Reduction of Lead in Drinking Water Act

Effective Date – January 4, 2014

Disclaimer

It is likely that over time EPA will provide additional guidance.

This is the ADH guidance at this point in time.

As of June 19, 1986

In general. No person may use any pipe, pipe or plumbing fitting or fixture, any solder, or any flux, after June 19, 1986, in the installation or repair of:

- (i) any public water system; or
- (ii) any plumbing in a residential or nonresidential facility providing water for human consumption, that is not *lead free (within the meaning of subsection (d)

The use prohibition in SDWA also applies to entities other than public water systems (PWS)

PWS includes collection, treatment and storage in addition to distribution facilities under SDWA

-exception for leaded joints necessary for the repair of cast iron pipes. (*Old lead free- next slide)

As of June 19, 1986

- “lead free”
  - (1) when used with respect to solders and flux refers to solders and flux containing not more than 0.2 percent lead;
  - (2) when used with respect to pipes and pipe fittings 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, refers to plumbing fittings and fixtures in compliance with standards established in accordance with subsection (e) of this section.

As of August 6, 1998

- 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.

As of January 4, 2014

- Redefine “lead free” in SDWA Section 1417(d) to:
  - lower the maximum lead content of plumbing products such as pipes and fixtures from 8.0% to 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.

As of January 4, 2014

- 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;"
  - "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."

As of January 4, 2014

- No requirement to replace any existing pipe, pipe fittings, plumbing fittings, or fixtures, including backflow preventers that was in compliance on or before January 3, 2014.
- New **potable** service pipe, pipe fittings, plumbing fittings, or fixtures including backflow preventers and wetted repair parts required to comply with new definition.

General

- Reduce lead in drinking water by reducing the amount of lead that the water may come into contact with.
- Reduce lead levels in new pipe, pipe fittings, plumbing fittings or fixtures that water may come into contact with prior to being consumed.
- No requirement to remove existing lead containing pipe, pipe fittings, plumbing fittings or fixtures, but if removed from potable service, reuse is limited or prohibited.

Service Connections (potable)

Exempt

- Service Saddle – Specifically exempt in law.
- Curb Box – not a wetted part
- Meter Box – not a wetted part
- Other parts of service connection that **do not** come in contact with the water.

Lead Free Required

- Corporation Stop
- Service Tubing
- Curb Stop
- Meter Setter
- Meter
- Pressure Reducing Valve
- Fittings and other parts that **do** come in contact with the water

Meter Work (potable)

- Q1. If a non-complying meter is removed from service due to non-payment, can it be re-installed in the same location?
  - A1. Yes.

    (The meter can also be locked off)
- Q2. If a non-complying meter is removed from service due to non-payment, can it be re-installed in a different location?
  - A2. No. Replacement with “lead free” is required.

Meter Work (potable)

- Q3. If a non-complying meter is removed from service for testing and repair is not needed, can it be reused in the same location?
  - A3. Yes.
- Q4. If a non-complying meter is removed from service for testing and repair is not needed, can it be reused in a different location?
  - A4. No, “lead free” is required.

Meter Work (potable)

- Q5. If a non-complying meter is removed from service for testing, and repair or parts replacement is needed, can it be repaired and reused in the same location?
  - A5. Yes, if wetted repair parts are “lead free”.
- Q6. If a non-complying meter is removed from service for testing, and repair or parts replacement is needed, can it be repaired and reused in a different location?
  - A6. No, “lead free” required.

Meter Work (potable)

- Q7. A water systems has several spare large meters and routinely changes meters at high usage customers, a used and tested meter is installed and the existing meter is tested and stored for a period of time until needed at the same or a different location, can water systems continue this practice with non-complying meters?
  - A7. No, “lead free” replacement meters required.

Meter Work (Potable)

- Q8 If a meter must be relocated due to road construction or other reasons, can non-complying components be reused on the same service?
  - A8. Yes.
- Q9. If a meter must be relocated due to road construction or other reasons, can non-complying components be reused on a different service?
  - A9. No, “lead free” Required.

Meter Work (Non-Potable)

- Q10. Are “lead free” components required on non potable service connections such as irrigation systems?
  - A10. No, Exempt
- Q11. Can non-complying components including salvaged or used non-complying components be used on non potable service connections?
  - A11. Yes, Exempt. Note that component must have been acceptable for use prior to 1/4/2014

Meter Work

- Q12. If a non potable service connection using non complying components installed after 1/3/2014 is converted to a potable service, must non complying components be replaced with “lead free” components?
  - A12. Yes, “lead free” required.

Tapping Sleeves

- Q13. Are tapping sleeves required to be “lead free”?
  - A13. Yes, “lead free” required
- Q14. Are tapping sleeves with valves required to be “lead free”?
  - A14. Yes, “lead free” required, except if the valve is a $\geq$ 2 inch distribution main gate valve, the valve part of the assembly is exempt.

Valve Boxes and PRV's

- Q15. Are valve boxes required to be "lead free"?
  - A15. No, exempt, not wetted.
- Q16. Are Pressure reducing valves required to be "lead free"?
  - A16. Yes, "lead free" required.

Air Relief Valves

- Q17. Are air relief valves required to be “lead free”?
  - A17. Yes, “lead free” required.
- Q18. Are air / vacuum relief valves required to be “lead free”?
  - A18. Yes, “lead free” required.

Other Valves

- Q19. Are Ball, Butterfly, Wafer, Double Door, Check and other valves except for gate valves ≥ 2 inches required to be “lead free”?
  - A19. Yes, “lead free” required for all valves except for distribution main gate valves ≥ 2 inches.

Miscellaneous Parts

- Q20. In general, are non wetted repair parts required to be “lead free”?
  - A20. No, parts that are non wetted are exempt.
- Q21. In general, are wetted repair parts required to be “lead free”?
  - A21. Yes, “lead free” required.

Pump Control Valves

- Q22. Are pump control valves required to be “lead free”?
  - A22. Yes, “lead free” required
- Q23. Are non-wetted pump control valve repair parts required to be “lead free”?
  - A23, No, exempt if non wetted
- Q24. Are wetted pump control valve repair parts required to be “lead free”?
  - A24, Yes, “lead free’ required if wetted.

Fire Hydrants

- Q25. Are Fire Hydrants required to be “lead free”
  - A25. Yes, “lead free” required*

*Fire Hydrants were not initially being tested to Standard 61 by NSF and were not initially required to be lead free. This changed on March 28, 2013. Non complying hydrants could be used downstream of a backflow preventer on non-potable only lines such as fire loops. Also, at least some manufacturers will make “lead free” parts to convert non complying hydrants to lead free hydrants.

Fire Hydrants

- Q26. Are non wetted fire hydrant repair parts required to be “lead free”?
  - A26. No, Exempt, Non-Wetted.
- Q27. Are wetted fire hydrant repair parts required to be “lead free”?
  - A27. Yes, “lead free” required.
- Q28. Can a complete non complying fire hydrant be reused after 1/3/2014?
  - A28. No, “lead free” required unless non potable only use or converted to “lead free” by replacement of all wetted parts with “lead free” parts.

Fire Hydrants

- Q29. Can non complying non wetted fire hydrant parts be reused?
  - A29. Yes, Exempt, Non Wetted.
- Q30. Can non complying wetted fire hydrant parts be reused?
  - A30. No, “lead free” required.
- Q31. Can complying wetted fire hydrant parts be reused?
  - A31. Yes

Blow Off / Flush Hydrants

- Q32. Are blow off assemblies / flush hydrants required to be “lead free”?
  - A32. Yes, “lead free” required. Handle blow off assemblies and flush hydrants the same way as regular fire hydrants.
- Q33. Are “lead free” hydrants required on “Private” water lines such as fire loops on industrial sites?
  - A33. Yes, Unless the hydrant is downstream of a backflow preventer on a non potable only line.

Sample Stations

- Q34. Are sample stations required to be “lead free”?
  - A34. Depends on use.
    - If used for a potable supply and for sampling, “lead free” required.
    - If used for non potable samples only and if kept locked or posted non potable, exempt as non potable.

Backflow Preventers

- Q35. Are backflow preventers required to be “lead free” if the downstream usage is non potable only?
  - A35. No, specifically exempt.
- Q36. Are backflow preventers required to be “lead free” if the downstream usage is potable only?
  - A36. Yes, “lead free” required.
- Q37. Are backflow preventers required to be “lead free” if the downstream usage is potable and non potable?
  - A37. Yes, “lead free” required.

Backflow Preventers

- Q38. Can a non complying backflow preventer on a non potable system only such as an irrigation system be removed from service and re-installed seasonally?
  - A38. Yes, exempt, non potable.
- Q39. Can a non complying backflow preventer on a potable use system be removed from service and re-installed seasonally?
  - A39. Yes, at the same location, but not at a different location.

Backflow Preventers

- Q40. Can non complying backflow preventers on potable use services be repaired?
  - A40. Yes, if repair parts are “lead free”.
- Q41. Can non complying backflow preventers be relocated to a different potable use service?
  - A41. No, “lead free” required.

Backflow Preventers

- Q42. Can components from a non complying backflow preventer be reused on a potable use non complying backflow preventer installed prior to 1/4/2014?
  - A42. No, “lead free” required unless the backflow preventer being repaired is exempt due to being on a non potable service only.

More Information

- Q43. I have questions about “lead free” compliance in a public water system, who should I ask?
  - A43. For questions about water meters and anything on the water system side of the water meter, ask the Engineering Section. For questions about the customer side of the water meter, ask Protective Health Codes.

More Information

- Q44. I have questions about “lead free” compliance on fire lines and/or fire systems, who should I ask?
  - A44. Ask the Engineering Section.
- Q45. Who is responsible for enforcement of “lead free” compliance on fire service lines?
  - A45. Likely to be the Engineering Section.

More Information

- Q46. Who is responsible for enforcement of “lead free” compliance in public water systems?
  - A46. It is the responsibility of the public water system to ensure that components installed after 1/3/2014 comply with the “lead free” requirements*

*It will likely be the responsibility of the Engineering Section to ensure compliance by public water systems for water meters and anything on the public water system side of the meter. Rules and Regulations Pertaining to Public Water Systems (RRPPWS) currently require NSF 61 certified components. RRPPWS are being changed to require Annex G of NSF 61 or NSF 372

Plumbing

- Q47. Who is responsible for enforcement of “lead free” compliance in plumbing systems?
  - A47. Protective Health Codes*

*The Arkansas State Plumbing Code has been changed to require “lead free” as of January 4, 2014.

Questions and Answers regarding plumbing are included so that water system operators will have some basic knowledge on plumbing system requirements. Contact Protective Health Codes with plumbing related questions and comments.

Plumbing

- Q48. Are toilets, bidets, urinals, fill valves, flushometer valves, tub fillers, and shower valves required to be “lead free”?
  - A48. No, Specifically Exempt.
- Q49. Are Kitchen sink and bathroom sink faucets required to be “lead free”?
  - A49. Yes, “lead free” required.

Plumbing

- Q50. Are hose bibs and yard hydrants required to be “lead free”?
  - A50. Yes, “lead free” required*

*Although the main use for hose bibs and yard hydrants may be irrigation, ADH and EPA believes that people do routinely drink from these outlets.

Plumbing

- Q51. Does the ice maker in a refrigerator connected to plumbing have to be “lead free”?
  - A51. Yes, “lead free” required.
- Q52. Are “point of use” treatment systems such as filters on kitchen sink faucets required to be “lead free”?
  - A52. Yes, “lead free” required.*

    *Point of use treatment systems offered for sale should have appropriate certifications.

Plumbing

- Q53. Are “whole house” and under sink “point of use” treatment systems required to be “lead free”?
  - A53. Yes, “lead free” required.
- Q54. Are automatic dishwashers required to be “lead free”?
  - A54. Yes.
- Q55. Are clothes washing machines required to be “lead free”?
  - A55. No.

QUESTIONS?