**Section 611.350 General Requirements**

a) Applicability and Scope

1) Applicability of and Compliance with this Subpart G. This Subpart G and Subpart AG constitute NPDWRs for lead and copper. This Subpart G and Subpart AG apply to all community water systems (CWSs) and non-transient, non-community water systems (NTNCWSs).

A) A supplier must comply with this Subpart G by October 16, 2024, except as otherwise required by Section 611.351, 611.354, 611.355, 611.356, or 611.360.

B) If the Agency issued a SEP before December 16, 2021, that expires on or after October 16, 2024, and the SEP exempts a supplier under any rule in former Subpart G (now redesignated Subpart AG), the supplier must comply with this Subpart G after the SEP expires, regardless of subsection (a)(1)(A). If the SEP expires before October 16, 2024, the supplier must comply with this Subpart G as required by subsection (a)(1)(A).

C) The Agency may issue a SEP requiring a supplier to comply with specified rules in this Subpart G before subsection (a)(1)(A) or (a)(1)(B) otherwise requires or as necessary to address issues in a notice the Agency received from USEPA under 40 CFR 142.23 or 142.30. The SEP must specify the rules in this Subpart G with which the supplier must comply and their counterparts in Subpart AG with which the supplier no longer needs to comply. The supplier must comply with the SEP-specified Subpart G rules in lieu of their counterparts in Subpart AG.

BOARD NOTE: This subsection (a)(1) derives from 40 CFR 141.80(a). USEPA’s Lead and Copper Rules Revisions (LCRR) apply to all suppliers on December 16, 2021. However, USEPA delays complying with LCRR until October 16, 2024, when any previously granted exemption expires, or as provided otherwise by any of several specified rules for corrosion control treatment; lead service line replacement; public education, supplemental monitoring, and mitigation; monitoring; and reporting (corresponding with 35 Ill. Adm. Code 611.351, 622.354, 611.355, 611.356, or 611.360). Until a supplier must comply with the LCRR, USEPA requires the supplier to comply with subpart I of 40 CFR 141 (2020). This requires the Board to codify two versions of the Lead and Copper Rule: one in Subpart AG, representing the Lead and Copper Rules prior to the LCRR (40 CFR 141 (2020)), and the other in this Subpart G, representing 40 CFR 141 incorporating the LCRR.

2) Scope. This Subpart G establishes a treatment technique including requirements for corrosion control treatment, source water treatment, lead service line inventory, replacing lead service lines, public notice, monitoring for lead in schools and child care facilities, and public education. Lead and copper action levels and the lead trigger level in samples collected at consumers' taps prompt these requirements. The rules in this Subpart G requiring lead sampling in schools and child care facilities and public education apply to all CWS.

b) Definitions. For this Subpart G only, this subsection (b) defines certain terms:

"Action level" means the computed concentration of lead or copper in water under subsection (c) determining applicability of some treatment requirements under this Subpart G. The action level for lead is 0.015 mg/L, and the action level for copper is 1.3 mg/L.

"Aerator" means the device embedded in a water faucet to enhance air flow in the water stream and prevent splashing.

"Child care facility" means a facility providing child care, day care, or early learning services to children under a license issued by a State or local agency.

BOARD NOTE: See, e.g., the Child Care Act of 1969 [225 ILCS 10].

"Corrosion inhibitor" means a substance that can reduce corrosivity of water toward metal plumbing materials, especially lead and copper, by forming a protective film on the interior surface of those materials.

"Effective corrosion inhibitor residual" means a concentration of corrosion inhibitor in the drinking water sufficient to form a passivating film on the interior walls of pipe.

"Elementary school" means a school classified by State and local practice as elementary and comprising any span of grades (including pre-school) through grade 8.

"Exceed" or "exceedance", relative to either the lead or the copper action level, means that the 90th percentile concentration of the samples the supplier collected during a six-month tap monitoring cycle is greater than the lead or copper action level.

"Fifth-liter tap sample" means a one-liter tap water sample a supplier collects under Section 611.356(b).

"Find-and-fix" means the requirements under this Subpart G that water systems must perform at every tap sampling site yielding a lead result above 15 µg/L.

"First-draw tap sample" means the first one-liter sample of tap water a supplier collects under Section 611.356(b)(2).

"Full lead service line replacement" means replacing a lead service line (as well as galvanized service lines requiring replacement) resulting in the entire length of the service line, regardless of service line ownership, complying with Section 611.126 at the time of replacement. A full lead service line replacement includes replacing a service line having only one portion that is lead, such as a service line previously subject to a partial lead service line replacement, as long as the entire service line complies with Section 611.126 after the replacement. A full lead service line replacement requires replacing galvanized service lines downstream of a lead service line.A full lead service line replacement could leave a lead service line in place in the ground but out of service if using a new non-lead service line replaces the out-of-service lead service line.

"Galvanized requiring replacement" refers to a galvanized service line Section 611.354(a)(4)(B) describes.

BOARD NOTE: This definition derives from 40 CFR 141.84(a)(4)(ii) for a term used in various rules.

"Galvanized service line" means iron or steel piping zinc-dipped to prevent corrosion and rusting.

"Gooseneck, pigtail, or connector" is a short section of flexible piping, typically not exceeding two feet, connecting segments of rigid service piping. Lead goosenecks, pigtails, and connectors are not part of the lead service line, but Section 611.354(c) may require replacing them.

"Large supplier" means a supplier regularly serving water to more than 50,000 persons.

"Lead service line" means a portion of pipe made of lead connecting the water main to the building inlet. A lead service line may be owned by the water system, the property owner, or both. A galvanized service line is a lead service line if it was or is downstream of any lead service line or service line of unknown material. If the only lead piping serving a home is a lead gooseneck, pigtail, or connector, and it is not a galvanized service line that is considered a lead service line, the service line is not a lead service line. Under Section 611.356(a) only, a galvanized service line is not considered a lead service line.

"Lead status unknown service line" means a service line that has not been shown to comply with Section 611.126. Physically verifying the material composition of a service line (e.g., copper or plastic) is not necessary for its lead status to be identified (e.g., if records demonstrate that the service line was installed after a municipal, State, or federal lead ban).

BOARD NOTE: See the description of "lead status unknown" in Section 611.354(a)(4)(D).

"Lead trigger level" means a particular concentration of lead in water that prompts certain activities under this Subpart G. The trigger level for lead is a concentration of 10 µg/L.

"Maximum permissible concentration" or "MPC" means the concentration of lead or copper in finished water entering the supplier's distribution system, which the Agency designates in a SEP based on the contaminant removal ability of the treatment properly operated and maintained.

BOARD NOTE: This definition derives from 40 CFR 141.83(b)(4). (See Section 611.353(b)(4)(B).)

"Meet" or "comply with", relating to either the lead or the copper action level, means that the 90th percentile concentration of the supplier's samples collected during a six-month tap monitoring cycle is less than or equal to the lead or copper action level.

"Mid-sized supplier" means a supplier regularly serving water to more than 10,000 persons up to 50,000 persons.

"Multiple-family residence" means a building in which multiple families currently reside, but not one that is also a "single-family structure".

"90th percentile concentration" means the concentration of lead or copper the supplier computes under subsection (c)(4) using the results of tap water sampling under Section 611.356.

BOARD NOTE: This definition derives from 40 CFR 141.80(c)(4).

"Optimal corrosion control treatment" or "OCCT" means the corrosion control treatment minimizing the lead and copper concentrations at users' taps while ensuring that the treatment will not violate any national primary drinking water regulations.

"Partial lead service line replacement" means replacing any portion of a lead service line or galvanized requiring replacement service line leaving any length of the lead service line or galvanized requiring replacement service line in service and requiring replacement upon completion of the work. 40 CFR 141.84(d) allows partial lead service line replacements under limited circumstances, but these do not count towards the mandatory or goal-based lead service line replacement rate under Section 611.354.

"Pitcher filter" means a non-plumbed water filtration device consisting of a gravity-fed water filtration cartridge and a filtered drinking water reservoir that is certified by its manufacturer, importer, or an accredited third-party certifying body as complying with the version of NSF/ANSI 53 in effect on the date of manufacture or import.

BOARD NOTE: NSF/ANSI 53 is the health-based standard for lead and several other contaminants for water filter devices, including pitcher filter-type devices. Identifying a device as certified under NSF/ANSI 53 at the time of purchase is possible. NSF maintains an on-line list of certified devices at info.nsf.org/Certified/dwtu/listings\_leadreduction.asp. See the definition of "accredited third-party certifying body" in 35 Ill. Adm. Code 611.126(b) relating to NSF/ANSI 372.

"Practical quantitation limit" or "PQL" means the lowest concentration of an analyte (substance) that a well-operated laboratory can measure with a high degree of confidence that the analyte is present at or above that concentration.

BOARD NOTE: This definition derives from 40 CFR 141.89(a)(1)(ii) and (a)(1)(iv).

"Pre-stagnation flushing" means opening taps to flush standing water from plumbing before a minimum six-hour stagnation period before lead and copper tap sampling under Subpart G.

"School" means any building or building complex associated with public, private, or charter institutions that primarily provides teaching and learning for elementary or secondary students.

"Secondary school" means a school comprising any span of grades beginning with the next grade following an elementary or middle school (usually 7, 8, or 9) and ending with or below grade 12. This definition includes both junior high schools and senior high schools.

"Single-family structure" means a building constructed as a residence for a single-family that the occupant currently uses as a residence or place of business.

"Small system supplier" or "small CWS supplier" means a CWS serving 10,000 or fewer persons.

BOARD NOTE: A small CWS is a small supplier that is a CWS. This definition derives from the preamble of 40 CFR 141.93. Corresponding Section 611.363 distinguishes a small CWS supplier from an NTNCWS supplier.

"Small supplier" means a supplier regularly serving water to 10,000 or fewer persons.

BOARD NOTE: USEPA did not revise its corresponding definition of "small water system" in 40 CFR 141.2 from 3,300 or fewer to 10,000 or fewer persons. This creates an inconsistency the Board corrected.

"Source water monitoring period" means any of the six-month periods during which a supplier must complete source water monitoring under Section 611.358.

BOARD NOTE: The Board added this definition to avoid confusion with "tap sampling period," "tap monitoring cycle", and "water quality monitoring period", as used under this Subpart G, and "compliance period" and "compliance cycle", as used elsewhere in this Part and Section 611.101 defines.

"Supplier not applying corrosion control treatment" means a PWS not fulfilling either of two conditions or purchasing all of its water from a supplier not fulfilling either of two conditions:

Neither the PWS nor the supplier providing its water has Agency-approved optimal corrosion control treatment; or

No other water quality adjustment in either the PWS's or the supplier’s treatment train infrastructure includes adjusting pH or alkalinity or adding corrosion inhibitor.

"Tap monitoring cycle" means the period of time during which a supplier must sample taps for lead and copper analyses. The lead and copper concentrations in tap samples determine the tap monitoring cycle, and the frequency can range from every six months (i.e., semi-annually) to once every nine years. A supplier semi-annually sampling taps must collect samples no less frequently than every six months, while a supplier annually sampling taps must sample no less frequently than every year. A supplier triennially sampling taps must collect samples no less frequently than every three years, and a supplier sampling taps under an Agency-issued waiver must sample no less frequently than every nine years. The start of each new tap monitoring cycle, with the exception of semi-annual monitoring, must begin on January 1.

BOARD NOTE: This term is equivalent to "tap sampling monitoring period" in 40 CFR 141. "Tap monitoring cycle" describes sampling frequency.

"Tap sampling period" means the period within a tap monitoring cycle when the supplier must collect samples for lead and copper analysis. For a supplier sampling at a reduced frequency, the supplier must sample taps between June and September, unless the Agency issues a SEP approving a different four-month period.

BOARD NOTE: "Tap sampling period" describes when the supplier collects samples.

"Tap sampling protocol" means the instructions a supplier gives to residents or those sampling on the supplier’s behalf to sample taps under this Subpart G.

"Water quality monitoring period" means any of the six-month periods during which a supplier must complete a cycle of tap and entry point water quality monitoring under Section 611.357.

BOARD NOTE: The Board added this definition. USEPA refers to these as "monitoring periods". The Board uses "water quality monitoring period" to avoid confusion with "tap sampling period," "tap monitoring cycle", and "source water monitoring period", as used under this Subpart G, and "compliance period" and "compliance cycle", as used elsewhere in this Part and Section 611.101 defines.

"Wide-mouthed bottles" means bottles one liter in volume having a mouth that is at least 55 mm wide.

BOARD NOTE: This subsection (b) derives from 40 CFR 141.2.

c) Lead Trigger Level and Lead and Copper Action Levels. The supplier determines the lead trigger levels and lead and copper action levels based on tap water samples it collects under 40 CFR 141.86 to calculate the 90th percentile concentration and tests using the analytical methods in 40 CFR 141.89.

1) The supplier exceeds the lead trigger level if the 90th percentile lead concentration as subsection (c)(4) specifies is determined to be greater than 10 µg/L.

2) The supplier exceeds the lead action level if the 90th percentile lead concentration is greater than 15 µg/L.

3) The supplier exceeds the copper action level if the 90th percentile copper concentration is greater than 1.3 mg/L.

4) The supplier must compute the 90th percentile lead and copper concentrations using the specified procedure:

A) Suppliers Not Having Sites with a Lead Service Line and Only Having Tier 3, 4, or 5 Sites Under 40 CFR 141.86(a)

i) The supplier must list the results of all lead or copper samples it took during a tap sampling period in ascending order, ranging from the sample with the lowest concentration to the sample with the highest concentration. The supplier must assign each sampling result an ordinal number, ascending by single integers, assigning the number 1 for the sample with the lowest contaminant level. The number the supplier assigns to the sample with the highest contaminant level must equal the total number of samples the supplier took.

ii) To determine the 90th percentile sample, the supplier must multiply the total number of samples taken during the tap sampling period times 0.9.

iii) The contaminant concentration in the sample corresponding with the ordinal number subsection (c)(4)(A)(ii) yields is the 90th percentile concentration.

iv) For a supplier collecting five samples per tap sampling period, the 90th percentile concentration is the average of the highest and second highest concentrations.

v) For a supplier the Agency allows to collect fewer than five samples under Section 611.356(c) or failing to collect five samples, the result for the sample with the highest concentration is the 90th percentile concentration.

B) Suppliers Having Enough Sites with a Lead Service Line Identified as Tier 1 or 2 Under 40 CFR 141.86(a) to Meet the Minimum Number of Sites 40 CFR 141.86(c) Requires

i) The supplier must arrange the results of all lead or copper samples it took at Tier 1 or Tier 2 sites during a tap sampling period in ascending order from the sample with the lowest concentration to the sample with the highest concentration. The supplier must not include sample results from Tier 3, 4, or 5 sites in this calculation. The supplier must assign each sampling result a number, beginning with the number 1 for the sample with the lowest contaminant concentration and ascending by single integers through increasing concentrations. The number assigned to the sample with the highest contaminant concentration must equal the total number of samples the supplier took.

ii) The supplier must multiply the number of Tier 1 or Tier 2 sites during the tap sampling period times 0.9.

iii) The 90th percentile concentration is the contaminant concentration in the numbered sample corresponding with the number the calculation under subsection (c)(4)(B)(ii) yields.

iv) For a supplier serving fewer than 100 people that collects five samples per tap sampling period, the 90th percentile concentration is the average of the highest and second highest concentration.

v) For a supplier the Agency allows to collect fewer than five samples under Section 141.86(c), or failing to collect five samples, the highest sample concentration is the 90th percentile concentration.

C) Suppliers Having Sites with a Lead Service Line Identified as Tier 1 or 2 Under Section 141.86(a) but Fewer Than the Minimum Number of Sites Section 141.86(c) Requires

i) The supplier must combine the results of all lead or copper samples it took at Tier 1 or Tier 2 sites with a sufficient number of the highest results from Tier 3, 4, or 5 sites to complete the minimum number of sites. The supplier must arrange the combined results in ascending order from the sample with the lowest concentration to the sample with the highest concentration. The supplier must not include sample results from any remaining Tier 3, 4, and 5 sites in this calculation. The supplier must assign each sampling result a number, beginning with the number 1 for the sample with the lowest contaminant concentration and ascending by single integers through increasing concentrations. The number the supplier assigns to the sample with the highest contaminant concentration must equal the total minimum number of sites listed in Section 141.86(c).

ii) The supplier must multiply the number of Tier 1 or Tier 2 sites during the tap sampling period times 0.9.

iii) The 90th percentile concentration is the contaminant concentration in the numbered sample corresponding with the number the calculation under subsection (c)(4)(C)(ii) yields.

iv) For a supplier serving fewer than 100 people that collects five samples per tap sampling period, the 90th percentile concentration is the average of the highest and second highest concentration.

v) For a supplier the Agency allows to collect fewer than five samples under Section 611.356(c) or failing to collect five samples, the highest sample concentration is the 90th percentile concentration.

d) Corrosion Control Requirements

1) Every supplier must install and operate corrosion control treatment under Sections 611.351 and 611.352 meeting the definition of optimal corrosion control treatment.

2) Any supplier complying with the applicable corrosion control treatment requirements the Agency specifies under Sections 611.351 and 611.352 is deemed as complying with subsection (d)(1).

3) A small CWS or NTNCWS supplier complying with the applicable small supplier compliance flexibility requirements the Agency specifies under Sections 611.351(a)(3) and 611.363 complies with the treatment requirement in subsection (d)(1).

4) A supplier must notify the Agency in writing under 40 CFR 141.90(a)(3) of any upcoming long-term change in water treatment or plan to add a new source as Section 611.360(a)(3) describes. The supplier must not implement a long-term change in water treatment or add a new source until after the Agency reviews and approves the action in a SEP. The SEP may require the supplier to conduct additional monitoring or take other action the Agency deems appropriate to ensure that the supplier maintains minimal levels of corrosion control in its distribution system.

e) Source Water Requirements

1) Any supplier exceeding the lead or copper action level must implement all applicable source water treatment requirements the Agency specifies under Section 611.353.

2) A supplier planning changes in its source water or making long-term treatment changes must describe the change to the Agency in writing under Sections 611.351(a)(3), 611.356(d)(2)(D), and 611.360(a)(3). The supplier must not implement the change until the Agency reviews and approves the change in a SEP.

f) Lead Service Line Replacement and Inventory. A supplier must conduct lead service line replacements as this subsection (f) requires.

1) Any supplier whose system exceeds the lead action level subsection (c) specifies must complete mandatory lead service line replacement. The supplier must conduct lead service line replacement under Section 611.354(g) and must include public education under Section 611.355(a) and (b).

2) A supplier exceeding the lead trigger level subsection (c) specifies must complete goal-based lead service line replacement under Section 611.354(f) and public education under Section 611.355(g) and (h).

3) All suppliers must prepare an inventory of service lines connected to their distribution systems, whether or not the supplier owns or controls the service lines, to identify lead service lines and lead status unknown service lines. The supplier must prepare the inventory under Section 611.354(a).

g) Public Education and Notification Requirements. Under Section 611.355(d), the supplier must provide notification of the lead tap water monitoring results to the persons served at each tested site (tap). A CWS supplier must conduct annual outreach to the Illinois Department of Public Health and local health agencies under Section 611.355(i). The supplier must complete additional actions:

1) Any supplier exceeding the lead action level must implement the public education requirements under Section 611.355.

2) Any supplier exceeding the lead trigger level subsection (c) specifies must notify all customers with a lead service line under Section 611.355(g).

3) Any supplier exceeding the lead action level subsection (c) specifies must notify the public under Subpart V.

4) Any supplier with lead service lines, galvanized service lines needing replacement, or lead status unknown service lines in its inventory, as Section 611.354(a) specifies, must notify all consumers with a lead service line, galvanized service line needing replacement, or a lead status unknown service line under Section 611.355(e).

5) Any supplier failing to reach its lead service line replacement rate goal, as required under Section 611.354(f) must conduct outreach activities in accordance with Section 611.355(h).

h) Monitoring and Analytical Requirements. A supplier must complete all tap water monitoring for lead and copper, monitoring for water quality parameters, and source water monitoring for lead and copper and analyze the monitoring results under this Subpart G as Sections 611.356, 611.357, 611.358, and 611.359 require.

i) Reporting Requirements. A supplier must report any information the treatment provisions of this Subpart G and Section 611.360 require to the Agency.

j) Recordkeeping Requirements. A supplier must maintain records as Section 611.361 requires.

k) Violating National Primary Drinking Water Regulations. Failing to comply with this Subpart G, including conditions the Agency imposes in a SEP, violates the lead and copper NPDWR.

l) Testing in Schools and Child Care Facilities. A supplier must collect samples from all schools and child care facilities within its distribution system under Section 611.362.

BOARD NOTE: This Section derives from 40 CFR 141.80.

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