

# LEAD COPPER RULE AND CORROSION CONTROL

## FACT SHEET

The Lead and Copper Rule became effective on December 7, 1992. This rule requires treatment when lead and/or copper in drinking water exceeds certain levels. Lead enters drinking water mainly from corrosion of lead-containing household plumbing; therefore the best way to find out if water is corrosive is to test water that comes from a household faucet. The City of Tulsa completes testing on household faucets on a triennial basis to comply with the Lead and Copper Rule.

### WHY ARE WE CONCERNED ABOUT CORROSION CONTROL TREATMENT IN OUR SYSTEM?

Corrosion leads to two different kinds of problems:

- Failure of pipe affecting infrastructure and increasing replacement cost
- Water quality changes affecting public health

### HOW DO WE CONTROL CORROSION IN OUR SYSTEM?

We optimize our system by:

- Adjusting pH to ensure we coat pipes with calcium carbonate scale to protect our water from contacting pipes and fixtures that can leach lead/copper into water
- Monitoring pH, Alkalinity

### HOW DO WE KNOW OUR WATER IS NOT CORROSIVE?

We evaluate our system by:

- Analyzing pH and alkalinity in our water treatment plants on a daily basis
- Analyzing pH and turbidity in our distribution systems on a weekly basis
- Analyzing finished waters for lead, copper, and calcium on a quarterly basis
- Analyzing lead and copper according to the Lead and Copper Rule on our approved distribution sites every three years.

### WHY DO WE ONLY TEST FOR CORROSIVE WATER EVERY THREE YEARS?

The City of Tulsa has continued to produce and maintain properties of high quality non-corrosive water. The Oklahoma Department of Environmental Quality has reduced our requirements for lead and copper testing based on our historical data. Our next sampling event will be in 2019.

	MCLG* (mg/L)	Action Level ** (mg/L)	90th % Limit	90th % Limit	90th % Limit	90th % Limit
Year			2007	2010	2013	2016
Lead	0	0.015	BDL(0.002)	BDL(0.002)	BDL(0.002)	0.002 <sup>†</sup>
Copper	1.3	1.3	0.112	0.17	0.22	0.28

\*Maximum Contaminant Level Goal (MCLG) — The level of contaminant in drinking water below which there is no known or expected risk to health. \*\* Action Level requires water utilities to sample specific number of samples in specific locations and verify that 90% of the samples are below this level. If that is not met, an appropriate Action is required to remedy situation. <sup>†</sup>In 2016, technological advancements in the Tulsa Water & Sewer laboratory allowed for lower detection limits on lead/copper samples.



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## DO WE HAVE A LEAD SERVICES LINE INVENTORY IN OUR SYSTEM?

It is difficult to determine the number of lead services lines in our system. Since the 1980s, repair crews have been replacing lead service lines and fittings between the main and meter as they are encountered.

## IS THERE AN ONGOING LEAD PUBLIC OUTREACH, EDUCATION, AND NOTIFICATION EFFORT?

The City of Tulsa Water and Sewer Department mails the results to all home owners that participate in the lead and copper sampling events. The Water Quality Report is posted annually [www.tulsawater.com](http://www.tulsawater.com) for public education. The Water and Sewer Department regularly participates in events to promote City of Tulsa water.

## WHO DO I CONTACT ABOUT HEALTH CONCERNS?

- **Tulsa City County Health Department:**  
918-582-9355 • [www.tulsa-health.org](http://www.tulsa-health.org)
- **Oklahoma State Health Department:**  
405-271-5600 • [www.ok.gov/health/](http://www.ok.gov/health/)



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