**Section 611.354 Lead Service Line Inventory and Replacing Lead Service Lines**

a) Lead Service Line Inventory. A supplier must develop an inventory identifying the materials composition for all service lines connected to its distribution system. The inventory must meet specific requirements:

1) The supplier must develop an initial inventory before October 16, 2024 and submit the inventory to the Agency as Section 611.360(e) requires.

2) The inventory must include all service lines connected to the supplier’s distribution system regardless of ownership status (e.g., where the supplier shares service line ownership, the inventory would include both the supplier-owned and customer-owned portions of the service line).

3) When conducting the inventory of service lines in its distribution system for the initial inventory under subsection (a)(1), the supplier must use any information on lead and galvanized iron or steel system components the supplier identified complying with 40 CFR 141.42(d). The supplier must also review the sources of information in subsections (a)(3)(A) through (a)(3)(D) to identify service line materials for the initial inventory. The supplier may use other sources of information the Agency approves in a SEP.

A) All construction and plumbing codes, permits, and existing records or other documents indicating the service line materials connecting structures to its distribution system.

B) All supplier 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.

C) All inspections and distribution system records indicating the materials composing the service connections connecting structures to its distribution system.

D) Any resource, information, or method for identifying and assessing service line materials the Agency provides or requires in a SEP.

4) The supplier must categorize every service line and supplier-owned portion of a service line under split ownership:

A) "Lead" for a lead service line.

B) "Galvanized Requiring Replacement" for a galvanized service line at any time downstream of a lead service line or currently downstream of a lead status unknown service line. If the supplier cannot demonstrate that a galvanized service line was never downstream of a lead service line, the supplier must presume a lead service line was upstream.

C) "Non-Lead" for a service line the supplier determines through an evidence-based record, method, or technique is not lead or galvanized requiring replacement under subsection (a)(4)(A) or (a)(4)(B). The supplier may classify the service line using its actual material of construction (e.g., “plastic” or “copper”) as an alternative to non-lead.

D) "Lead Status Unknown" for a service line of material the supplier does not know is lead, galvanized requiring replacement, or non-lead service line under subsection (a)(4)(A), (a)(4)(B), or (a)(4)(C), e.g., if the supplier has no documented evidence supporting material classification. The supplier may classify the line as “unknown”, as an alternative to classifying it as lead status unknown, however, all requirements applying to lead status unknown service lines will apply to those the supplier classifies as Unknown. A supplier may provide more information regarding its lead status unknown lines, as long as the inventory clearly distinguishes unknown service lines from those for which the supplier verified the material of construction through records or inspection.

BOARD NOTE: See the definition of “lead status unknown service line” in Section 611.350(b).

5) The supplier must identify and track service line materials in its inventory as the supplier encounters them in the course of its normal operations (e.g., checking service line materials when reading water meters or performing maintenance activities).

6) The supplier must update its inventory based on all applicable sources in subsections (a)(3) and (a)(5) and any lead service line replacements or service line material inspections the supplier conducted. The supplier may use other sources of information the Agency approves in a SEP and must use other sources of information the Agency requires in a SEP. The supplier must submit the updated inventory to the Agency as Section 611.360(e) requires. The publicly accessible inventory must reflect inventory updates no less frequently than when the supplier must submit them to the Agency.

A) A supplier whose inventory contains only non-lead service lines needs not provide inventory updates to the Agency or public. If the supplier subsequently finds a lead service line within its system, the supplier must prepare an updated inventory under subsection (a) on a schedule the Agency establishes in a SEP.

B) This subsection (a)(6)(B) corresponds with 40 CFR 141.84(a)(6)(ii), which USEPA marked “Reserved”. This statement maintains structural consistency with USEPA’s rule.

7) To calculate the number of service line replacements under subsections (f) or (g), the supplier must apply the replacement rate to the sum of known lead and galvanized requiring replacement service lines when the supplier first exceeds the lead trigger level or lead action level plus the number of lead status unknown service lines in the beginning of each year of the supplier’s annual goal-based or mandatory full lead service line replacement program.

A) A supplier must count each service line only once when calculating the required number of service lines it must replace, even if the supplier shares service line ownership, and the supplier must replace both the customer-owned and system-owned portions.

B) The supplier must annually update the number of service lines it needs to replace by subtracting the number of lead status unknown service lines the supplier discovered are non-lead and adding the number of non-lead service lines the supplier discovered are lead or galvanized requiring replacement service lines.

C) Verifying a lead status unknown service line as non-lead in its inventory does not count as replacing a service line.

BOARD NOTE: Using the number of lead and galvanized requiring replacement service lines at the time of first exceeding the lead trigger level applies for subsection (f). The number at the time of first exceeding the lead action level applies for subsection (g). The number of lead status unknown service lines remaining at the beginning of each year applies to both.

8) The supplier must keep its service line materials inventory publicly accessible.

A) The inventory must include a locational identifier, such as a street address, block, intersection, or landmark, for each lead or galvanized requiring replacement service line. A supplier may include a locational identifier for lead status unknown service lines or list the exact address of each service line.

B) A supplier serving more than 50,000 persons must make the publicly accessible inventory available online.

9) If a supplier has no lead, galvanized requiring replacement, or lead status unknown service lines (regardless of ownership) in its inventory, the supplier may comply with subsection (a)(8) using a written statement, in lieu of the inventory, declaring that its distribution system has no lead or galvanized requiring replacement service lines. The statement must include a general description of all applicable sources the supplier used under subsections (a)(3), (a)(5), and (a)(6) to determine these service lines are absent.

10) The supplier must include instructions for accessing the service line inventory (including inventories consisting only of a statement under subsection (a)(9)) in its Consumer Confidence Report under Section 141.153(d)(4)(K).

b) Lead Service Line Replacement Plan. A supplier with one or more lead, galvanized requiring replacement, or lead status unknown service lines in its distribution system must submit a lead service line replacement plan to the Agency under Section 611.360(e) before October 16, 2024. The lead service line replacement plan must have sufficient detail to ensure the supplier can comply with lead service line replacement requirements under this Section. The plan must include specific descriptions:

1) A strategy for determining the composition of lead status unknown service lines in its inventory;

2) A procedure for conducting full lead service line replacement;

3) A strategy for informing customers before a full or partial lead service line replacement;

4) For a supplier serving more than 10,000 persons, a lead service line replacement goal rate the supplier recommends if the supplier exceeds the lead trigger level;

5) A procedure for customers to flush particulate lead from service lines and premises plumbing;

6) A prioritization strategy for lead service line replacement based on factors, including targeting known lead service lines, replacing lead service lines for disadvantaged consumers and populations most sensitive to the effects of lead; and

7) A strategy for funding lead service line replacements considering ways to replace the customer-owned portion for those unable to pay.

c) Operating Procedures for Replacing Lead Goosenecks, Pigtails, or Connectors

1) The supplier must replace any lead gooseneck, pigtail, or connector it owns when the supplier encounters it during planned or unplanned water system infrastructure work.

2) The supplier must offer to replace a customer-owned lead gooseneck, pigtail, or connector; however, the supplier needs not bear the cost of replacing the customer-owned parts.

3) The supplier needs not replace a customer-owned lead gooseneck, pigtail, or connector if the customer objects to replacing it.

4) Replacing a lead gooseneck, pigtail, or connector does not count towards goal-based or mandatory lead service line replacements under subsections (f) or (g).

5) When replacing any gooseneck, pigtail, or connector attached to a lead service line, the supplier must follow the risk mitigation procedures 40 CFR Section 141.85(f)(2) specifies.

d) Conducting Lead Service Line Replacement That May Result in Partial Replacements

1) A supplier planning to partially replace a lead service line (e.g., replace only the supplier-owned portion) in the course of planned infrastructure work must notify the service line’s owner, or the owner’s authorized agent, and any non-owner residents the service line serves at least 45 days before the replacement. The notice must explain that the supplier will replace the supplier-owned portion of the service line and offer to replace the customer-owned portion (not supplier-owned). The supplier needs not bear the cost of replacing the customer-owned portion of the lead service line.

A) Before returning a service line to service, the supplier must provide notice complying with Section 611.355(a) and explaining that consumers may experience a temporary increase of lead levels in their drinking water due to the replacement, providing information about the health effects of lead, and describing actions consumers can take to minimize their exposure to lead in drinking water. If the lead service line undergoing partial replacement serves multi-family dwellings, the supplier may post the information at a conspicuous location instead of providing individual notice to each resident.

B) The supplier must inform consumers about service line flushing using the procedure in subsection (b)(5) requires before returning the affected service line to service.

C) The supplier must provide the consumer with a pitcher filter or point-of-use treatment device to reduce lead, six months of replacement cartridges, and use instructions before returning the affected service line to service. If the affected service line serves more than one residence or non-residential unit (e.g., a multi-unit building), the supplier must provide a filter, six months of replacement cartridges and use instructions to every unit in the building.

D) The supplier must offer to collect a follow up tap sample between three and six months after partially replacing a lead service line. The supplier must provide the results from the follow up sample under Section 611.355(d).

2) Any supplier replacing the supplier-owned portion of a lead service line in the course of an emergency repair must notify and provide risk mitigation measures to the persons the affected service line serves as subsections (d)(1)(A) through (d)(1)(C) require before returning the line to service.

3) If a customer notifies a supplier that the customer plans to replace the customer's portion of the lead service line, the supplier must make a good faith effort to coordinate simultaneously replacing the supplier’s portion. If simultaneously replacing the supplier- and customer-owned portions cannot be conducted, the supplier must replace the supplier-owned portion as soon as practicable but no later than 45 days after the customer replaces the customer-owned portion of the lead service line. The supplier must notify and provide risk mitigation measures as subsections (d)(1)(A) through (d)(1)(C) require. If the supplier fails to replace its portion of the lead service line within 45 days after the customer replaces the customer’s portion of the lead service line, the supplier must notify the Agency under Section 611.360(e) within 30 days after failing to meet the deadline. The supplier must complete replacing the supplier-owned portion of the service line no later than 180 days after the customer replaces the customer-owned portion.

4) If a supplier receives notice or otherwise learns that a customer replaced the customer-owned portion of a lead service line within the previous six months leaving the system-owned portion in place, the supplier must replace its portion within 45 days after the supplier becomes aware the customer replaced the customer-owned portion. The supplier must notify and provide risk mitigation measures as subsections (d)(1)(A) through (d)(1)(C) require within 24 hours after the supplier becomes aware of the customer replacing the customer-owned portion. If the supplier fails to replace the supplier-owned portion of the service line within 45 days after becoming aware of the customer replacing the customer-owned portion, the supplier must notify the Agency under Section 611.360(e) within 30 days after failing to meet the deadline. The supplier must complete replacing the supplier-owned portion of the service line no later than 180 days after the customer replaces the customer-owned portion.

5) If a supplier receives notice or otherwise learns that a customer replaced the customer-owned portion of a lead service line more than six months in the past, the supplier needs not replace the supplier-owned portion of the lead service line under this subsection (d)(5). However, the supplier must still include the system-owned portion when calculating a lead service line replacement rate under subsection (a)(7).

e) Conducting Full Lead Service Line Replacements. A supplier conducting a full lead service line replacement must notify the service line’s owner, or the owner’s authorized agent, and any non-owner residents the service line serves within 24 hours after completing the replacement. The supplier needs not bear the cost of replacing the customer-owned portion of the lead service line.

1) The notice must comply with Section 611.355(a), explain that consumers may experience a temporary increase of lead levels in their drinking water due to the replacement, inform about the health effects of lead, and explain actions a consumer can take to minimize exposure to lead in drinking water. If the lead service line the supplier will replace serves a multi-family dwelling, the supplier may post the information at a conspicuous location instead of providing individual notice to all residents.

2) The supplier must inform about flushing the service line using the procedure the supplier developed under subsection (b)(5) before returning the replaced service line to service.

3) The supplier must provide the consumer with a pitcher filter or point-of-use treatment device to reduce lead, six months of replacement cartridges, and use instructions before returning the replaced service line to service. If the lead service line serves more than one residence or non-residential unit (e.g., a multi-unit building), the supplier must provide a filter and six months of replacement cartridges and use instructions to every unit in the building.

4) The supplier must offer to the consumer to collect a follow up tap sample between three and six months after replacing a lead service line. The supplier must provide the results from the follow up sample to the consumer under Section 611.355(d).

f) Goal-Based Full Lead Service Line Replacement for Suppliers Having a 90th Percentile Lead Concentration Exceeding the Lead Trigger Level But Not the Lead Action Level. A supplier serving more than 10,000 persons having a 90th percentile lead concentration under Section 611.356 that exceeds the lead trigger level but not the lead action level must conduct goal-based full lead service line replacement at a rate approved in an Agency-issued SEP.

1) The supplier must annually calculate the number of full lead service line replacements it must conduct under subsection (a)(7).

2) The supplier must replace lead service lines complying with subsection (d) or (e).

3) Only a full lead service line replacement counts towards a supplier’s annual replacement goal. A partial lead service line replacement does not count towards the goal.

4) The supplier must inform customers having a lead, galvanized requiring replacement, or lead status unknown service line as Section 611.355(g) requires.

5) A supplier failing to meet its lead service line replacement goal must take certain actions:

A) Conduct public outreach activities under Section 611.355(h) until either the supplier meets its replacement goal, or tap sampling shows the 90th percentile concentration does not exceed the lead trigger level for two continuous years of monitoring.

B) Resume its goal-based lead service line replacement program under this subsection (f) if its 90th percentile lead concentration anytime later exceeds the lead trigger level but not the lead action level.

6) The first year of a supplier's lead service line replacement program begins on the first day after the end of the tap sampling period during which the supplier exceeded the lead trigger level. If the supplier samples annually or less frequently, the end of the tap monitoring cycle is September 30 of the calendar year during which the sampling occurs. If the Agency issues a SEP establishing an alternative tap monitoring cycle, the end of the supplier’s tap monitoring cycle is the last day of that cycle.

g) Mandatory Full Lead Service Line Replacement for Suppliers Whose 90th Percentile Lead Concentration Exceeds the Lead Action Level. A supplier serving more than 10,000 persons that exceeds the lead action level in tap sampling monitoring under Section 611.356 must replace full lead service lines on its distribution system at an annual rate of at least three percent on a two-year rolling average basis.

1) The supplier must calculate its average annual number of full lead service line replacements under subsection (a)(7).

2) The supplier must replace lead service lines under subsections (d) and (e).

3) Only a full lead service line replacement counts towards a supplier’s mandatory annual replacement rate of at least three percent. A partial lead service line replacement does not count towards the supplier’s mandatory replacement rate.

4) A supplier must inform its customers having a lead, galvanized requiring replacement, or lead status unknown service line as Section 611.355(g) requires.

5) A CWS supplier serving 10,000 or fewer persons or a NTNCWS supplier for which the Agency issues a SEP approving or designating replacing lead service lines as a compliance option must replace lead service lines as Section 611.363(a)(1) describes. The supplier must replace lead service lines complying with subsections (d) and (e).

6) A supplier may stop replacing lead service lines after cumulatively replacing the required number. Unless the Agency issues a SEP under subsection (g)(9) requiring another percentage, the required number is at least three percent of the service lines subsection (a)(7) determines times the number of years between when the supplier most recently began mandatorily replacing lead service lines and when the supplier calculates its lead 90th percentile concentration under Section 611.360(c)(4) to be at or below the lead action level during each of four consecutive six-month tap monitoring cycles. If the supplier later exceeds the lead action level, it must restart mandatorily replacing lead service lines at the same rate on a two-year rolling average basis, unless the Agency issues a SEP under subsection (g)(9) requiring an alternative replacement rate.

7) A supplier may also cease mandatorily replacing lead service lines if the supplier has no remaining lead status unknown service lines in its inventory, and the supplier obtains refusals or non-responses to its offer to replace the customer-owned portion of the lead service line from every customer on its distribution system still served by a lead service line or a galvanized requiring replacement service line. For this subsection (g)(7) and under Section 611.360(e), a supplier must document customer refusals to the Agency, including any written refusals signed by the customers, any documents memorializing customers verbally refusing, and any documents memorializing no response from customers after the supplier made at least two good faith attempts to reach the customer, each attempt offering to replace the full lead service line. If the supplier's lead 90th percentile concentration later exceeds the lead action level, the supplier must offer to replace the customer-owned portion for every customer served through a full or partial lead service line or galvanized requiring replacement service line. The supplier need not bear the cost of replacing the customer-owned portion of any lead service line.

8) The first year of lead service line replacement begins the first day after the end of the tap sampling period during which the supplier exceeded the lead action level.

9) If the Agency determines a shorter schedule is feasible, the Agency must issue a SEP requiring a supplier to replace lead service lines on a shorter schedule than this Section otherwise requires, taking into account the number of lead service lines in the supplier’s system. The Agency must issue this SEP within six months after the supplier must begin replacing lead service lines under subsection (g).

h) Reporting to Demonstrate Compliance to the Agency. To demonstrate that it complies with subsections (a) through (g), a supplier must report the information Section 611.360(e) specifies to the Agency.

BOARD NOTE: This Section derives from 40 CFR 141.84.

(Source: Amended at 47 Ill. Reg. 16486, effective November 2, 2023)