San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

Lead and Drinking Water - SFPUC PROGRAMS

WHAT IS THE SOURCE OF LEAD IN DRINKING WATER?

Lead in drinking water differs from home to home because it primarily comes from corrosion of faucets, other plumbing fixtures and lead solder in the home plumbing. It may also be present in service pipelines that bring water from the distribution pipeline to the home.

There is no lead in San Francisco's distribution lines, and all lead service lines from the distribution system were removed in the 1980s; since then, whenever a previously unidentified lead service line is found, it is quickly removed.

WHAT ARE THE RISKS?

If consumed, lead has toxic effects on the human body including neurobehavioral effects (decreased intelligence) in children and hypertension in adults. Elevated levels of lead can also cause serious health problems to pregnant women and infants.

OUR CORROSION CONTROL AND MONITORING PROGRAM

Our corrosion control treatment consists of maintaining alkaline water pH (above neutral) throughout our distribution system by adding lime and/or sodium hydroxide to the water. This practice is typical for water systems serving low-mineral-content high-quality water from mountain supplies, such as our Hetch Hetchy supply. This corrosion control approach was approved by the State Water Resources Control Board (SWRCB) in 2006 based on a corrosion control study conducted for us by an outside consultant. SWRCB is responsible for enforcing US Environmental Protection Agency (USEPA) and State drinking water regulations.

THE LEAD REGULATORY REQUIREMENTS

The (USEPA regulates lead in drinking water under the Lead and Copper Rule (LCR), a federal drinking water standard effective in 1991. The LCR specifies a monitoring regime that emphasizes more vulnerable residences and an Action Level of 15 µg/L for lead in drinking water as measured at customers' taps. If lead concentrations during a LCR monitoring event exceed this limit in more than 10% of customer taps sampled, the water system must undertake a number of additional actions to control corrosion and inform the public about steps to take to reduce their exposure and protect their health. Additionally, lead service lines under control of the water system may need to be replaced if a lead concentration of more than 10% has been detected.

HOW CAN I REDUCE POTENTIAL LEAD EXPOSURE FROM DRINKING WATER?

When your water has been sitting for several hours, you can flush your tap until it feels colder, for 30 seconds to 2 minutes, before using water for drinking or cooking. You can also use certified filters to further reduce any potential lead exposure from drinking water. If you are concerned about lead levels in your water, you may wish to have your water tested.

CAN I HAVE MY WATER TESTED?

San Francisco residents may request a sampling kit and analysis for a small fee ($25) by calling 311. Women, Infants & Children (WIC) Program participants can request a free lead test. This tap water sampling is conducted by the resident according to a lead and copper sampling procedure provided by us. We will pick up the collected sample, conduct analysis, and provide results to the resident.

The LCR Action Level refers to a concentration measured at the tap rather than in the municipal water supply system because lead in drinking water is derived principally from household plumbing.

If lead concentrations during a LCR monitoring event exceed the Action Level in more than 10% of customer taps sampled, the water utility must undertake additional actions to control corrosion and inform the public about steps to take to reduce their exposure to lead in tap water and protect their health. Additionally, lead service lines under control of the water system may need to be replaced if they exist.

We have been sampling for lead at the required number of customer taps in compliance with the LCR every three years since the 1990s.

The latest monitoring was conducted in August 2018 and revealed that our water is in full compliance with the LCR. These results are a testimony to our successful efforts in lead control over the last several decades. LCR monitoring data can be found at **sfpuc.org/LCRdata**.

Reducing Lead in Our System

In conjunction with monitoring and corrosion control efforts, we continuously work to further reduce lead exposures from drinking water to City residents.

LEAD COMPONENT REPLACEMENT

1980s Removal of approximately 7,000 lead service lines in the San Francisco water distribution system.
1983 "Leaded" water main joints in the distribution system are discontinued.
2000 Initiation of lead-free water meter replacement program, to replace all meters within 20 years.
2000s Provided lead-free faucets to childcare centers and public schools in San Francisco at no cost.
2003 Began replacing curb stops with lead-free units as replacement was needed.
2020 Lead Service Line Replacement Program begins to remove lead components connected to utility service lines.

PUBLIC OUTREACH AND EDUCATION

We have been proactively educating customers about potential lead exposure from drinking water, its health effects, and the reduction of that potential exposure since the 1980s. Also, in partnership with the San Francisco Department of Public Health's Childhood Lead Prevention Program, we provide water sampling and laboratory services to help investigate the lead sources for San Francisco children whose blood lead level meets the state's criteria for warranting medical case management and environmental investigation services. We also offer free home testing for lead in water to families that qualify for the Women, Infants & Children (WIC) Program.

LEGISLATIVE ACTION

As a result of the following laws, the plumbing components used in drinking water systems for human consumption in California have been "lead-free" since 2010. The plumbing components are considered "lead-free" if the weighted average lead content of the component's wetted surface area is not more than 0.25%.

2010 California AB 1953 (Chan) "Lead Plumbing": The SFPUC advocated with other local utilities to mandate only "lead-free" plumbing components be used in drinking water supplies. AB 1953 became State law and effective on January 1, 2010.
2014 HR 5289 (Eshoo/Miller) "Get the Lead Out" legislation: Supported its lead-free provisions, which were subsequently folded into S.3874, signed into law by the President on January 4, 2011. This federal lead-free requirement, similar to California AB 1953, became effective on January 1, 2014.
2017 Water system permit amendment and California AB 746: "Lead Testing of Drinking Water in California Schools": Testing of lead in water at schools began in April 2017 and was completed for all San Francisco Unified School District K-12 campus locations and sites, as well as parochial schools. In addition, we test fixtures by request at private schools throughout the City.
2017 California SB 1398 and amendment SB 427 (Leyva): "Public and Community Water Systems: Lead User Service Lines": The SFPUC completed an inventory of known galvanized pipelines and unknown pipe materials. Field investigations are ongoing to identify lead components connected to galvanized pipelines and unknown pipe materials. The field investigations are anticipated to be completed by the end of 2022. Lead components will be scheduled for replacement when identified.

CONSUMER RESOURCES: REGULATION/HEALTH

- USEPA's Safe Drinking Water Hotline: 800-426-4791
- USEPA lead information: epa.gov/your-drinking-water/basic-information-about-lead-drinking-water
- USEPA LCR: epa.gov/dwreginfo/lead-and-copper-rule
- SWRCB: waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadandcopperrule.shtml
- California Department of Public Health: cdph.ca.gov/Programs/CCDPHP/DEODC/CLPPB/Pages/CLPPBhome.aspx
- San Francisco Department of Public Health, Lead Prevention Program: sfdph.org/dph/eh/CEHP/Lead/
- Centers for Disease Control and Prevention (CDC): cdc.gov/nceh/lead/

NSF, WATER TREATMENT PRODUCTS COMPLYING WITH NSF61-G FOR LEAD:

- Search for NSF Certified Drinking Water Treatment Units or Filters: nsf.org/Certified/DWTU/

We're Committed to Quality: Our highly trained chemists, technicians and inspectors consistently monitor the water we serve—throughout our system, every day of the year. For additional information and materials, please visit **sfpuc.org/quality**. For questions about YOUR water, please call 311. You can also visit **311.org**.