

ADEQ Arizona Department of Environmental Quality
Lead in Drinking Water
Public Education Information

Pine Creek Domestic Water Improvement District ("PCCDWID") are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, one commercial structure in the community has lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Per EPA, this situation is not a violation of EPA rules. However, under Federal law we are required to have an updated program in place to minimize lead in your drinking water by 3/31/22 even though no excessive levels of lead have been found at any homes within the community.

This program includes:

1. Public education content (this document)
2. Possible corrosion control treatment (treating the water to make it less likely that lead will dissolve into the water)
3. Possible source water treatment (removing any lead that is in the water at the time it leaves our treatment facility)

This document also explains the simple steps you can take to protect yourself by reducing your exposure to lead in drinking water.

Important Information about Lead in Your Drinking Water

PCCDWID recently found elevated levels of lead in drinking water at the small lab building at the Wastewater Treatment Plant. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

HEALTH EFFECTS OF LEAD

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

SOURCES OF LEAD

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing or shoes). Lead is found in some toys, some playground equipment, and some children's metal jewelry.

Brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 0.25 percent wetted surface lead to be labeled as "lead-free."

Testing over 25 years indicates the water from the ground at the PCCDWID wells does not contain lead. Additionally, testing over 25 years indicates water from the community well structures, tanks, pump station, water mains, valves or meters has not tested positive for any lead contaminants. When water is in contact with pipes and plumbing containing lead for several hours, the lead may enter drinking water. Homes built before 1988 are more likely to have lead pipes or lead solder.

Don't forget about other sources of lead such as lead paint, lead dust, and lead in soil. Wash your children's hands and toys often as they can come into contact with dirt and dust containing lead.

STEPS YOU CAN TAKE TO REDUCE YOUR EXPOSURE TO LEAD IN YOUR WATER

1. Run your water to flush out lead

Run water from the cold water tap for 15-30 seconds to flush lead from interior plumbing or until it becomes cold and reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours.

2. Use cold water for cooking and preparing baby formula

Do not cook with or drink water from the hot water tap. Also, do not boil water from the hot water tap, as hot water can dissolve lead more quickly than cold water. Rather, if you need hot water, draw water from the cold tap and heat it on the stove. Do not use water from the hot water tap to make baby formula.

3. Identify and replace plumbing fixtures containing lead

New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 0.25 percent wetted surface lead to be labeled as "lead-free."

4. Test your water for lead

If you are concerned about lead coming from plumbing inside your home, call us at 928-476-2260 to find out how to get your water tested for lead.

5. Get your child's blood tested

Contact the state or local health department or healthcare provider to find out how you can get your child tested for lead, if you are concerned about exposure.

6. Look for alternative sources of treatment of water

You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or www.nsf.org for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.

What happened? What is being done?

Since our system has been tested every year for lead contaminants and none was ever detected at any location, we have never been required by EPA or the Arizona Department of Environmental Quality ("ADEQ") to take any action. However, during September, 2021 we left sample bottles for the five homes we regularly monitor to take sample from kitchen or bath sinks. One home owner was unable to complete the sample and to return the test bottles to our operator to take to the independent laboratory in a timely manner. Therefore, our operator took a sample at the sink in the small laboratory building at the wastewater treatment plant. All five samples were processed to the required standards by our normal independent laboratory on 9-22-21. The normal four homes all passed, as usual, each with less than 13% of the lead level requiring corrective action. However, the sample taken at the WWTP sink was about 3 times the level requiring action (45.9 parts per billion vs. limit of 15 ppb). **Per ADEQ, this situation is not a violation of EPA rules,** but it does trigger requirements for significant additional testing and for customer notifications, thus this flyer is included in your water bill.

The failed test result could be a simple false-positive reading at the one location; however, even if that is the case, we are required by EPA/ADEQ to carry out 49 additional tests, a Corrosion Control Treatment Action Plan, and a Source Water Treatment Recommendation Plan over the next 9 months. The District is not aware of the of any sources of lead within the community; however, we will be replacing the faucet and piping at the lab sink assuming that equipment is the source of the positive test. Because of our long-term record of no testing failures at homes in the system we will not, at this point, be doing anything at the homes except the normal testing, which will now require testing at ten homes instead of five. Consumers need to aware that much debate with EPA comes from systems owners (district, cities, private companies, etc.) system operators, and even consumers that it is unreasonable for the EPA to hold the water providers responsible for possible test failures that occur beyond the customer meters. Typically within the industry, lead and copper test failures occur in household plumbing; however serious lead failures have occurred within the production or distribution systems like in Flint, Michigan, resulting in EPA taking very aggressive stands on all possible failure causes.

For More Information

Call us at 928-476-2260 or visit our Web site at pccdwid.org. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at www.epa.gov/lead, or contact your health care provider.

From Pine Creek Canyon Domestic Water Improvement District, Public Water System ID#AZ0404044 as of 11-30-21.