

MARIPOSA PUBLIC UTILITY DISTRICT

*DIRECTORS:
WILLIAM H. BONDSHU
LARRY ENRICO
DANA L. FINNEY
FRANK MOCK
MIKE CLEARY*

*MARK L. ROWNEY,
GENERAL MANAGER
CLERK, EX-OFFICIO,
SECRETARY*

**P.O. Box 494
Mariposa, CA 95338
209-966-2515 FAX (209) 966-6615
<https://www.mariposapud.org>**

water

wastewater

fire protection

November 2019

FACTS ABOUT LEAD AND THE MARIPOSA PUBLIC UTILITY DISTRICT (MPUD) DRINKING WATER SYSTEM

Lead is a heavy metal found in natural deposits in certain parts of the country. There has been no lead detected in the water sources used by MPUD. MPUD has not found any lead pipes in the water distribution system. There are some household plumbing systems that may contain small amounts of lead in pipe fittings especially brass fixtures and lead base solder used in copper pipe installations, depending on the age of the structure.

When lead leaches into drinking water, it can cause adverse health effects, especially for pregnant women and young children. According to the California Department of Toxic Substances Control, exposure to high levels of lead can result in delays in physical or mental development, learning disabilities, behavioral problems, and impaired hearing and kidney damage in babies and young children. In adults, exposure to high levels of lead can result in kidney damage, high blood pressure, nerve disorders, fertility problems, and memory and concentration problems.

The Safe Drinking Water Act Amendments of 1986 require only lead-free pipe, solder and flux to be used in any public water system, plumbing in a residential or non-residential facility. Each state was required to implement and enforce these limitations by June 1988.

The United States Environmental Protection Agency (EPA) adopted National Primary Drinking Water regulations for lead and copper in 1991. The regulations require Public Water Systems to collect samples "at the tap" inside structures and analyze for lead and copper. Sample points are selected to represent structures that were constructed before 1986.

Even though Public Water Systems may not contain lead at detectable levels, lead may leach out from the plumbing in buildings through corrosion of pipes and fittings. Corrosion occurs when metals react with oxygen and metal oxides. The chemistry of water either increases or decreases its ability to dissolve the metals in plumbing. Water that is acidic tends to be more corrosive and water that is alkaline is less corrosive. Consequently,

MPUD adjusts the pH of the water and adds a corrosion inhibitor to the drinking water at the Surface Water Treatment Facility.

MPUD collects samples from twenty (20) private residences and businesses throughout the public water service area every three years, at a minimum. The samples are analyzed for lead and copper. The results of the lead and copper monitoring are submitted to the State Water Resources Control Board (SWRCB) Drinking Water Program and reported in the annual *Consumer Confidence Report* which can be found on-line at <https://www.mariposapud.org>.

The last sample collection for lead and copper analysis in the MPUD service area occurred in September 2019. One sample out of the twenty (20) sites resulted in a detectable level of lead at 0.0051 parts per million (ppm). The action level for lead is .015 ppm.

In summary, the MPUD water system monitoring results for lead and copper are less than the EPA drinking water action levels.

Homes with private water sources (not in MPUD) such as wells and springs should be checked for green-blue stains and or corrosion of plumbing fixtures as an indicator of acidic water. A metallic taste in the water first drawn from the tap after several hours of non-use could also be a cause for concern. The tap type treatment devices that may reduce lead include reverse osmosis and distillation units. Carbon, sand and cartridge type filters and water softeners do not remove lead. If lead in the private water system is suspected, the consumer should run water through the tap, after long periods (6 hours or more) of non-use, to exchange the water in the plumbing. This should take about one minute. Reuse flushed water for plants and other non-human consumption. If the water is suspected to be high in lead or copper, a laboratory analysis should be conducted.

Additional information can be found at <https://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water#health>