



Lead Service Line Inventory

LCRR Regulatory Compliance Training

WARWS Casper 2024

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LCRR – Initial Lead Service Line Inventory

*All CWS and NTNCWS must develop an initial inventory to identify the materials of service lines connected to the public water distribution system and submit to the primacy agency by **October 16, 2024**.*

Facts about Lead

What is Lead?

Lead is a naturally occurring element found in small amounts in the earth's crust. While it has some beneficial uses, it can be toxic to humans and animals, causing health effects.

Where is Lead Found?

Lead can be found in all parts of our environment – the air, the soil, the water, and even inside our homes.

- Ø Lead was used as early as the Roman Empire due to its malleability and corrosion resistance. They were able to manipulate lead to forge revolutionary waterways.
- Ø The word "plumbing" comes from the Latin word for lead, *plumbum*. (Pb)

Lead can be found throughout a child's environment.



Homes built before 1978 (when lead-based paints were banned) probably contain lead-based paint.



Lead can be found in some products such as toys and toy jewelry.



When the paint peels and cracks, it makes lead dust. Children can be poisoned when they swallow or breathe in lead dust.



Lead is sometimes in candies imported from other countries or traditional home remedies.



Certain water pipes may contain lead.



Certain jobs and hobbies involve working with lead-based products, like stain glass work, and may cause parents to bring lead into the home.

Content source: [National Center for Environmental Health, Division of Environmental Health Science and Practice](#)

Health Effects of Lead

Young children, infants, and fetuses – Even low levels of lead in the blood of children can result in:

- Behavior and learning problems
- Lower IQ and Hyperactivity
- Slowed growth
- Hearing Problems
- Anemia

Pregnant women - Lead in women's body can be passed to fetus during pregnancy.

- Born too early or too small
- Hurt the baby's brain, kidneys, and nervous system
- Learning or behavioral problems
- Miscarriage

Adults - Lead is also harmful to other adults too.

- Cardiovascular effects
- increased blood pressure, incidence of hypertension
- Decreased kidney function
- Reproductive problems (in both men and women)

Lead in Drinking Water

- Lead is not usually found in source water, or in the chemicals used for treating drinking water.
- Lead typically will enter drinking water when lead containing household fixtures, plumbing and water service lines corrode.
- Dissolved oxygen, low pH (acidity) and low mineral content in water are common corrosion catalysts.
- Lead service lines are largest source of lead in drinking water.
- Lead service lines were installed primarily during the late 1800s through the 1940s.



Drinking Water Regulations for Lead

- The **Lead and Copper Rule (LCR)** was originally promulgated in 1991
- The SDWA gives EPA authority to set enforceable standards to control lead and copper in drinking water.
- *EPA has determined there is no safe level of lead exposure. (MCLG = Zero)*
- The 1991 Lead and Copper Rule set an enforceable treatment technique regulation water systems must follow to control lead and copper contamination in drinking water.
- EPA has revised the regulation in 2000, 2007 and 2021.

Lead and Copper Rule Revisions

- Lead and Copper Rule Revisions (LCRR) – Finalized 2021
- ***Compliance date: Oct. 16, 2024:**
 - Initial Service Line Inventory
 - Notification of known or potential LSLs
 - Tier 1 public notification of a lead action level exceedance
 - And all associate reporting requirements of the above.

** Only includes the requirements of the LCRR EPA proposes to retain with the pending finalization of LCRI.*

Lead and Copper Rule Improvements (LCRI)

- EPA has proposed the Lead and Copper Rule Improvements (LCRI) to strengthen some key elements of the rule.
- EPA plans to finalize the LCRI by Oct 2024 (before LCRR compliance date).
- LCRI will replace the LCRR, except for the Oct. 16, 2024, compliance date for those requirement listed on previous slide.
- The compliance date for the rest of the LCRI requirements would be 3 years after the promulgation date (Presumably Oct. 2027)

What is a Service Line Inventory?

- ***A service line:*** Is the pipe that connects the water main to the plumbing in a home or building. When any part of that pipe is made of lead, it is called a lead service line (LSL).
- Given the public health risks, there is a need to identify lead service lines on both public and private property so that they can be removed.
- ***A service line inventory:*** Is a spreadsheet of all the service lines and their materials in the water system's distribution system.
- Each service line is entered into its own row, and each service line or sections of service line when ownership is split is given a material classification.

Overview of the LCRR Inventory Requirements

INVENTORY SPECIFICATIONS

Must include all service lines: Prepare an inventory that includes all service lines connected to the distribution system-

- Include all service lines, regardless of actual or intended use.
- Includes all service lines, regardless of who owns the service line.
- Water systems use physical address locations for each service line in their inventory (internal and LSLI reporting versions).

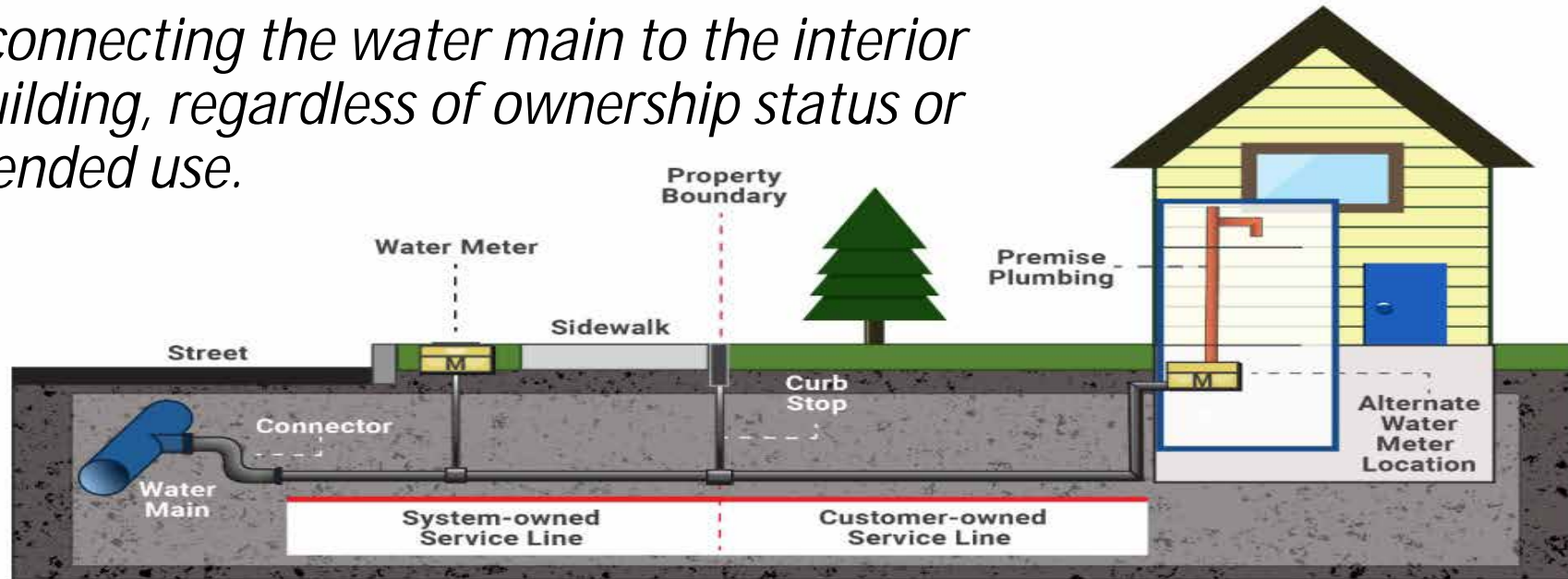
Material Classification: Each service line must be characterized as lead, galvanized requiring replacement, lead status unknown (or unknown), or non-lead using approved sources of information.

Sources of Information to Identify Material: Use previous materials evaluation, construction and plumbing codes/records, water system records, distribution system inspections and records, information obtained through normal operations.

Which service lines must be included in the service line inventory?

Your initial service line inventory must include:

All service lines connecting the water main to the interior plumbing in a building, regardless of ownership status or the actual or intended use.

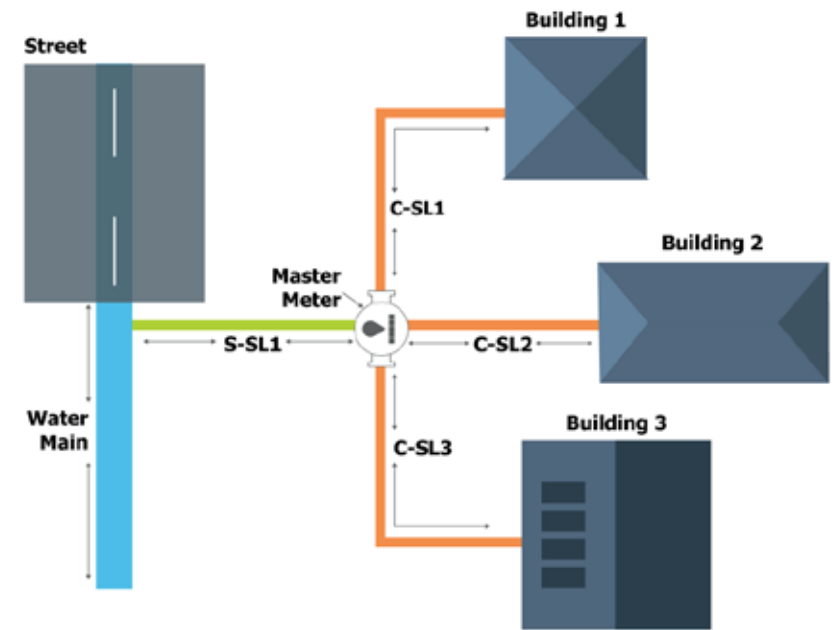


- ü Service lines owned entirely by the customer.
- ü Both the system-owned, and the customer-owned portions of the service line when ownership is split.

Which service lines must be included in the service line inventory?

Your initial service line inventory must include:

- ü Service lines with non-potable applications such as fire suppression or those designated for emergency.
- ü Vacant or abandoned buildings, even if water service is turned off.
- ü Service lines connecting multiple units to building on a property.



KEY

C=Customer-owned

S=System-owned

SL=Service Line

Customer-owned
Service line=

System-owned
Service line=

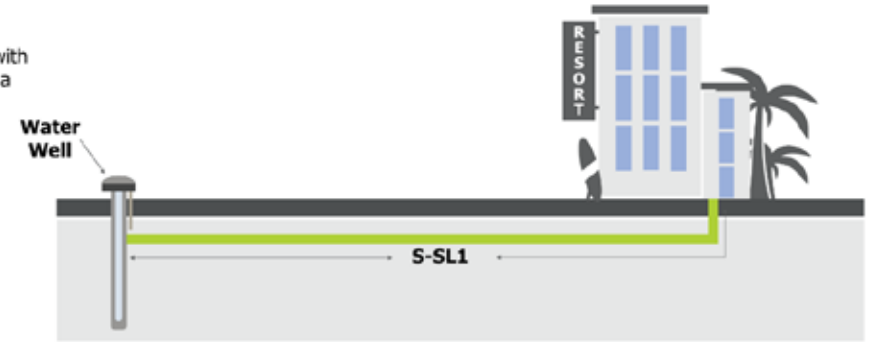
Meter



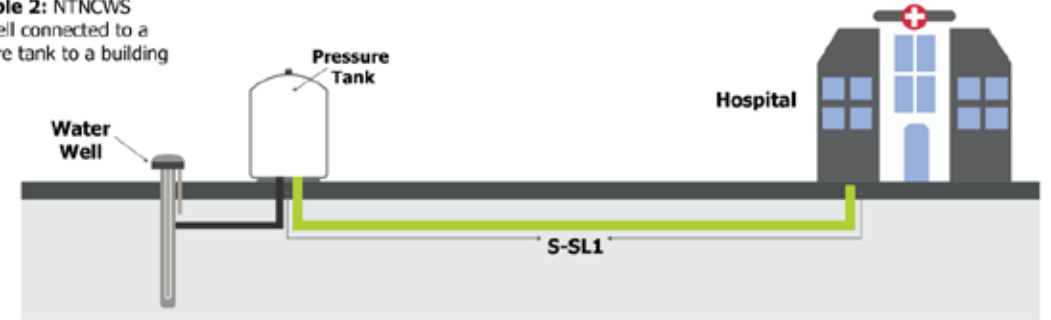
Which service lines must be included in the service line inventory?

- ü Water systems with one service line.
 - Ø Wholesaler with a service line that serves the WTP.
- ü Service lines connecting a well to a single building such as in cases where the system meets the definition of a CWS or NTNCWS but does not have an extensive distribution system.

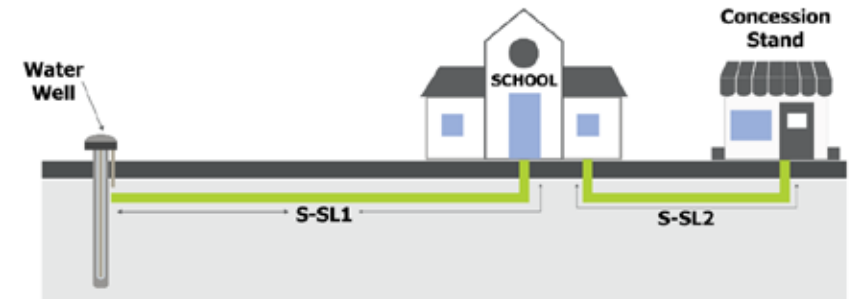
Example 1: NTNCWS with well pumped directly to a building



Example 2: NTNCWS with well connected to a pressure tank to a building



Example 3: NTNCWS with well connected to a building connected to another building

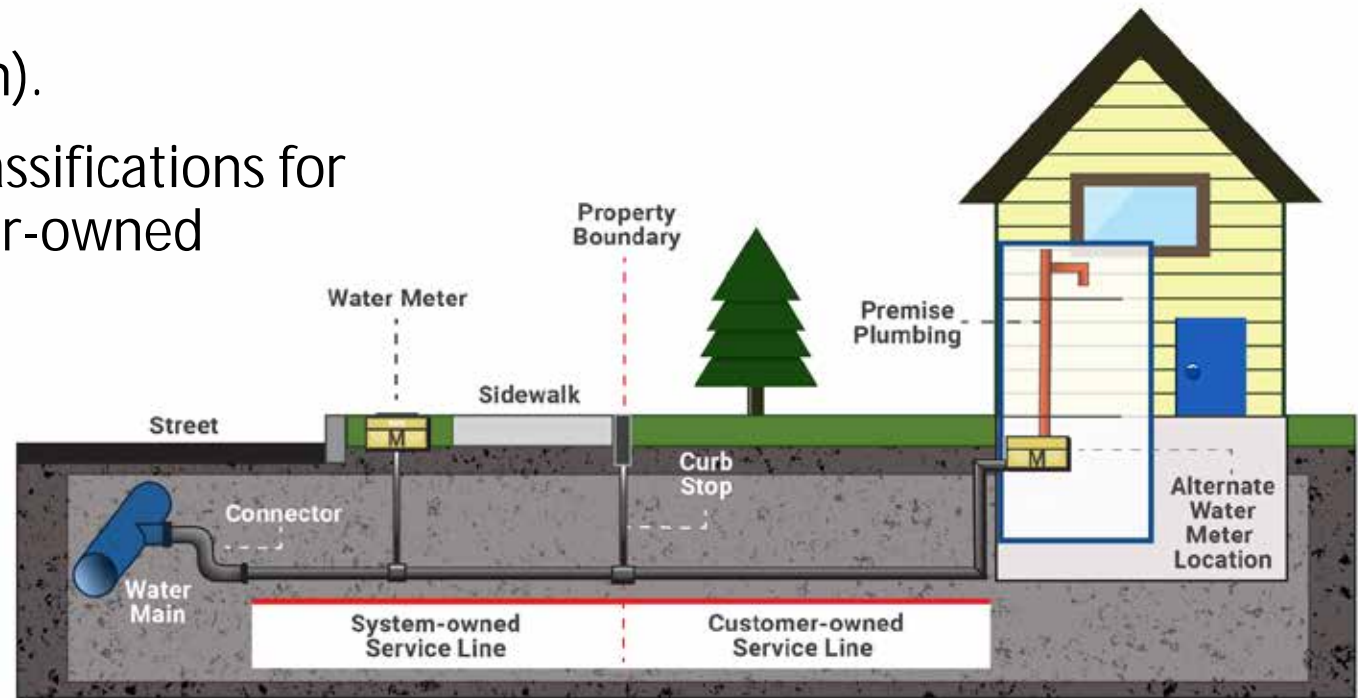


What not to inventory

- Do not inventory the distribution system materials (i.e., mains and transmission lines)
- Do not inventory plumbing materials as part of the service line.
 - A service line typically enters the building through floor of crawl space or wall of the foundation and terminates at a shut off valve that connects the service line to the plumbing within a couple feet of where it enters.
 - There might be an interior meter- the service line should connect to the plumbing after the meter.
 - You can include plumbing materials in a separate section of the inventory if you would like to track that information. This may be important to record if there are possible lead components in the customers plumbing.
- Only inventory the service lines in your distribution system.
 - Example: If you sell water to another water system (with its own PWS ID) on a master meter that water system is responsible for their own service line inventory. Check to see if you have records of your consecutive connections that show that show legal separation .

Required Service Line Material Classifications:

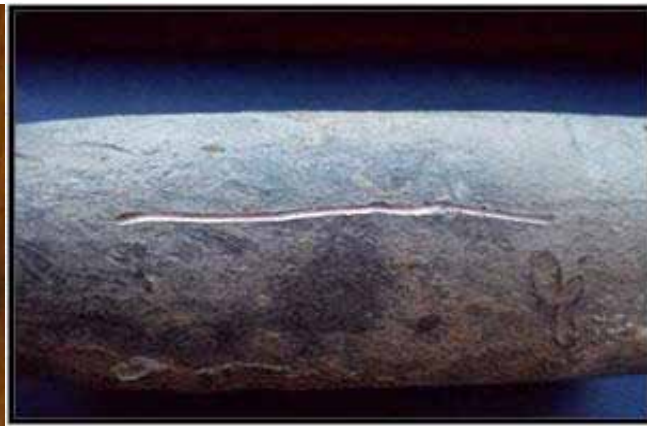
- Under the LCRR, you must use one of the following material classifications for your service lines:
 - Lead;
 - Galvanized requiring replacement (GRR);
 - Non-lead; or
 - Lead status unknown (or unknown).
- You must include separate material classifications for the water system-owned and customer-owned portions where ownership is split
- A single overall classification per service line is also needed.



CHOOSING THE RIGHT CLASSIFICATION

What is a "Lead" service line?

- 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.
- When any portion of the service line between the connection at the main and connection at the premise plumbing is made of lead (except for lead connectors) the overall service line material classification is Lead.



SYSTEM-OWNED PORTION OR SYSTEM-SIDE PORTION	CUSTOMER-OWNED OR CUSTOMER-SIDE PORTION	Entire Service Line Material Classification
Service Line Material Classification	Service Line Material Classification	
<i>Lead</i>	<i>Lead</i>	<i>Lead</i>
<i>Lead</i>	<i>Galvanized Requiring Replacement (GRR)</i>	<i>Lead</i>
<i>Lead</i>	<i>Non-Lead</i>	<i>Lead</i>
<i>Lead</i>	<i>Lead Status Unknown</i>	<i>Lead</i>
<i>Non-Lead</i>	<i>Lead</i>	<i>Lead</i>
<i>Lead Status Unknown</i>	<i>Lead</i>	<i>Lead</i>

CHOOSING THE RIGHT CLASSIFICATION

What is a “Galvanized Requiring Replacement” service line?

- A galvanized service line that is or ever was downstream of a lead service line or;
 - A galvanized service line that is currently downstream of a “Lead Status Unknown” 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.*
- *Demonstrating service line was never previously lead-
Evidence based records that support material classification.*



SYSTEM-OWNED PORTION OR SYSTEM-SIDE PORTION		CUSTOMER-OWNED OR CUSTOMER-SIDE PORTION	Entire Service Line Material Classification
Service Line Material Classification	Was Material Ever Previously Lead?	<i>Service Line Material is:</i> Galvanized	
Lead		Galvanized Requiring Replacement	Lead
Non-Lead	Yes	Galvanized Requiring Replacement	Galvanized Requiring Replacement
Unknown		Galvanized Requiring Replacement	Galvanized Requiring Replacement
Non-Lead	Don't know	Galvanized Requiring Replacement	Galvanized Requiring Replacement

CHOOSING THE RIGHT CLASSIFICATION

Why does a galvanized service line that is or ever was downstream of a lead service line require replacement?

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

- **Galvanized pipes are a source of lead in drinking water:** Lead particles released from upstream lead service lines can attach to the surface of galvanized pipes. Over time, the particles can enter your drinking water, causing elevated lead levels.
- **Considered a lead service line:** The risk of lead exposure from these pipes is significant enough that the LCRR updates the definition of a lead service line (LSL) to include: *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.*
- **To avoid potential customer confusion:** Water systems should not label these service lines as “Lead” in the inventory. Instead, they must be labeled “Galvanized requiring replacement” which allows their correct material composition to be listed while maintaining they are not to be classified as “Non-lead” since they will need to be replaced.

CHOOSING THE RIGHT CLASSIFICATION

What is a “Non-Lead” service line?

- The service line is determined through an evidence-based record, method, or technique that it is not lead or GRR.
- Records may vary in availability and accuracy. Consider the level of confidence you have in records when classifying service lines as non-lead based on records alone.
- Information pulled from records that might indicate service line is NOT lead:
 - Installation date after 1988 (Fed Lead Ban)
 - Pipe diameter >2”
 - Pipe material is indicated as a non-lead type.
- Water systems may choose to subclassify non-lead service lines to indicated the specific material. (i.e., copper, plastic)

SYSTEM-OWNED PORTION OR SYSTEM-SIDE PORTION		CUSTOMER-OWNED OR CUSTOMER-SIDE PORTION	Entire Service Line Material Classification
Service Line Material Classification	Was Material Ever Previously Lead?	Service Line Material Classification	
<i>Non-Lead</i>	<i>No</i>	<i>Non-Lead - Galvanized</i>	<i>Non-Lead</i>
<i>Non-Lead</i>	<i>No</i>	<i>Non-Lead</i>	<i>Non-Lead</i>

CHOOSING THE RIGHT CLASSIFICATION

What is a “Lead Status Unknown” service line?

- The service line material is not known to be a lead, GRR, or non-LSL,
- No documented evidence supporting non-lead material classification,
- You have the option to use the terminology of “unknown” instead of “lead status unknown” service line.
- You may elect to use subclassifications of unknown service lines when service line material has not been verified through evidence-based records or visual inspection indicating the likelihood of lead.

SYSTEM-OWNED PORTION OR SYSTEM-SIDE PORTION		CUSTOMER OWNED OR CUSTOMER-SIDE PORTION	Entire Service Line Material Classification
Service Line Material Classification	Was Material Ever Previously Lead?	Service Line Material Classification	
<i>Non-Lead</i>		<i>Lead status unknown</i>	<i>Lead status unknown</i>
<i>Lead status unknown</i>		<i>Non-lead</i>	<i>Lead status unknown</i>
<i>Lead status unknown</i>		<i>Lead status unknown</i>	<i>Lead status unknown</i>

Example: *The material of an individual service line is not known, but it was installed during a time prior to lead ban when lead was not commonly used in the system, based on interviews with experienced staff and plumbers.*

The service line material has not been verified as non-lead, but the system could consider using the subclassification of Unknown-Unlikely Lead. This may communicate better to the customer as well.

Lead Goosenecks, Pigtails, and Connectors:

What are they?

A short section of piping made of lead, typically no longer than 2 ft, used for connections between rigid service piping.

Do they need to be identified for the initial lead service line inventory?

No, they do not at this time*

Do lead goosenecks qualify as an LSL?

No, they do not if they are 2 ft or less in length.

Ø EPA STRONGLY recommends water systems track these lead components separately in the inventory if identified.

***Proposed LCRI requires a service line inventory update which includes:**

- Baseline Inventory - Records review to identify lead connectors.

What If I Only Have Non-Lead Service Lines?

Systems may be able to demonstrate through evidence-based records, methods, or techniques that all service lines in their system (both system- and customer-owned) are non-lead. Water systems with only non-lead service lines are subject to the following requirements under the LCRR:

- The requirements for developing an initial inventory are *the same* for systems with all non-lead service lines as they are for those with LSLs, GRRs, and/or service lines of unknown material.
- Develop an initial inventory that complies with the requirements to use and review certain information as described in 40 CFR §141.84(a)(3).
- You must prepare an initial inventory of service lines in your distribution system and submit it to your Primacy Agency by **October 16, 2024**.
- Include language in their annual Consumer Confidence Report (CCR) explaining how customers can access the inventory or provide a statement with the description of methods used to make the determination (40 CFR §141.153(d)(4)(xi)). Note that this requirement applies to community water systems (CWSs) only.
- Notify the Primacy Agency within 30 days and prepare an updated inventory on a schedule established by the Primacy Agency if the system subsequently finds an LSL or GRR service lines (40 CFR §141.90(e)(3)(ii)).

Scenario	Basis of Determination	Recommended Documentation
Never had LSLs	Municipal codes and construction dates (e.g., all service lines were installed after lead was banned)	<ul style="list-style-type: none"> • Relevant municipal code language and dates and references/web links to materials that are available online. • Dates when service lines were constructed, and a list of service line materials used instead of lead. • Confirmation that no LSLs have ever been found in the system.
	Detailed historical records on service line material, location, and size indicating that all service lines are a material other than lead (e.g., copper or PVC)	<ul style="list-style-type: none"> • Description of historical records including format of the records and condition. • Specific standard operating procedures (SOPs) or policies regarding LSL installation. • Description of how the system verified the accuracy of historical records including the method(s) and number of verified service lines records compared to the total. • Confirmation that no LSLs have ever been found in the system.
	Field investigations	<ul style="list-style-type: none"> • Description of methods including how the system inspected the material of the system-owned and customer-owned portion, if applicable. • The number of service lines that were investigated using each method. • Confirmation that no LSLs have ever been found in the system.
Replaced all LSLs and GRR	Detailed historical records of non-lead lines and records showing when each LSL and GRR service line was replaced	<ul style="list-style-type: none"> • Description of historical records documenting non-lead service line material along with description of how the system verified the accuracy of non-lead records. • Specific SOPs or policies regarding LSL installation. • Detailed list of where and when each LSL and GRR was replaced.

Historical Records Review - Required

- Gather, review and use records required in 40 CFR §141.42(d), 40 CFR §141.84(a)(3) as first step to build initial inventory

- ü Previous materials evaluation for LCR TSSP
- ü Construction and plumbing codes
- ü Distribution system map & drawings
- ü Historical records on each service connection
- ü Meter installation records,
- ü Historical capital improvement plans,
- ü Standard operating procedures
- ü Inspection records
- ü Information through normal operations

- **Note:** Federal lead ban effective date – post 1988

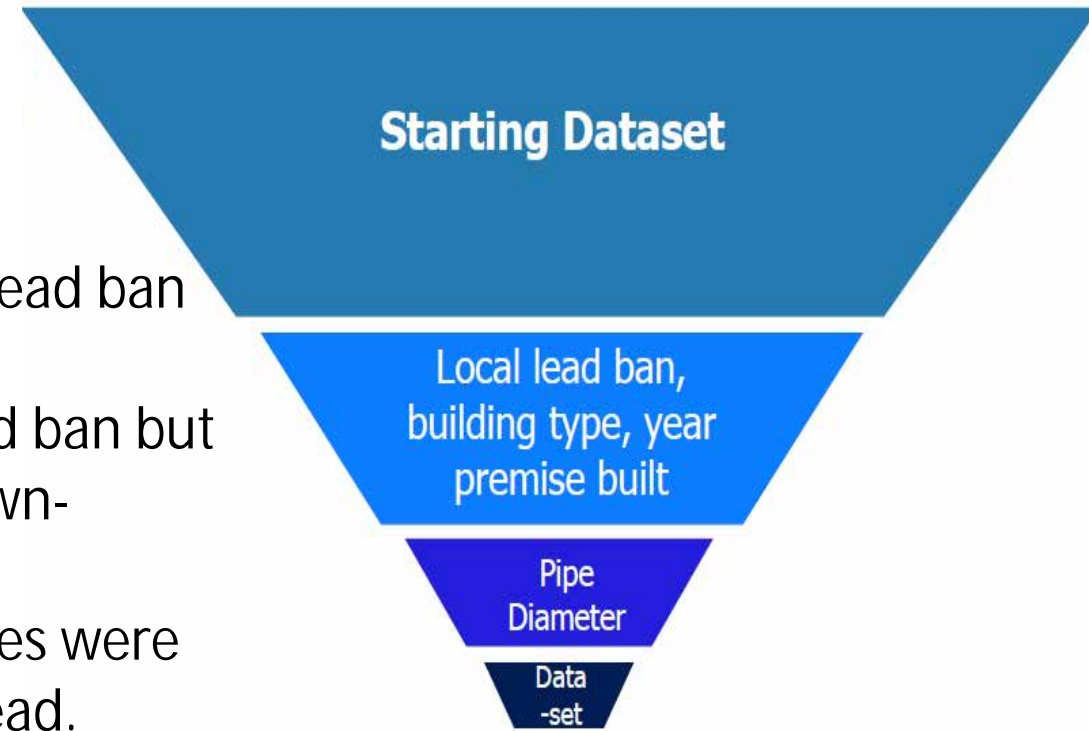
(a)

LOT NO	DATE SOLD	SIZE OF MAIN	SIZE OF SERVICE	SIZE OF FERRULE	SIZE OF PIPE	LENGTH OF PIPE	REMARKS
73481	7-15-41	6	3/4	3/4	3/4	22 ft Lead	18" E of E L.L. of 18th St 11" N of S L.L. of Molen St North Wall The above is 9/12/41 rem 1-3-72 Reck 2/20/41 5/6 1-3-72
3844							101 East 1st Ave 114 Ft W of - L.L. of Summit St 12 Ft N of S L.L. of 1st Ave Main Size 6" Ston Size 3/4" Pipe Length 26 ft Lead Date Renewed 9/14/14 Reissued

Source: Hensley et al., 2021

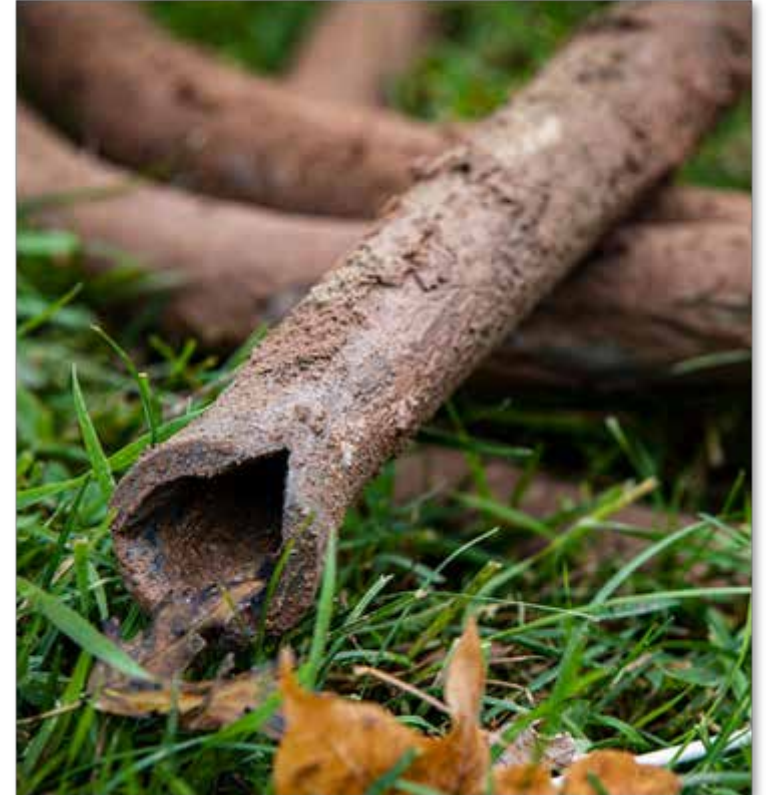
Preliminary Records Review

- Start by identifying local plumbing code history.
 - When was lead banned in your system?
- Identify the service lines that were installed AFTER the lead ban
 - à Non-lead service lines.
- Identify the service lines that were installed prior to lead ban but at a time when lead was not commonly used
 - à Unknown-Unlikely Lead service lines.
- Identify the OLD service lines in your system. Service lines were most common prior to the 1950s.
 - à Unknown-Likely Lead.
- Still have unknowns? Look for records that identify pipe diameter.
 - Lead service lines were typically less than 2". Thus, primarily served single family homes.
 - Homes with service lines greater than 2" in diameter
 - à Non-lead service lines.



Previous Materials Evaluations

- 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.



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

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

73481 SERVICE RECORD
 LOT NO. 230 645 E. Moler St.
 DATE SOLD 7-15-41
 SIZE OF MAIN 6 18" E of S L.L. of 18th St
 SIZE OF STOP 3/4
 SIZE OF FERRULE 3/4 11" N of S L.L. of Moler St
 SIZE OF LEAD 3/4
 LENGTH OF LEAD 22 ft Lead
 LOCATION OF METER North Wall
 NAME NUMBER SIZE DATE SET REMARKS
 Meter 22014 3/4 5/16 11-3-72

3844 SERVICE RECORD
 LOT NO. 101 East 1st Ave
 DATE SOLD
 SIZE OF MAIN 6 114 Ft 26 of - L.L. of Summit St.
 SIZE OF STOP 3/4
 SIZE OF FERRULE 3/4 12 Ft N of S L.L. of 1st Ave.
 SIZE OF LEAD 3/4
 LENGTH OF LEAD
 LOCATION OF METER
 NAME NUMBER SIZE DATE SET REMARKS
 Meter 22014 3/4 5/16 11-3-72
 Remarks Main Size 6" Stop Size 3/4 Pipe Length 26 KIND Lead
 Date Renewed 9/14/11 Reissued

Tap Cards

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

Other Information

- EPA understands many water systems may have insufficient and/or inaccurate records, and other sources of information may provide additional information on service line materials.

Examples of other information that systems might find useful in developing the LSLI:

- Interviews with experienced system staff and plumbers can be used to focus (prioritize) the inventory effort, verify utility practices, and support historical records when accuracy of records is questionable.
 - Experienced staff may also know where relevant historical records are located.
 - Systems may also consider interviewing their neighboring water systems to inquire about regional practices.
 - **However, interviews should not be used as the sole source of information to classify service line materials as non-lead for the initial inventory.**
- Building and tax records
- Online GIS Maps
- Dated satellite/areal imagery

Develop Procedures for Gathering Service Line Information During Normal Operations

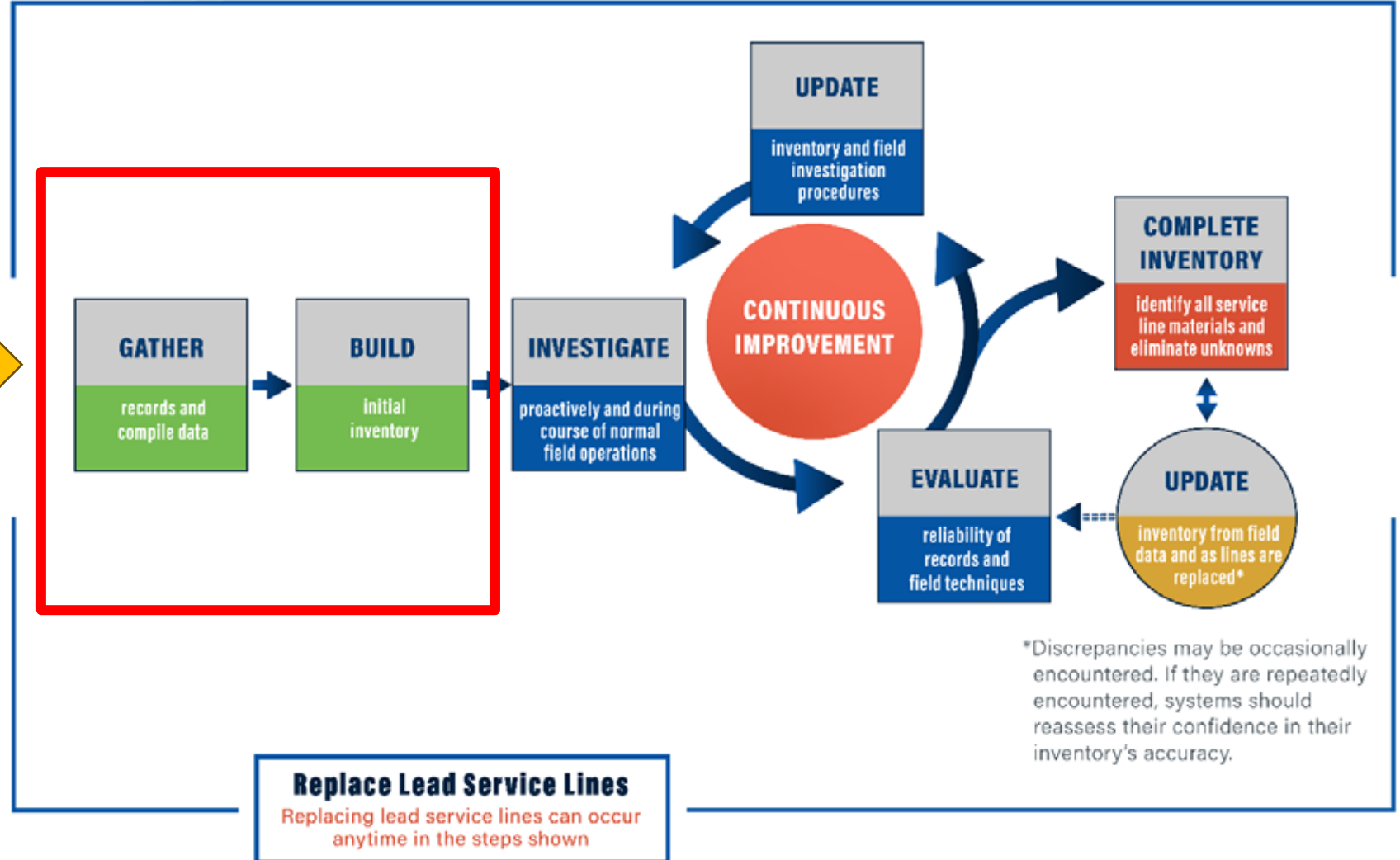
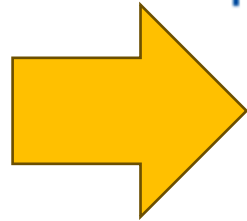
- Identifying service line material should be built into normal operations such as:
 - Water meter reading, repair, or replacement;
 - Service line repair or replacement;
 - Water main repair or replacement; and
 - Backflow prevention inspections.
- Consider adding standard operating procedures (SOPs)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



Example of Meter Pit
Source LSLR Collaborative 2018

Inventory Timeline

YOU ARE
HERE!



Service Line Investigations

- Service line investigations are NOT required under the LCRR for the initial service line inventory.
- Use of any investigative methods besides a 2-point visual inspection are not approved at this time. (Not required for LCRR either)
- Following the completion of the required records review, if a water system wishes to begin to identify service line materials at the unknown sites or verify their non-lead sites, then:
 - ü May conduct a two-point visual inspection to identify service line material.
 - ü Under the proposed LCRI visual inspections must be conducted at a minimum of two points along the service line exterior.
 - ü Examples of visual inspections: Excavation (including potholing), visual inspection in the meter pit or stop box, or visual inspection inside the home.
 - ü Where ownership of the service line is shared, the water system must visually inspect both portions of the service line.
- Ø **Note:** If visually inspecting a service line at the main, stop box, meter or inside the building, ensure you are observing the service line and not a connector or meter components.

Public Accessibility and Location Identifiers

- All systems must make their inventory publicly available. Examples include:
 - Posting to the system website,
 - By mail, or
 - Making it available in your office.
- The inventory **must** include a location identifier for all LSLs and GRRs.
 - Can be a street address, block, intersection, emergency 911 address, GPS coordinates.
 - Allows the public to track LSL locations and replacement progress.



Public Accessibility Option for All Non-Lead Service Line Inventories

- You do have options for *sharing information with the public*:
 - Make the initial inventory publicly available; OR
 - Provide a written statement that the system has no LSLs, GRRs, or lead status unknowns and a general description of all applicable sources (as described in the regulation for developing a service line inventory) used to make this determination.

Public Education Requirement:

Consumer Notice of Known or Potential Lead Service Lines

Notification of known or potential service line containing lead: Water system must inform all persons served at service connections with lead, galvanized requiring replacement, or lead status unknown service lines.

Timing: A water system must provide the initial notification within **30 days** of completion of their initial service line inventory.

- EPA will treat the compliance date of October 16, 2024, as the start date for calculating the 30-day deadline for water systems that complete the initial inventory on time.
- Water systems must also provide the notice at the initiation of service for new customers. This requirement applies beginning October 16, 2024.
- Water systems must repeat notification on an annual basis until the entire service connection is no longer lead, galvanized requirement replacement, or unknown.

Public Education Requirement:

Consumer Notice of Known or Potential Lead Service Lines... continued

Content: The notice must include a statement that explains the person's service line is a [Lead; GRR; or Unknown-Might Contain Lead], has an explanation of health effects of lead*, and provides steps to minimize lead exposure in drinking water.

Additional information that must be included if the service line is:

- **Confirmed LSL:** Must include opportunities to replace the LSL, any available financing programs, and statement that the system must replace its portion if property owners notify the system that they are replacing their portion.
- **GRR SL:** Must also include opportunities for service line replacement.
- **Lead status unknown SL:** Must also include opportunities to verify the material of the service line.

* Information on Health Effect of Lead provided must use the specific language requirements of 141.85(a) (iii)

Delivery: By mail or hand delivery

Submitting the Initial Inventory

LCRR LSLI reporting requirements

No later than **October 16, 2024**, the water system must submit to the Primacy Agency an inventory of service lines as required in § 141.84(a). This includes providing information to demonstrate compliance with requirements of § 141.84(a)(1-6 & 8 -10)

- EPA's LSLI template includes additional forms for water systems to fill out to demonstrate compliance, if you elect to use EPA's LSLI template.

Violations

- Violations of the LCRR for the lead service line inventory include a treatment technique (TT) violation and a reporting (RPT) violation.
- The rule requires the development of an initial lead service line inventory and the submittal of that initial lead service line inventory to the Primacy Agency by the compliance date of the rule, October 16, 2024.

Example Violations	Violation Category	Public Tier Notice
A system fails to develop and submit an initial service line inventory by October 16, 2024.	TT- LSL Inventory RPT – LSL Reporting	3 2
A system submits an incomplete service line inventory (e.g., Does not include all service lines, Does not use appropriate sources of information that are available, Does not appropriately classify service line materials, Does not include a location identifier for each LSL and GRR).	TT- LSL Inventory	3
A system does not make their inventory publicly accessible.	TT- LSL Inventory	3
A system with no LSL, GRR or Unknown service lines does not provide a general description of all applicable sources used to make a determination of all Non-lead.	TT- LSL Inventory	3

EPA Region 8 Water Ops Website

EPA Region 8 Water Ops Website:

Drinking Water System Operations in Wyoming and on Tribal Lands in EPA Region 8



<https://www.epa.gov/region8-waterops>

EPA United States Environmental Protection Agency

Environmental Topics | Laws & Regulations | Report a Violation | About EPA

Drinking Water System Operations in Wyoming and on Tribal Lands in EPA Region 8

This website is designed for use by owners, operators and administrative staff who work at public drinking water supply systems in **Wyoming** and on **Tribal lands** within the jurisdiction of **EPA Region 8** (CO, MT, ND, SD, UT and WY).

Drinking Water Programs

- Basic Information about Wyoming & Tribal Drinking Water Programs
- Drinking Water Watch - Public Access

Emergency Preparedness

- Basic Emergency Preparedness
- Total Coliform or E. coli Positives
- Boil Water Advisory Template
- Loss of Pressure
- Natural Disasters
- Water System Security

Reporting Results to EPA Region 8

- Reporting Public Water System Results
- Reporting Errors
- Public Notification
- Consumer Confidence Reports

Regulations and Compliance

- Regulations Guidance
- New and Revised Rules
- Revised Total Coliform Rule (TRCRL)
- Lead Service Line Inventories (LSLI)
- Links to Stay in Compliance

Monitoring and Sampling

- General Sampling Information
- Certified Laboratories
- Sample Collection Guide
- Harmful Algal Bloom Response
- Guide to Monitoring Requirements

Operations and Assistance

- Operational Improvements
- Sanitary Surveys
- Tech Tips
- Operator Training & Certification
- Funding Sources
- Training Opportunities

Search This Site
Looking for what?

Click to Search

Need Help?
[Contact List for EPA Region 8's Drinking Water Branch](#)

News

- Re Tribal Monthly Newsletters
- Wyoming and 60 Tribal Drinking Water Systems Newsletter 2023
- What's New in the R8 Drinking Water Program

Related Information

- Ground Water and Drinking Water
- Safe Drinking Water on Tribal Lands
- Drinking Water and Wastewater Resilience

The following links exit the site:

- W8 Water and Wastewater Agency Response Network (W8WARN) | 60
- WY Association of Rural Water Systems (W8ARWS) | 60
- W8 Drinking Water Construction Permitting

Drinking Water Watch Website

Drinking Water Watch - Public Access

Water system information: System type, population, service connections, monitoring results



[Drinking Water Branch \(epa.gov\)](https://www.epa.gov/dw)

The screenshot shows the 'Drinking Water Watch' website interface. The page title is 'Drinking Water Watch' and the version is 'Version 3.02'. The main content area is titled 'Public Water Supply Systems Search Parameters' and includes the following fields:

- Water System No.
- Water System Name
- Principal County Served
- Water System Type
- Primary Source Water Type

Below these are 'Sample Search Parameters' with a 'Sample Class' dropdown menu and a 'Sample Collection Date Range' section. The date range is set from 6/28/2021 to 6/28/2023. At the bottom, there are buttons for 'Search For Water Systems', 'Search For Samples', 'Review Consumer Confidence Data', and 'Clear'.

Region 8 LSL Inventory Webpage

LSL Inventories Webpage Part of the EPA Region 8 Water Ops Website



Lead Service Line Inventories in Wyoming and on Tribal Lands in EPA Region 8

New Requirement

Developing and maintaining a service line inventory is a new requirement of the Revised Lead and Copper Rule (LCRR). Lead service lines are a significant source of lead in drinking water. Establishing an inventory of service line materials and identifying the location of lead service lines is a key step in getting them replaced and protecting public health. **All Wyoming and Tribal Community Water Systems and Non-Transient Non-Community Water Systems are required to develop and submit to EPA Region 8 an initial inventory of service line materials by October 16, 2024.**

EPA Headquarters and EPA Region 8 have created guidance, forms, fact sheets, recorded webinars, tools and information to assist public water systems with complying with this requirement. In addition, funding, technical assistance and services to support lead service line inventories and lead service line replacement are available to help meet this requirement.

On this page:

- [Contacts](#)
- [Region 8 Template, Reporting Forms and Instructions](#)
- [Service Line Inventory Guidance](#)
- [Service Line Inventory Trainings](#)

Contacts

EPA Region 8 Safe Drinking Water Branch lead service line inventory contacts:

- Jill Minter, Lead Service Line (LSL) Coordinator, minter.jill@epa.gov, 303-312-6084
- Erica Wenzel, LCR and LSL Specialist, wenzel.eric@epa.gov, 303-312-6411

Related Information

- [Reporting Forms](#)
- [Revised Lead and Copper Rule](#)
- [Basic Information about Lead in Drinking Water](#)
- [Protect Your Tap: A Quick Check for Lead](#)
- [Lead Service Line Replacement](#)
- [Funding Sources for Drinking Water Systems in Wyoming and on Tribal Lands in EPA Region 8](#)
- [Funding for Lead Service Line Replacement](#)
- [Water Technical Assistance \(WaterTA\)](#)

Update coming soon!

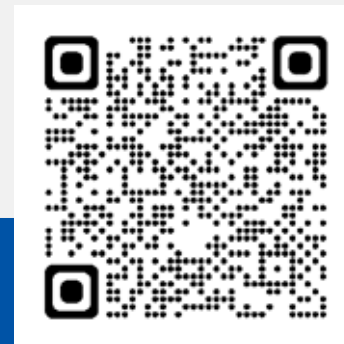
EPA Region 8 has also created [EPA Region 8 Lead Service Line Inventory General Information Form \(xlsx\)](#) (628.29 KB, 08/07/2023) for public water systems in Wyoming and on Tribal Lands in Region 8 who have completed their inventories using a format other than the EPA Region 8 Service Line Inventory Template.

EPA Region 8's -Wyoming Structures Built Date Map App (2023 Lead Service Line Prioritization Study)

- Map shows results of using structure-built dates as a proxy for evaluating the potential existence of LSLs.
- Older built dates corresponds to a higher likelihood of LSLs, while more modern built dates indicate a reduced probability.
- Assumptions/Constraints: EPA makes no claim regarding the accuracy or precision of the data shown herein.
- Questions or concerns regarding the Property Assessment Information Dataset obtained from the Wyoming Department of Revenue should be directed to the individual county Assessor's Department for consideration.
- This is not a predictive model; actual service line materials have not been verified.



<https://experience.arcgis.com/experience/82ee4c6fbe574633b293723dd6d1afce>



Key Reference: EPA Inventory Guidance

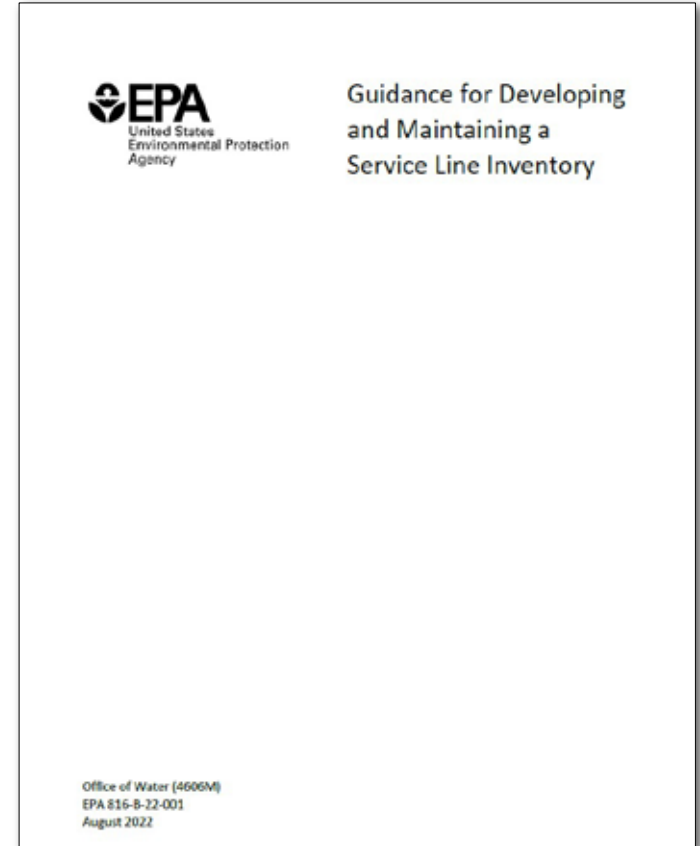
Who is it for?

- Drinking water systems of all sizes
- Primacy agencies

What does it contain?

- LCRR inventory-related requirements
- Recommendations/best practices
- Case studies and example materials
- Inventory template
- 164 pages

Guidance available at <https://www.epa.gov/ground-water-and-drinking-water/revised-lead-and-copper-rule> and at <https://www.epa.gov/region8-waterops/lead-service-line-inventories-wyoming-and-tribal-lands-epa-region-8>



Disclaimer: *This document is not a regulation itself, nor does it change or substitute for those provisions and regulations nor impose legally binding requirements on EPA, states, or the regulated community.*

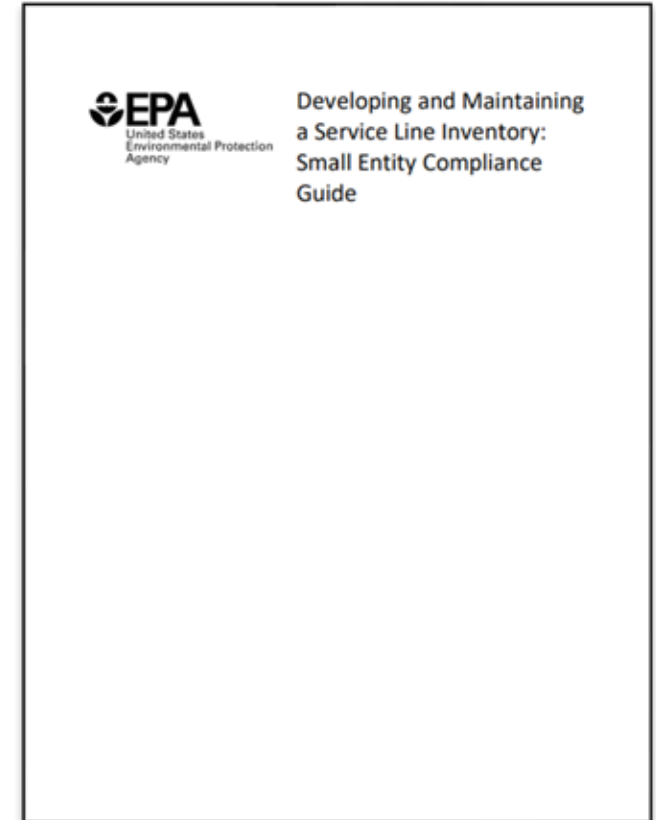
Key Reference: EPA Small Entity Guide

Who is it for ?

- Small CWSs and NTNCWSs
- For small towns, rural water districts, MHPs, HOAs, small private systems, schools with their own water supply

What does it contain?

- LCRR inventory-related requirements
- Additional service line configuration examples
- Summary of recommendations/best practices
- NTNCWS configurations
- Example of completed inventory template and forms for a hypothetical system
- ~50 pages



Available online: <https://www.epa.gov/ground-water-and-drinking-water/revise-lead-and-copper-rule> or at <https://www.epa.gov/region8-waterops/lead-service-line-inventories-wyoming-and-tribal-lands-epa-region-8>

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Key Reference: EPA Inventory Fact Sheet

Who is it for?

- Drinking water systems of all sizes
- Primacy agencies

What does it contain?

- LCRR inventory-related requirements
- Recommendations/best practices
- Key graphics from inventory guidance
- 8 pages total



Available online: <https://www.epa.gov/ground-water-and-drinking-water/reviced-lead-and-copper-rule> or at <https://www.epa.gov/region8-waterops/lead-service-line-inventories-wyoming-and-tribal-lands-epa-region-8>

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WY DEQ LSLI Tech Assistance

- has funded a new program offering free assistance to Wyoming water systems to plan and develop lead service line inventories.
- EPA Region 8 is aware of the program and is coordinating with the state.
- The OSLI and WYDEQ contract has been awarded to HDR. You may be contacted by HDR, Engineering Associates or the Water Guy about the program.
- You are welcome to accept their services if you choose.
- Heath Turbiville from HDR will present later today.
- For more information on the program contact: wyoinglsl@hdrinc.com



Thank you for attending today's training on the:

Lead Service Line Inventory

LCRR Regulatory Compliance Training
WARWS Casper 2024

Do you have any questions?

Erica Wenzel, Lead Service Line Specialist
Safe Drinking Water Branch, EPA Region 8
April 18, 2024