**Section 611.126 Using Lead-Free Pipes, Fittings, Fixtures, Solder, and Flux for Drinking Water**

a) Applicability and Scope

1) This Section incorporates federal standards for pipes; pipe or plumbing fittings; or fixtures, solder, and flux, assections 1417 and 1461 of SDWA (42 U.S.C. 300g-6 and 300j-21) require. This Section applies to any person introducing these products into commerce, such as a manufacturer, importer, wholesaler, distributor, reseller, or retailer. This Section also applies to any person using these products when installing or repairing specific facilities:

A) A PWS; or

B) A residential or nonresidential facility providing water for human consumption.

2) This subsection (a)(2) corresponds with 40 CFR 143.10(b), which USEPA marked "reserved". This statement maintains structural consistency with the corresponding USEPA rules.

BOARD NOTE: Subsection (a) derives from 40 CFR 143.10.

b) Definitions. The following definitions apply to this Section:

"Accredited third-party certification body" means a body the American National Standards Institute (ANSI) accredits to provide product certification for meeting the lead**-**free requirements of not more than a weighted average of 0.25 percent lead content for the wetted surfaces, consistent with section 1417 of SDWA and subsection (c), such as certification to the NSF/ANSI 372 standard.

"Administrator" means the Administrator of USEPA or an authorized representative.

"Affiliated" means a person or entity directly controlling, indirectly controlling (through one or more intermediaries), under control of, or under common control with a specific person or entity. Affiliated persons or entities include any of the following: a parent company and all wholly or partially owned subsidiaries of the parent company, or two or more corporations or family partnerships having overlap in ownership or control.

"Alloy" means a substance composed of two or more metals or of a metal and a nonmetal.

"Coating" means a thin layer of material, such as paint, epoxy, zinc galvanization, or other material, usually applied by spraying or in liquid form to coat internal surfaces of pipes, fittings, or fixtures.

"Custom fabricated product" means a product:

A manufacturer makes on a case-by-case basis to accommodate the unique needs of a single customer;

Not having an assigned Universal Product Code (UPC);

That no manufacturer, importer, wholesaler, distributor, retailer, or other source stocks or makes available through inventory for distribution; and

That no person catalogs in print or on the internet with a specific item number or code.

"Drinking water cooler" means any mechanical device that is affixed to drinking water supply plumbing actively cools water for human consumption.

"Fitting" means a pipe fitting or plumbing fitting.

"Fixture" means a receptacle or device connected to a water supply system or discharging to a drainage system or both. Fixtures used for potable uses include:

Drinking water coolers, drinking water fountains, drinking water bottle fillers, and dishwashers;

Plumbed-in devices, such as point-of-use treatment devices, coffee makers, and refrigerator ice and water dispensers; and

Water heaters, water meters, water pumps, and water tanks, unless nobody uses them for potable uses.

"Flux" means a substance someone uses to help melt or join metals, such as by removing oxides and other coatings or residues from the metals before joining by using solder or other means.

"Importer" means any person introducing any pipe, pipe or plumbing fitting or fixture, solder, or flux entering the United States into commerce; any "importer", as defined in 19 CFR 101.1, incorporated by reference in Section 611.102; or both.

"Introduce into commerce" or "introduction into commerce" means selling or distributing products or offering products for sale or distribution in the United States.

"Liner" means a rigid lining, such as a plastic or copper sleeve, that is:

Sealed with a permanent barrier to exclude lead-bearing surfaces from water contact; and

Of sufficient thickness and otherwise has physical properties necessary to prevent erosion and cracking for the expected useful life of the product.

"Manufacturer" means a person or entity conducting either of certain activities:

Processing or making a product; or

Having a second person process or make products under a contractual arrangement for distribution, using the first person's or entity's brand name or trademark.

"Non-potable services" means all product uses and applications that are not potable uses.

"Person" means an individual, corporation, company, association, partnership, municipality, or State or federal agency, including an officer, employee, or agent of a corporation, company, association, municipality, or State or federal agency.

"Pipe" means a conduit, conductor, tubing, or hose and may also include permanently attached end fittings.

"Pipe fitting" means any piece, such as a coupling, elbow, or gasket, a person uses for connecting pipe lengths or other plumbing pieces together or for changing direction.

"Plumbing fitting" means a plumbing component controlling the volume or directional flow of water, such as a kitchen faucet, bathroom lavatory faucet, manifold, or valve.

"Point-of-use treatment device" means point-of-use treatment device, as defined in Section 611.102.

"Potable uses", for purposes only of this subsection (b), means services or applications providing water for human ingestion, such as drinking, cooking, preparing food, dishwashing, brushing teeth, or maintaining oral hygiene.

"Product" means a pipe, fitting, or fixture.

"Public water system" or "PWS" is defined in Section 611.101.

"Solder" means a type of metal persons use to join metal parts, such as sections of pipe, without melting the existing metal in the joined parts. Solder usually appears on the market in the form of wire rolls or bars.

"State" means the State of Illinois and its authorized agencies.

"United States" includes its commonwealths, districts, states, tribes, and territories.

"Water distribution main" means a pipe, typically found under or adjacent to a roadway, supplying water to buildings via service lines.

BOARD NOTE: Subsection (b) derives from 40 CFR 143.11.

c) Definition of Lead**-**Free and Calculation Methodology

1) "Lead**-**free", for the purposes of this Section, means:

A) Not containing more than 0.2 percent lead, for solder and flux; and

B) Not more than a weighted average of 0.25 percent lead if the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.

2) Calculate the weighted average lead content of a pipe, pipe fitting, plumbing fitting, or fixture using the following formula:

A) For each wetted component, multiply the percentage of lead in the component by the ratio of the wetted surface area of that component to the total wetted surface area of the entire product to derive the weighted percentage of lead of the component.

B) The sum of the weighted percentage of lead of all wetted components gives the weighted average lead content of the product.

C) Use the lead content of the material used to produce wetted components to determine compliance with subsection (c)(1)(B).

D) For lead content of materials given as a range, use the maximum content of the range.

3) If a coating is applied to the internal surfaces of a pipe, fitting, or fixture component, use the maximum lead content of both the coating and the alloy to calculate the lead content of the component.

4) If a liner is manufactured into a pipe, fitting or fixture, use the maximum lead content of the liner to calculate the lead content of the component.

5) If a fixture contains any media (e.g.*,* activated carbon, ion exchange resin) contained in filters, do not use the media in determining the "total wetted surface area of the entire product" in subsection (c)(2).

6) In addition to the definitions of "lead**-**free" in subsections (c)(1) through (c)(5), no drinking water cooler containing any solder, flux, or storage tank interior surface that may come into contact with drinking water is lead**-**free if the solder, flux, or storage tank interior surface contains more than 0.2 percent lead. The manufacturer must make its drinking water coolers so that each individual part or component that may come in contact with drinking water does not contain more than eight percent lead while still meeting the maximum 0.25 percent weighted average lead content of the wetted surfaces of the entire product.

BOARD NOTE: Subsection (c) derives from 40 CFR 143.12.

d) Use Prohibitions

1) No person may use any pipe, pipe or plumbing fitting or fixture, solder, or flux that is not lead**-**free in the installation or repair of specific facilities:

A) Any PWS; or

B) Any plumbing in a residential or nonresidential facility providing water for human consumption.

2) Subsection (d)(1) does not apply to leaded joints necessary for the repair of cast iron pipes.

BOARD NOTE: Subsection (d) derives from 40 CFR 143.13.

e) This subsection (e) corresponds with 40 CFR 143.14, requiring authorized states to implement the requirements of section 1417(a)(1) of SDWA (42 U.S.C. 300g-6(a)(1)) and 40 CFR 143.13. This statement maintains structural consistency with the corresponding USEPA rule.

f) Introduction into Commerce Prohibitions

1) No person may introduce into commerce any pipe, pipe or plumbing fitting or fixture, solder, or flux that is not lead**-**free, except for a pipe for use in manufacturing or industrial processing;

2) No person engaged in the business of selling plumbing supplies in the United States, except a manufacturer, may sell solder or flux that is not lead**-**free; and

3) No person may introduce into commerce any solder or flux that is not lead**-**free, unless the solder or flux bears a prominent label stating that it is illegal to use the solder or flux in the installation or repair of any plumbing providing water for human consumption.

BOARD NOTE: Subsection (f) derives from 40 CFR 143.15.

g) Exemptions. Subsections (d), (f), and (j) do not apply to certain products:

1) Pipes, pipe fittings, plumbing fittings, or fixtures, including backflow preventers, exclusively for use in non-potable services such as manufacturing, industrial processing, irrigation, outdoor watering, or any other uses in which no person would reasonably anticipate that someone would use the water for human consumption. Additional products that could be "used exclusively for non-potable services" include:

A) Products clearly labeled, on the product, package, or tag with a phrase like, "Not for use with water for human consumption", or another phrase conveying the same meaning in plain language;

B) Products incapable of use in potable services (e.g.*,* physically incompatible) with other products needed to convey water for potable uses; and

C) Products plainly identifiable and marketed as solely for a use other than conveying water. These other uses include conveying air, chemicals other than water, hydraulic fluids, refrigerants, gases, or other non-water fluids.

2) Toilets, bidets, urinals, fill valves, flushometer valves, tub fillers, shower valves, fire hydrants, service saddles, and water distribution main gate valves (provided the valves are at least two inches (5.1 cm) in diameter or larger).

3) Clothes washing machines, emergency drench showers, emergency face wash equipment, eyewash devices, fire suppression sprinklers, steam-capable clothes dryers, and sump pumps.

BOARD NOTE: Subsection (g) derives from 40 CFR 143.16.

h) This subsection (h) corresponds with 40 CFR 143.17, which USEPA marked "Reserved". This statement maintains structural consistency with the corresponding USEPA rule.

i) Required Labeling of Solder and Flux That Is Not Lead**-**Free. Solder and flux that is not "lead**-**free", as defined in subsection (c)(1)(A), must bear a prominent label stating that it is illegal to use the solder or flux in the installation or repair of any plumbing providing water for human consumption.

BOARD NOTE: Subsection (i) derives from 40 CFR 143.18.

j) Required Certification of Products

1) A manufacturer or importer introducing into commerce products that must meet the lead**-**free requirements of section 1417 of the Safe Drinking Water Act and subsection (c) must ensure, except as provided in subsections (j)(1)(A) through (j)(1)(C), that the products are certified compliant, as specified in subsections (j)(2) and (j)(3), by September 1, 2023, or before introducing the product into commerce, whichever occurs later. The manufacturer or importer must maintain documentation substantiating the certification for at least five years after the date the manufacturer or importer last sold the product.

A) Product components of assembled pipes, fittings, or fixtures do not need to be individually certified if the entire product in its final assembled form is lead-free certified.

B) Direct replacement parts for previously installed lead-free certified products do not need to be individually certified if the weighted average lead content of wetted surface area for the part does not exceed the lead content of the original part.

C) Dishwashers do not need to be certified.

2) The manufacturer or importer must obtain certification of its products from an accredited third-party certification body, except as provided in subsection (j)(3). The manufacturer or importer must keep records for all products an accredited third-party certification body certifies, minimally including documents substantiating certification, certification dates, and expiration dates. The manufacturer or importer must provide these documents upon request to the Agency or USEPA, as specified in subsection (k)(2).

3) A manufacturer or importer may self-certify its products under subsection (j)(3)(A) or (j)(3)(B). A manufacturer or importer electing to self-certify its products must comply with subsections (j)(4) through (j)(7).

A) Manufacturers having fewer than ten employees, or importers entering products purchased from or manufactured by manufacturers having fewer than ten employees, may elect to self-certify products in lieu of obtaining certification from an accredited third-party certification body. The number of employees includes any persons employed by the manufacturer and its affiliated entities. The number of employees must be calculated by averaging the number of persons that the manufacturer and its affiliated entities employ, regardless of part-time, full-time, or temporary status, for each pay period over the manufacturer's and affiliated entities' latest 12 calendar months or averaged over the number of months in existence if less than 12 months. Any firm that subsequently expands employment to ten or more employees, based on the most recent 12-month average number of persons employed, is no longer eligible to self-certify products and must obtain third-party certification within 12 months after having ten or more employees.

B) A manufacturer or importer may elect to self-certify any custom-fabricated product in lieu of obtaining certification from an ANSI-accredited third-party certification body, regardless of the number of persons the manufacturer or importer employs.

4) To self-certify products, the eligible manufacturer or importer must attest that its products comply with the definition of "lead**-**free" in subsection (c) by developing and maintaining a "certificate of conformity". The certificate of conformity must be:

A) Signed by a responsible corporate officer; general partner; proprietor; or an authorized representative of a responsible corporate officer, general partner, or proprietor; and

B) Posted the certificate to a website with continuing public access in the United States, unless the certificate is being distributed by other means (e.g.*,* electronically or in hard copy) with the product through the distribution channel for final delivery to the end-use installer of the product.

5) The certificate of conformity must be in English and include:

A) Contact information for the manufacturer or importer:

i) The entity's or proprietor's name;

ii) Street and mailing addresses;

iii) Phone number; and

iv) Email address;

B) For products imported into the United States, contact information for the manufacturer;

C) A brief listing of the products, including, when applicable, unique identifying information such as model names and numbers;

D) A statement attesting that the products meet the lead**-**free requirements of section 1417 of the Safe Drinking Water Act (42 U.S.C. 300g-6) and subpart B of 40 CFR 143 and that the manufacturer or importer is eligible to self-certify the product under that rule;

E) A statement indicating how the manufacturer or importer verified conformance with section 1417 of the Safe Drinking Water Act (42 U.S.C. 300g-6) and subpart B of 40 CFR 143; and

F) The signature, date, name, and position of the signatory and the name and position of the officer, partner, or proprietor who is principal if the signatory certifies as agent on behalf of a responsible corporate officer.

6) A manufacturer or importer self-certifying products must maintain, at a primary place of business within the United States, certificates of conformity and sufficient documentation to confirm that products meet the lead-free requirements of this Section. Sufficient documentation may include detailed schematic drawings of the products indicating dimensions, records of calculations of the weighted average lead content of the products, documentation of the lead content of materials used in manufacture, and other documentation the manufacturer or importer used in verifying the lead content of a plumbing device. The manufacturer or importer must provide this documentation and certificates of conformity upon request to the Agency or USEPA, as specified in subsection (k)(2). The manufacturer or importer must also maintain this documentation and certificates of conformity for at least five years after it last sold the product.

7) The manufacturer or importer must complete the certificate of conformity and documents before introducing a product into commerce.

BOARD NOTE: Subsection (j) derives from 40 CFR 143.19.

k) Compliance Provisions

1) Not complying with the Act or this Section may subject a person to enforcement action. Enforcement action may include injunctive or declaratory relief, a Board order to cease and desist, civil penalties, or criminal penalties.

2) USEPA or the Agency may, on a case-by-case basis, request any information, such as records it deems necessary to determine whether a person complies with section 1417 of the Safe Drinking Water Act (42 U.S.C. 300g-6); subpart B of 40 CFR 143, incorporated by reference in Section 611.102; and this Section. The manufacturer or importer must provide requested information to USEPA or the Agency at a time and in a format as reasonably requested by USEPA or the Agency.

BOARD NOTE: Subsection (k) derives from 40 CFR 143.20.

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