TOWN OF FRISCO WATER DIVISION

December 28, 2021
Public Water System ID: CO0159055
System Name: Town of Frisco

Corrosion Control Treatment System Installation Not Complete & Lead Testing Results in Exceedance of Maximum Allowable Limits in the Second Half of 2021

Installation of Corrosion Control Treatment Systems

The Town of Frisco failed to install corrosion control treatment (CCT) systems at the Town's water sources by the August 29, 2021 deadline and is responsible for informing all water customers each 90 days until the corrosion control systems are in place. The Colorado Department of Public Health and Environment (CDPHE) issued the first violation for the missed deadline on September 1, 2021, and Frisco's water division has been in the process of installing the systems at all four water sources and anticipates complete installation of the CCT systems by the first quarter of 2022.

There are several different chemical and mechanical methods a water system, such as the Town of Frisco, can use for CCT, and each water system determines the best method available to reduce lead. Currently, 156 systems in Colorado have pH adjustment in their treatment plants for various uses, not just for corrosion control. The corrosion control system that the Town of Frisco will install at each of Frisco's four water sources will adjust the pH of the water by adding small, metered amounts of **sodium hydroxide** into the system. This CCT will make Frisco's water more neutral to slightly alkaline in order to prevent the lead and copper from dissolving into the water when in contact with fixtures and/or pipes in individual buildings; the Town's targeted operating pH range was determined to be a pH of 7.3-7.7

Using Sodium Hydroxide for Corrosion Control

Sodium hydroxide is used in a variety of manufacturing processes for many products, including, medicines and pharmaceutical products like aspirin, anticoagulants, and cholesterol-reducing medications. Sodium hydroxide is also used in several food-processing applications, such as curing foods, removing skins from fruits and vegetables for canning, or as an ingredient in food preservatives that help prevent mold and bacteria from growing in food.

Municipal water treatment facilities, including Denver Water and Dillon, already use sodium hydroxide to control water acidity and to help remove heavy metals, and the Town of Frisco already uses this substance for cleaning out water system filters.

There will not be a difference in the taste or smell of your Town of Frisco water.

Recent Lead and Copper Testing Results in Violation of Maximum Allowable Limits

During the latest round of testing for the Town of Frisco's Lead and Copper Monitoring Program for the second half of 2021, lead levels tested in exceedance of the maximum allowable limits, as nine (9) homes/buildings out of forty (40) homes/buildings tested in Frisco were found to have lead levels in exceedance of 15 parts per billion (ppb).

Results from those nine (9) homes/buildings found to be in exceedance of the maximum allowable limits for lead in the second half of 2021:

- 36 ppb
- 33 ppb
- 31 ppb
- 26 ppb
- 25 ppb
- 21 ppb
- 21 ppb
- 19 ppb
- 18 ppb

- Frisco has four (4) water sources and the first round of source water testing found that all four (4) of Frisco's water sources have lead levels registering at below detectable levels (BDL). A second round of source water samples was sent to the lab on December 20, 2021.
- Testing for lead done in the first half of 2021 showed that six (6) out of the forty (40) homes/buildings tested were in exceedance of the maximum allowable limits for lead.
- All of Frisco's main water lines are constructed out of ductile iron, and all service lines (from the main line to homes) are either copper or galvanized; not lead.

What are the maximum allowable levels of lead in drinking water?

In 1991, the maximum allowable lead levels in drinking water went from fifty (50) parts per billion (ppb) to fifteen (15) parts per billion (ppb) measured at the tap.

What is a part per billion (ppb)?
One part per billion = 1 ug/L (microgram per liter).
This amount is equal to:

- One drop of ink in a backyard swimming pool
- One grain of sand in a child's sandbox
- One second in 32 years

Where, when and how is testing done for lead?

- As of 2018 in a water service area of Frisco's size, 40 homes/buildings must be tested every six months, as opposed to the previous requirement to test in 10 homes/buildings every three years.
- Homes/buildings are selected for testing based on tiered selection criteria and must have been constructed from 1983 to 1987.
- Most home/building residents collect their own samples, after receiving instructions from the water provider. Samples must be cold water from an inside faucet that is used regularly for drinking water, but that has not been used in the previous six (6) hours at a minimum. The faucet, where samples are taken, may not be connected to any type of personal water treatment system.

What are the health effects associated with lead exposure?

Lead can cause serious health problems, especially for pregnant women and young children. 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.

What are the 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). 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.

How does lead get into drinking water?

Lead in drinking water typically comes from the corrosion of household plumbing materials. Lead solder was used in household plumbing until 1987.

Brass faucets, fittings, and valves, including those advertised as "lead-free", may contribute lead to drinking water. Until 2014, the allowed end-use brass fixtures, such as faucets, with up to eight percent lead to be labeled as "lead free". Currently, plumbing fixtures labeled National Sanitation Foundation (NSF) certified may only have up two percent lead. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

When water is in contact with pipes or plumbing that contains lead for several hours, the lead may enter drinking water. Homes built in or before 1987 are more likely to have plumbing containing lead. New homes may also have lead; even "lead-free" plumbing may contain some lead. EPA estimates that 10 to 20 percent of a person's potential exposure to lead may come from drinking water. Infants who consume mostly formula mixed with the lead-containing water can receive 40 to 60 percent of their exposure to lead from drinking water.

Steps you can take to reduce your exposure to lead in your water

Please read this information closely to see what you can do to reduce lead in your drinking water.

1) Run your water to flush out lead. If it hasn't been used for several hours, run the cold water tap until the temperature is noticeably colder. This flushes lead-containing water from the pipes. To conserve water, remember to catch the flushed tap water for plants or some other household use (e.g. cleaning).
2) Always use cold water for drinking, cooking, and preparing baby formula. Never cook with or drink water from the hot water tap. Never use water from the hot water tap to make formula.
3) Do not boil water to remove lead. Boiling water will not reduce lead.
4) Periodically remove and clean the faucet's strainer/aerator. While removed, run the water to remove debris.
5) You may consider investing in a home water treatment device or alternative water source. When purchasing a water treatment device, make sure it is certified under Standard 53 by NSF International to remove lead. Contact NSF at 1-800-NSF-8010 or visit www.nsf.org. You may also visit the Water Quality Association's website at www.wqa.org.
6) Test your water for lead. A list of certified laboratories is listed at www.colorado.gov/cdphe/dwlabs.
7) Get your child's blood tested. Contact your local health department (970-668-9161) or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.
8) Identify and replace plumbing fixtures containing lead. Brass faucets, fittings and valves, including those advertised as "lead-free," may leach lead into drinking water. The NSF website at www.nsf.org has more information on lead-containing plumbing fixtures. You should use only lead-certified contractors.
9) Have a licensed electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electric code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

What happened and what is being done?

Corrosion Control Systems

- The Town of Frisco water division will perform water quality checks for both source and mixed water every two weeks for the first six months once the CCT system is installed and will compare them to results from samples collected prior to the installation of the CCT. This will determine if the CCT is properly installed and operating and will set water quality parameters.
- Engineering for these CCT systems began in August 2020, CDPHE reviewed and approved the plans for these design in January 2021, and the Town contracted with Velocity Plant Services in July 2021 to install these four CCT systems. Velocity Plant Systems has encountered supply chain issues, and therefore, is now targeting project completion by the first quarter of 2022.

Lead and Copper Testing

- Lead and copper monitoring will continue every six months for the 40 individual homes/buildings in the Town of Frisco, which are part of the sampling pool.
- A second round of source water testing for lead and copper was sent to the lab on December 20, 2021, and results are expected in early January. The first round of source water testing showed lead levels registering at below detectable levels (BDL) at all four water sources.
- Public outreach and education to all water users, including parents of children attending daycares and schools in Frisco, healthcare facilities, and all residents, will continue to ensure that awareness of testing outcomes and next steps are well publicized and understood.

Town Programs for Water Customers

- The Town continues to offer the Start at the Tap fixture rebate program, implemented in July 2019, to encourage homeowners to replace old fixtures in Frisco homes and buildings with WaterSense approved fixtures, which are more efficient and lead free. More information at FriscoWater.com.
- The Town is now also offering free lead and copper testing for homes/buildings built on and before 1987 in the Town of Frisco. Please email Town of Frisco Water Foreman, Ryan Thompson, at RyanT@TownofFrisco.com to request a sampling kit.

More information

- Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, schools, and businesses). You can do this by posting this notice in public places or by distributing copies by hand.
- Please visit FriscoGov.com
- Call or email Ryan Thompson, Water Foreman- 970-668-9156 and RyanT@TownofFrisco.com
- For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at www.epa.gov/lead or contact your health care provider.

Notice Provided by: Town of Frisco **Date: December 28, 2021**