Water Contaminants and Your Health

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk. 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 1-800-426-4791.

Sources of Contaminants

The sources of drinking water (both tap water and bottled water) 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 from 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.

(continued on back)

- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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

Public Participation

The Elsinore Valley Municipal Water District Board of Directors meetings are open to the public. The Board meets twice a month on the second and fourth Thursday at 4:00 p.m. Meeting agendas are placed on our posting board at the front of the EVMWD headquarters building at 31315 Chaney St., Lake Elsinore and can be viewed at www.evmwd.com. To request a schedule of the meetings, you can contact the District at 674-3146, ext. 8220 or check the website at www.evmwd.com/board.

Spanish speaking customers may contact the District's customer service representatives at (951) 674-3146 for a translation of this report.

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

Customer Information

EVMWD is committed to providing you with information about your resources. You can access water quality, conservation, education, public speakers, customer service information and copies of the Consumer Confidence Report at our website at www.evmwd.com.

For more information on water quality contact:

Julius Ma, P.E.
Water Resources Manager
(951) 674-3146, ext. 8201
jma@evmwd.net

Elsinore Valley Municipal Water District
www.evmwd.com

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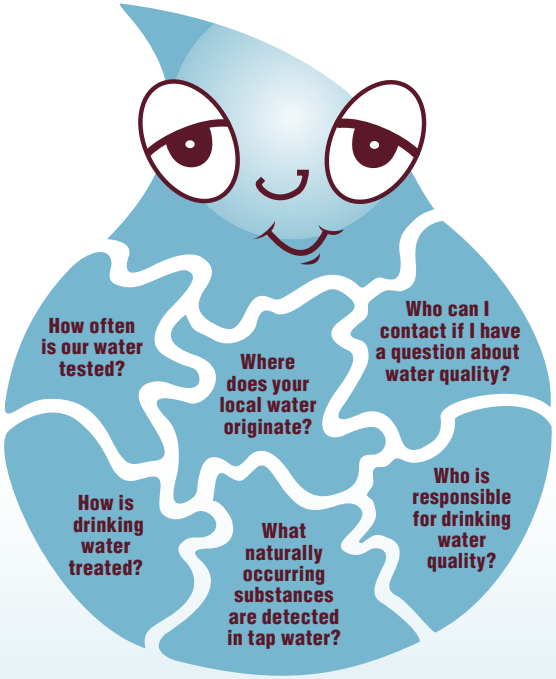
Elsinore Valley Municipal Water District

2005 Consumer Confidence Report

Vol. 17
2006



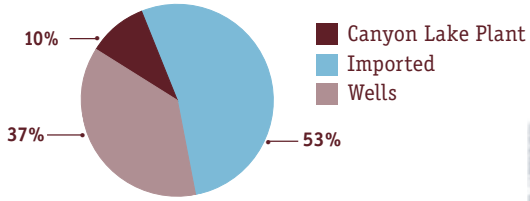
Puzzled About Your Water?

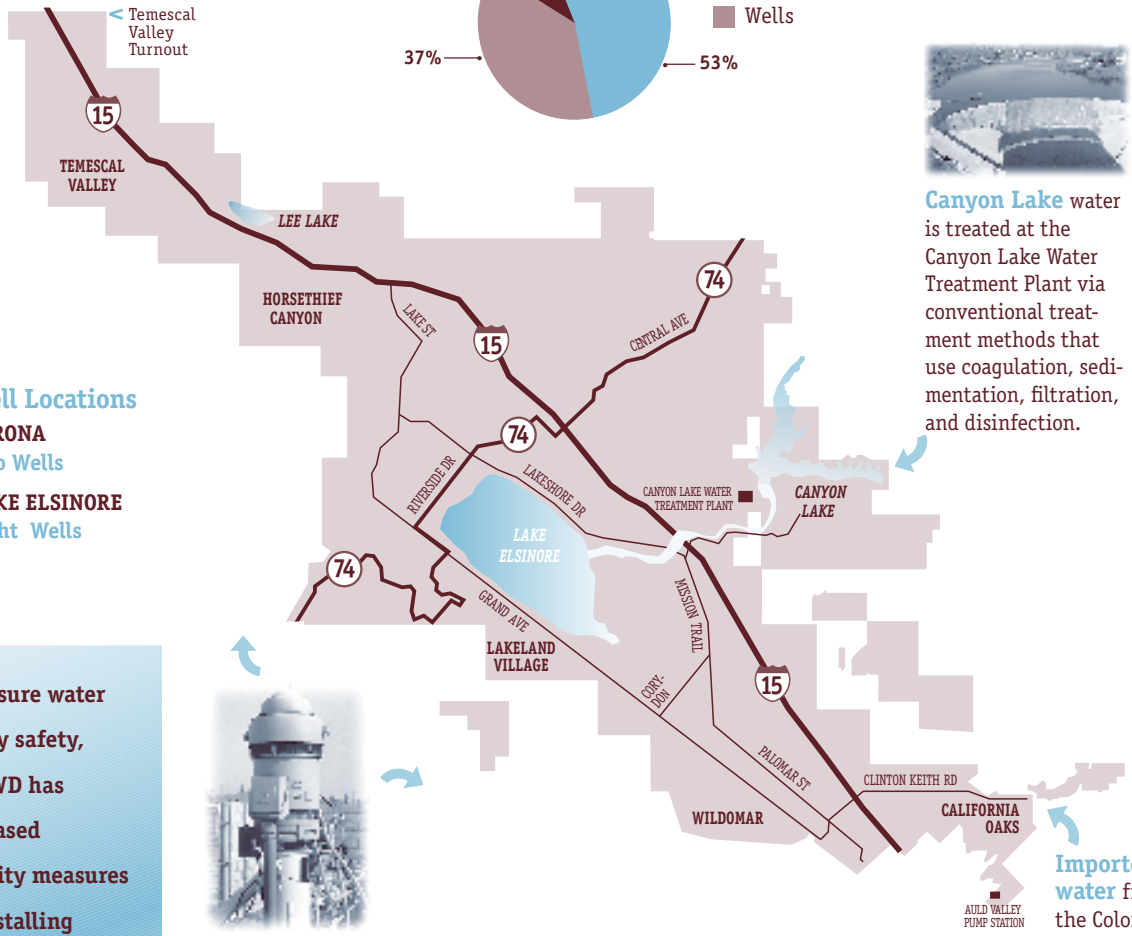
This report shows you how last year, as in years past, your tap water met or exceeded all State and Federal drinking water health standards. Included are details about where your water originates, what it contains and how it complies with water quality standards.

2005 WATER SUPPLY SOURCES

EVMWD uses three water sources that are distributed through a "loop line" delivery system that travels around Lake Elsinore.

Location of Water Sources





Canyon Lake water is treated at the Canyon Lake Water Treatment Plant via conventional treatment methods that use coagulation, sedimentation, filtration, and disinfection.

Well Locations

CORONA
Two Wells

LAKE ELSINORE
Eight Wells

To ensure water supply safety, EVMWD has increased security measures by installing additional monitoring equipment at key locations and by keeping staff on heightened alert.

Local groundwater is pumped from water aquifers deep below the Elsinore and Temescal Valley areas. Ten active wells supplied 37% of our water in 2005.

Imported water from the Colorado River is delivered from Lake Skinner through the Auld Valley pipeline in Murrieta. Water from Northern California is also delivered through the Temescal Valley Turnout.

Source Water Assessment

An updated assessment of the Canyon Lake water source for Elsinore Valley Municipal Water District was completed in April 2002. The Watershed Sanitary Survey Update Report covered San Jacinto River and Salt Creek, which are the two tributary runoff sources to the Canyon Lake Reservoir. The Canyon Lake water source is considered most vulnerable to the following activities associated with contaminants detected in the water supply: concentrated animal facilities, wastewater collection systems, septic tanks and recreational activities in and around the reservoir.

The District has also completed the source assessment for our groundwater wells in the Elsinore and Temescal Valley areas. Wells in the Elsinore area are considered most vulnerable to urban runoff, septic systems, gas stations and commercial activities.

The Metropolitan Water District of Southern California supplies the District with imported water from two sources, Colorado River Aqueduct and State Water Project supplies. In December 2002, Metropolitan Water District of Southern California completed its source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting Metropolitan by phone at (213) 217-6850.

San Jacinto River Watershed

Copies of the 2002 Watershed Sanitary Survey Update Report and the Groundwater Source Assessment Report are available at the District headquarters library at 31315 Chaney Street, Lake Elsinore. You may request a summary of the assessment be sent to you by contacting Mr. Julius Ma at (951) 674-3146, ext. 8201.

CHEMICAL PARAMETERS	Unit	State MCL (MRDL)	PHG (MCLG) (MRDLG)	ELSINORE SYSTEM								TEMESCAL SYSTEM		MAJOR SOURCES IN DRINKING WATER
				Canyon Lake WTP		Groundwater		Lake Skinner		Mills WTP		Groundwater		
				Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	
PRIMARY STANDARDS — Mandatory Health Related Standards by California Dept. of Health Services														
CLARITY														
Combined Filter Effluent Treatment Plant Effluent Only	NTU	0.3 & 1 (a)	NA	0.03-0.29	0.29***	ND-0.02	0.02***		0.18***		0.05***	ND-0.62	0.62***	Soil runoff
%<0.3	%	95%	NA	100%	100%	NR	NR		96%		100%	NR	NR	
MICROBIOLOGICAL														
Total Coliform	(b)	5%	(0)	*	*	*	*	*	*	*	*	*	*	Naturally present in the environment
Fecal Coliform/E.Coli	(b)	(b)	(0)	*	*	*	*	*	*	*	*	*	*	Human and animal fecal waste
VOLATILE ORGANIC COMPOUNDS														
1,4-Dichlorobenzene	ppb	5	6	ND	ND	ND-1.4	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
INORGANIC CHEMICALS														
Aluminum (c)	ppb	1000	600	55	55	ND-56	ND	ND-151	73	ND-83	52	56-58	57	Residue from water treatment process; erosion of natural deposits
Arsenic	ppb	50	0.004	5.8	5.8	ND-28.2	11	ND	ND	ND-2.0	ND	ND	ND	Erosion of natural deposits; glass & electronics production wastes
Barium	ppb	1000	2000	ND	ND	ND-140	28.70	ND-104	ND	ND	ND	ND-110	ND	Discharge from oil & metal refineries; erosion of natural deposits
Fluoride	ppm	2.0	1	0.2	0.2	0.2-1.0	0.4	0.16-0.28	0.23	ND-0.11	ND	0.3-0.4	0.4	Erosion of natural deposits; water additive for tooth health
Nitrate (as N) (d)	ppm	10	10	ND	ND	ND-5.6	2.5	ND-0.75	ND	ND-1.5	0.79	3.6-4.5	4.1	Runoff & leaching from fertilizer use; sewage; natural erosion
Nitrite (as N)	ppm	1	1	ND	ND	ND-0.1	ND	ND	ND	ND	ND	ND	ND	Runoff & leaching from fertilizer use; sewage; natural erosion
Selenium	ppb	50	(50)	12	12	ND-15.7	4.0	ND	ND	ND	ND	ND	ND	Refineries, mines & chemical manufacturers discharges; runoff
RADIONUCLIDES														
Gross Alpha	pCi/L	15	(0)	ND	ND	ND-4.63	2.25	ND-5.5	4.2	ND	ND	12.4	12.4	Erosion of natural deposits
Uranium	pCi/L	20	0.43	ND	ND	ND-4.53	3.67	2.9-3.2	3.0	ND	ND	11.3	11.3	Erosion of natural deposits
DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCTS PRECURSORS														
Bromate(e)	ppb	10	(0)	NR	NR	NR	NR	NA	NA	3.6-9.7	8.4	NR	NR	By-product of drinking water ozonation
Chlorine Dioxide	ppb	(800)	(800)	ND-690	20	NR	NR	NR	NR	NR	NR	NR	NR	Oxidant added for water treatment
Chlorite	ppm	1.0	(0.8)	ND-0.94	0.56	NR	NR	NR	NR	NR	NR	NR	NR	By-product of oxidation by chlorine dioxide
DBP Precursors Control (TOC)	ppm	TT	NA	TT	TT	NA	NA	TT	TT	TT	TT	NA	NA	Various natural and man-made sources
SECONDARY STANDARDS — Aesthetic Standards Established by California Dept. of Health Services														
Aluminum	ppb	200	600	55	55	ND-56	ND	ND-151	73	ND-83	52	56-58	57	Residue from water trtmnt process; erosion of natural deposits
Chloride	ppm	500	NA	120	120	36-160	88	83-92	88	42-88	60	42-71	57	Runoff/leaching from natural deposits; seawater influence
Color	Units	15	NA	ND	ND	ND-3	ND	1-3	2	1-2	1	ND	ND	Naturally occurring organic materials
Corrosivity (f)	SI	non-corrosive	NA	0.94	0.94	NR	NR	0.04-0.60	0.38	-0.02-0.19	0.09	NR	NR	Natural or industrially-influenced balance of hydrogen, carbon & oxygen in water; affected by temperature & other factors
Foaming Agents – MBAS	ppb	500	NA	ND	ND	ND-50	ND	ND	ND	ND	ND	ND	ND	Municipal & industrial waste discharges
Iron	ppb	300	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND-110	55.0	Leaching from natural deposits; industrial wastes
Manganese	ppb	50	NL=500	ND	ND	ND-31	3.9	ND	ND	ND	ND	ND	ND	Leaching from natural deposits
Odor - Threshold (TON)	Units	3	NA	ND	ND	ND	ND	2	2	2	2	ND	ND	Naturally occurring organic materials
pH	pH Units	NA	NA	8.6	8.6	7.5-9.3	8.2	8.1-8.2	8.1	8.3-8.5	8.4	6.8-7.5	7.2	
Specific Conductance	µS/cm	1600	NA	840	840	466-890	710	687-938	854	380-623	480	510-730	620	Substances that form ions in water; seawater influence
Sulfate	ppm	500	NA	120	120	28-200	102	103-210	173	40-92	62	94-130	112	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	ppm	1000	NA	550	550	260-530	420	386-554	501	209-344	269	330-470	400	Runoff/leaching from natural deposits
Turbidity (Monthly)	NTU	5	NA	0.24	0.24	ND-0.02	ND	0.06-0.08	0.07	0.05	0.05	ND-0.62	0.31	Soil runoff
OTHER CHEMICAL COMPOUNDS — Unregulated, for monitoring only														
Alkalinity as CaCO3	ppm	NA	NA	120	120	53-160	106	95-114	107	58-89	68	96-130	113	
Boron	ppb	NA	NL=1000	NR	NR	NR	NR	150-160	150	110-270	160	NR	NR	Runoff/leaching from natural deposits; industrial wastes
Calcium	ppm	NA	NA	57	57	2.7-92	45	38-62	55	16-25	20	61-82	72	
Hardness as CaCO3	ppm	NA	NA	230	230	7.1-290	143	169-260	231	75-120	97	210-270	240	Hardness Conversion: 1 grain/gal = 17.1 ppm as CaCO3
Magnesium	ppm	NA	NA	22	22	ND-16	13.9	18-25.5	23	8.5-14.5	11.5	13-16	15	
Potassium	ppm	NA	NA	10	10	ND-2.6	1.2	3.8-4.6	4.3	2.2-3.4	2.8	1.6-2.1	1.9	
Radon (Radionuclides)	pCi/L	NS	NS	NR	NR	120-1470	352	ND	ND	ND	ND	1560-1900	1720	
Sodium	ppm	NA	NA	74	74	54-150	95	69-88	82	41-76	55	31-54	43	
TOC	ppm	TT	NA	3.7-5.2	4.8	ND-0.9	0.3	2.3-3.1	2.7	1.7-4.0	2.7	0.715-0.716	0.7	Various natural and man-made sources
Vanadium	ppb	NA	NL=50	NR	NR	NR	NR	ND	ND	3.2-4.5	3.9	NR	NR	Naturally-occurring; industrial waste discharge

California DHS/Measurement Abbreviations

NTU = Nephelometric Turbidity Unit

pCi/L = PicoCuries per liter (a measure of radioactivity)

ppb = parts per billion or micrograms per liter (ug/L)

ppm = parts per million, or milligrams per liter (mg/L)

TOC = Total Organic Carbon

wtp = water treatment plant

*** = highest result

Other Abbreviations

NA = not applicable

ND = none detected

NR = not required

NS = no standard

µS/cm = microsiemens per centimeter

SI = Saturation Langelier Index — an index for the scaling and corrosive potential of water

Additional Tests Were Performed For 80 Organic Compounds and 15 Radiological Compounds and All Were Non-Detected In 2005.

Water Quality Terms & Abbreviations

Average: The average reported in the data is the combined result of multiple collection samples.

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

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 (EPA).

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

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.

Notification Level (NL): Regulatory notification level.

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

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.

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

Radon: A radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program or call EPA's Radon Hotline (800-SOS-RADON).

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

Turbidity: Is a measure of the cloudiness of the water, and it is a good indicator of the effectiveness of our filtration system.

Notes

(a) The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. Turbidity is a measure of the cloudiness of the water and is a good indicator of water quality and filtration performance. Monthly turbidity values are listed in the Secondary Standards section.

(b) Total coliform MCLs: No more than 5% of the monthly samples may be total coliform positive. Fecal coliform/E.Coli MCLs: The occurrence of 2 consecutive total coliform positive samples, one of which contains fecal coliform/E.Coli, constitutes an acute MCL violation. These MCLs were not violated in 2005. Results are based on the distribution system's highest percent positives. Compliance is based on the combined distribution system sampling from many locations. Over 1,346 samples were analyzed in 2005.

(c) Aluminum has a secondary MCL of 0.2 ppm.

(d) State MCL is 45 mg/L as Nitrate, which equals 10.16 mg/L as N.

(e) Running annual average was calculated from weekly samples.

(f) Corrosivity is measured by the SI–Saturation (Langlier) Index. A positive index indicates non-corrosivity.

(g) 90th percentile value, as required by the Lead and Copper Rule. 10 samples were taken in 2003 from the Temescal system and 60 from the Elsinore system in 2004, as required. None of the results exceeded the action levels for lead and copper. The next sample events for Temescal and Elsinore are scheduled for 2007.

(h) Lead and copper are regulated in a Treatment Technique under the Lead and Copper Rule. It requires systems to take water samples at the consumers' tap. The federal notification level, which triggers water systems into taking treatment steps if exceeded in more than 10% of the tap water samples, is 1.3 ppm for copper and 15 ppb for lead.

(i) Quarterly distribution system samples. Compliance is based on a running annual average of more than 96 samples. The overall running annual average for 2005 is 69.7 ppb.

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old.

CHEMICAL PARAMETERS	Unit	State MCL (MRDL)	PHG (MCLG) (MRDLG)	ELSINORE SYSTEM		TEMESCAL SYSTEM	
				Range	Average	Range	Average
DISTRIBUTION SYSTEM SAMPLING — Required by the California Dept. of Health Services							
Turbidity (System)	NTU	5	NA	ND-7.72	0.06	ND-0.29	0.04
pH	pH Units	NA	NA	6.46-9.39	8.21	6.57-8.19	7.25
Color	Units	15	NA	ND-23	0.4	ND-8	0.4
Chlorine Residual MRDL)	ppm	(4)	(4)	0.01-3.38	1.28	0.15-1.81	1.32
Temperature	°C	NA	NA	9-32	22.3	14-26	20
Lead‡ (h)	ppb	TT (h)	2	ND-55	ND(g)	ND-17	12(g)
Copper (h)	ppm	TT (h)	0.17	ND-0.770	0.470(g)	0.013-1.100	0.15(g)
Total Coliform*	(b)	5%	(0)	0-1%	0.15%	0	0
Total Trihalomethanes(i)	ppb	80	NA	0.95-150	82.2**	2.0	2.0
Haloacetic Acids	ppb	60	NA	8.3-58	29.1	8.6	8.6

* Bacterial samples are collected within the distribution system. Fifty locations are within the Elsinore system and two in the Temescal system.

**Highest quarterly average. Compliance is based on running annual average of the last four quarters, which is 69.7 ppb, less than the MCL of 80 ppb.

Water Quality Measurements

Trace chemicals are measured in parts per million, which is the same as milligrams per liter. Some elements are measured in parts per billion.

▸ **Fluoride** is naturally occurring in water and soil in varying amounts. Fluoridation of public drinking water supplies has been widely shown to prevent tooth decay. Legislation requires that water districts add fluoridation if outside funding sources other than water rates are available. Look under "Primary Standards" on the chart for more detail about the naturally occurring fluoride in the local water supply.

▸ **Arsenic** On 2/22/02, the USEPA lowered the arsenic MCL from 50 ppb to 10 ppb. Water systems are expected to comply with the new MCL by 1/23/06. Several groundwater wells in the Elsinore area have low levels of arsenic. The current average level is 11 ppb, which is less than the 50 ppb MCL in the 2005 reporting period for this CCR edition. Our groundwater comprises about 37% of our water supply. Our customers are assured that the water from their taps will contain less than 10 ppb of arsenic due to the mixing and dilution of the groundwater with other water sources. EVMWD is piloting new treatment technologies to lower arsenic levels in well water. A new treatment plant will be built in mid 2007. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

▸ **Nitrate** in drinking water at levels above 10 mg/L NO_3-N 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 10 mg/L NO_3-N 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.

‡ **Lead:** Sample results from our Temescal System indicate low levels of 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 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).