## City of Kennewick (COK) Lead and Copper Testing Information

The City of Kennewick, as well as all other water systems, is required to test for lead and copper to ensure the water is safe. In compliance with the EPA, testing is completed every three years. The latest round of water testing was completed during the 2016 calendar year, where 30 water samples were taken from residential homes. All results from this last round of testing (and previous testing) were below the EPA's Action Level (see below):

EPA's Action Level		COK	COK 2016 Sample Results (90 <sup>th</sup> Percentile)		
• Lead:	0.015 mg/l	•	Lead:	0.00178 mg/l	
• Copper:	1.3 mg/l	•	Copper:	0.762 mg/l	
		COK	COK 2013 Sample Results (90th Percentile		
		•	Lead:	0.00202 mg/l	

• Copper: 0.670 mg/l

## Lead and Copper Information American Water Works Association and EPA

Lead and copper are seldom found in drinking water source waters. Lead contamination almost always occurs after water has left the treatment plant and moves through the distribution system piping into household plumbing containing lead.

Water is naturally corrosive, and in some cases, can corrode the pipes and plumbing. This corrosion can also occur in home fixtures such as faucets. If these fixtures are made of brass, which typically contains some lead, the fixtures can add dissolved lead to the drinking water.

Brass fixtures and lead-based solder used in home plumbing prior to 1986 are significant sources of lead exposure in drinking water. Grounding of electrical circuits in homes to water pipes and galvanic action between two dissimilar metals may increase corrosion that could cause lead to leach into the water. Customers who soften their water or otherwise change its corrosivity can affect the lead content of the water.

Water systems use corrosion control to protect the pipes in their distribution systems and the plumbing inside homes and buildings. From a regulatory perspective, effective corrosion control is one important element in preventing elevated lead levels at customers' taps.

The EPA has noted that some new fixtures, valves, and fittings can leach lead after installation for some time, even though they meet the "lead free" requirements of the Safe Drinking Water Act. The fixtures can leach lead for a variety of reasons; one is that the water has not yet built up a protective scale on the inside of the fixture. This is called passivation. To learn more about passivation click <u>here</u>. Passivation occurs as corrosion inhibitors react with fixtures and create a protective coating which prevents leaching.