

Lead and Copper Rule Improvements (LCRI)

Instructions for Developing the Baseline Service Line & Connector Inventory

Guidance Document | October 2026

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1. Introduction

The purpose of the State Water Resources Control Board Division of Drinking Water (DDW) inventory template is to help water systems comply with the federal Lead and Copper Rule Improvements (LCRI) baseline inventory requirements for service lines and connectors. The new LCRI inventory template provides fillable forms that water systems can use to document their methods and organize their data. The DDW strongly recommends, but does not require, water systems to use the DDW template.

1.1. DDW Inventory Template Organization

LCRI Spreadsheet Template: The DDW LCRI inventory template is a spreadsheet workbook that contains two tabs or worksheets to complete. Instructions for the Inventory Report worksheet are covered in [Section 2](#) and instructions for the Detailed Inventory Worksheet are covered in [Section 3](#).

- If you have spreadsheet software issues or if you need a printable inventory template to fill out by hand, please contact the [LCR Unit](#).

Transition from LCRR to LCRI Template: The DDW inventory template has been updated in various ways to include additional information that was not required in the previous initial inventory required under the federal Lead and Copper Rule Revisions (LCRR). The updates to the template are described in [Appendix A](#).

- Note: You can request the LCR Unit to transfer your initial inventory data from the old LCRR template to the new LCRI template by submitting a [Transfer Request Form](#).

1.2. Alternative Inventory Formats

Any alternative inventory submissions must contain the required information in the Inventory Report section of this guide. Any alternative inventory spreadsheet for the Detailed Inventory should also have the same allowed entries for certain columns as the DDW template which are provided in [Appendix B](#).

1.3. DDW Contact and Additional Resources

For submissions and any other correspondence regarding the LCRI Inventory, please contact the Lead and Copper Rule (LCR) Unit at DDW-LCR@waterboards.ca.gov. Additional guidance, resources, and templates are available on the [DDW LCR Water System Resources](#) webpage.

2. Inventory Report Worksheet

This worksheet is for water systems to document the methods and resources used to develop their inventory and summarize data reported in the Detailed Inventory worksheet. The worksheet also includes checks for minimum requirements for submission and reminders of follow up actions to help systems comply with inventory requirements.

2.1. Submission and Water System Information

- 1. Submission Type:** Required. Select **LCRI Baseline** if you are submitting the first service line and connector inventory under the LCRI. Select **LCRI Update** for other inventory submissions.
- 2. Reporting Period:** Required. Select the time frame that represents the reported data. Select **Pre-LCRI (up to November 2027)** for baseline inventories developed and submitted by November 1, 2027. The reporting period **November 2027 - December 2028** refers to inventory and replacement activities conducted between November 1, 2027, and December 31, 2028, which is the first “program year” in the LCRI. The reporting period for every program year thereafter is on a calendar year basis from January 1 to December 31 starting in 2029. See [Section 4](#) for more information on inventory reporting periods.
- 3. Water System Number (PWSID):** Required. Enter the public water system identification number (PWSID) formatted as “CA” followed by a 7-digit number (e.g., “CA1234567”).
- 4. Water System Name:** Optional. Enter the name of the water system as it appears in SDWIS or the electronic Annual Report (eAR).
- 5. Mailing Address:** Optional. Enter the Address, City, State, and Zip Code.
- 6. Water System Type:** Optional. Select **Community** (CWS) or **Non-Transient Non-Community** (NTNC).
- 7. Population Served (number of people):** Optional. Enter a numerical value.
- 8. Number of Service Connections:** Required. Enter the number of service connections the water system reported in the most recent eAR. This number is compared with the number of service lines reported in the Detailed Inventory worksheet as a general check that all service lines have been inventoried.
- 9. Number of Service Lines:** Auto-populated. The number of service lines auto-populates from the Detailed Inventory worksheet. If the number of service lines is less than the number of service connections in Question 8, provide a brief explanation in Question 9b.

- **9a. Service Line Ownership Type:** Required. Select the type of ownership:
 - The entire service line is owned by the water system
 - The entire service line is owned by the customer
 - Ownership is split; The system owns a portion, and the customer owns a portion
 - Other (describe below)

If selecting **Other (describe below)**, provide a brief description in Question 9b. The inventory must include each service line (and identified connector) that is connected to the public water distribution system regardless of ownership status.

- **9b. Other Service Line Information:** Enter additional information noted above if required. Provide a brief explanation if there are fewer service lines than service connections.

10. System Administrative Contact and 11. Inventory Preparer Contact: The full name, phone number, and email address of the current water system administrator (and inventory preparer if different) is required. If the system administrative contact is different from what is reported in SDWIS or the eAR, notify the [LCR Unit](#) and your DDW or county regulating agency so that this information can be updated in SDWIS.

2.2. Inventory Methodology

12. Describe Historical Records Reviewed: Required. If no relevant records describing system-owned or customer-owned service line materials are available, please enter “NA”. Historical records include:

- **12a. Construction Records and Plumbing Codes:** Required. Describe all permits and existing construction records or other documentation which indicate the service line materials used to connect structures to the distribution system
- **12b. Water System Records:** Required. Describe 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
- **12c. Distribution System Records:** Required. Describe 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
- **12d. Other records:** Optional. Describe any other records or information used to identify service line and connector materials that do not fit the categories above.

13. Data Collection During Normal Operations: Optional. For each normal operation activity listed, select **Yes** or **No** to indicate whether service line and connector data will

be collected during that activity. Describe any other activities during which inventory data will be collected if applicable.

14. Service Line and Connector Investigation Methods: Optional. Some investigation methods listed will auto-populate **Yes** or **No** if used based on the Detailed Inventory worksheet.

- **Interviews (water system staff, operators):** Optional. Select **Yes** or **No** to indicate if the system conducted interviews with operators or other staff for service line and connector information. Note that interviews cannot be used as the sole source of information for the basis of material classification. Field verification will be needed to validate the interviews.
- **Other or Emerging Methods (describe):** Optional. Describe any other methods that were used to identify service line and connector materials.

Note that case-by-case approved methods such as statistical analysis, interpolation, predictive models, water quality sampling, and other or emerging methods must be described in an inventory workplan and submitted to DDW for review and approval before being used.

2.3. Public Accessibility Documentation

The publicly accessible inventory must include the following information:

- Records Review (see [Section 2.2 Q12](#)) – Description of records reviewed, permits, construction records, water system records, distribution system records
- Associated Street Address (or Other Locational Identifier if a street address is not available) for each connector and service line
- Total number of Lead, Galvanized Requiring Replacement, Lead Status Unknown, and Non-lead service lines reported separately
- Total number of Lead and Unknown connectors reported separately
- If applicable:
 - Total number of fully replaced Lead service lines and fully replaced Galvanized Requiring Replacement service lines
 - Total number of partially replaced Lead service lines and partially replaced Galvanized Requiring Replacement service lines

15. How is the system making the inventory publicly accessible?: Required. Select **Yes** or **No** to indicate if the public accessibility method will be used.

- **Online Methods:** All water systems serving more than 50,000 people must provide the inventory online. If posting the inventory online, providing the link to the inventory in the *Other (describe)* field is recommended.
- **Written Non-lead Statement:** Beginning November 1, 2027, only water systems with no Lead, Galvanized Requiring Replacement, or Lead Status Unknown service lines AND no Lead or Unknown connectors may post a written non-lead statement instead of the inventory to meet the public accessibility requirement. The statement must include a general description of all applicable sources and methods that were used to identify service line and connector materials in the inventory.

2.4. Other Inventory Information

16. Provide any additional information about the inventory: Optional. This is an area to provide additional narrative information about the inventory.

2.5. Detailed Inventory Summary

The information in this section of the Inventory Report worksheet auto-populates from the data entered in the Detailed Inventory worksheet and cannot be edited directly.

17. Materials Reported for Service Lines

- **17a. Summary of Entire Service Lines:** Auto-populated. A summary of material classifications reported in *Column AB (Entire Service Line Classification)* of the Detailed Inventory worksheet (see [Section 3.6 Column AB](#)).
- **17b. Summary by Service Line Portion / Ownership:** Auto-populated. A summary of specific service line material classifications reported in *Column I (Upstream/System portion)* and *Column T (Downstream/Customer portion)* of the Detailed Inventory Worksheet (see [Section 3.5 Columns I and T](#)).

18. Materials Reported for Connectors: Auto-populated. A summary of connector material classifications reported in *Column E* and *Column Q* of the Detailed Inventory worksheet (see [Section 3.4 Columns E and Q](#)).

- Note: The Detailed Inventory worksheet allows two connector entries to be reported per service line. Please contact the [LCR Unit](#) if there is a service line in the distribution system that has more than two connectors present.

2.6. Inventory Certification for Final Submission

19. Minimum Submission Completeness Check: Auto-populated. This section checks the inventory template for completion of the minimum required information.

DDW will review the inventory submission to help identify where additional information or revisions may be needed if all checks are not met.

- **19a. All required fields answered in this sheet:** Check that all questions marked with an asterisk and all input fields with a thick outer border have been filled out in the Inventory Report worksheet.
- **19b. All service lines accounted for:** Check that the correct number of service connections have been reported in Question 8. Generally, the number of *Service Lines* should be about equal to or greater than the number of *Service Connections* reported. If there are fewer service lines than service connections, an explanation is required in Question 9b. If the total number of service lines is incorrect, changes must be made to the Detailed Inventory worksheet.
- **19c. All material classifications valid:** Check that *Column AB (Entire Service Line Material Classification)* in the Detailed Inventory contains no errors or missing information.
- **19d. All addresses/other locational IDs entered:** Check that *Column B (Street Address)* and/or *Column C (Other Locational Identifier)* has been entered for each service line and connector reported.

20. Inventory Maintenance and Follow Up Actions: Required. The water system must acknowledge certain requirements and actions related to the inventory.

21. Submission Certification: Required. The water system must certify that the information in the submission has been reviewed and the information being submitted is true and accurate.

3. Detailed Inventory Worksheet

This worksheet is for water systems to document information for each service line including location, connectors, bases for identifying pipe materials, and supporting information. All service lines to each building connected to the distribution system, including those classified as non-lead, must be included in the inventory.

- **PWSID (Cell B1):** This cell auto-fills to reference the public water system number entered in Question 3 in the Inventory Report worksheet and cannot be edited directly.
- **Reporting Period (Cell C1):** This cell auto-fills to reference the reporting period entered in Question 2 in the Inventory Report worksheet and cannot be edited directly.
- **Service Line # (Column A):** This column is pre-filled to number each service line reported and cannot be edited directly. Contact the [LCR Unit](#) if you need an inventory template with more service line rows.

3.1. Unique Locational Identifier Information

All service lines and connectors must have a unique locational identifier. The entire service line material will not correctly classify in *Column AB* if this information is missing.

Street Address (Column B): Required for all service lines and connectors. For service lines or connectors at the same street address, please add a description in *Other Locational Identifier (Column C)* so that each service line or connector has a unique location. If a street address is not available, a different location descriptor in *Column C* is required.

Other Locational Identifier (Column C): Required if street address is not available. Examples of a non-address locational identifier include building name or other description, unit number, space number, block, intersection, GPS coordinates, etc.

3.2. System ID

System Service Line Identifier (Column D): Optional. Water systems may use this column to enter their own information for tracking service line or connectors such as customer identification numbers, water meter numbers, etc.

3.3. Service Line Portions (Up/Sys and Down/Cus)

Split ownership/multi-material service lines: The template is designed to track service line and connector information for service lines that may be split by ownership between the water system and customer or split into an upstream and downstream portion by a meter, shutoff valve, or other valve:

- **Up/Sys** (Upstream/System): Typically, the system-owned portion is on the upstream side closer to the water main or source.
- **Down/Cus** (Downstream/Customer): Typically, the customer-owned portion is on the downstream side closer to the home or building inlet.

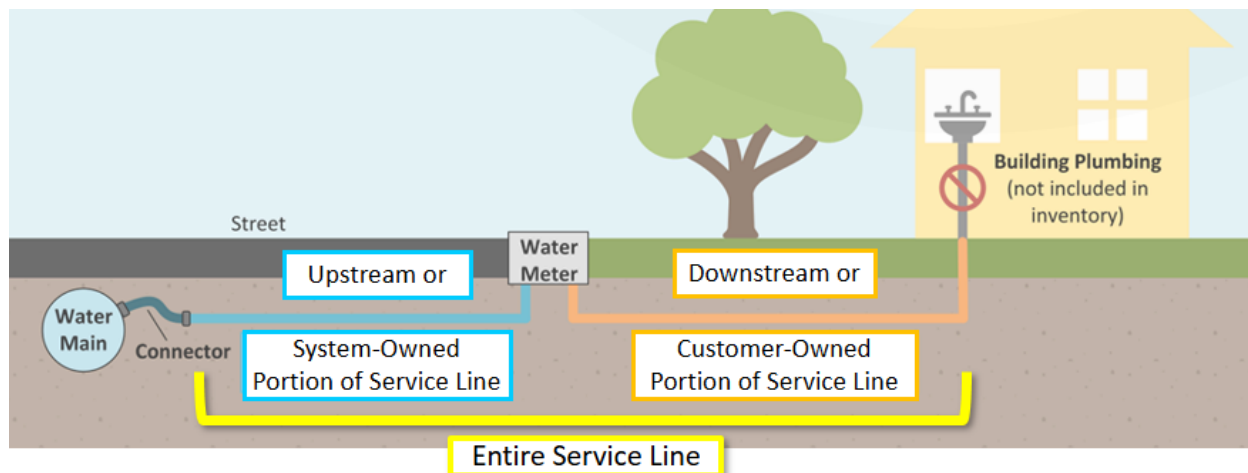


Figure 1. Example of Service Line Ownership Distinctions.

See [Appendix C](#) on how to classify the entire service line material when it is split between an upstream and a downstream portion or a system-owned and a customer-owned portion.

Single ownership/multi-material service lines: If your system does not have split ownership and consists of multiple materials from source to building, enter the material closest to the source on the upstream/system-owned side and enter the material closest to the building inlet on the downstream/customer-owned side of the template.

Single ownership/single-material service lines: If your system does not have split ownership and consists of a single material from source to building, repeat (copy/paste) all information from the upstream/system-owned side on the downstream/customer-owned side of the template. Both sides must have a connector and service line material entered for the entire service line to correctly classify in *Column AB*.

3.4. Connector Information

Connector information can be entered on the upstream/system-owned portion (*Columns E, F, G*) and the downstream/customer-owned portion (*Columns Q, R, S*). If more than two connectors are present at a service line location, please add a note in the *Connector Notes* (*Columns G and S*) and notify the [LCR Unit](#).

Connector Material Classification (*Columns E and Q*): Required for both portions of the service line. The entire service line material will not correctly classify in *Column AB* if this information is missing. Dropdown options include:

- **No connector present**
- **Lead**
- **Galvanized**
- **Non-Lead - Copper, Non-Lead - Plastic, Non-Lead - Other**
- **Unknown**

Note: Water systems are encouraged but not required to specify the material of a non-lead connector. Water systems that choose not to specify the material of the non-lead connector may select **Non-Lead - Other**. Multiple materials or materials not listed in the dropdown options can be entered in the *Connector Notes (Columns G and S)*.

Connector Basis of Material Classification (Columns F and R): Required unless the *Connector Material* is **Unknown**. Dropdown options include:

- **Historical records**
- **Installation date is after state or local lead ban**
- **Statistical analysis**
- **Visual inspection**
- **Mechanical excavation**
- **Replaced - previously Lead**
- **Removed**
- **Other (Explain in Notes)**

Connector Notes (Columns G and S): Required if the *Connector Basis of Material Classification* is **Other (Explain in Notes)**. Provide any additional information as needed, such as materials or bases not listed as a dropdown option.

- **Up/Sys Connector Notes (Column G):** If using a template that the LCR Unit has pre-populated with LCRR initial inventory data, this column may include data from the former LCRR template that indicated if a lead connector was present at the service line with a response of either **Yes, No, Was Present in the Past, No**, or **Don't know**.

3.5. Service Line Information

Service line information can be entered on the upstream/system-owned portion (*Columns H through P*) and the downstream/customer-owned portion (*Columns T through AA*).

Upstream/System-Owned Portion Ever Previously Lead (Column H): Required unless the upstream/system-owned service line portion is currently **Lead**. This column is for determining whether the material classification for a downstream/customer-owned galvanized service line would be considered **Galvanized** or **Galvanized Requiring**

Replacement (see [Section 3.5 Column T](#) and [Appendix C](#)). The entire service line material will not correctly classify in *Column AB* if this information is missing. Dropdown options include:

- **Yes**
- **No**
- **Don't know**

Service Line Material Classification (*Columns I* and *T*): Required. Dropdown options include:

- **Lead**
- **Galvanized**
- **Galvanized Requiring Replacement** ("GRR", only selectable on the downstream/customer-owned portion)
- **Non-Lead - Copper, Non-Lead - Plastic, Non-Lead - Other**
- **Unknown**

Note: Water systems are encouraged but not required to specify the material of a non-lead service line. Water systems that choose not to specify the material of the non-lead service line may select **Non-Lead - Other**. Multiple materials or materials not listed in the dropdown options can be entered in the *Service Line Notes (Columns P* and *AA)*.

Galvanized vs. Galvanized Requiring Replacement (*Column T*): In *Column T*, **Galvanized** or **Galvanized Requiring Replacement** will appear red if incorrectly categorized. Ensure *Column H* is correct before changing *Column T*.

- If it is unknown or confirmed that the material of the upstream/system-owned service line portion was previously lead (i.e., *Column H* is **Don't know** or **Yes**), and the downstream/customer-owned portion is galvanized, enter the service line material in *Column T* as **Galvanized Requiring Replacement** (GRR). The downstream/customer-owned side would be considered GRR because galvanized service lines that are or ever were downstream from a lead service line can adsorb lead and contribute to lead in drinking water.
- If the material of the upstream/system-owned service line portion was never previously lead (i.e., *Column H* is **No**), and the downstream/customer-owned service line is galvanized, enter the service line material in *Column T* as **Galvanized**.

Service Line Basis of Material Classification (*Columns J* and *U*): Required unless the service line material is **Unknown**. Dropdown options include:

- **Historical records** (see [Section 2.2 Q12](#))

- **Installation date is after state or local lead ban**
- **Service line diameter 4 inches or greater**
- **Service line repair or replacement record**
- **Statistical analysis or predictive models**
- **Interpolation**
- **Field inspection**
- **Other (Explain in Notes)**
- **Replaced - previously Non-Lead/Galvanized**
- **Replaced - previously Lead**
- **Replaced - previously Galvanized Requiring Replacement** (only selectable on the downstream/customer-owned portion)

See [Section 2.2 Inventory Workplan](#) for approved identification methods, and methods approved on a case-by-case basis. If the method used is not listed, select **Other (Explain in Notes)** and describe the method(s) in the *Service Line Notes (Columns P and AA)*.

Note: if multiple bases of material classification apply, choose the highest confidence option. This will be important later for determining the non-lead validation pool.

- If the service line was inspected, choose **Field inspection**
- If a non-inspected service line was installed after the lead ban, choose **Installation date is after state or local lead ban**

Service Line Installation Date (*Columns K and V*): Required if the *Service Line Basis of Material Classification* is **Installation date is after state or local lead ban**. If a water system uses a local ordinance that banned the use of lead other than the California lead ban effective January 1, 1986, provide the effective date of the local lead ban in the *Service Line Notes (Columns P and AA)* or Inventory Report worksheet.

Service Line Diameter (inches) (*Columns L and W*): Required if the *Service Line Basis of Material Classification* is **Service line diameter 4 inches or greater**. Enter the service line diameter size in inches as a decimal number and do not include text (e.g., “half-inch”, “unknown”) or other special characters (e.g., double quote ” to indicate inches). If the service line diameter is less than 4 inches, a different basis of material classification must be used.

Service Line Field Verification Method (*Columns M and X*): Required if the *Service Line Basis of Material Classification* is **Field inspection**. DDW encourages water systems to field verify service line materials where possible. Dropdown options for field verification method include:

- **Visual inspection at meter pit**
- **Visual inspection - other (not at meter pit)**
- **Customer self-identification**

- **Mechanical excavation at one location**
- **Mechanical excavation at multiple locations**
- **Other (Explain in Notes)**

If the verification method is **Other (Explain in Notes)**, explain the method used in the *Service Line Notes* (*Columns P* and *AA*).

Service Line Field Verification Date (*Columns N* and *Y*): Required if the *Service Line Basis of Material Classification* is **Field inspection**. Enter the date of when the field verification (service line field inspection) was conducted.

Service Line Replacement Date (*Columns O* and *Z*): Required if the *Service Line Basis of Material Classification* is any of the **Replaced** - options. Enter the date of when the service line was replaced.

Service Line Notes (*Columns P* and *AA*): Required if *Service Line Basis of Material Classification* or *Verification Method* is **Other (Explain in Notes)**. Provide any additional information as needed such as materials, bases, verification methods not listed as dropdown options; if a service line portion is removed, empty, or inaccessible; etc.

3.6. Entire Service Line

Entire Service Line Material Classification (*Column AB*): Required and auto-populated. Where service lines are split between a system-owned or customer-owned portion or split between an upstream and downstream portion, each entire service line must be counted only once and classified as:

- **Lead**
- **Galvanized Requiring Replacement** (GRR)
- **Lead Status Unknown**
- **Non-lead**

For more information on how split-portion service lines are given a single material classification, see [Appendix C](#).

Required Information for Column AB: The Detailed Inventory worksheet will auto-populate the entire service line material classification based on:

- Unique Location Identifier (*Columns B* and/or *C*)
- Connector Materials (*Columns E* and *Q*)
- Was Upstream/System-Owned Portion Ever Previously Lead? (*Column H*)
- Service Line Materials (*Columns I* and *T*)

Error Message in Column AB: Auto-populated. If using this worksheet for inventory tracking, a red error message will appear in *Column AB* if the above columns are not

correctly filled or left blank. Reselecting entries using the dropdown options should fix most errors. Possible errors and solutions:

- **Error: Invalid Column H, I, or T. Check spelling & valid options (see dropdown)** – Reselect the entry in the Ever Previously Lead? column and service line material columns using the dropdown menu.
- **Error: Missing Response in Column B or C** – Enter a street address if available or other locational identifier for the service line.
- **Error: Missing Response in Column E or Q** – Ensure a connector material is entered on both portions of the service line.
- **Error: Column T considered Galvanized** or **Error: Column T considered GRR** – Ensure the Ever Previously Lead? column is correct before changing the downstream/customer service line material in *Column T* (see [Section 3.5. Column H](#)).
- **Error: Missing Column H** – Answer whether the upstream/system service line portion was ever previously lead.
- **Error: Missing Column H and Column I** – Answer the Ever Previously Lead? column and enter a service line material on the upstream/system portion of the line.
- **Error: Missing Column H and Column T** – Answer the Ever Previously Lead? column and enter a service line material on the downstream/customer portion of the line.
- **Error: Missing Column I** – Enter a service line material on the upstream/system portion of the line.
- **Error: Missing Column I and Column T** – Enter a service line material for both portions of the service line.
- **Error: Missing Column T** – Enter a service line material on the downstream/customer portion of the line.

4. Submission and Approval

Inventory Submission	Reporting Period	Inventory Due Date
LCRI Baseline	Pre-LCRI (before November 2027)	November 1, 2027
LCRI Update	November 2027 - December 2028	January 30, 2029
LCRI Updates Thereafter	January - December calendar year	January 30 following the end of the reporting period

4.1. Submission

Email to DDW LCR Unit (preferred): Please submit completed LCRI inventories to the [LCR Unit](#) via email for review. This helps ensure the inventory is complete and approved before it is uploaded to the Lead Service Line Inventory (LSLI) Portal.

4.2. Review and Approval

After an inventory has been submitted, DDW will review the inventory and contact the water system via email to:

- Provide comments or request revisions to the inventory if needed
- Notify the system when the inventory is approved
- Notify the system of any public notifications required (see [Section 4.3](#) below)

Note: DDW will post information from approved inventories (including the street address or locational identifier) on all service lines and connectors online.

4.3. Public Notifications

Known or Potential Lead Service Line Material: Pursuant to 40 CFR 141.85(e), water systems must provide public notification to customers served by **Lead**, **Galvanized Requiring Replacement**, and/or **Lead Status Unknown** service lines within 30 days after the inventory deadline or within 30 days of DDW's approval of the completed inventory.

Failure to Meet the Inventory Deadline: Pursuant to 40 CFR 141.203 and 40 CFR Appendix A to Subpart Q – I.C.1, water systems that fail to develop a complete inventory by the deadline must provide Tier 2 public notice to its customers within 30 days of the deadline. Systems that fail to submit an inventory by the deadline must provide Tier 3 public notice to its customers or include the Tier 3 notice in their Consumer Confidence Report for that year.

Appendix A. Key Changes from LCRR to LCRI Inventory Template

- The LCRI has two worksheets. The PWS Information, Inventory Methods, Inventory Summary, and Public Accessibility Documentation worksheets from the LCRR template are now subsections within the Inventory Report worksheet in the LCRI template.

Inventory Report

- The *Other Inventory Information* subsection was added for water systems to enter additional narrative information about the inventory if needed.
- The *Inventory Certification for Final Submission* subsection was added for water systems to check for minimum required inventory information, acknowledge additional inventory-related requirements, and certify the inventory submission.

Detailed Inventory

General Changes

- Order of columns has slightly changed.
- The *Lead Connector Present?* column from the LCRR template was removed. After the LSLI Portal is updated for the LCRI, any data in that column will appear in the *Up/Sys Connector Notes* column on the LSLI Portal.
- The *Was the Service Line Material Field Verified?* column from the LCRR template was removed. Water systems should indicate if a service line was field verified by entering the verification method and date.
- Dropdown options indicating use of water quality sampling to identify service line materials were removed. These options referred to specific EPA sampling protocols which must be approved by DDW through a pilot study and workplan. Systems did not use these methods and misunderstood them as tap sampling which is not a valid method for identifying service lines.
- Dropdown options indicating use of CCTV inspection at curb box to identify service lines materials were not used and therefore removed.

New – Connector Information

- There is a new *Connector Material Classification* column on each of the Upstream/System and Downstream/Customer portions of the service line. A response is required for these columns for every service line in the inventory.

- There is a new *Connector Basis of Material Classification* column on each of the Upstream/System and Downstream/Customer portions of the service line. A response in this column is only required if a connector is present and the material is not Unknown.
- There is a new *Connector Notes* column on each of the Upstream/System and Downstream/Customer portions of the service line.
 - Any responses to the *Lead Connector Present?* column in the LSLI Portal for the LCRR inventory will be moved to the new *Up/Sys Connector Notes* column.

New – Service Line Replacement Information

- The *Service Line Basis of Material Classification* columns on the Upstream/System and Downstream/Customer portions of the service line contain new dropdown options to use when service lines are replaced.
- There is a new *Service Line Replacement Date* column on each of the Upstream/System and Downstream/Customer portions of the service line. A replacement date should be entered if the corresponding portion of the service line has been replaced.

Appendix B. Detailed Inventory Dropdown Options

Connector Material	Connector Basis of Material Classification	Upstream/System Service Line Material	Downstream/Customer Service Line Material	Was Upstream/System Side Service Line Ever Previously Lead?	Upstream/System Service Line Basis of Material Classification	Downstream/Customer Service Line Basis of Material Classification	Service Line Field Verification Method
No connector present	Historical records	Lead	Lead	Yes	Historical records	Historical records	Visual inspection at meter pit
Lead	Installation date is after state or local lead ban	Galvanized	Galvanized	No	Installation date is after state or local lead ban	Installation date is after state or local lead ban	Visual inspection - other (not at meter pit)
Galvanized	Statistical analysis	Non-Lead - Copper	Galvanized Requiring Replacement	Don't know	Service line diameter 4 inches or greater	Service line diameter 4 inches or greater	Customer self-identification
Non-Lead - Copper	Visual inspection	Non-Lead - Plastic	Non-Lead - Copper		Service line repair or replacement record	Service line repair or replacement record	Mechanical excavation at one location
Non-Lead - Plastic	Mechanical excavation	Non-Lead - Other	Non-Lead - Plastic		Statistical analysis or predictive models	Statistical analysis or predictive models	Mechanical excavation at multiple locations
Non-Lead - Other	Replaced or removed - previously Lead	Unknown	Non-Lead - Other		Interpolation	Interpolation	Other (Explain in Notes)
Unknown	Replaced or removed - previously Non-Lead		Unknown		Field inspection	Field inspection	
	Other (Explain in Notes)				Other (Explain in Notes)	Other (Explain in Notes)	
					Replaced - previously Non-Lead/Galvanized	Replaced - previously Non-Lead/Galvanized	
					Replaced - previously Lead	Replaced - previously Lead	
						Replaced - previously Galvanized Requiring Replacement	

Appendix C. Entire Service Line Classification

Upstream / System-Owned Portion (Columns H and I)	Downstream / Customer-Owned Portion (Column T)	Entire Service Line Classification (Column AB)
Lead	Lead	Lead
Lead	Galvanized (Requiring Replacement)	Lead
Lead	Non-lead	Lead
Lead	Lead Status Unknown	Lead
Non-lead	Lead	Lead
Non-lead (and unknown or confirmed as previously Lead)	Galvanized (Requiring Replacement)	Galvanized Requiring Replacement
Non-lead (and never previously lead)	Galvanized	Non-lead
Non-lead	Non-lead other than Galvanized	Non-lead
Non-lead	Lead Status Unknown	Lead Status Unknown
Lead Status Unknown	Lead	Lead
Lead Status Unknown	Galvanized (Requiring Replacement)	Galvanized Requiring Replacement
Lead Status Unknown	Non-lead	Lead Status Unknown
Lead Status Unknown	Lead Status Unknown	Lead Status Unknown

Source: Exhibit 2-3 of Guidance for Developing and Maintaining a Service Line Inventory (USEPA, 2022).