

**Preparing Your Baseline Inventory Webinar – Question Responses**  
**September 17, 2025**  
**Hosted by VDH Office of Drinking Water and presented by TruePani**

The following responses address the questions submitted during presentation by TruePani on September 17, 2025, covering the Lead and Copper Rule Improvement (LCRI) Baseline Inventory required for all community (CWS) and non-transient (NTNC) waterworks. Citations to the National Primary Drinking Water Regulations or Virginia Department of Health Office of Drinking Water (VDH ODW) guidance are provided when appropriate.

**1. Baseline Inventory – Due Date**

*What is the due date of the baseline inventory, and is this different from the initial inventory submitted in October 2024?*

Answer: The initial inventory was required under the 2021 Lead and Copper Rule Revisions (LCRR) and was due on October 16, 2024 ([40 CFR 141.84\(a\)\(1\)](#)). The baseline inventory is required by the 2024 Lead and Copper Rule Improvements (LCRI) and builds on the initial service line inventory by requiring documentation about what is known about connectors. The baseline inventory is due November 1, 2027. ([40 CFR 141.84\(a\)\(2\)](#) and [40 CFR 141.80\(a\)\(3\)](#))

**2. Baseline Inventory – Documenting Service Lines**

*We have some unknowns on the customer side that go to vacant or abandoned buildings, or we have cut off service at the meter. How do we handle these on the baseline inventory? Should we remove them?*

Answer: For the purposes of the LCRI, the EPA defines a service line as a portion of pipe that connects the water main to the building inlet. Where a building is not present, the service line connects the water main to an outlet for consumers ([40 CFR 141.2 “Service line”](#)).

As such, vacant/abandoned buildings where the service line connects the building to the water main but the water service has been turned off should be included in the inventory. In short, if there is a service line connected to a building or outlet for consumers, it should be included even if the building is vacant or the account is inactive. Only remove a location from the baseline inventory if there is no longer a service line connecting the building to the water main.

**3. Baseline Inventory – New Service Lines**

*Do buildings (such as homes and businesses) constructed after the submission of the initial inventory need to be added to the baseline inventory?*

Answer: The service line inventory is intended to be a living document that is updated to most accurately reflect the current state of the distribution system. Any new services

added to the distribution system must be included in the baseline inventory ([40 CFR 141.84\(a\)\(2\)](#) and [LCRI Preamble](#)).

#### **4. Connectors – Presence and Material Determination**

*What if you have no information about whether a connector is present? When the presence of a connector is unknown for a given service line, what steps must be taken to investigate it?*

Answer: The LCRI requires that a waterworks' baseline inventory contains connector material information from either a review of existing records or when identified during normal operations. If there is no information on whether a connector is present for a service line, the inventory field can be left blank. If there is information on the presence of a connector, it must be categorized as either lead, non-lead, unknown, or no connector present. The LCRI does not require waterworks to proactively investigate connectors materials and unlike service line materials, there is no deadline to document all connector materials ([40 CFR 141.84\(a\)\(2\)\(i\)](#) and [LCRI Preamble](#) ).

#### **5. Connectors – Connector vs Service Line**

*Does the presence of a lead connector require the entire service line to be designated as “lead” in the inventory?*

Answer: The presence of a lead connector has no bearing on the overall material designation of a service line. For the purposes of LCRI, connectors (also known as goosenecks or pigtails) and service lines are not the same, as a connector is defined as a “short segment of piping not exceeding three feet that can be bent and is used for connections between service piping, typically connecting the service line to the main... **lead connectors are not considered to be part of the service line**” ([40 CFR 141.2 “Connector”](#)). Therefore, a lead connector does not cause a service line to be classified as lead, nor would it cause a line to be classified as galvanized requiring replacement (GRR).

#### **6. Identifying Unknowns – Utilizing Build Year**

*If a house is built after the lead ban but the exact material is unknown, can the service line be considered non-lead?*

Answer: Virginia banned the use of lead on the private side on August 1, 1978, and then banned the use of lead on the public side on June 19, 1988. Depending on the delineation of service line ownership and the date of installation, a partial or full non-lead determination can be assigned to service lines based solely on an installation year.

#### **7. Validation Pool**

*Do two-point inspections which were used to identify service line materials for the initial inventory count towards the required number of inspections for the validation pool?*

Answer: The LCRI validation pool consists of all non-lead service lines except service lines classified as non-lead based on:

- Installation after a statewide lead ban date:
  - Private side ban on August 1, 1978
  - Public side ban on June 19, 1988
- Two-point visual inspections
- Previously replaced lead or GRR lines

Lines that were previously identified through two-point inspections would not be included in the validation pool and therefore cannot be used to fulfill the requirements for validation pool inspections. Common examples of lines included in the validation pool are non-lead service lines classified using pre-lead ban records (such as tap cards) or classified as non-lead through statistical methodology but not visually examined. Once the validation pool is determined, only a subset of these service lines require two-point visual inspections. ([40 CFR 141.84\(b\)\(5\) et seq](#)) Remember that the validation pool is an EPA LCRI requirement that is separate from the VDH corroborating evidence ([LCRI Preamble](#)).

## **8. Validation Pool - Statistical Methodology**

*We used statistical sampling for a portion of our system as part of the initial inventory. Will the fully known inventory require that each service be checked? Will the baseline inventory require that each service be verified?*

Answer: All statistical methods require VDH field office approval before implementation ([ODW Guidance for Statistical Methods and Predictive Modeling](#)). For the purposes of this response, we assume “statistical sampling” is synonymous with “statistical methodology” and relates to investigating a subset of service lines to make an overall determination for a larger group. All waterworks must complete the validation pool unless non-lead service lines were determined through post lead ban installation date, a previous two-point inspection, or part of a full lead or GRR service line replacement. Any service line determined to be non-lead through statistical methodology that was not physically inspected at two points will be included in the validation pool. As described in the LCRI, waterworks must conduct validations on a subset of the service lines in the validation pool, and thus the LCRI does not require each service line to be physically verified. ([40 CFR 141.84\(b\)\(5\)](#))

## **9. Customer Notifications**

*Does the language of customer notification letters need to be approved by VDH?*

Answer: VDH posted an approved template, as well as links to EPA’s templates on the [LCRR guidance webpage](#). These templates include all mandatory language and information required by the LCRR. VDH field office approval is not needed if a

waterworks simply completes and distributes the VDH or EPA template. However, if the waterworks elects to deviate from the ODW or EPA template, they should request their field office review and approve the changes. In addition, ODW field office approval is also required if the waterworks chooses a method of delivery other than hand delivery or mail.

#### **10. Customer Notifications – New Service Initiation**

*What is timeframe for notifications to new customers served by lead, GRR, or unknown material service lines and does this change under the LCRI?*

Answer: Waterworks are currently required to notify all new customers served by a lead, unknown or GRR service line upon service initiation. The requirements in the LCRR and LCRI are the same, stating, “For notifications to new customers, water systems must provide the notice at the time of service initiation.” ([40 CFR 141.85\(e\)\(2\)](#)) VDH ODW clarified that mailing the notification within one business day would be acceptable. VDH ODW recommends that waterworks develop business practices to ensure this requirement is met.

#### **11. Compliance Tap Sampling – Standard Monitoring**

*What service line materials trigger standard monitoring under the LCRI? Are unknowns treated as lead for the monitoring requirements? If you have unknowns, must the system return to standard monitoring and collect 1st & 5<sup>th</sup> liter samples?*

Answer: All waterworks with lead or galvanized requiring replacement service lines in their inventories as of November 1, 2027, including those deemed optimized must conduct standard monitoring. Therefore, a baseline inventory with only unknown and non-lead service lines alone does not trigger standard monitoring ([40 CFR 141.86\(c\)\(2\)\(i\)](#)). The first- and fifth-liter sample protocol is applicable only to Tier 1 and Tier 2 sampling sites, which are generally homes or structures with premise plumbing made of lead and/or served by a lead service line. Tiers 1 through 4 do not include sample sites with unknown service line materials. ([40 CFR 141.86\(a\)\(4\)\(i\)](#))

#### **12. School and Licensed Childcare Facility Sampling**

*If the service line serving a school or childcare facility has been determined to be non-lead, is it still required to conduct water sampling at this school?*

Answer: Beginning November 1, 2027, primary schools and child care facilities served by community waterworks are required to be sampled regardless of service line material. Schools that were constructed or had full plumbing replacements after January 1, 2014 and are served by non-lead service lines are exempt ([40 CFR 141.92\(a\)\(1\)\(i\)](#)).

#### **13. Two-Point Inspections**

*How are “two-point inspections” defined?*

Answer: A two-point inspection is defined as a physical inspection in which two separate portions of pipe's exterior are visually examined. When ownership of the service line is split, one point of the inspection must be conducted on each portion of the service line. ([40 CFR 141.84\(b\)\(5\)](#)).

#### **14. VDH ODW Corroborating Evidence**

*When conducting inspections as corroborating evidence for usage of build year/installation date to identify service lines as non-lead, is the number of lines required to be inspected determined using the number of lines which were installed in the 24-month period after the respective lead ban, or using all service lines in the inventory?*

Answer: All service lines installed in the 24-month period following the respective lead ban would be considered for corroboration. A subset of 1% of these lines (or 5 lines, whichever is greater) must be physically verified. ([Using Date of Construction to Classify Water Service Lines as Non-Lead](#))