The Reduction of Lead in Drinking Water Act was enacted on January 4, 2011 to amend Section 1417 of the Safe Drinking Water Act (SDWA or Act) respecting the use and introduction into commerce of lead pipes, plumbing fittings or fixtures, solder and flux. The Act established a prospective effective date of January 4, 2014, which provided a three year timeframe for affected parties to transition to the new requirements. Upon signature the Community Fire Safety Act of 2013¹ will further amend Section 1417 to exempt fire hydrants. In anticipation of these changes taking effect, EPA is providing the following summary of the requirements of the lead ban provisions in Section 1417 and some answers to frequently asked questions related to the amendments to assist manufacturers, retailers, plumbers and consumers in understanding the changes to the law.

Outreach

On August 16, 2012, EPA held a public webinar with stakeholders to discuss the Reduction of Lead in Drinking Water Act and the potential ramifications that this change in law may have. Participants included public utilities, government agencies, plumbing manufacturers, plumbing retailers and trade associations. At the end of this webinar, EPA solicited comments from the attendees on issues and concerns related to the new requirements. The webinar proceedings and the solicited input were used in formulating an initial set of Frequently Asked Questions (FAQs) that were published for public comment on May 23, 2013. EPA held a webinar on November, 25 2013 to solicit information from stakeholders regarding the applicability of Section 1417 to fire hydrants. EPA was reassessing whether fire hydrants should be subject to the lead free requirements when the Community Fire Safety Act was passed. EPA has revised this document to explain that fire hydrants would be exempt from the lead free requirements in accordance with the Community Fire Safety Act.

This document, including revised answers to frequently asked questions, is intended to help the public understand the statutory requirements, EPA intends to further clarify and refine these and other issues related to these provisions in a future rulemaking. These FAQs include some recommendations that are advisory only (indicated by the use of the words such as "should" or "encourages").

EPA remains interested in feedback on these FAQs, for refinement of these answers, to respond to new questions, or to determine which issues should be explored in its rulemaking. As a result, EPA may revise or supplement these FAQs from time to time.

SDWA Section 1417

Since 1986, the Safe Drinking Water Act ("SDWA" or "the Act") has prohibited the <u>use</u> of certain items that are not lead free and since 1996 the Act has made it unlawful for anyone to <u>introduce into commerce</u> items that are not lead free.

¹ The Community Fire Safety Act of 2013 was passed in both the House (December 2, 2013) and Senate (December 17, 2013). As of December 19, 2013, the President's signature to enact the bill is pending.

Use Prohibition

Section 1417(a)(1) prohibits the "use of any pipe, any pipe or plumbing fitting or fixture, any solder, or any flux, after June 1986, in the installation or repair of (i) any public water system; or (ii) any plumbing in a residential or non-residential facility providing water for human consumption, that is not lead free" as defined in Section 1417(d). Prior to the 2011 Amendments, the only exception to this prohibition was for "leaded joints necessary for the repair of cast iron pipes."

Unlawful Commerce Provision

There are three components to the "unlawful commerce" provision. Section 1417(a)(3) provides that "it shall be unlawful –

- (A) for any person to introduce into commerce any pipe, or any pipe or plumbing fitting or fixture, that is not lead free, except for a pipe that is used in manufacturing or industrial processing;
- (B) for any person engaged in the business of selling plumbing supplies, except manufacturers, to sell solder or flux that is not lead free; or
- (C) for any person to 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."

Summary of the Amendments to SDWA Section 1417

The 2011 Reduction of Lead in Drinking Water Act revised Section 1417 to:

- (1) Redefine lead free in SDWA Section 1417(d) to:
 - lower the maximum lead content of the wetted surfaces of plumbing products such as pipes, pipe fittings, plumbing fittings and fixtures from 8.0% to a weighted average of 0.25%;
 - establish a statutory method for the calculation of lead content; and
 - eliminate the requirement that lead free products be in compliance with voluntary standards established in accordance with SDWA 1417(e) for leaching of lead from new plumbing fittings and fixtures.
- (2) Create exemptions in SDWA Section 1417(a)(4) from the prohibitions on the use or introduction into commerce for:
 - "pipes, pipe fittings, plumbing fittings or fixtures, including backflow preventers, that are used exclusively for nonpotable services such as manufacturing, industrial processing, irrigation, outdoor watering, or any other uses where the water is not anticipated to be used for human consumption;" (SDWA 1417(a)(4)(A))

• "toilets, bidets, urinals, fill valves, flushometer valves, tub fillers, fire hydrants, shower valves, service saddles, or water distribution main gate valves that are 2 inches in diameter or larger." (SDWA 1417(a)(4)(B))

Effective Date of the Amendments

The amendments will become effective on January 4, 2014. Until January 4, 2014:

- The definition of lead free is a maximum lead content of 8.0%
- None of the exemptions created by the 2011 amendments apply
- Plumbing fittings and fixtures must be in compliance with the voluntary standard Section 9 of NSF, International (NSF)/American National Standards Institute (ANSI) Standard 61.

As of January 4, 2014, the 2011 amendments to Section 1417 of SDWA take effect and therefore:

- A new definition of lead free applies, including a maximum lead content of 0.25% and a method for calculating it, unless the product is covered by one of the exemptions.
- While SDWA still refers to voluntary standards, it no longer requires plumbing fittings and fixtures to be in compliance with Section 9 of NSF/ANSI Standard 61 (e.g., new endpoint devices).

Other laws related to the sale or use of plumbing products that contain lead

It is important to note that State and local jurisdictions may have additional limitations or requirements regarding the use or sale and distribution of pipes, pipe or plumbing fittings, or fixtures that contain lead. Contact your local or State plumbing or drinking water authority to find out more about any additional requirements that may apply.

Frequently Asked Questions

Definition of Lead Free

- 1. Q. How exactly will the definition of lead free change?
 - A. Prior to January 4, 2014, lead free has the following definition:-
 - (1) when used with respect to solders and flux, lead free refers to solders and flux containing not more than 0.2 percent lead;
 - (2) when used with respect to pipes and pipe fittings, lead free refers to pipes and pipe fittings containing not more than 8.0 percent lead; and
 - (3) when used with respect to plumbing fittings and fixtures, lead free refers to plumbing fittings and fixtures in compliance with standards established in accordance with SDWA Section 1417(e) (e.g. Section 9 of NSF/ANSI Standard 61).

Effective January 4, 2014, lead free means:

(A) not containing more than 0.2 percent lead when used with respect to solder

and flux; and

(B) not more than a weighted average of 0.25 percent lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.

Calculation

For purposes of the Act, the weighted average lead content of a pipe, pipe fitting, plumbing fitting, or fixture is calculated by using the following statutory formula:

- For each wetted component, the percentage of lead in the component is multiplied by the ratio of the wetted surface area of that component to the total wetted surface area of the entire product to arrive at the weighted percentage of lead of the component.
- The weighted percentage of lead of each wetted component is added together, and the sum of these weighted percentages constitute the weighted average lead content of the product. The lead content of the material used to produce wetted components is used to determine compliance.
- For lead content of materials that are provided as a range, the maximum content of the range must be used.²

Questions about Coverage

2. Q. What did Congress mean by pipes, pipe fittings, plumbing fittings and fixtures?

A. By removing Section 1417(d)(3) from the definition of lead free, the 2011 amendments eliminated distinctions between "pipes" "pipe fittings", "plumbing fittings" and "plumbing fixtures." As a general matter, Congress intended that these amendments broadly apply to pipes and plumbing that may provide water for human consumption so that lead in the wetted surfaces of these conveyances can be minimized or eliminated, thus reducing exposures to lead in tap water. For purposes of these FAQs, EPA is using the term "pipes, fittings or fixtures" as a shorthand to refer to pipes, pipe fittings, plumbing fittings and fixtures, as those terms are used in the Act

Example:

Component(Pb%) Lead Content(RWSA) Ratio of Wetted Surface AreaWeighted % LeadWasher0.50%1/10000.0005Pipe0.10% lead999/10000.099Weighted Average Lead Content: 0.0005 + 0.099 = 0.0995

² Following is an example of the statutory calculation. Note: The formula will vary for each product depending upon the number of components and the wetted surface area of each component. Equation: Total % Lead = $[Pb\%C_1 X RWSAC_1] + [Pb\%C_2 X RSAC_2] + [Pb\%C_n X RSAC_n]$

- **3. Q.** I am a manufacturer of faucet-mounted water treatment devices and plumbed-in treatment devices, which may include dedicated faucets. Are these types of devices a pipe, fitting or fixture that is subject to the new lead free requirements?
 - **A.** Yes, both point-of-use and point-of-entry devices are covered by the lead free requirements because the terms used by Congress are commonly understood to include kitchen and bathroom faucets and the pipes leading to such faucets. These devices are typically integrated into a faucet or plumbing system that delivers drinking water and as such is considered to be covered by the new lead free requirements. Because these devices may be designed to remove lead, EPA expects that some may already meet the lead content limit of 0.25%.
- **4. Q.** I am a manufacturer of stand-alone appliances that are not connected to a potable water distribution system (i.e. non-plumbed), such as coffee makers or pour through water filters. Are these types of items required to meet the new definition of lead free before I introduce them into commerce?
 - **A.** These stand-alone, non-plumbed, appliances or devices do not logically fit within the statutory reference to pipes, fittings or fixtures because they are not plumbed in and they are not part of the drinking water distribution system. The focus of SDWA Section 1417 is to prevent the contamination of the drinking water in the distribution system by lead that has leached from pipes, faucets and other fixtures incidental to the delivery of potable water. As noted in the legislative history of the 1996 amendments to Section 1417, "[i]t is the intent of the Committee that the terms pipe and plumbing fittings and fixtures in the legislation are in reference to drinking water applications...." EPA does encourage manufacturers to avoid the use of lead in such appliances and EPA also encourages consumers to consult the manufacturers of these items to make sure that they do not contain lead.

Where such devices are, however, integrated into pipes, fitting or fixtures for the delivery of water, such as a plumbed in coffee maker, they would logically come within the scope of the new lead free requirements.

- **5. Q.** Are fire hydrants subject to the lead free requirements in section 1417(a)?
 - **A.** No, the Community Fire Safety Act of 2013, once enacted, would exempt fire hydrants from the lead free requirements in section 1417(a).
- **6. Q.** Are household appliances or fixtures, such as washing machines, dishwashers and water heaters subject to the lead free requirements?

- **A.** If the appliance or fixture is part of the plumbing system and is not used exclusively for nonpotable services, it is subject to the lead free requirements. As a result, washing machines are exempt as a device that is used exclusively for nonpotable services. Dishwashers and water heaters, on the other hand, are not exempt because they are used for potable services.
- 7. Q. How does EPA interpret the phrase "potable services"?
 - A. EPA interprets "potable services" to be services or applications that provide water suitable for human ingestion (e.g. drinking, teeth brushing, food preparation, dishwashing, maintaining oral hygiene).
- **8. Q.** Are temporarily installed items, including those used for emergency repairs, subject to the new lead free requirements?
 - **A.** There is no exemption in the statute for temporary or emergency repairs; therefore under the language of the statute, any pipe, fitting or fixture used in installation or repair, beginning January 4, 2014, is subject to the lead free requirements and must meet the new definition of lead free, even if their installation is only temporary or for an emergency repair.
- **9. Q.** I am a manufacturer of hose bibs (threaded faucets with nozzles bent downward). I market them and sell them primarily for use outdoors (e.g. to connect to a garden hose, sprinkler, or irrigation system) but they could be used for services associated with human consumption as well. Are the hose bibs required to meet the new definition of lead free?
 - **A.** A hose bib is a pipe, fitting or fixture under the language of the statute and therefore it is subject to the requirements in Section 1417 unless it is used exclusively for nonpotable services. If you market and sell hose bibs for nonpotable services, and the bibs are prominently and clearly labeled as illegal to use for potable services and not anticipated to be used for human consumption, then EPA would generally consider them to be used exclusively for nonpotable services and therefore, exempt from the lead free requirements in SDWA 1417(a)(1) and (3).
- 10. Q. I am a manufacturer of pipes, fittings or fixtures (e.g. backflow preventers). Some of the products I make are marketed and sold for use in nonpotable services exclusively, and some products I make are marketed and sold for both potable and nonpotable services. The products marketed and sold for use in nonpotable services could theoretically be used for potable services. If I affix a label to the products that are sold for nonpotable services identifying it as illegal to use for potable services, could it be considered exempt under 1417(a)(4)(A)?
 - **A.** Yes. While there is no requirement in the statute to label pipes, fittings or fixtures as either lead free or not lead free, a manufacturer could use labeling to establish that the pipe,

fitting or fixture is used exclusively for nonpotable services and therefore, exempt from the lead free requirements in SDWA 1417(a)(1) and (3). In implementing the new requirements, EPA would generally consider pipes, fittings or fixtures to be used exclusively for nonpotable services if they are marketed and sold for use in nonpotable services, and prominently and clearly labeled as illegal to use in potable services and not anticipated for human consumption.

EPA also recommends that the label identify some examples of potable services to convey that it includes more than drinking water. For example, the label could say "It is illegal to use this product in potable services such as drinking water, handwashing, food preparation, and dishwashing."

- 11. Q. I am a manufacturer of toilets, bidets, urinals, fill valves, flushometer valves, tub fillers, shower valves, service saddles, or water distribution main gate valves that are 2 inches in diameter or larger. Now that the new law exempts these products from the use prohibition and the unlawful commerce provision in SDWA 1417(a)(1) and (3), do they still need to meet the old definition of lead free or could they contain more than 8.0% lead?
 - **A.** Once the amendments take effect on January 4, 2014, there will be nothing in the SDWA that would require any part of these products to meet the old (or new) definition of lead free. However, there may be State or local laws prohibiting these products from containing more than a certain percentage of lead, or other legal implications to increasing the lead content of these products, so manufacturers may want to seek legal advice before increasing the lead content of these products.
- **12. Q.** I am a manufacturer of products that are not anticipated to be used in potable services but the products are not used exclusively in nonpotable services. Are the products exempt from the requirements of the Act under Section 1417 (a)(4)(A)?
 - A. No, only pipes, fittings or fixtures that are used exclusively in nonpotable services are exempt under 1417(a)(4)(A). If the item is used exclusively in nonpotable services it is also not anticipated to be used for human consumption, but the inverse is not necessarily true. Pipes, fittings or fixtures that are not anticipated to be used for human consumption but are physically capable of being used for potable services may not be used exclusively for nonpotable services in which case they would not be exempt under Section 1417(a)(4)(A).
- **13. Q.** I am a manufacturer of products that are sold for use in nonpotable services but they could be connected to potable services. If I want to assure my products are used exclusively for nonpotable applications, what kind of labeling should I use?
 - **A.** If you choose to label your pipes, fittings or fixtures in order to establish that they are to be used exclusively for nonpotable services, the labeling should be clear and prominent;

otherwise, it may not be reasonable to assume that the product will be used exclusively for nonpotable services and not anticipated to be used for human consumption. EPA recommends that the labeling consist of both a product label and a packaging label because products can get separated from their packaging. Another reason for labeling both the package and the product is that one package may contain many individual products within it and purchasers may not be aware of the label on the bulk package. EPA further recommends that product labels consist of physically marking the product, a tag physically attached to each individual product or an individual bag that contains each individual product. Labels should clearly indicate that it is illegal for use in potable services and not anticipated for human consumption.

Effective Date

- **14. Q.** I operate a hardware store that sells pipes, fittings or fixtures primarily to homeowners, contractors, and some small businesses that sell plumbing services. I recently purchased a large amount of pipes, fittings or fixtures that meet the old definition of lead free, but not the new definition of lead free. If my inventory of these fixtures has not sold by January 4, 2014, may I continue to sell them until I've sold my existing supply?
 - **A.** No. The changes to the law become effective on January 4, 2014. Congress provided a transition period of three years after enactment (2011) of the new requirements. The statute does not provide any further extensions or exceptions for back inventory, small businesses, or sales to end-users. However, back inventory that could be used in both potable and nonpotable services may still continue to qualify for the exemption, and, as a result, be sold, if the products are clearly labeled as illegal to use for potable services.
- 15. Q. I am a builder and I anticipate that I will have a project that is partially completed on January 4, 2014. Am I required to remove all the plumbing that is not compliant with the new definition of lead free?
 - **A.** Any plumbing installed prior to January 4, 2014 would not need to be replaced under SDWA so long as it met the lead free requirements applicable at the time of installation. Any pipe, fitting or fixture installed after January 4, 2014 must meet the new lead free definition. EPA recommends you check with your local building inspector to get more information on implementation of this requirement, including any documentation required to demonstrate the lead content and installation date.

Calculating Lead Content, Third Party Certification and Labeling Products

16. Q. I am a manufacturer of plumbing fittings. How do I determine whether my products meet the definition of lead free in SDWA?

- **A.** Starting January 4, 2014, the statute requires that you use the method for calculating lead content in Section 1417(d)(2), which is described in the answer to question 1.
- **17. Q.** I am a manufacturer of plumbing supplies. If I apply a coating to the wetted surface or use a lead removal technology to treat the surface, how does it affect my calculation of the lead content of the material used to produce the wetted component?
 - A. Section 1417 (d)(1)(B) defines lead free for pipes, fittings or fixtures to mean "not more than a weighted average of 0.25% lead" when used with respect to the wetted surfaces. The statutory provision for calculating lead content (Section 1417(d)(2)) provides that "[t]he lead content of the material used to produce wetted components is used to determine compliance with the lead free definition." That provision also provides that, for lead content of materials that are provided as a range, the maximum content of the range must be used. The "material used to produce wetted components" includes all of the materials used to produce any component that has a wetted surface. If a coating is applied to a pipe, fitting or fixture, you must calculate the lead content of both the alloy and the coating and use the maximum lead content. If a pipe, fitting or fixture is treated with a lead removal technology, you would need to calculate the lead content of the alloy used to produce the pipe, not just the surface of the pipe, fitting or fixture because the alloy is the material used to produce the pipe and the pipe is the wetted component. If the lead content of the material is provided as a range, you would use the maximum lead content.
- **18. Q.** Now that the new definition of lead free no longer refers to pipes, fittings or fixtures "in compliance with standards established in accordance with subsection (e) of this section", could State or local law and regulations still prohibit the use of products that are not in compliance with certain voluntary standards?
 - **A.** As of January 4, 2014, pipes, fittings or fixtures are no longer required by the SDWA to be in compliance with voluntary standards (e.g., Section 9 of NSF/ANSI Standard 61 or NSF/ANSI Standard 372) because Congress removed Section 1417(d)(3) (which referenced Section 1417(e)) from the definition of lead free. State or local laws and regulations (e.g., plumbing codes) however, may still prohibit the use of products that are not in compliance with certain voluntary standards.
- **19. Q.** I am a plumbing manufacturer. Does the SDWA require that my products be certified by a third party to demonstrate compliance with the new definition of lead free?
 - **A.** The SDWA does not require manufacturers to obtain third party certification of their products. However, EPA encourages manufacturers to use third party certification or to create a system to document compliance (e.g., self-certification) with Section 1417 of SDWA and to provide important information to subsequent purchasers or users of the product, including retail stores, plumbers and consumers. Additionally, a recent survey of States

found that 47 have requirements for water treatment and distribution system components to comply with NSF/ANSI Standard 61 and most of them require an ANSI-accredited third party certification.

- **20. Q.** I am a manufacturer of pipes, fittings or fixtures. Am I required to label my products as being lead free?
 - **A.** There are no requirements in SDWA for a manufacturer to label these products as lead free; however, EPA encourages manufacturers to provide subsequent purchasers or users of the product, including retail stores, plumbers and consumers with information that clearly indicates the lead content in the products they are selling or distributing. Additionally, some States or local governments may require lead free labeling.
- **21. Q.** Is there a role for third party certifications?
 - **A.** While the SDWA does not require third party certification, third party certification bodies or agencies may be used by manufacturers to inform consumers which products meet a voluntary standard. One such standard, NSF/ANSI 372, is consistent with the requirements of the Reduction of Lead in Drinking Water Act. A third party certification such as NSF/ANSI 372 could be a useful way to identify a product as meeting the requirements of Section 1417. Also, there may be State or local laws that require third party certification.
- **22. Q.** I am installing a bathroom sink faucet (e.g., a plumbing fixture serving water intended for human consumption) and I want to be sure that the fixture meets the requirements of the Reduction of Lead in Drinking Water Act. How can I tell which product to purchase?
 - **A.** Any bathroom sink faucet for sale after January 4, 2014 must be lead free (containing not more than 0.25% weighted average lead content). While the statute does not require labeling, EPA encourages and expects many plumbing product manufacturers to label their products as lead free so that they can demonstrate compliance with SDWA as well as provide information to purchasers or users of the product.

Many State plumbing codes require the use of products that are in compliance with NSF/ANSI standards 61 and 372. NSF/ANSI Standard 372 is a certification process by which independent laboratories verify that the plumbing product is in compliance with the requirements of the 2011 Reduction of Lead in Drinking Water Act. Products will bear the mark of the laboratory that has independently certified that the product meets the standard. EPA published a brochure to assist the public with identifying the various marks that indicate a product has been certified as lead free to the new requirement of the Act: "How to Identify Lead-Free Certification Marks for Drinking Water System & Plumbing Materials." You can access the document at http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100GRDZ.txt

Alternatively, a consumer could directly contact the manufacturer of the product to confirm that the model you wish to purchase meets the lead free requirements.

Repairs and Replacement Parts

23. Q. How does EPA interpret the new statutory provisions to apply to repairs, reinstallations, and replacement parts?

A. Repairs of previously installed pipes, fitting or fixtures

A pipe, fitting or fixture that was installed in a public water system or a facility providing water for human consumption prior to the effective date of the 2011 Act does not need to meet the new definition of lead free regardless of whether it is repaired. The repaired pipe, fitting or fixture is not being "used" in the repair or installation, or "introduced into commerce" and therefore, the requirements of Section 1417 are not triggered as a result of the repair. Parts used in repairs may need to meet the requirements of Section 1417 (see "Replacement Parts" below and FAQ #24, 26, 27 and 28).

The temporary removal of pipes, fittings, or fixtures for repairs and reinstallation to their original location would not trigger the requirements of Section 1417 because the pipes, fittings or fixtures are not being installed or "used in" repair. (See FAQ #29). Similarly, the temporary removal of pipes, fittings or fixtures for storage or calibration and reinstallation to their original location would not trigger the requirements of Section 1417. (See FAQ #30.)

Replacement Parts

After the effective date of the 2011 Act, any replacement parts that are pipes, fittings, or fixtures either installed or used in repairs of a public water system or a facility providing water for human consumption, or introduced into commerce, must meet the definition of lead free. (See FAQ #25)

However, where the replacement of pipes, fittings, or fixtures is part of a device (such as a water heater) made up of several component parts and the device meets the definition of lead free in the 2011 Act, the replacement parts themselves need not meet the new definition of lead free. As long as the overall device would meet it with the replacement part installed, then the requirements of Section 1417 would be met. Such replacement parts should be labeled as specifically for use in the device that meets the new definition of lead free. (See FAQ # 24.)

Also, the use or introduction into commerce of replacement parts that are <u>not</u> pipes, fittings, or fixtures does not trigger the requirements of Section 1417. EPA recommends that any replacement parts that are <u>not</u> pipes, fittings, or fixtures that come into contact with potable water meet the definition of lead free in the 2011 Act because of their potential to cause elevated levels of lead in drinking water, but they are not required to do so. (See FAQ #26.)

- **24. Q.** I am a manufacturer of pipes fittings or fixtures that serve water intended for human consumption. These pipes, fittings or fixtures are made up of several component parts. If I sell or provide free replacement parts, **AND** the original pipe, fitting or fixture met the lead free requirement in the 2011 Act, must those replacement parts meet the new definition of lead free?
 - **A.** If the original pipe, fitting or fixture met the lead free requirement in the 2011 Act, and the replacement parts are sold for use in that specific device, they would not make the fixture noncompliant, and therefore those parts do not need to meet the lead free requirement.
- **25. Q.** I am a plumber who installs and repairs pipes, fittings or fixtures that provide water for human consumption. If one of these devices requires replacement after January 4, 2014 does the new pipe, fitting or fixture need to meet the new federal definition of lead free?
 - **A.** Yes, the replacement of a pipe, fitting or fixture would trigger the requirements of Section 1417 and the new pipe, fitting or fixture would need to meet the new definition of lead free. Section 1417(a)(1) prohibits the use of a pipe, fitting or fixture that is not lead free in the installation or repair of any plumbing in a residential or non-residential facility providing water for human consumption.
- **26. Q.** I am a plumber who installs and repairs plumbing in facilities providing water for human consumption. A pipe, fitting or fixture requires repair of a part that is not a pipe, fitting, or fixture. Does the new part need to meet the definition of lead free?
 - **A.** No. The definition of lead free does not apply to component parts that are not "pipes, pipe fittings, plumbing fittings, and fixtures" (referred to in these FAQs as "pipes, fittings, and fixtures"). EPA recommends that the wetted components of any replacement parts that are not pipes, fittings, or fixtures also be lead free. (See FAQ #2). EPA also notes that solder and flux used to install or repair pipes, fittings and fixtures may not contain more than 0.2 percent lead (See FAQ #1).
- **27. Q.** I am repairing, in place, a pipe, fitting or fixture, which provides water for human consumption. The pipe, fitting of fixture was installed *prior to* January 4, 2014 and I do not know whether it meets the new definition of lead free in the 2011 Act. Do the replacement parts need to meet the new definition of lead free?
 - **A.** While the previously installed pipe, fitting or fixture does not need to meet the new definition of lead free as it was installed prior to the effective date of the new lead free requirements, the statutory language requires that any replacement parts that are pipes, fittings or fixtures must meet the lead free requirements. In addition, EPA recommends that

any replacement parts that are not pipes, fittings, or fixtures that come into contact with potable water should meet the definition of lead free in the 2011 Act.

- **28. Q.** I am repairing a pipe, fitting or fixture, which provides water for human consumption. The pipe, fitting or fixture was installed *after* January 4, 2014 and meets the new definition of lead free. Do the replacement parts need to meet the new definition of lead free?
 - **A.** It is unlikely that somebody making a repair will be able to recalculate the weighted average of lead in the pipe, fitting or fixture as a whole. Therefore, if the repair calls for parts that are pipes, fitting, or fixtures, those parts must meet the new definition of lead free unless the repair is using parts specifically made by the vendor for use in repairing the specific pipe, fitting or fixture in question, ensuring that the new parts would have the same lead content as the existing parts that are being replaced.
- **29. Q.** If I am repairing a pipe, fitting or fixture which was installed *prior to* January 4, 2014 and I need to temporarily remove it, does it need to meet the new definition of lead free after the repair has been completed?
 - **A.** No. The repaired pipe, fitting, or fixture does not need to meet the definition of lead free because it is not being "used in" a repair or installed for the first time or introduced into commerce. Just as a pipe, fitting, or fixture that does not meet the new definition of lead free may be repaired in place, a pipe, fitting, or fixture can be temporarily taken out of service for repair and returned to the same location without triggering the requirement to meet the definition of lead free in the 2011 Act. Any component parts used in the repair that are themselves pipes, fittings, or fixtures must meet the definition of lead free in the 2011 Act (see FAQ # 25).
- **30. Q.** I operate a water system that temporarily removes pipes, fittings or fixtures (e.g. seasonal storage or calibration) and the pipe, fittings or fixtures are returned to their original location; must these pipes, fittings or fixtures meet the new definition of lead free after January 4, 2014?
 - **A.** No. Because the water system is simply returning an unaltered pipe, fitting or fixture to the same location it would not be required to meet the new definition of lead free.

Introduction Into Commerce

- **31. Q.** Has EPA interpreted the term "introduction into commerce" in SDWA Section 1417(a)(3)?
 - **A.** Yes. In 1998, after Section 1417 was amended to prohibit the introduction into commerce of any pipes, pipe or plumbing fittings or fixtures, EPA issued guidance on the enforcement and implementation of Section 1417. In the guidance, EPA explained that it "interprets 'introduce into commerce' as used in Section 1417 of SDWA to cover not only the initial offering of products for sale but also the sale or distribution from an inventory of products."

(WSG #129, Sept. 24, 1998, at 2).

- **32. Q.** If I give away free replacement parts, am I introducing those parts into commerce?
 - **A.** Yes. As noted, above, EPA has previously interpreted the phrase "introduce into commerce" as including the distribution of products, not just the sale of products, so giving away free products or parts would be covered by the Act.

Office of Water (4707M)

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