

Primary Drinking Water Standards								
RADIOLOGICAL	Year Range	Reporting Units	MCL (SMCL)	PHG (MCLG)	Violation	Result Range	Average	Source of Substance
Gross Alpha Particle Activity	2004	pCi/L	15	(0)	No	ND - 3.2	ND	Erosion of natural deposits
Uranium	2004	pCi/L	20	0.43	No	ND - 2.61	ND	Erosion of natural deposits
INOGRANIC CHEMICALS	Year Range	Reporting Units	MCL (SMCL)	PHG (MCLG)	Violation	Result Range	Average	Source of Substances
Aluminum	2003 - 2004	ppm	1 (0.2)	0.6	No	ND - 0.9	0.1	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic ¹	2004 - 2005	ppb	50	0.004	No	ND - 8	3	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium	2003 - 2004	ppm	1	(2)	No	ND - 0.18	ND	Discharges of oil drilling wastes and from metal refineries, erosion of natural deposits
Fluoride ²	2004 - 2005	ppm	2.0	1	No	0.2 - 2.6	1.1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nickel	2003 - 2004	ppb	100	12	No	ND - 24	3.4	Erosion of natural deposits; discharge from metal factories
Nitrate (as NO ₃) ³	2005	ppm	45	45	No	ND - 24	6.6	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
			MCL (SMCL)	PHG (MCLG)	Violation	Highest Level	Lowest Monthly Percent	
Turbidity (Surface water requiring filtration) ⁴	2005	NTU	TT	n/a	No	0.19	98.2%	Soil runoff
DISINFECTION BY-PRODUCTS	Year Range	Reporting Units	MCL (SMCL)	PHG (MCLG)	Violation	Result Range	Highest Running Annual Average	Source of Substance
Total Haloacetic Acids (HAA5) ⁵	2005	ppb	60	n/a	No	4.2 - 72.0	27.3	By-product of drinking water disinfection
Total Trihalomethane (TTHM)	2005	ppb	80	n/a	No	6.8 - 51.5	31.3	By-product of drinking water chlorination
DISINFECTANT	Year Range	Reporting Units	MRDL	PHG (MCLG)	Violation	Result Range	Average	Source of Substances
Chlorine (as Cl ₂)	2005	ppm	4.0	(4)	No	ND - 3.2	1.1	Drinking water disinfectant added for treatment
OTHER REGULATED SUBSTANCES	Year Range	Reporting Units	AL	PHG (MCLG)	Violation	Level Detected (90th Percentile)	# Samples Exceeding AL	Source of Substances
Copper	2005	ppm	1.3	0.17	No	0.83	0 of 41	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	2005	ppm	15	2	No	6	0 of 41	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Secondary Drinking Water Standards and Unregulated Compounds								
Inorganic Chemicals	Year Range	Reporting Units	MCL (SMCL)	PHG (MCLG)	Violation	Result Range	Average	Source of Substances
Alkalinity	2003 - 2004	ppm	n/a	n/a	No	38 - 238	148	Erosion of natural deposits
Boron	2004	ppb	NL=1000	n/a	No	270 - 1000	770	Erosion of natural deposits
Calcium	2003 - 2004	ppm	n/a	n/a	No	17 - 52	31	Erosion of natural deposits
Chloride	2003 - 2004	ppm	(500)	n/a	No	6 - 59	25	Runoff/leaching from natural deposits; seawater influence
Color	2003 - 2004	UNITS	(15)	n/a	No	ND - 5	1	Naturally occurring organic materials
Hardness	2003 - 2004	ppm	n/a	n/a	No	60 - 216	108	Erosion of natural deposits
Iron	2004 - 2005	ppb	(300)	n/a	No	ND - 210	ND	Leaching from natural deposits; industrial wastes
Magnesium	2003 - 2004	ppm	n/a	n/a	No	3.2 - 9.7	6.6	Erosion of natural deposits
Manganese	2004 - 2005	ppb	(50)	n/a	No	ND - 40	ND	Leaching from natural deposits
Odor	2003 - 2004	T.O.N.	3	n/a	No	ND - 1	1	Naturally occurring organic materials
pH	2003 - 2004	UNITS	n/a	n/a	No	5.95 - 7.90	7.47	Inherent characteristic of water
Potassium	2003 - 2004	ppm	n/a	n/a	No	ND - 4.3	2.6	Erosion of natural deposits
Sodium	2003 - 2004	ppm	n/a	n/a	No	16 - 92	54	Erosion of natural deposits; seawater influence
Specific Conductance (E.C.)	2003 - 2004	umhos/cm	(1600)	n/a	No	180 - 568	444	Substances that form natural deposits; seawater influence
Sulfate	2003 - 2004	ppm	(500)	n/a	No	6 - 47	20	Leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	2003 - 2004	ppm	(1000)	n/a	No	130 - 376	281	Runoff/leaching from natural deposits
Turbidity	2003 - 2004	NTU	(5)	n/a	No	ND - 1.0	0.2	Soil runoff
Vanadium	2003 - 2005	ppb	NL=50	n/a	No	ND - 4.2	ND	Erosion of natural deposits; manufacturing of alloys and steel
Zinc	2003 - 2004	ppm	(5)	n/a	No	ND - 0.31	0.06	Leaching from natural deposits; industrial wastes

¹ While your drinking water meets the current standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The California Department of Health Services continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

² Children who drink water containing fluoride in excess of the state MCL of 2 mg/L may get mottled teeth. MCL compliance is determined by the running annual average of samples collected on a quarterly basis.

³ Nitrate in drinking water at levels above 45 ppm is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant or you are pregnant, you should ask advice from your health care provider.

⁴ Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

⁵ Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

umhos/cm = measure of specific conductance
 pCi/L = picoCuries per liter (measure of radioactivity)
 ppm = parts per million (milligrams per liter)
 NTU = nephelometric turbidity unit
 ppb = parts per billion (micrograms per liter)
 SMCL = secondary maximum contaminant level
 ND = none detected
 n/a = not applicable

Kern River Valley District

2005 Water Quality Report for Kernville

At California Water Service Company, we are committed to supplying you with high-quality water. We are pleased to provide this annual water quality report, which includes information about where your water comes from, what it contains, and how it compares to state and federal standards. It also explains the steps we take to protect your water supply.

We care about what you think. If you have any suggestions or concerns, please call us. Also, please watch for bill inserts, where you will find announcements of any water-related public meetings or workshops as well as important information about your water.

About Your Water Supply

California Water Service Company's (Cal Water) Kern River Valley District provides high-quality water to more than 4,500 customers throughout the Valley with a local supply pumped from rock fissures beneath the ground and surface water treated at our microfiltration plant. In 2004, Cal Water's Arden system became the second system in the Kern River Valley district to convert from predominantly well water to surface water. Approximately 19,000 feet of 8-inch pipeline now connects Arden to the Company's Kernville system, which was the first system to make the conversion. This report reflects this merger of the Arden and Kernville systems.

If you have any questions, please contact Local Manager Chris Whitley at (760) 379-5336.

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Our Commitment to Our Customers

All of us at Cal Water appreciate having the opportunity to serve you, our valued customer. We know that water quality is important to you, and we are committed to providing water that meets or surpasses all water quality standards. Toward that end, our team of leading water quality experts vigilantly monitors our supply and maintains a state-of-the-art water quality laboratory. And we are always looking for opportunities to improve our operations. In fact, our mission is to be **the** leader in providing communities and customers with traditional and innovative utility services.

In order to ensure that tap water is safe to drink, USEPA and the California Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

General Information About Water

The sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

MICROBIAL CONTAMINANTS, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

INORGANIC CONTAMINANTS, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

PESTICIDES and HERBICIDES, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

ORGANIC CHEMICAL CONTAMINANTS, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

RADIOACTIVE CONTAMINANTS, which can be naturally occurring or be the result of oil and gas production and mining activities.

Water Hardness

Water is considered soft if total hardness is less than 75 ppm; moderately hard at 75 to 150 ppm; hard at 150 to 300 ppm; and very hard at 300 ppm or higher. To determine total hardness of your water in grains per gallon, simply divide amount given in parts per million by 17.1.

Cal Water is coordinating with state and federal agencies to enhance the security of our water supplies. Please report any suspicious activities near water facilities to us immediately.

Recommendation for Those Who May Have Special Water Needs

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immunocompromised people, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly people, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Drinking Water Source Assessment and Protection Program (DWSAPP)

By the end of 2002, Cal Water had submitted to the California Department of Health Services a DWSAPP report for each water source in the water system. The DWSAPP report identifies possible sources of contamination to aid prioritizing cleanup and pollution prevention efforts. All reports are available for viewing or copying at our Customer Center.

The water sources in your system are considered most vulnerable to high-density housing, wastewater, storm water, automobile body and repair shops, fire stations, hotels/motels, medical/dental offices, utility stations (maintenance areas), hardware/lumber/parts stores, recreational areas, agriculture, animal operations, schools, existing and historic gas stations, above-ground and underground storage tanks, water supply wells, drinking water treatment plants, and freeways/state highways.

We encourage customers to join us in our efforts to prevent water pollution and protect our most precious natural resource.

How to Read the Table

We test your water for more than 100 contaminants for which state and federal standards have been set. THIS TABLE LISTS ONLY THOSE THAT WERE DETECTED. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's (USEPA's) Safe Drinking Water Hotline at (800) 426-4791. The water quality test results shown in this table are divided into two main sections: those related to "primary standards" and those related to "secondary standards." Primary standards protect public health by limiting the levels of contaminants in drinking water. Secondary standards are limits for substances that could affect the water's taste, odor, and appearance.

Definitions of terms and abbreviations used in the table

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as are economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Notification Level (NL): A health-based advisory level for an unregulated contaminant in drinking water. It is used by DHS to provide guidance to drinking water systems.

Primary Drinking Water Standard or PDWS: MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.