

# Community Waterworks Service Line Inventory - Direct Entry into Swift Submittals Portal Virginia Department of Health, Office of Drinking Water

## **Applicability**

1. These instructions apply to the addition of individual service lines directly into the GEC Swift Submittals portal for creating and submitting a Service Line Inventory.
2. These instructions are intended for use by Community waterworks and Non-transient Noncommunity waterworks with 6 or more service lines.
3. NTNC waterworks with 5 or fewer service connections where the waterworks owns all of the service connections should refer to Small NTNC Service Line Inventory – Direct Entry into Swift Submittals Portal document for detailed instructions for using the GEC Swift Submittals portal.

All Community waterworks, including wholesale waterworks must complete and submit a service line inventory. All inventories must include any wholesale connections.

## **Getting Started**

1. Log into your GEC account at <https://portal.gecsws.com> to open the Swift Submittals homepage.
2. Click on “Update Service Lines” (in the left sidebar), select the waterworks you are representing, and then click on “Add New Service Line” (at the lower right corner).

## **Lead Service Line Inventory Updates – Detailed Instructions for New Entries**

Each time you click on “Add New Service Line,” and come to this page, you will be entering detailed information for a single service line connecting a water main to a customer's plumbing. This will need to be done separately for each service line connected to the waterworks, regardless of use (e.g., potable, fire suppression, irrigation, industrial water, wholesale connection, etc.) and regardless of status (active, inactive, abandoned, etc.). Remember: if you have a large number of lines, you can use a spreadsheet template to compile all of the required information and then upload it as a batch.

The Add New Service Line data entry process is organized into six sections:

- **Location Information**
- **System-Owned Portion**
- **Customer-Owned Portion**
- **Other Potential Sources of Lead**
- **Additional Information to Assign Tap Monitoring Tiering**
- **Lead Service Line Replacement (LSLR)**

ODW requires waterworks to report responses for fields marked with an asterisk (\*). ODW recommends that waterworks report responses for all fields to the extent data is available. As explained in more detail below, select a response from either a dropdown menu or directly enter the information.

## **Location Information**

- **Unique Service Line ID\***: Assign a unique ID to each entry that represents one service line. Number each entry, starting with the number 1 and ending with the number that equals the total number of service lines included in your inventory.

- **Street Address\*** and **City\***: ODW is requiring that waterworks provide addresses as their location identifier and include this information for all service lines. The map feature may identify the precise location based on the information you enter, but if it is not able to do so, this will not interfere with the completeness or accuracy of the entry.
- **Sensitive Population\***: Indicate if the location serves a sensitive population using the dropdown menu. Children are considered sensitive to lead. The following are options to identify service lines that are more likely to serve multiple children: School; Day Care; Multifamily Home; Other.
- **Disadvantaged Neighborhood\***: Indicate if the location meets the state affordability guidelines or other measures using the dropdown menu.

The **Street Address** can include the full address, if desired. For example, 123 East Main Street, Anytown, VA, 23456.

**How can I check if areas qualify as disadvantaged?**

Satisfy one of these criteria to be considered disadvantaged:

1. [Weighted monthly user rates](#) exceed target rate(s) where the target user rate equals 1 percent of the Median Household Income (MHI)

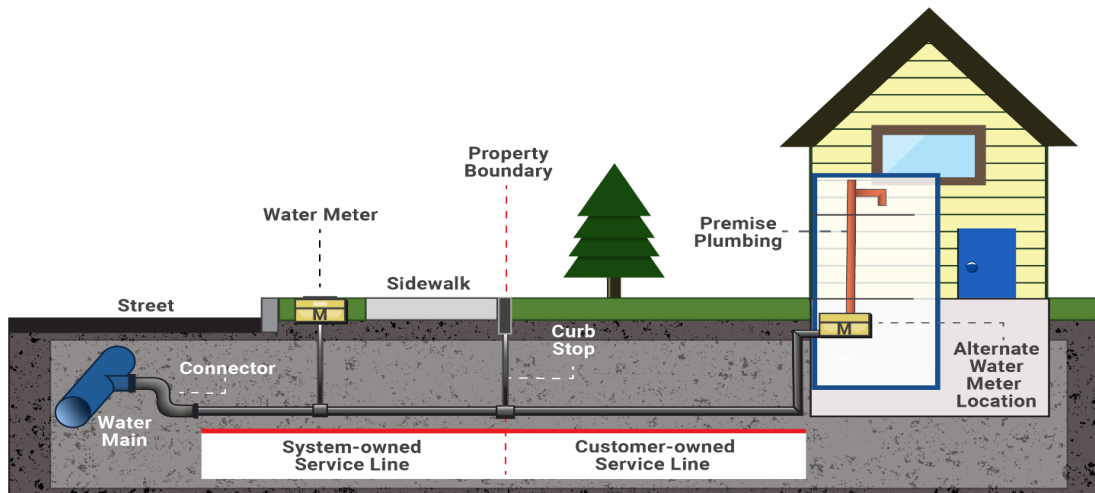
$$\text{Monthly User Rate} > \text{Target User Rate}$$

$$\text{Target User Rate} = \frac{\text{MHI}}{12 \text{ months}} 0.01 = \$\_\_\_\_\_\_/\text{month}$$

2. Meet the criteria to be designated as serving an Environmental Justice Community as identified by the [Climate and Economic Justice Screening Tool \(CEJST\)](#). Highlighted areas are considered disadvantaged.

**System-Owned Portion**

In many cases, service line ownership is split, meaning that the waterworks owns a portion, and the customer owns a portion of the service line. Exhibit 1 below is a diagram of a possible division in service line ownership between the waterworks and customer.



Complete this section with information about the portion of the service line owned by the waterworks.

- **System-Owned Portion Service Line Material Classification\***: Select the material subclassifications

for the system-owned portion of the service line. If "Non-lead - Other" is selected, provide additional information in the "Notes (System Side)" box at the bottom of this section.

- **If Non-Lead, Was Material Ever Previously Lead?\*** Select "Yes", "No" or "Don't know." This information is important for determining if a downstream/ customer-owned galvanized service line will ultimately require replacement (i.e., classified as galvanized requiring replacement).
- **Service Line Installation Date:** If known, enter the date in the format of MM/YYYY when the service line was installed or replaced.
- **Service Line Size:** If known, enter the diameter in inches. This information may be useful as a screening method to help identify if a service line is non-lead. Most lead service lines are 2 inches or less in diameter.
- **Basis of Material Classification\*:** Select the method used for materials classification. If the method you used is not one of the options, select "Other" and describe the basis for material classification in the "Notes (System Side)" box at the bottom of this section.
- **Was the Service Line Material Field Verified?\*** Select "Yes" or "No" from the dropdown menu. Not all service lines must be field verified. Depending on the identification method, a certain subset of lines must be verified. See the *Lead Ban Guidance and Chronology* on ODW's [LCRR Guidance web page](#).
- **Describe the Field Verification Method:** If service line was field verified, select the method used for field verification. If the method used is not one of the options, select "Other" and describe the field verification in the "Notes (System Side)" box at the bottom of this section..
- **Enter the Date of the Field Verification:** If service line was field verified, enter the date.
- **Notes:** Use this box to provide any additional information such as additional details about the basis of material classification, additional information on the field verification method, or documentation of previous materials classification.

The **Notes** field is limited to only letters, numbers, apostrophes, hyphens, and periods.

Service Line Material Field Verified – This means the service line material was determined by observing the service line by field methods. Typically, field verification is used when records are incomplete or are unreliable. This observation need not be specifically implemented as part of the service line inventory effort and can include observations during meter replacements, waterline replacements and other field activities. Waterworks owners need to evaluate the reliability of field verifications made in the past, since the information can change. In addition, some field verification is also required to confirm service line material assignments made based on date of construction.

### Customer-Owned Portion

Complete this section with information about the portion of the service line owned by the customer. The fields are identical to those in the section above for the System-Owned Portion, and the instructions are the same.

**Addressing customers with complicated service lines: What should a waterworks do when the service line downstream of a meter is complicated; for example, where the waterworks serves multiple buildings or a campus?**

- The LCRR requires systems to include all service lines [40 CFR § 141.84(a)(2)], regardless of the actual or intended use.
- Work with the owner(s) of the downstream service line(s) to identify the customer service line material(s).
- Document the interactions and findings; you will be able to submit additional materials through a different section of the Swift Submittals portal.
- At a minimum, report the customer service line material immediately downstream of the meter.
- If you plan to submit additional materials related to the customer-owned portion of a service line, describe these materials in the “Notes (Customer Side)” box at the bottom of this section.

**Other Potential Sources of Lead**

- **Is there a Lead Connector?\*** Select “Yes,” “No,” or “Don’t Know.” For example, if a lead gooseneck or pigtail is used to connect the water main to the service line, then enter, “Yes.”
- **Is there Lead Solder in the Service Line?\*** Select “Yes,” “No,” or “Don’t Know.”
- **List Other Fittings and Equipment Connected to the Service Line that Contain Lead\*:** List connectors and any other lead-containing fittings and equipment that are connected to the service line such as backflow preventers and/or meters.

**List Other Fittings...** is limited to only letters, numbers, apostrophes, hyphens, and periods.

**Why ask about Lead Connectors, Lead Solder, and other Lead Fittings?**

- These items are included to maintain consistency with the EPA Service Line Inventory Template.
- This information, if available, should be tracked. It is useful for identifying sample locations for your Lead and Copper Rule tap monitoring plan and prioritizing service lines for replacement.
- Lead Solder in service lines could be a criterion for replacement.
- Lead Fittings in service lines could be a criterion for replacement.
- Lead Connectors and Lead Solder are criteria assigning Tier Level for future sampling (see “Additional Information to Assign Tap Monitoring Tiering,” below). Lead connectors in a service line are a criterion for Tier 3 sample sites, while Lead Solder in Building Plumbing is a criterion for Tier 4 sample sites.
- Point-of-Entry or Point-of-Use Treatment may disqualify a sample site and should be tracked if known.

**Additional Information to Assign Tap Monitoring Tiering**

These fields are used to document additional information that can be helpful in assigning a tap sample tiering classification as follows:

- **Building Type Connected to the Service Line:** Use the dropdown menu to indicate if the building type connected to the service line is single family, multiple family residence, building or other. For example, a service line serving a non-residential building would be classified as a “building”. A service line serving only an irrigation system would be classified as “other”.
- **Point-of-Entry or Point-of-Use Treatment Present?** Use the dropdown menu to indicate if the home or building connected to the service line has a point-of-entry or point-of-use treatment device. For example, a whole house softener is a point-of-entry treatment device. A lead filter installed on a kitchen sink is a point-of-use treatment device.

- **Does the Interior Building Plumbing Contain Copper Pipes with Lead Solder Installed Before Your State's Lead Ban (April 1, 1986)?** Use the dropdown menu to indicate if the premise plumbing contains lead solder installed before the Lead Ban. Refer to the *Lead Ban Guidance and Chronology* on <https://www.vdh.virginia.gov/drinking-water/lcrr-guidance/>
- **Current LCR Sampling Site?** Use the dropdown menu to indicate if this location is a current sampling site for lead and copper tap sampling under the Lead and Copper Rule.

### Lead Service Line Replacement (LSLR)

In the future, if a lead or Galvanized Requiring Replacement line is replaced, you will come back to this entry to provide the replacement date. Any line replacement completed before the creation of this inventory should not be entered in this section as a “replacement”; rather, the current material(s) should be identified in the first two sections of this form (“System-Owned Portion” and “Customer-Owned Portion.”)

- **Date of Waterworks-Owned LSLR:** Indicate the date the waterworks-owned portion of the lead service line was replaced if applicable.
- **Date of Customer-Owned LSLR:** Indicate the date the customer-owned portion of the lead service line was replaced if applicable.

### System-Generated Data: Classifying the Entire Service Line When Ownership Is Split

While the LCRR requires the inventory to categorize each service line or portions of the service line where ownership is split, a single classification per service line is also needed to support various LCRR requirements, such as lead service line replacement (LSLR), tap sampling, and risk mitigation. Upon adding the inventory entries into the web portal, the software will automatically calculate the total service lines in each of the four categories based on your entries. Table 1 below indicates the rubric for classifying the material for the entire service line when ownership is split between the waterworks and customer. For more information, see EPA's, *Guidance for Developing and Maintaining a Service Line Inventory* (2022).

**Table 1: Classification of Entire Service Line When Ownership is Split**

Waterworks-Owned Portion	Customer-Owned Portion	Classification for Entire Service Line
Lead	Lead	Lead
Lead	Galvanized Requiring Replacement	Lead
Lead	Non-lead	Lead
Lead	Lead Status Unknown	Lead
Non-lead	Lead	Lead
Non-lead and never previously lead	Non-lead, specifically galvanized pipe material	Non-lead
Non-lead	Non-lead, material other than galvanized	Non-lead
Non-lead	Lead Status Unknown	Lead Status Unknown
Non-lead, but waterworks is unable to demonstrate it was not previously Lead	Galvanized Requiring Replacement	Galvanized Requiring Replacement
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).

### System-Generated Data: Galvanized Requiring Replacement (GRR)

“Galvanized Requiring Replacement” means the galvanized service line is or ever was at any time downstream of an LSL or is currently downstream of a lead status unknown service line. If the waterworks is unable to demonstrate that the galvanized service line was never downstream of an LSL, it must presume there was an upstream LSL (40 CFR § 141.84(a)(4)(ii)).

ODW takes “downstream” to mean along the service line, and not along the distribution pipe. An example of a GRR service line is when the customer-owned portion from the meter to the building is galvanized, and the waterworks-owned portion from the water main to the meter was previously lead but has been replaced. The customer-owned portion of the service line would be GRR.

Note that answering “Yes” or “Don’t Know” to the question “If Non-Lead, Was Material Ever Previously Lead?” in the System-Owned Portion section might affect the classification of the customer-owned portion of the line as follows: if a customer-owned portion is identified as Galvanized but the system-owned portion used to be lead or may have ever been lead in the past, the customer-owned portion of the line will be classified as Galvanized Requiring Replacement, and will impact the classification of the entire service line.

**Table 2: Addressing Galvanized Requiring Replacement Service Lines**

“Galvanized Requiring Replacement” means where a galvanized service line is or was at any time downstream of a lead service line or is currently downstream of a “Lead Status Unknown” service line. If the waterworks 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. (40 CFR § 141.84(a)(4)(ii))

When a waterworks identifies a galvanized service line, most frequently on the customer side, it must decide how to classify the resulting combination of utility and customer service line materials. Here are some possible scenarios:

System-Owned Portion Service Line Material Observed	If Non-Lead in System-Owned Portion, Was Material Ever Previously Lead?	Customer-Owned Portion Service Line Material Observed	Customer-Owned Portion Service Line Material Classification	Basis
Galvanized	No	Galvanized	Galvanized	<ul style="list-style-type: none"> <li>Same material (galvanized) on System Service Line.</li> <li>No history and no records of Lead Service Lines.</li> </ul>
Copper	No	Galvanized	Galvanized	<ul style="list-style-type: none"> <li>Copper replaced an unknown previous material.</li> <li>No history and no records of Lead Service Lines.</li> </ul>
Copper	Unknown	Galvanized	Galvanized Requiring Replacement	<ul style="list-style-type: none"> <li>Copper replaced an unknown previous material.</li> <li>History of Lead Service Lines present.</li> <li>Unknown if prior system SL was lead.</li> </ul>
Unknown	Not applicable	Galvanized	Galvanized Requiring Replacement	<ul style="list-style-type: none"> <li>Classified by definition as GRR.</li> </ul>
Copper	Yes	Galvanized	Galvanized Requiring Replacement	<ul style="list-style-type: none"> <li>Previous lead system SL</li> <li>History of Lead Service Lines present.</li> </ul>
Galvanized	Unknown or Yes	Galvanized	Galvanized Requiring Replacement	<ul style="list-style-type: none"> <li>Previous lead system SL</li> <li>History of Lead Service Lines present.</li> </ul>
Lead	Yes	Galvanized	Galvanized Requiring Replacement	<ul style="list-style-type: none"> <li>Previous lead system SL</li> <li>History of Lead Service Lines present.</li> </ul>

Waterworks that answer, “If Non-Lead, Was Material Ever Previously Lead?” with “No” will need to explain the basis for this assertion. For those that do not have records specific to a service line but assert there is no history of lead service lines, provide the basis for the statement, including the available data to back up the assertion.

The most conservative approach for addressing galvanized service lines is to treat all galvanized service lines as if the waterworks service line was lead in the past and classify the galvanized service lines as galvanized requiring replacement.