

wellcare® information for you about Reduction of Lead in Drinking Water Act

Why have Federal Lead Regulations in Drinking Water?

The U.S. Environmental Protection Agency (EPA) reports that the health effects of lead are most severe for infants and children. Exposure to high levels of lead in drinking water can result in delays in physical or mental development. For adults, it can result in kidney problems or high blood pressure. Although the main sources of exposure to lead are ingesting lead paint chips and inhaling lead dust, EPA estimates that 10 to 20 percent of human exposure to lead may come from lead in drinking water. Infants who consume mostly mixed formula can receive 40 to 60 percent of their exposure to lead from drinking water.

How has Lead in Drinking Water been controlled in previous years?

Federal efforts to control concentrations of lead in drinking water began in 1974 with the release of the Safe Drinking Water Act (SDWA). The SDWA was amended in 1986, Section 1417, that all pipes, solders, pipe fittings, and plumbing fixtures used in the installation or repair of any public water system, or any residential or nonresidential facility that provides water for human consumption be “**lead-free.**” Under the SDWA, lead-free restrictions, pipes and fittings were limited to not more than **8.0% lead**, and solders and flux could not contain more than **0.20% lead** by weight. In addition, plumbing fittings and fixtures were limited to not more than **4.0%** (measured by dry weight) after Aug. 6, 2001.

Further regulations have significantly reduced or eliminated the use of lead products in the environment. Some of the products and date of these regulations include:

- Gasoline (1975 – 1995)
- Paints (1978)
- Solders (1986)
- End-point plumbing devices (1996)
- Toys (2009)

What are the New Regulations?

The first states to adopt “lead-free” laws were California and Vermont. California Health and Safety Code, (Section 116875, commonly known as AB 1953) and the Vermont Act 193. After January 1, 2010, in California and Vermont, the maximum allowable lead content in “lead-free” pipes, pipe or plumbing fittings, fixtures, solder, or flux intended to convey or dispense water for human consumption through drinking or cooking is as follows:

- Max 0.2 % lead in solder and flux;
- Max 0.25 % lead in wetted surfaces of pipes, pipe fittings, plumbing fittings and fixtures, as determined by a weighted average.

(Calculation: For each wetted component, the percentage of lead in the component shall be multiplied by the ratio of the 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 shall be added together, and the sum of these weighted percentages shall constitute the weighted average lead content of the product).

The California and Vermont Lead-Free law is now the basis for the new Federal Public Law 111-380-Jan. 4, 2011. This amendment to the SDWA, known as the “Reduction of Lead in Drinking Water Act” is effective January 4th, 2014.

Are there any exceptions to the New Regulations?

Exceptions to the new lead-free law include: pipes, pipe fittings, plumbing fittings, or fixtures, including backflow preventers, that are used exclusively for non-potable 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. In addition, 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 are excluded from the new lead-free law.

Who does the New Regulations apply to?

If you use or introduce into commerce any pipe, valves, plumbing fittings or fixtures, solder, or flux intended to convey or dispense water for human consumption, your products must comply with the law. Additionally, if you introduce into commerce solder or flux, your products must comply with the law.

If I am a homeowner, how do I know my water system is lead-free?

Many manufacturers have already complied with the January 4th, 2014 implementation date of the federal “Reduction of Lead in Drinking Water Act.” Even without federal certification requirements regarding the lead content of plumbing products, California’s mandate for third-party certification will be followed by most manufacturers seeking a single approval path that covers both federal and state requirements. For that reason, it is important to use and install only clearly marked low-lead products.

If you are a homeowner and are concerned about potential lead exposure from your private water system, have your water tested by a state certified water testing laboratory in your area. For more information on lead in drinking water and well water testing see our wellcare® information sheets on “Lead in Drinking Water” and “Well Water Testing.”

FOR MORE INFORMATION to help you maintain your well and protect your water supply

wellcare® is a program of the **Water Systems Council (WSC)**. **WSC** is the only national organization solely focused on protecting the health and water supply of the 43 million people nationwide who depend on household wells for their water supply.

This publication is one in a series of **wellcare®** information sheets. There are more than 90 information sheets available **FREE** at www.watersystemscouncil.org.

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