



# Lead Service Line Inventory

## Recommendations for Optional LSL Inventory Progress Improvement Work

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## LCRI LSL Next Steps Overview

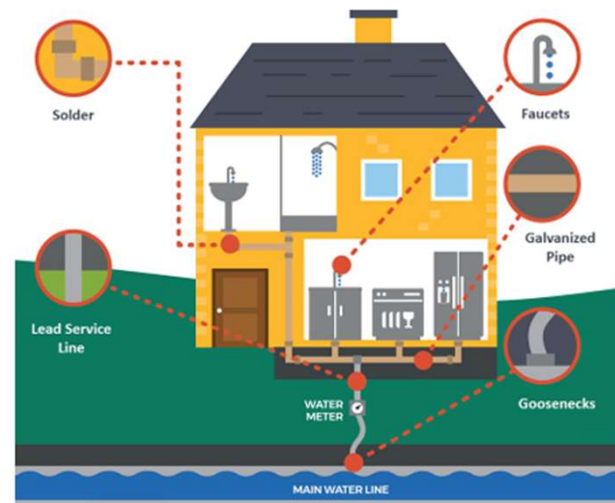
2025 EPA and DEQ Virtual Rule Roundup

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## Lead in Drinking Water

- Lead in drinking water irreparably harms the health of children and adults and disproportionately impacts lower-income communities and communities of color.
- Legacy lead pipes have exposed generations of Americans to health-harming lead and will continue to do so until they are removed.
- EPA estimates that up to 9 million homes are connected to water mains through lead pipes, posing an ever-present risk to American's health and wellbeing.



## Recent Lead and Copper Rule History



## LCRR Retained Elements: Deadlines in 2024-2027

### For the 2021 LCRR retained elements in 2024 LCRI

- ✓ **Develop, make publicly available, and submit to EPA an initial inventory of service line materials** – Due Oct 16, 2024 (Complete!)
  - **NOTE:** Updates to the initial inventory are **NOT** required in 2025 or 2026.
- **Deliver Public Education – Notification of Service Line Material**
  - ✓ **Initial** – System must provide notification within 30 days of completing initial inventory or by Nov 15, 2024 (Complete!)
  - **Repeat** – System must provide notification on an annual basis in 2025 & 2026 (within calendar year by Dec 31)- **Reminder: 2025 notice due to be delivered by 12/31/2025 (Letter templates (optional) available at EPA WaterOps Website)**
  - **New customer:** Systems must also notify new customers served at the affected connections at the time-of-service initiation.
- **Certification for Annual Notification of Service Line Materials** – Annually, by July 1, the system must submit to EPA, certification to compliance with the delivery of the Notification of Service Line Material for the previous calendar year. System must also provide example copy of the letter/s used.
  - ✓ 2024 Notification- Certification Due by July 1, 2025 (Complete)
  - 2025 Notification- Certification Due by July 1, 2026
  - 2026 Notification- Certification Due by July 1, 2027

## Annual Notification of Service Line Material

*All water systems with lead, galvanized requiring replacement, or lead status unknown service lines in their inventory pursuant to § 141.84(a) must inform all persons served by the water system at the service connection with a lead, galvanized requiring replacement, or lead status unknown service line.*

### Content:

- All letters must include:
  - A statement that the service line is either: LEAD, GALVANIZED REQUIRING REPLACEMENT, or UNKNOWN BUT MAY BE LEAD.
  - An explanation of the health effects of lead as specified in the rule and below (this language is required and cannot be changed).
  - Steps persons at the service connection can take to reduce exposure to lead in drinking water.

### Delivery:

- All water systems must provide the notification by mail or hand delivery. Some non-transient non-community water systems that do not have residential populations, may post the notice in a common area at the facility to allow consumers to review if approved by the Primacy Agency.

### Letter Templates (Optional) – Available on EPA Region 8 WaterOps Website

- Letter templates water systems can use for the required public education notices for lead, galvanized requiring replacement (GRR), and lead status unknown service lines
- Includes required standard language and health information
- Water system add system specific required information
- <https://www.epa.gov/region8-waterops/reporting-forms-drinking-water-systems-wyoming-and-tribal-lands-epa-region-8#lsli>

## Certification of Annual Notification of Service Line Material

### Due Annually by July 1 (2025- 2027)

- The water system must certify to the Primacy Agency that it delivered the Service Line Material Consumer Notification for the previous calendar year.
- The water system must also provide an example copy of the notification to the Primacy Agency.
- Instructions and Certification Template available on EPA Region 8 Water Ops Website – LSLI Reporting Forms.

<https://www.epa.gov/region8-waterops/reporting-forms-drinking-water-systems-wyoming-and-tribal-lands-epa-region-8#lsli>

**CERTIFICATION OF DELIVERY FOR THE CONSUMER NOTIFICATION OF LSL AND OF LSL INFORMATION MATERIALS**

PWS NAME: \_\_\_\_\_ PWS ID No.: \_\_\_\_\_

It is the intent of this water system to certify that it has delivered the annual consumer notification and delivered lead service line information materials to affected consumers with a lead, galvanized requiring replacement, or lead status unknown service line in accordance with § 141.85(a) for the previous calendar year of: \_\_\_\_\_.

**CERTIFIED BY:**

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Address or Phone No.: \_\_\_\_\_

By signing below the respondent identified above hereby certifies that the water system has complied with the consumer notification of lead service line materials as specified in § 141.85(a).

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Recommendations: Continuous Improvement Strategies for the Service Line Inventory\*

\*Not a current requirement for the LSL Inventory. Recommendations are for consideration only for those systems that would like to continue to make progress on identifying materials of service lines an updating (internally) their inventories prior to the compliance date of LCRI.

### What was required for the initial inventory?

- Inventory all service lines in distribution regardless of ownership.
- Review and use the required sources of information to identify service line materials for the initial inventory.
- Classify each service line as Lead, Galvanized requiring replacement (GRR), Lead status unknown (or unknown), or Non-lead.
- Make Inventory Publicly Accessible, Location identifier required for GRR and Lead.



## Locate Existing Lead Pipes

While not required during this time, EPA strongly recommends that water systems be continuously working on identifying materials of unknown service lines and replacing lead service lines as soon as possible.

### Types of Water Pipes (Service Lines)

**Lead** – A dull, silver-gray color that is easily scratched with a coin. Use a magnet - strong magnets will not cling to lead pipes.



**Galvanized** – A dull, silver-gray color. Use a magnet - strong magnets will typically cling to galvanized pipes.



**Plastic** – White, rigid pipe.



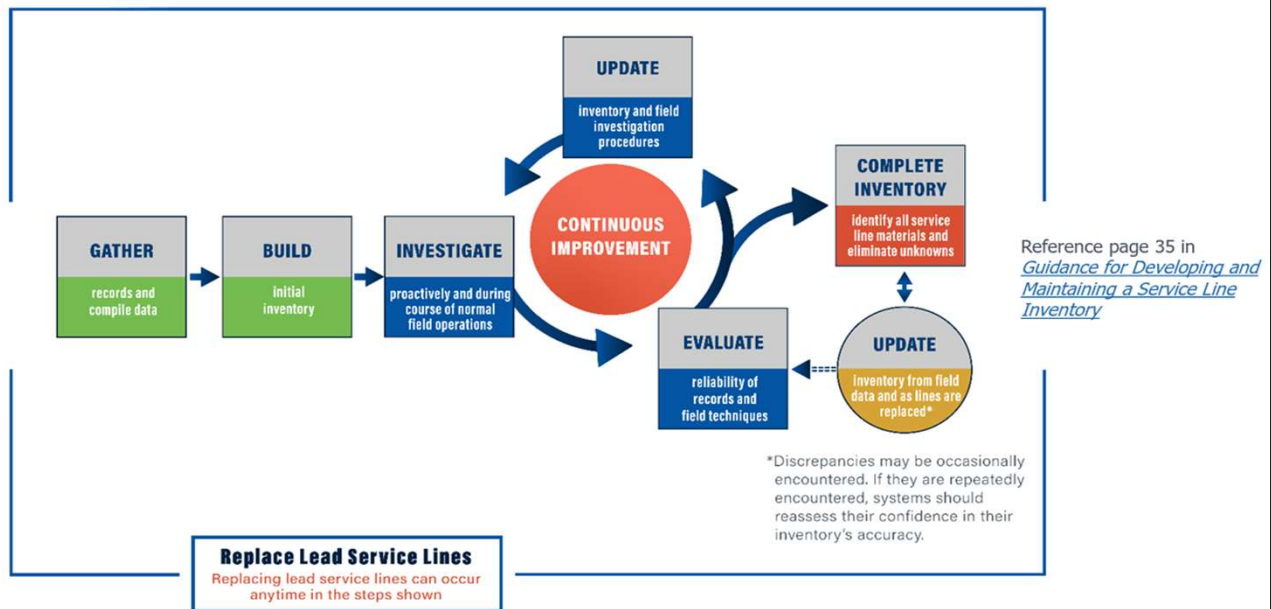
**Brass** – Dark reddish brown to a light silvery color. Older pipes may be corroded and may contain lead.



**Copper** – The color of a penny.



## Service line Inventory Continuous Improvement





## Continuous Improvement

*Gather Records and Build*

- Revisit the Required Historical Records Review...



Records  
Review

## Previous Materials Evaluation

- Under the 1991 Lead and Copper Rule (LCR), systems were required to conduct a materials evaluation.
- Initial number of LSLs under LCR.
- Any documents related to special monitoring for corrosivity characteristics.



Records  
Review

## Construction and Plumbing Codes



### • Places to look for documents:

- Municipal building permit/code enforcement department
- Agency overseeing state plumbing code
- Local governing body (e.g., city or town council)
- City archives, which are often in city public libraries
- Online databases with historical city codes



### ○ Things to look for:

- When LSLs were allowed/specified or banned from use
- Service areas most likely to have LSLs by home/building construction date and service line size
- Service line and plumbing materials in construction and plumbing permits

Records  
Review

## Water System Records

- Distribution system maps and drawings
- Historical records on each service connection
  - e.g., Tap cards or drill records
- Meter installation records
- Historical capital improvement plans or maps
- Standard operating procedures

The image shows two examples of water system records. The left record is a 'Tap Card' for service number 73481, with handwritten details including '645 E. Main St.', '18" - 5" = 5" L.S. = 18" L.S.', '11" - 11" = 1" L.S. = 11" L.S.', and '22" L.S. = 22" L.S.'. The right record is a 'SERVICE RECORD' showing a map of the service area with 'LSLs identified' marked in red. It includes handwritten notes like '101 East 1st Ave', '114" x 26" = 11" L.S. = 11" L.S.', and '12" x 11" = 5" L.S. = 12" L.S.'. Both forms include fields for 'Date', 'Location', 'Remarks', and 'Signed'.

Tap Cards

Records  
Review

## Distribution System Inspections

- All inspections and records of the distribution system that indicate material composition of the service connections
- Types of inspection records could include:
  - Responses to customer complaints
  - Inspections to locate leaks
  - Inspections to investigate meter issues
  - Cross connection inspections



## Preliminary Records Review

### *What records can be used to identify non-lead service lines???*

Evidence Based Records Example: Service line installed after lead ban...

#### Lead Banning Plumbing Codes

- ✓ Identify local plumbing and building code history.
  - Find at local government offices (municipal code enforcement) or water system SOPs
  - When was lead banned in your system?
  - If lead ban date can't be found, you may use post 1988 as default lead ban date.



#### SL Installation Dates

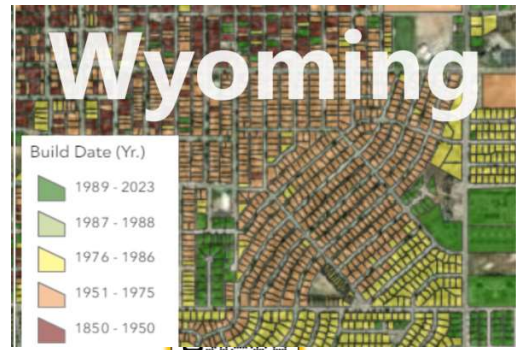
- ✓ Look for records that indicate when service line was installed.
  - Use the 2023 WY Structure Build Date Study Map (Next Slide), or for additional info or updated data, find property records at county assessors offices for customer side (many records are online and mapped).
  - Tap cards, capitol improvement projects, maps, drawings, etc. for water system side.



## EPA Region 8's Wyoming Structures Built Date Map

### 2023 Lead Service Line Prioritization Study

- Online GIS map shows dates structures were constructed and the likelihood of lead based on that time range.
- Assumptions/Constraints: EPA makes no claim regarding the accuracy or precision of the data shown herein.
- This is not a predictive model; actual service line materials have not been verified.



<https://experience.arcgis.com/experience/82ee4c6f8e574633b293723dd6d1afce>

## Continuous Improvement

### Gathering and Tracking Service Line Information During Normal Operations

- Create inspection records of service line materials from information collected during normal operations
- Identifying service line material should be built into normal operations such as:
  - Water meter reading, repair, or replacement;
  - Service line repair or replacement;
  - Water main repair or replacement; and
  - Backflow prevention inspections.
- Consider adding standard operating procedures (SOPs) to document how the information will be collected and used.



Example of Meter Pit and Service Lines  
Source LSLR Collaborative 2018

## EPAWATERTA

### EPA's free Water Technical Assistance

Including the Get the Lead Out Initiative (GLO), helps communities:

- **LSL Inventories**
- **Community Engagement Plans**
- **Lead Service Line Replacement Plans**
- **State Revolving Fund (SRF) Applications**

Request assistance by completing the WaterTA request form:

<https://www.epa.gov/water-infrastructure/water-technicalassistance-waterta>



## LCRI: Lead Service Line Inventory and Replacements

*What's Next? – A General Timeline Overview*

## Key LCRI Provisions for LSLs

- The LCRI strengthens nationwide requirements to protect the public from lead in drinking water. These advancements are commonsense, achievable, and built on actions taken by states and cities.
  - Locate Legacy lead pipes,
  - Replace lead service lines within 10 years
  - Improve communication - Communicating transparently and frequently



## LCRI: LSL Inventory and Replacement Requirements - *Due Next*

### Compliance Deadline - by Nov 1, 2027

- **“Baseline” Service Line Inventory**
  - 1<sup>st</sup> required update to the initial inventory - Adds a connector material inventory to your initial service line inventory
  - Submit a baseline service line inventory that includes lead connectors
    - Review available information that describes connector materials and locations and include identified connector material classifications in the baseline inventory
    - Classify material of each connector identified as: Lead, Non-lead, Unknown, or No connector present
  - Include an address location ID for **ALL** service line and connectors (If available)
  - Include the total number of each type of service line, the number of lead and unknown connectors, the number of full lead and GRR service line replacements, and the number of partial lead and GRR service line replacements.
- **Service line replacement plan**
  - Required for systems that have at least one lead, GRR, or unknown service line.

#### Disclaimers:

- Full extent of requirements is not exclusive or limited to information provided in this slide, specific dates given could be subject to change.
- Technical guidance for States and public water systems that are specific to the requirements or subject matter of service line inventory and replacement requirements under LCRI are currently under development by EPA.

## LCRI: LSL Inventory and Replacements - General Timeline Overview

**Nov 1, 2027 – Jan 30, 2038**

- **Baseline Inventory and Replacement Plan (if applicable)** – Due by 11/1/2027
- **Service Line Inventory Public Education: Notification of Service Line Material**
  - **Initial** - Due to be delivered within 30 days of completing Baseline Inventory (by 11/31/2027)
  - **Repeat** – System must provide notification on an annual basis (within calendar year by Dec 31)
  - **New customer:** Systems must also notify new customers served at the affected connections at the time-of-service initiation.
- **Annual Inventory Updates** – By January 30 after the end of the 1st program year (01/30/2029), then annually thereafter .
- **Multiple Annual Certifications:** By January 30 after the end of the 1<sup>st</sup> program year, then annually thereafter. – Note: Certification for the initial notification of service line material (after the completion of the Baseline inventory ) is due by Jan 30, 2028
- **Inventory Validation** – Complete by 12/31/2034, Final Reporting by Jan 30, 2035.
  - All water systems must validate the accuracy of the non-lead service line category in the inventory.
- **Full-Service Line Replacements** – Complete by 12/31/2037, Final Reporting by Jan 30, 2038.

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**Thank you for attending today's presentation on the:  
Lead Service Line Inventory**

**Do you have any questions?**

**Please visit our EPA Region 8 Lead  
Service Line Inventory Webpage!**



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