

How the upcoming Lead and Copper Rule will impact utilities

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In The News

Lead is in the news as the U.S. Environmental Protection Agency prepares to revise the federal Lead and Copper Rule. The EPA's National Drinking Water Advisory Council has already recommended revisions that mandate all water systems implement a strategic plan for the complete removal of lead service lines. The responsibility for replacement is shared between utilities and their customers.

The recent crisis over lead contamination in Flint, Michigan water heightened focus on the issues of protecting the public and the competent management of public water systems. According to the U.S. EPA, lead is a toxic metal that is naturally found in all parts of our environment – air, soil, water, and even inside our homes. Exposure may come from our daily activities including the use of fossil fuels, some industrial facilities and past use of lead based paint. Homes constructed before 1990 likely have lead compounds in the plumbing materials.

In the case of Flint, a state-appointed administrator, in an attempt to save money, decided to switch from water purchased from Detroit to the Flint River without sufficient testing and treatment for contaminants. The result was the massive contamination of the Flint water system. Soon after the switch, the water started looking, smelling and tasting dirty. Lead is a corrosive metal. As it flowed through the Flint water distribution system, it started eroding the iron pipes. Now the biofilm inside the pipes has been destroyed, and the lead levels coming out of customer water taps range from approximately 300 to 900 times the 0.015 parts per million Maximum Contaminant Level set by the U.S. EPA.

Lead poisoning can result in neurological damage, organ failure, learning disabilities and even death. Once ingested, lead does not leave the body. Instead it is accumulated in the brain, bones, kidneys and other major organs. While it is not possible to completely eliminate exposure to lead, it is possible to reduce exposure.

In 1986, the Safe Drinking Water Act was amended to prohibit the use of pipes, solder or flux that were not lead-free in public water systems or plumbing facilities providing for human consumption. In 1996, the Act was further amended to prohibit the sale of any pipe, fitting or fixture that was not lead free.



Hot Springs Has Been Proactive

The Flint situation underscores the need for utilities to be diligent in their mitigation efforts and in communicating with the public. The city has been proactive in addressing the lead levels in its drinking water. Hot Springs has replaced virtually all old brass meters containing lead with new, lead-free meters. Further, old leaded fittings have been replaced and all new repairs to water lines are made with lead free fittings. The city also adds a polymer blend recognized by the EPA as the Best Available Technology for the reduction of lead and copper in water supplies. The polymer blend acts as a corrosion inhibitor and helps reduce scaling in pipes, as well.

The City of Hot Springs is on a reduced monitoring schedule. Testing for lead and copper is required every three years. In 2013 the level was 0.003 parts per million, well below the action level of .015 parts per million. Testing is scheduled again in 2016.



Should You Be Concerned

Most homes built before 1986 are likely to have lead-soldered copper or galvanized steel service lines. Residents should consider replacing their plumbing if they have corroded galvanized piping or copper lines that were lead soldered. Water coming from hot water tanks in such homes is more likely to have a higher lead level than from the cold water tap.

For More Information

To read more, visit these links:

<http://www.drinktap.org/>

<http://www.cdc.gov/nceh/lead/tips/water.htm>

The State of Arkansas currently does not receive funding from the Centers for Disease Control and Prevention for lead poisoning prevention programmatic activities. To learn more about these initiatives in Arkansas, contact the persons listed below.

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