

Water Quality at Cadiz

Fact Sheet

Water quality at Cadiz is excellent. It meets all State and Federal water quality standards for drinking water, including maximum contaminant levels (MCLs) for Chromium, without treatment. It is suitable for both domestic and agricultural use. The vast watershed in which the water originates has very few overlying land uses and is free from the threat of bacterial waste and industrial contamination. There has never been the kind of heavy industry in the Cadiz Valley that has caused pollution in Hinkley and other areas.

Fact: Cadiz water meets all State & Federal Standards for Chromium

- Cadiz water is far below both the State and Federal standards for total Chromium, which includes Chromium-6 (Hexavalent Chromium). The national standard for total Chromium is 100 ppb and California's standard is more stringent at 50 ppb. Naturally occurring Chromium has been measured at Cadiz at well below these standards (between 10-16ppb). There is presently no state or federal standard specific to Chromium 3 or 6.

Fact: Chromium at Cadiz is a natural element not industrial pollution

- The measurement for Chromium refers to a total of Chromium-3 and Chromium-6. Chromium-3 is a natural occurring groundwater constituent and is an essential dietary nutrient. It is in food and groundwater throughout CA. Chromium-6, which has sometimes been associated with industrial production, is also a naturally occurring metal, as at Cadiz, and is found dissolved in groundwater related to certain rock geologic formations.
- Chromium-6 occurs at very low levels throughout the state, likely due to its presence in geological formations. (Chromium-6 Fact Sheet, California Department of Public Health, www.cdph.ca.gov)

Fact: Chromium is found in water supplies throughout California

- According to the state health department, numerous public drinking water sources in Southern California have Chromium-6 at levels greater than the proposed public health goal but below State standards, including the Coachella Valley. Where Chromium has occurred at dangerous levels, it has been near industrial operations or manufacturing, where Chromium-6 is a chemical by-product discharged to the groundwater system and not a naturally-occurring element.
- Results of Unregulated Chemical Monitoring for Chromium-6 (UCMR) monitoring from over 7,000 drinking water sources showed chromium-6 at or above the 1-µg/L DLR in about one-third of them. (CA Department of Public Health)



Fact: Cadiz Water can be treated to meet any future chromium standard.

- Policy groups have proposed Public Health Goals (PHGs) to reduce the MCL for total Chromium and Chromium-6 in California to less than 1 ppb. A PHG is NOT a boundary line between a “safe” and “dangerous” level of a contaminant. A PHG is a health-protective level of a contaminant in drinking water that California’s public water systems should strive to achieve if technically and economically feasible. These goals have not yet been implemented, because naturally occurring Chromium is so widespread in our groundwater sources and treatment to such trace levels can be costly for water providers. Any future reduction in MCL is not expected to be as low as the public health goal because of the impact it would have on the State’s water sources. Drinking water can still be acceptable for public consumption if it contains contaminants at levels higher than the PHG but lower than the state/federal standards.
- Because the measurement of naturally occurring Chromium is presently low at Cadiz, if a lower MCL for Chromium is ever implemented, then Cadiz water could be easily treated or blended to meet any new standard.
- Cadiz is responsible for all treatment costs. Ratepayers would not be. If required it will not increase their rates.

Fact: Cadiz Water has lower total dissolved solids than the Colorado River Aqueduct

- Cadiz water is substantially better than state and federal standards for total dissolved solids (TDS) and much softer than California’s Colorado River supply. All groundwater having a TDS below 3,000 mg/L is considered by the State to be a potential domestic or municipal source of water supply. The upper limit secondary Maximum Contaminant Limit (MCL) for TDS is 1,000 mg/L. TDS concentrations at Cadiz typically range from 300 to 400 milligrams per liter (mg/L).
- By comparison, the Metropolitan Water District’s (MWD) has set a target for TDS in its service area at 500 mg/L. However, the actual concentration of TDS in the Colorado River Aqueduct is generally around 700 mg/L and the water must be treated or blended. Elevated TDS creates aesthetic issues and increases economic costs for affected residential and business customers. Hard water clogs pipes and machinery and drives up water heating prices. Economic damages from increased salinity approach \$1 billion a year in the States that use Colorado River water. Consequently, blending Cadiz water in the CRA will provide a water quality benefit to MWD.

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