



Is my water safe from lead and copper?

The short answer: **YES**

Federal regulations require Paradise Irrigation District to sample for lead and copper in your drinking water and then the state reviews those samples. Based on the sampling results, there is no reason for concern. **The samples show no lead and only minimal results for copper—and those levels are well below the action level of the Health Department.** See table on the next page for full details.

*Here's a more detailed answer from
PID's Treatment Plant Superintendent:*

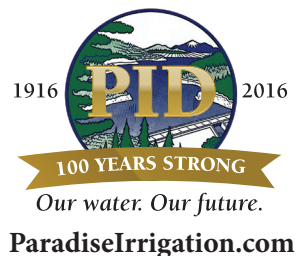
What Is the Purpose of the Lead and Copper Drinking Water Regulations?

On June 7, 1991, the United States Environmental Protection Agency or EPA, published in the Federal Register, a regulation to control lead and copper in drinking water. This regulation is known as the Lead and Copper Rule. The purpose of the lead and copper regulations is to protect public health by minimizing lead and copper levels in drinking water.

The District's untreated water stored in Paradise Lake and Magalia Reservoir does not contain lead or copper. Also, in 2010 the District began using only lead free materials for the construction and repair of the distribution system, and only uses plastic service lines from the water main to the meter, instead of copper pipe.

Because lead and copper in drinking water is primarily due to the corrosion of distribution and household plumbing materials, tap water samples are collected at kitchen or bathroom faucets of residences and other buildings. This requirement complicates sample collection, requiring water systems to coordinate with the people we serve.

Sample locations are selected based on a review of building permits for single-family structures with copper pipes with lead solder installed in the early 1980's (between 1982 and 1985 if available), which are considered most vulnerable to lead and copper leaching into the drinking water from household plumbing. There are no sample locations available with lead pipes or lead service lines.



What Are the Requirements of the Lead and Copper Regulations?

Customer tap monitoring results are the primary factor for determining ongoing monitoring requirements and whether a water system needs to undertake any of the treatment techniques listed below. The result of the District's monitoring shows that no additional treatment is required.

- Lead Service Line Replacement – The District does not have any lead pipes or lead service lines in the distribution system.
- Source Water Treatment – This would have no benefit to avoid lead and copper in the drinking water, because the source water does not contain any lead or copper.
- Corrosion Control Treatment – The District adds zinc orthophosphate at the treatment plant to control the corrosive effects of the drinking water. This was done to protect the District's aging steel pipelines, and is a treatment technique that minimizes lead and copper leaching from pipes and faucets in household plumbing.

In 1995 the District tried to use sodium hydroxide (NaOH) to raise pH, which lowers the corrosivity of water, but the untreated water did not have a sufficient amount of calcium in it to be beneficial.

- Public Education – The District provides lead and copper information in the annual Consumer Confidence Report.

There is no maximum contaminant level (MCL) for lead or copper. However, if the lead and copper tap monitoring results are higher than the lead action level of 15 parts per billion (ppb) and/or the copper action level of 1.3 parts per million (ppm), corrosion control treatment is required at the water treatment plant. To determine whether an action level has been exceeded, the value at the 90th percentile of all lead or copper samples collected is compared against its respective Action Level. This means that no more than 10 percent of the samples can be above either Action Level.

The District's Lead and Copper Sampling Results

Chemical	Year Sampled	Violation	Action Level	Public Health Goal *	Amount Detected at 90th%	Sites Above Action Level
Copper (ppm)	2014	No	1.3	0.3	0.27	0 of 30
Lead (ppb)	2014	No	15	0.2	0	0 of 30

* A Public Health Goal is set at a level in which there are no health affects.

What are the Concerns and Health Effects with Lead and Copper?

Based on the District's monitoring results shown above, the lead and copper content in the drinking water at customer taps are not a health concern. The State has not required the District do any corrosion control treatment for lead and copper at the treatment plant.

If a water supplier determines that there are samples with elevated levels of lead and copper then the health effects of concern would include the following:

Lead

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/lead>.

Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.

Copper

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.