead, GRR, or lead status unknown service line within 30 days of completing their initial service line inventory and annually thereafter until the service connection is no longer a lead, GRR, or lead status unknown service line. New customers must be notified of the service line material at the time of service initiation.

Examples of Commonly Found Pipe Materials

Types of Water Pipes (Service Lines)	
<p>Lead – A dull, silver-gray color that is easily scratched with a coin. Use a magnet - strong magnets will not cling to lead pipes.</p> 	<p>Plastic – White, rigid pipe.</p> 
<p>Galvanized – A dull, silver-gray color.</p> 	<p>Brass – Dark reddish brown to a light silvery color. Older pipes may be corroded and may contain lead.</p> 



Source: <https://www.dewater.com/do-you-have-lead-pipes-let-us-help-you-find-out>

- 5 The water system must create a publicly accessible service line material inventory. Water systems serving more than 50,000 people must also publish the service line inventory online. However, the exact street addresses do not need to be on the publicly available version of the service line material inventory. Each lead and GRR service line must be associated with a locational identifier. It is recommended that all service lines in the publicly accessible inventory has a locational identifier. A locational identifier can be a general location such as street, block, intersection, landmark, or other geographic marker associated with the service line. It is recommended that water systems consider updating their publicly accessible inventory in real-time.
- 6 Water systems must identify and track service line materials in the inventory as they are encountered in the course of its normal operations (e.g., checking service line materials when reading water meters or performing maintenance activities). It is recommended that PWS identify the composition of the internal plumbing materials in the inventory as encountered or during any activities that the internal plumbing can be observed.
- 7 Water systems must update the inventory based on all applicable sources of information described in these Requirements and any lead service line replacements (LSLR) or service line material inspections that may have been conducted. The water system may use other sources of information, if approved by the State, and must use other sources of information provided or required by the State. Water systems must submit the updated inventory to the State. The inventory updates must be reflected in the publicly accessible inventory when submitted to the State.
 - i Water systems must provide the inventory updates in accordance with its tap sampling monitoring period as required by the LCRR, but no more frequently than annually. (Updates must be submitted in the format prescribed in the "Updated Materials Inventory" worksheet.)
 - ii Water systems whose inventories contain only non-lead service lines (for both the system-owned and customer-owned) are not required to provide inventory updates to the State or to the public. However, if in the future, such a water system finds "lead" or galvanized requiring replacement within its system, it must notify the State within 30 days of identification and it must prepare an updated inventory in accordance with these requirements on a schedule established by the State. **Note that the system must develop the initial material inventory regardless of the service line material composition.**
- 8 Community water systems (CWSs) must include a statement in the annual Consumer Confidence Report (CCR) that they have prepared a service line inventory and instructions on how to access the inventory. For CWSs with only non-lead service lines: Provide a statement that there are no lead, GRR, or lead status unknown service lines and a description of methods used to make such determination or a statement of how to access the service line inventory.