



The New Lead and Copper Rule

– To Better Protect Children and Communities

The U.S. Environmental Protection Agency recently released its new lead and copper rule which will require routine lead testing at daycares and schools.

The title on this article contains the words of the Environmental Protection Agency (EPA) employees describing the goals of the new Lead and Copper Rule (LCR). A brief EPA fact sheet can be found at https://www.epa.gov/sites/production/files/2020-12/documents/lcr_overview_fact_sheet_12-21-2020_final.pdf

As the fact sheet states, the goals will be achieved by: 1) better protecting children with testing of the drinking water at schools and child care facilities; 2) getting the lead out of the water through additional testing and locating lead service lines; and, 3) building the information infrastructure needed to empower communities in addressing lead in drinking water.

So, what does this mean for those who operate public water systems?

LCR History

Back in 2014, the city of Flint, Michigan, had very high levels of lead in the drinking water and high lead levels were detected in children's blood. This was a result of the city's lead pipes and the city changing its water supply to another source.

The city of Flint had been monitoring for lead in drinking water since the early 1990's. With the background of the extreme, 2014 contamination of the Flint drinking water, the EPA has recently promulgated more lead and copper regulations for all public water supplies.

On November 13, 2019, the United States Environmental Protection Agency published the proposed, additional regulations on lead and copper for public water supplies. EPA spent three years drafting these proposed regulations.

The public had three months until February 13, 2020, to review and give comments to EPA concerning the proposed regulations. Other than casual acquaintance with the proposed regulations, I doubt that many officials in cities, rural water districts or other elected officials did not read the proposed regulations, nor submit comments to the EPA on the proposed regulations.

The Kansas Lifeline magazine discussed some of the proposed changes in the March 2020 issue. The article can be found at this link: <https://krwa.net/portals/krwa/lifeline/2003/RegsOnLeadCopper.pdf>.

EPA makes new law

About the previous Lead and Copper requirements promulgated in 1991, EPA states that "...there is a compelling need to modernize and improve the rule by

EPA's Suite of Actions

- **Identifying areas most impacted:** Identify lead gooseneck and lead service line locations.
- **Strengthening treatment requirements:** Present Action Level is 15 ppb. Establishes a 10-ppb Trigger Level requiring systems to “re-optimize” or conduct corrosion control study.
- **Systematically replacing lead service lines:** Systems with lead service lines or lead service lines unknown must create a lead service line replacement plan. Also, possibly more stringent requirements.
- **Increasing sampling reliability:** New criteria for selecting homes and way to collect samples at sites where lead service lines are present.
- **Improving risk communication:** Changing notification requirements and consistent language in individual notifications, CCR, and new public education materials.
- **Protecting children in schools:** Lead testing at schools and child care facilities; and providing notification and information to them.

strengthening its public health protection and clarifying its implementation requirements to make it more effective and more readily enforceable”.

On December 21, 2020, the Environmental Protection Agency Administrator Andrew Wheeler signed the new rule. The new law is called a rule and it was publicized on the Internet on that date.

On January 15, 2021, EPA published the new rule in the Federal Register. The new rule can be found at <https://www.govinfo.gov/content/pkg/FR-2021-01-15/pdf/2020-28691.pdf>. The first 84 pages are background information and the regulations are 31 pages beginning on page 4280.

Both the previous regulations and the new regulations are known as the Lead and Copper Rule (LCR). As EPA states about the 1991 rule, “The LCR is a complicated rule...”. In keeping with tradition the new regulations continue the complexity.



This photo shows lead piping from a service connection line gooseneck that connects the water main to a residential water meter. This particular piping came from a small city in central Kansas that replaced all city water lines, all city service connection lines, and water meters.

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- Standard Operating Procedures: Present and Historical
- Inspection Reports and Records education materials.

EPA advises that “States and public water systems need expertise and resources to identify the sampling locations and to work with customers to collect samples for analyses.” This means that cities and RWDs will spend more time and money learning expertise about the new law, taking samples, and completing notifications and paperwork.

Inventory of water systems

Identifying areas that are most likely impacted by lead and that are to be sampled will be determined by developing an “initial inventory” within the next three years. The inventory requirements are similar to the recent 2017 inventory required by KDHE, but new and additional information may be needed.

The sidebar “EPA’s Suite of Actions” lists some of the possible ways, as noted by EPA, of determining whether lead piping is present. In most Kansas small water systems this data had not been maintained over the years or is not now available.

Better Protecting Children at Elementary Schools and Child Care Facilities*

Children spend a large amount of time in elementary schools and child care facilities and lead in the internal plumbing of these facilities can pose a risk to children’s health. For the first time, the new Lead and Copper Rule requires that community water systems test for lead in drinking water in elementary schools and child care facilities that they serve. The old rule had no federal requirement for community water systems to test for lead in drinking water in these buildings. This common sense and critical improvement ensures that children – who are at increased risk from lead exposure – are protected where they spend a significant amount of time learning and playing. The water system is also required to provide timely results along with information about the actions the elementary school or child care facility can take to reduce lead in drinking water.

*From EPA Fact Sheet: LCR Overview. The complete factsheet can be accessed at https://www.epa.gov/sites/production/files/2020-12/documents/lcr_overview_fact_sheet_12-21-2020_final.pdf

The unavailability of this data presents interesting aspects on how the EPA-envisioned program (for example, removing lead pipe) can be successful. Fortunately, in Kansas it is believed that there are very few lead water mains. However, the extent and records of lead goosenecks or lead pipes between the water mains and meters are unknown in many systems.

Preparing for changes

In the coming year detailed information on the LCR should become available. Those who manage municipal and RWD water supplies should take the opportunity when convenient to learn more what changes might be coming.

The Kansas Rural Water Association will be including updates on the Lead and Copper Rule changes in future training sessions. Watch for these and other training opportunities on KRWA’s website at www.krwa.net/training.

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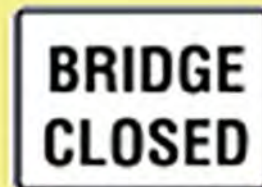
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