						GROUNDWATER		SURFACE WATER		
Primary Drinking Water Standards										
INORGANIC CHEMICALS	**Year Range**	**Reporting Units**	**MCL (SMCL)**	**PHG (MCLG)**	**Violation**	**Result Range**	**Average**	**Result Range**	**Average**	**Source of Substance**
Arsenic	2003 - 2005	ppb	50	n/a	No	ND - 1.6	0.9	ND	ND	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium	2003 - 2005	ppm	1	(2)	No	0.1 - 0.3	0.2	ND	ND	Discharges of oil-drilling wastes and from metal refineries; erosion of natural deposits
Chromium	2003 - 2005	ppb	50	(100)	No	4.4 - 27.6	13.6	ND	ND	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride	2003 - 2005	ppm	2	1	No	ND - 0.6	0.2	ND - 0.1	ND	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate[1]	2005	ppm	45	45	No	2.4-29.4	16.4	ND - 6.7	2.4	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
						Highest Level	**Lowest Monthly %**	**Highest Level**	**Lowest Monthly %**	**Source of Substance**
Turbidity (surface water requiring filtration)[2]	2005	NTU	TT	n/a	No	n/a	n/a	0.28	100%	
ORGANIC CHEMICALS	**Year Range**	**Reporting Units**	**MCL (SMCL)**	**PHG (MCLG)**	**Violation**	**Result Range**	**Average**	**Result Range**	**Average**	**Source of Substance**
Tetrachloroethlylene (PCE)	2003 - 2005	ppb	5	0.06	No	ND - 2	0.25	ND	ND	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Trichloroethylene (TCE)	2003 - 2005	ppb	5	0.8	No	ND - 0.9	0.03	ND	ND	Discharge from metal-degreasing sites and other factories
						Lowest Quarterly RAA Ratio		**Lowest Quarterly RAA Ratio**		
Total Organic Carbon (TOC)	2005	ppm	n/a	n/a	No	NA		1.5		Various natural and manmade sources
DISINFECTION BY-PRODUCTS	**Year Range**	**Reporting Units**	**MCL (SMCL)**	**PHG (MCLG)**	**Violation**	**Result Range**		**Highest Running Annual Average**		**Source of Substance**
Total Haloacetic Acids (THAA)	2005	ppb	60	n/a	No	ND - 47		20		By-product of drinking water disinfection
Total Trihalomethane (TTHM)	2005	ppb	80	n/a	No	0.7 - 55		35		By-product of drinking water chlorination
DISINFECTANT	**Year Range**	**Reporting Units**	**MRDL**	**PHG (MCLG)**	**Violation**	**Result Range**		**Highest Running Annual Average**		**Source of Substance**
Chloramine	2005	ppm	4	4	No	0.1 - 2.2		1.4		Drinking water disinfectant added for treatment
Chlorine	2005	ppm	4	4	No	ND - 1.4		0.2		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 Substance**
Copper	2004	ppm	1.3	0.17	No	0.25		0 of 34		Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	2004	ppb	15	0.002	No	ND		0 of 34		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**	**Result Range**	**Average**	**Source of Substance**
Alkalinity	2003 - 2005	ppm	n/a	n/a	No	162 - 320	273	41 - 115	82	Erosion of natural deposits
Boron	2003	ppm	NL=1	n/a	No	0.3 - 0.5	0.4	ND - 0.2	0.1	Erosion of natural deposits
Calcium	2003 - 2005	ppm	n/a	n/a	No	18 - 61	48	14 - 33	23	Erosion of natural deposits
Chloride	2003 - 2005	ppm	(500)	n/a	No	34 - 93	69	41 - 140	86	Runoff/leaching from natural deposits; seawater influence
Chromium Hexavalent	2003	ppb	n/a	n/a	No	2 - 10	5	NA	NA	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.
Color	2003 - 2005	UNITS	(15)	n/a	No	1 - 3	2	ND	ND	Naturally occurring organic materials
Hardness	2003 - 2005	ppm	n/a	n/a	No	118 - 408	325	55 -136	97	Erosion of natural deposits
Magnesium	2003 - 2005	ppm	n/a	n/a	No	15 - 74	52	3 - 15	8	Erosion of natural deposits
pH	2003 - 2005	STD U	n/a	n/a	No	7.4 - 8	7.6	7.5 - 9.3	8.5	Inherent characteristic of water
Potassium	2003 - 2005	ppm	n/a	n/a	No	1 - 2	2	1 - 4	2	Erosion of natural deposits
Sodium	2003 - 2005	ppm	n/a	n/a	No	34 - 74	46	35 - 109	57	Erosion of natural deposits; seawater influence
Specific Conductance (E.C.)	2003 - 2005	umhos/cm	(1600)	n/a	No	428 - 987	810	253 - 698	429	Substances that form natural deposits; seawater influence
Sulfate	2003 - 2005	ppm	(500)	n/a	No	14 - 61	43	13 - 55	31	Leaching from natural deposits; industrial wastes
Total Dissolved Solids	2003 - 2005	ppm	(1000)	n/a	No	276 - 572	462	164 - 389	260	Runoff/leaching from natural deposits; seawater influence
Turbidity (ground water)	2003 - 2005	NTU	(5)	n/a	No	ND - 1.4	0.3	NA	NA	Soil runoff
Vanadium	2004 - 2005	ppb	NL=50	n/a	No	ND - 7.8	4.8	ND	ND	Erosion of natural deposits; manufacturing of alloys and steel
Zinc	2003 - 2005	ppm	(5)	n/a	No	ND - 0.05	0.01	ND	ND	Leaching from natural deposits; industrial wastes

[1] Nitrate in drinking water at levels above 45 mg/L 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 a 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 certain specific enzyme deficiencies. If you are caring for an infant or you are pregnant, you should ask advice from your health care provider.

[2] For surface water systems, the treatment technique dictates that the turbidity level of the filtered water be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. Turbidity is a measurement of the cloudiness of water and is monitored because it is a good indicator of the effectiveness of Zone 7's filtration system.

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

Livermore District

2005 Water Quality Report for Livermore

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 (Cal Water) has provided high-quality water utility services in the Livermore area since 1927. In addition to the 17,900 customer connections in our Livermore system, we serve 200 customer connections through operating contracts with Castlewood Country Club and Crane Ridge Mutual Water Company. To meet our Livermore and Crane Ridge Mutual customers' needs, we use a combination of local groundwater pumped from 12 wells and surface water purchased from Alameda County Zone 7 Water Agency through eight turnouts of the Alameda County Flood Control and Water Conservation District. This supply is delivered through a system that includes 25 storage tanks, 39 booster pumps, and 198 miles of pipeline. Cal Water proactively maintains and upgrades its facilities to ensure a reliable, high-quality supply.

If you have any questions, please contact Local Manager John Freeman at (925) 447-4900.

195 South "N" Street
Livermore, CA 94550-4350
(925) 447-4900
www.calwater.com

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 district are considered most vulnerable to the following activities associated with contaminants detected in the water supply: drinking water treatment plants and sewer collection systems. The sources are considered most vulnerable to the following activities, for which no associated contaminant has been detected: gas stations, dry cleaners, underground storage tanks (confirmed leaking tanks), above-ground storage tanks, high-density housing, wells (water supply), dry cleaners, dredging, storm drain discharge points, and railroads.

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 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.