

## **Facts on Lead in Drinking Water**

The City of Golden Water Treatment Plant is committed to the health of families and members of our community and works to limit your exposure to lead in drinking water. We take steps to control water chemistry to ensure that the water at your tap is the same quality as the water leaving the plant.

Lead is a common metal found in the environment, but lead in drinking water does not come from source water, the water treatment plant or the water main. In drinking water, lead comes from lead service lines running from the water main in the street to the home and from plumbing inside the home. Potential sources of lead in premise plumbing are lead pipes, lead solder on copper piping, or brass or chrome-plated brass faucets and fixtures with lead solder. In the U.S. lead service lines were installed until the mid-1950's and according to the EPA, homes built before the 1986 ban of lead-use in plumbing materials are more likely to have lead pipes, fixtures and solder. City of Golden Ordinance 151 mandated all service lines be made of copper in 1937. If you are concerned and don't know what type of service line you have to your home, you can have a licensed plumber test your line to determine if it is made of lead or some other type of material.

Lead from these plumbing materials can leach into drinking water when water is corrosive. Corrosive water occurs when it has the wrong pH or when it does not contain enough dissolved solids. The City of Golden has an approved corrosion control program that prevents corrosive water from being sent out into the distribution system. We constantly monitor pH, alkalinity, hardness, temperature and various other water quality characteristics to ensure corrosion control is correctly and consistently implemented. The City also conducts lead and copper monitoring in the water distribution system to validate our corrosion treatment is adequate.

## **Testing for Lead and Copper in Drinking Water**

Lead and copper samples are taken at the plant and out in the community at several designated sampling sites. To select these sites, we target homes that are likely to have or have lead plumbing materials. Using build date information and with citizen cooperation the City previously collected samples from 34 households every three years. In response to the water crisis in Flint, the State of Colorado is now requiring all public water systems to sample for lead every year. Golden will begin this annual sampling schedule in June of 2017.

Since the main source of lead in drinking water comes from lead service lines and household plumbing, the Lead and Copper Rule is a treatment technique rule that sets an "Action Level (AL)" rather than a "Maximum Contaminant Level (MCL)". An MCL is based on health effects whereas an AL is a water treatment evaluation tool. If there is an exceedance of the 0.015 mg/L action level in more than 10 percent of the samples tested, it automatically triggers changes in how the plant treats water. This may include additional treatment for corrosion control or even replacing some water mains. The City of Golden is on a reduced monitoring schedule of every year instead of every six months because of the City's long term historical data showing no evidence of corrosivity. Since the Lead and Copper monitoring rule went into effect in 1991, the City has not had a single exceedance for lead and copper. Water treated here has been carefully balanced before entering the system.

## **Actions You Can Take**

Even though we take great care in treating our water, if you have a lead service line or lead-bearing materials in your home plumbing or fixtures there will always be a risk of lead being in your drinking water. You can take steps to identify and remove lead materials within your home plumbing to reduce your family's risk.

Without making plumbing changes, you can reduce risk. The longer water sits in pipes that are made of lead or have lead solder, the higher the lead levels may be. If the water at a faucet hasn't been used for several hours, flushing the cold water for a couple minutes, or until the water reaches a consistent temperature will remove the water that has had the longest contact with any lead materials. In addition, only use cold water for drinking or when cooking; hot water can cause a greater amount of lead to release from plumbing. Always only use cold tap water, including water used for making ice, beverages and infant formula. Removing and cleaning faucet aerators every month will also help get rid of particles that can collect in the aerator screen. It is good practice to replace aerators every year.