Frequently Asked Questions:
Lead and Copper Rule Revisions (LCRR)
Lead Service Lines (LSL) Inventory

*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 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. U.S. EPA’s new Lead and Copper Rule Revisions (LCRR) strengthen every aspect of the LCR to better protect communities and children in elementary schools and childcare facilities from the impacts of lead exposure. The new LCRR will get the lead out of our nation’s drinking water and empower communities through information. Over the next three years, the LCRR will require community water systems (CWSs) and non-transient non-community water systems (NTNCs) throughout the United States (approximately 4,000 water systems in California) to conduct an inventory of service lines and determine the material of those lines and fittings.

On January 20, 2021, federal Executive Order 13990 directed all federal agencies to undertake review and action, as appropriate, to address the promulgation of federal regulations and other actions during the prior four years. Of those actions, the LCR was specifically identified as an agency action requiring review. Consequently, U.S. EPA delayed the effective and compliance dates established in the LCR to December 16, 2021 and October 16, 2024, respectively. U.S. EPA also engaged with local communities, states, local governments, utilities, and stakeholders for input regarding any changes that should be made to the LCRR.

On December 16, 2021, following U.S. EPA engagement activities, U.S EPA published Docket No. EPA-HQ-OW-2021-0255 in the federal register. The LCRR compliance and effective dates listed above, as well as the text from the January 15, 2021 regulation, were not changed and became effective. Within the Docket, U.S. EPA committed to propose and revise the LCRR by October 2024 with the Lead and Copper Rule Improvements (LCRI). The LCRI is expected to delay the implementation of portions of the LCRR beyond the October 16, 2024 compliance date. U.S. EPA will not delay the service line material inventory requirements in the LCRR.
The LCRI may include modifications to the following sections¹:

- Timely replacements of Lead Service Lines
- Revised tap sampling and lead action/trigger levels
- Small system flexibility
- School and Child Care Center sampling
- Public education
- Corrosion Control Treatment

1. What are the new general requirements for LSL Inventory in the LCRR?

All community and non-transient non-community public supply systems (water system) must comply with the LCRR and must develop an initial service line material inventory to identify the materials of service lines connected to the public water distribution system by October 16, 2024. Though the LCRR do not define a “service line,” they define a “lead service line” as such: “Lead service line means a portion of pipe that is made of lead, which connects the water main to the building inlet. …” (Complete definition in Section 3). The inventory must include all service lines connected to the water system’s distribution system, regardless of ownership status. If the service line ownership is shared, the inventory would include both the portion of the service line owned by the water system and the customer-owned portion of the service line.

2. What is the LCRR definition of a lead service line, gooseneck and galvanized line?

Lead service line means a portion of pipe that is made of lead, which connects the water main to the building inlet. A lead service line may be owned by the water system, owned by the property owner, or both. A galvanized service line is considered a lead service line if it ever was or is currently downstream of any lead service line or service line of unknown material. If the only lead piping serving the home is a lead gooseneck, pigtail, or connector, and it is not a galvanized service line that is considered a lead service line, then the service line is not a lead service line.

Gooseneck, pigtail, or connector is a short section of piping, typically not exceeding two feet, which can be bent and used for connections between rigid service piping. Lead goosenecks, pigtails, and connectors are not considered to be part of the lead service line but may be required to be replaced pursuant to 40 Code of Federal Regulation (CFR) section 141.84, subdivision (c).

Galvanized service line means iron or steel piping that has been dipped in zinc to prevent corrosion and rusting.

¹ U.S. EPA will also consider addressing these issues through non-regulatory actions such as the development of implementation tools, guidance, and other federal programs.
Note from the definitions above: A galvanized line that is connected downstream of a lead gooseneck or lead pipe that is 24 inches long or less is not required to be replaced. If a galvanized line is or was connected to a lead pipe more than 24 inches long, the galvanized line must be replaced and is considered a lead service line by LCRR definition regardless of ownership status.

3. How are the general requirements in California Health and Safety Code section 116885 and the LCRR similar?


The definition of “user service line” in the California Health and Safety Code includes the service line from the water main to the meter, which is typically the water-system-owned portion of the line. Health and Safety Code section 116885 requires that all lead from the water main to the meter be inventoried and replaced so that the State Water Resources Control Board’s (State Water Board) Division of Drinking Water (DDW) can continue to collect data on lead goosenecks.

The data collected by community water systems can be used to complete a portion of the LCRR inventory requirements, but the LCRR inventory must also include the portion of the service line from the meter to the building inlet, or the customer-owned portion of the total service line. Also, if a lead gooseneck is connected to a galvanized pipe, that service line may need to be included in the water system’s LCRR tap sampling plan pursuant to 40 CFR section 141.86 subdivision (a)(5).

4. How is each portion of the service line material categorized in the LCRR?

DDW will be collecting material data on both the water-system-owned portion of the service line (water main to the meter) and the private-side portion of the service line (meter to the building inlet). Each portion of all service lines served by all water systems must be categorized in the following manner:

(i) “Lead” where the service line is made of lead.

(ii) “Galvanized Requiring Replacement” 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”

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2 California Health and Safety Code section 116890, subdivision (a)(4) defines a “user service line” as the same definition found in California Code of Regulations, title 22, section 64551.06: “‘User service line’ means the pipe, tubing, and fittings connecting a water main to an individual water meter or service connection.”
service line. If the water system is unable to demonstrate that the galvanized service line was never downstream of a lead service line, it must presume there was an upstream lead service line.

(iii) “Non-lead” where the service line is determined through an evidence-based record, method, or technique not to be lead or galvanized requiring replacement. The water system may classify the actual material of the service line (i.e., plastic or copper) as an alternative to classifying it as “Non-lead.”

(iv) “Lead Status Unknown” where the service line material is not known to be lead, galvanized requiring replacement, or a non-lead service line, such as where there is no documented evidence supporting material classification. The water system may classify the line as “Unknown” as an alternative to classifying it as “Lead Status Unknown,” however, all requirements that apply to “Lead Status Unknown” service lines must also apply to those classified as “Unknown.” Water systems may elect to provide more information regarding their unknown lines as long as the inventory clearly distinguishes unknown service lines from those where the material has been verified through records or inspection.

The water system must identify all service lines, regardless of usage of the water (e.g., non-potable use such as fire suppression system), and active/emergency status of the service line. The service line could be repurposed in the future for a potable, active use.

The inventory is used in several parts of the LCRR, including to determine specific requirements on lead service line replacement, to conduct customer and property owner notification, and to select compliance tap sampling sites.

All water systems must develop and submit to DDW an initial inventory by October 16, 2024.

5. How does a water system document each service line?

Pursuant to the LCRR, each service line or portion of the service line where ownership is split, must be categorized separately. DDW will be developing our own template in the future. Various states along with the Association of State Drinking Water Administrators (ASDWA) have developed templates to input data for lead service line inventories. Examples from ASDWA, Wisconsin, Minnesota, Michigan and Kansas are available at the following link:

https://www.asdwa.org/lead-and-copper-rule-lcr/

Though California does not yet have a specific list of data that will be required, water systems can view the information in the above examples and begin documenting their inventories with similar information.

DDW will collect the water system-owned and customer-owned inventory numbers by 2024. A specific address will be required if any portion of the service line contains lead, galvanized
requiring replacement, lead gooseneck/fitting or lead status unknown. DDW has not fully developed all the information needed at this time. DDW will be posting the inventory information that is collected on our public webpage in 2024.

6. What information does a water system need to use to develop the required inventory?

The LCRR inventory requirement directs water systems to undergo a paper-record review of information pertaining to service lines, both water system-owned and customer-owned portions. The LCRR requires the water system to utilize the following information to develop an inventory. The water system may use other sources of information not listed below if approved by DDW.

- All construction and plumbing codes, permits, and existing records or other documentation which indicates the service line materials used to connect structures to the distribution system. (Example: Determine if there is any ordinance (City or County Building Department) that prohibits lead lines, and its effective date.)
- All water system records, including distribution system maps and drawings, historical records on each service connection, meter installation records, historical capital improvement or master plans, and standard operating procedures. (Example: System tap cards may contain helpful information, such as the diameter of the service line and the installation date of the main and user service line.)
- All inspections and records of the distribution system that indicate the material composition of the service connections that connect a structure to the distribution system.

California Health and Safety Code section 116885 required a material inventory of all community water systems’ service lines from the water main to the meter by July 1, 2018. Accordingly, most community water systems have already obtained some of the information that can be used to complete the new U.S. EPA LCRR requirements. Water systems must continue to review records, such as those listed above, to further inventory the remaining service line information.

For example, in 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%. In California, a similar law prohibiting the use of both lead solder and lead pipe was enacted in 1985. Any construction occurring in 1986 to present is assumed to not contain lead pipes or goosenecks. Physical verification will not be needed but dates of construction need to be verified by a record. The service line material can be labeled non-lead.

7. What other inventory information is needed for schools and child care centers?

The LCRR requires that each water system compile a list of schools and child care facilities served by the water system by October 16, 2024 (40 CFR section 141.92 subdivision (a)).
“Child care facility” means a location that houses a licensed provider of child care, day care, or early learning services to children, as determined by the State, local, or tribal licensing agency (40 CFR section 141.2). In California, licensed Child Care Centers are regulated by the Department of Social Services. California’s “Child Care Center” definition does not include Family Child Care Homes.

“School” means any building(s) associated with public, private, or charter institutions that primarily provides teaching and learning for elementary or secondary students (40 CFR section 141.2).

Resources:

Many examples of strategies, webpages, and resources have been developed by water systems and states over the past few years. Some are provided below:

Example of road map to LSLR - how to identify service line material and prepare an inventory:  https://www.lslr-collaborative.org/

Example of how to identify service line material: Madison (WI)  

Example of a map and how to identify service line material: Greater Cincinnati (OH) Water Works webpage:  https://la.mygcww.org/do-i-have-a-lead-service-line/

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

The Division of Financial Assistance (DFA) administers the implementation of the State Water Board’s financial assistance programs, including loan and grant funding.

General Inquiries  
Telephone: (916) 327-9978

Drinking Water State Revolving Fund  
Email: DrinkingWaterSRF@waterboards.ca.gov  
Webpage:  https://www.waterboards.ca.gov/water_issues/programs/grants_loans/

9. How will a water system with an approved timeline for replacement required by California Health and Safety Code section 116885 be incorporated into these new requirements?

A water system with an approved timeline must continue to replace lead user service lines as required. Timeline approval letters came with instructions for precautions water systems should take when doing replacements to protect their customers.
(These FAQs were last updated on March 7, 2022)