

Arlington Water Utilities Lead and Copper Testing Frequently Asked Questions

Q. Why is lead and copper testing done in Arlington?

A. Lead and copper testing is done to determine if water treatment techniques used by the Arlington Water Utility (“AWU”) are consistently effective in minimizing the corrosiveness of the water delivered to its customers, right up to the customer’s faucet, in accordance with drinking water regulations. The treatment of water to minimize corrosion greatly reduces customers’ exposure to unsafe levels of lead or copper. The regulations covering what is known as the Lead and Copper Rule were set by the United States Environmental Protection Agency (“USEPA”) and adopted by the Texas Commission on Environmental Quality (“TCEQ”).

Q. What is meant by the corrosiveness of the water?

A. Water, by its very nature, is corrosive to most metals over time. Corrosive is just another term to describe the ability of water to dissolve lead or copper in a customer’s plumbing into the drinking water. A water treatment facility can minimize water’s corrosive tendencies by adjusting the pH (acidity) of the water, monitoring the amount of dissolved minerals in the water which may inhibit corrosion and lastly, by possibly adding other chemicals, such as phosphates, to protect the water pipes.

Q. Where does lead or copper found in drinking water come from?

A. Lead or copper can be found naturally in water reservoirs throughout Texas, but at extremely low levels. In fact, levels of lead and copper in reservoirs are so low that they are not a health concern. However, if water is not properly treated to minimize its corrosive tendencies, the water delivered to customers can dissolve lead or copper found in a customer’s own plumbing.

Q. Does my home contain lead and/or copper?

A. Copper piping is very common in homes built over the last 50 years. Copper piping was also connected using lead-tin solder (a soft metal that was melted, then cooled and solidified) and a lead-containing flux which aided in the connection or soldering process. In addition, in many plumbing fixtures such as kitchen or bathroom faucets, lead was added to the metal brass to make it easier manufacture the faucets. Although lead has been used extensively in piping for drinking water pipes in areas east of the Mississippi River, the good news is most, if not all, homes in the Arlington area never used lead as a piping material for drinking water plumbing. Lead has largely been banned from plumbing fixtures in the United States.

Q. Is there anything I can do to protect myself from high levels of lead or copper dissolved from my own plumbing?

A. Yes, the most effective way to reduce exposure to lead and copper from a home's plumbing is to always allow the water to run until the water is noticeably cooler than when the faucet was opened. This allows the amount of water sitting in the home's water line to be flushed away before water is used for consumption. This flushing has been consistently shown through testing to be very effective in reducing lead and copper exposure.

Q. How is the water in Arlington tested for lead and copper?

A. The water is tested for lead and copper using the precise protocol outlined by the USEPA. This protocol is designed to test for lead and copper under the worst conditions possible. For instance, lead and copper samples are collected from "first draw" samples, meaning the water has been in contact with a customer's plumbing for at least six hours without disruption and will be the first water drawn in the morning. Since water can dissolve metals into the water through a process known as leaching, drawing the first water from a faucet in the morning should provide the worst conditions possible for lead and copper leaching. Additionally, since water can become more corrosive the warmer it becomes, samples must be taken during the summer months. Lastly, since these metals can flake off and be caught in a faucet strainer, strainers are not removed before sampling.

Q. How many samples are tested for lead and copper in Arlington?

A. Testing under the USEPA protocol requires a certain number of samples based upon the population being served by the Water Utility. In the case of the AWU, the initial sampling protocol required 50 samples to be analyzed each year during specific months of the year.

Q. Has the original sampling protocol changed?

A. Yes, because the AWU has had excellent results with its lead and copper control program, TCEQ has allowed the AWU to reduce the frequency of sampling from every year to every three years. The same number of samples (50) and the same timing, (samples collected in the summer months) are still in effect.

Q. Who collects the samples in Arlington?

A. The customers of homes selected for testing collect the samples. Since it would not be practical for water utility sampling personnel to collect samples of the first water drawn very early in the morning in a customer's home, samples were collected by the customers themselves after receiving instructions from the AWU.

Q. How were the sample sites for the AWU selected?

A. Again, following the USEPA protocol of attempting to determine the worst-case scenario for lead or copper testing, the plumbing of AWU customer's homes was thoroughly researched through plumbing permits, building records of homes, in some cases actual home inspections and more recently Customer Service Inspections. Although they would have been used as sample sites if located, no homes with lead service lines (the water line from the water line in the street into the home) were in Arlington. The next

worst-case scenario for a customer's plumbing was from homes built during a period when copper piping connected with solder that contains lead was the typical standard for home construction. These homes would also have been built with lead-containing brass plumbing fixtures like faucets. Homes of this type are the sample sites in Arlington. These sample sites are generally not changed. This provides consistency with the overall testing program.

Q. What is a Customer Service Inspection?

A. A Customer Service Inspection is an inspection done on the plumbing of new residential homes that includes a test of the solder that holds copper pipes together and at least one brass fixture to ensure that they do not contain lead. If they are shown to contain lead, they must be removed and replaced. Customer Service Inspections including the test for lead have been done for nearly 20 years in the City of Arlington.

Q. Who analyzes "first draw" lead and copper samples collected by customers?

A. All the lead and copper samples analyzed for the AWU were analyzed by laboratories selected by the TCEQ. AWU personnel did not collect nor analyze the samples. That changed in 2015 when AWU analyzed its own lead and copper samples in its certified laboratory following stringent laboratory protocols and testing methods.

Q. How can I access the results of lead and copper testing in Arlington? What have the results shown?

A. The AWU lead and copper testing has consistently shown levels of these metals to be well below the Action Level ("AL") set by USEPA. All the lead and copper testing results are reported in the annual Consumer Confidence Report ("CCR"). The CCR is available on the City's website www.arlingtontx.gov/water/ccr. The results can also be found on the Texas Drinking Water website that is maintained by TCEQ here: http://dww2.tceq.texas.gov/DWW/JSP/PBCUSampleSummaryResults.jsp?tinwsys_is_number=5796&tinwsys_st_code=TX&wsnumber=TX2200001 &DWWState=TX&begin_date=&end_date=&counter=0.

Q. Can I have my home tested for lead and copper?

A. If you have concerns about the quality of water in your home, please call our water quality line at 817-575-8984.

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