

Proposed Lead and Copper Rule Improvements (LCRI) Technical Fact Sheet: Inventory Validation Requirements November 2023

Accurate service line inventories are essential to ensure replacement of all lead and galvanized requiring replacement (GRR) service lines. EPA is proposing to require all water systems to validate the accuracy of a subset of non-lead service lines in their inventory. Water systems would be required to validate non-lead service lines in their LCRI inventory no later than three years before either the 10-year deadline or the deferred deadline for the mandatory service line replacement (e.g., year 7 for systems with a 10-year deadline) or by an earlier deadline established by the State.

These requirements would also apply to water systems that have all non-lead lines in their LCRI inventory that were identified by a method other than 1) review of records listed in the rule or 2) two-point visual inspection. The proposed validation tests the reliability of the water system’s inventory and provides systems, States, and consumers with additional confidence in the accuracy of the inventory.

The proposed service line validation steps are as follows:

Step 1: Define your validation pool. To identify which service lines require validation under the proposed LCRI, you must first identify your “validation pool.” The validation pool consists of service lines that are classified as non-lead (e.g., plastic or copper) in your inventory, except those identified as non-lead through a review of records listed in the rule or a two-point visual inspection. For example, a service line that that was identified as copper based on a one-point visual inspection at the meter pit would be part of your validation pool. However, if this service line material was also visually inspected at another point, such as inside the home, or the line was also verified by reviewing a record (e.g., construction as-built record or tap card), it would **not** be in your validation pool.

Step 2: Determine the minimum number of validations required. Use Table 1 to determine the minimum number of validations required based on the size of your validation pool from Step 1. For example, if you have 2,150 non-lead service lines in your validation pool, the minimum number of validations required would be 341. If you have 1,000 non-lead service lines in your validation pool, the minimum number of validations required would be 20% of 1,000 or 200.

Step 3: Randomly select service lines to be validated. Next, you will need to randomly select service lines from your validation pool for visual inspection. The minimum number of required randomly selected service lines is the number from Step 2 above. To help you randomly select service lines, you can use tools such as a random number generator to randomly assign every service line a number and then randomly select from the numbers. This step is intended to minimize bias in your selection, so the validation results can be used to represent the accuracy of your non-lead service lines in the inventory.

| Table 1. Minimum Number of Validations Required | |
|---|--------------------------------|
| Size of Validation Pool | Number of Validations Required |
| <1,500 | 20% of validation pool |
| 1,500 to 2,000 | 322 |
| 2,001 to 3,000 | 341 |
| 3,001 to 4,000 | 351 |
| 4,001 to 6,000 | 361 |
| 6,001 to 10,000 | 371 |
| 10,001 to 50,000 | 381 |
| >50,000 | 384 |

Step 4: Validate the non-lead service lines through a two-point visual inspection. The next step is to validate that the service lines identified in Step 3 are non-lead by conducting visual inspection at a minimum of two points along the service line exterior. For example, visual inspection of the service line could be conducted by excavation (such as potholing), viewing the service line material in the meter pit or stop box, or viewing the service line entering the building. If you have already conducted a one-point visual inspection, then one additional visual inspection at a different point along the line is all that is required. Where ownership of the service line is shared, the water system must visually inspect both portions of the service line. If access to private property is necessary to complete the validation and the water system is unable to gain access, the water system would have to randomly select another non-lead service line in Step 3 to validate instead.

Step 5: Update your inventory and submit results to your State. You would complete service line validation and submit results to the State by year seven of your replacement program, with limited exceptions as described above. You would also be required to notify your State and update your service line inventory if you identify a lead or GRR service line that was previously categorized as non-lead and comply with any actions required by the State to address the inventory inaccuracy.

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