



December 2023

The Environmental Protection Agency Federal Lead and Copper Rule (LCR)



Lead and Copper Rule (LCR)



There are no safe levels of lead

For many years, the EPA has passed laws to address lead in gasoline, paints and other products



Lead and Copper Rule (LCR)



In 1991, EPA published the first LCR to minimize lead and copper in drinking water.

Since then, the rule has been revised several times.

The latest revision was in December 2023 with the Lead and Copper Rule Improvements.



Lead and Copper Rule (LCR)



Lead is not naturally found in water

Lead that is found in water comes from pipes, faucets and fixtures

In 1986, Congress banned the use of lead pipes

In 1987, Oklahoma adopted this ban





Lead and Copper Rule (LCR)



KEY PROVISIONS:

1. Identifying areas most impacted
2. Strengthening drinking water treatment requirements
3. Replacing lead service lines (not found in Broken Arrow)
4. Increasing sampling reliability
5. Protecting children in schools
6. Improved public communications of results



Lead and Copper Rule (LCR)



Identifying areas most impacted

Develop a service line inventory by October 16, 2024





Lead and Copper Rule (LCR)



Basis for BA Lead Service Line Inventory

- BA currently has 41,000 water accounts
- Service Lines installed after Oklahoma adopted the lead ban in 1987 are assumed to be lead free
- All service lines installed before 1988 have been inspected at the meter box (City and Customer)
- This inventory must be published by October 16, 2024



Lead and Copper Rule (LCR)



Develop a service line inventory

Location Information				System-Owned Portion				
Unique Service Line ID	Street Address	Latitude (Recommended)	Longitude (Recommended)	Is there a Lead Connector?	System-Owned Service Line Material	Basis of Material Classification	Service Line Installation Date	Was Service Line Material Ever Previously Lead?
1568708390	609 N ELM AVE			No	Non-Lead - Material Unknown	Visual Inspection Record (for example, meter installation record)	July 24, 1949	No

Customer-Owned Portion				
Customer-Owned Service Line Material	Basis of Material Classification	Service Line Installation Date	Material Classification for the Entire Service Line	Comments
Galvanized Iron/Steel	Visual Inspection Record (for example, meter installation record)	7/24/1949	Non-Lead	



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Strengthening treatment requirements

- Flint, Michigan began because there was no corrosion control
- BA corrosion control by adjusting the pH
- BA required corrosion study submitted and approved by ODEQ



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Replacing Lead Service Lines

- To date, we have not found any lead service lines in Broken Arrow.
- If found, it is not clear as to who will pay (about \$4,000 each)



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Increasing sampling reliability

- Number of sites has increase from 30 last year to 50 this year. This number may increase to 100.
- Samples are collected by the homeowner from inside their home.
- Public will likely request additional samples from their homes, businesses, schools, etc.



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Protecting children in schools

Sampling required at schools and childcare facilities served by the system – 20% per year. BA has about 63. Atherton Elementary has been done by ODEQ.

Must provide the results and information to:

- The school or child care facility, and
- ODEQ and local or state health department
- Excludes facilities built after January 1, 2014
- Currently, no timeline for completing this testing



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Lead and Copper Rule (LCR)



Improved public communications of results

- UTILITIES
 - [Total Water Usage](#)
 - [Know Your Water](#)
 - [Mayor's Water Conservation Challenge](#)
 - [Drinking Water Quality Reports](#)
 - [Water Taps Instructions](#)
- + INDUSTRIAL PRETREATMENT PROGRAM
 - [Water Conservation Program](#)
 - [Water Supply/Chloramination Process](#)
 - [AMRs](#)
 - [Water Reclamation](#)
 - [Per- and Polyfluoroalkyl Substances \(PFAS\)](#)
- [Water Testing Volunteers](#)

Government » Utilities »

WATER TESTING VOLUNTEERS

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To protect public health, the City of Broken Arrow performs hundreds of water quality tests each month at the Water Treatment Plant and out in our distribution system to ensure that your drinking water is safe to drink and meets all required State and Federal Drinking Water Standards.

This year, the requirements include additional testing for lead. Lead is not naturally found in water however, it may be in pipes, faucets and fixtures installed before the lead ban in 1988. Because of the health risks associated with lead, the U.S. Environmental Protection Agency (EPA) has set the Maximum Contaminant Level Goal of **zero** for lead. To keep lead from entering the water, the EPA requires water systems to treat the water to make it non-corrosive.

The City of Broken Arrow's test results have consistently been far below the EPA's action levels. You can [review the past 10 years of Water Quality Reports here](#). In previous years, we have been required to collect 30 samples from customer homes each year. This year, we are required to collect 50 samples as part the EPA's increased monitoring program. In the coming years, this number may be increased to 100.



Lead and Copper Rule Improvements (LCRI)



- **Achieving 100% lead pipe replacement within 10 years.** This means the replacement deadline will be October 16, 2034 at the latest, given that the rule will go into effect by October 16, 2024.
- **Locating legacy lead pipes.** Doing this should be achieved by the lead service line inventory requirement in the LCRR—but in case water systems need an incentive, this requirement is also part of the new LCRI.
- **Improving tap sampling.** The LCRI proposes key updates to improve tap sampling for lead contamination, including the requirement to “collect first liter and fifth liter samples at sites with lead service lines and use the higher of the two values when determining compliance with the rule.”
- **Lowering the lead action level.** The LCRI proposes lowering the lead action level from 15 µg/L to 10 µg/L. The lead action level refers to the level at which a water system must “inform the public and take action to reduce lead exposure.”
- **Strengthening protections to reduce exposure.** Where several lead action levels are present in a system, water systems will have to: 1) Distribute certified lead



QUESTIONS?