



Municipal Water District

Olivenhain Municipal Water District  
1966 Olivenhain Road  
Encinitas, CA 92024  
(760) 753-6466

*“Providing a high quality, reliable water supply to our customers since 1961”*

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*This annual water quality report, is printed on recycled paper, as are all District publications.* 

# Consumer Confidence Report 2003

*An Annual  
Drinking Water  
Quality Report*



Municipal Water District

This brochure explains how drinking water provided by Olivenhain Municipal Water District (District) meets and exceeds all state and federal water quality standards for drinking water. Included is a listing of results from water quality tests as well as an explanation of where our water comes from and tips on how to interpret the data. The data presented is for January 1 through December 31, 2003. We are proud to share our results with you. Please read them carefully.

*Get Involved*

We encourage public interest and participation in our community's decisions affecting drinking water and any other issues. Board of Directors Meetings occur on the second Friday at 8:00 a.m. and the fourth Wednesday of every month in the Boardroom at the District Office. The time of the Wednesday meeting alternates on a monthly basis between 8:00 a.m. and 6:00 p.m. The public is welcome.

*For more information, call Tom Kennedy at (760) 632-4647.*

*El informe contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo o hable con alguien que lo entienda bien, llame Abe Gonzalez a (760) 632-4643.*

# Consumer Confidence Report 2003

## Water Source

The imported treated water supply for Olivenhain Municipal Water District is obtained from the San Diego County Water Authority (SDCWA). SDCWA purchases treated water from Metropolitan Water District of Southern California (MWD). The water distributed is a blend of water from the Colorado River and water from Northern California and is treated at the Lake Skinner treatment plant owned by MWD. Lake Skinner is located in southwestern Riverside County.

The raw, or untreated imported water, is also purchased from SDCWA, however, the District treats the water locally at the Olivenhain Water Treatment Plant. You will notice separate columns for water that is treated at Lake Skinner Treatment Plant and water that is treated at the District's plant.

The Olivenhain Municipal Water Treatment Plant uses membrane technology to produce a high quality finished water. Fewer chemicals are used in this treatment process than conventional treatment and the membrane process offers improved barriers against pathogens such as choliform, bacteria, cryptosporidium and giardia protozoans.

For more information on the Lake Skinner source water and a source water assessment, please contact Dr. Michael Stewart with MWD at (213) 217-5696. For more information on the Olivenhain Water Treatment Plant, please contact Tom Kennedy at (760) 632-4647.

## What About Radon?

Radon is a radioactive gas found throughout the United States that you can't see, taste, or smell. Olivenhain Municipal Water District tested for and did not detect radon in your water. There is no Federal regulation for radon levels in drinking water at this time. If you are concerned about radon in your home and would like additional information, contact the Radon Hotline (1-800-SOS-RADON).

## What About Cryptosporidium?

*Cryptosporidium* (pronounced "krip-toe-spore-id-ee-um") is a protozoan parasite found in lakes and rivers, typically when these waters contain animal or sewage waste. *Cryptosporidium* was not detected in samples of water from the Olivenhain Municipal Water District.

## What About 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 you can flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from United States Environmental Protection Agency (USEPA) Safe Drinking Water Hotline (1-800-426-4791).

## Important Health Information

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 (1-800-426-4791).

The trace contaminants found in District water sources are listed in the table found at the center of this report, along with standards of each. It is important to note that drinking water standards are based on research to protect the general public and may not be sufficient to protect certain persons, as noted below.

**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 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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

## How do contaminants get into the water?

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:

**(A) Microbial contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**(B) 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.

**(C) Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**(D) 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.

**(E) Radioactive contaminants**, 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 and the State Department of Health Services (Department) 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 provide the same protection for public health.

## How to Read These Tables

The results of tests performed in 2003 are presented in the tables. Terms used in the Water Quality Tables and in other parts of this report are defined here.

**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 (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 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.

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

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

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

### PRIMARY STANDARDS - Mandatory Health - Related Standards

Clarity (a)	MCL	PHG (MCLG)	State DLR	Range Average	Combined Skinner Plants	OWTP	Major Sources
Combined Filter (NTU)	0.3	–	–	Highest	0.09	0.06	Soil runoff
Effluent Turbidity %	95 (a)	NA	–	% < 0.3	100%	100%	Soil runoff

Microbiological (b)	MCL	PHG (MCLG)	State DLR	Range Average	Combined Skinner Plants	OWTP	Major Sources
Total Coliform Bacteria %	5.0 (b)	(0)	–	Range	0 - 0.12%	0 - 0.1%	Naturally present in the environment
				Average	0.02%	0.01%	

Organic Chemicals Pesticides/PCBs	MCL	PHG (MCLG)	State DLR	Range Average	Combined Skinner Plants	OWTP	Major Sources
Methyl- <i>tert</i> -butyl-ether (MTBE) (d,e) (ppb)	13	13	3	Range	ND-0.5	ND	Leaking underground gasoline storage tanks and pipelines
				Average	ND	ND	

Inorganic Chemicals	MCL	PHG (MCLG)	State DLR	Range Average	Combined Skinner Plants	OWTP	Major Sources
Fluoride (ppm)	2	1	0.1	Range	0.15 - 0.27	0.23	Erosion of natural deposits; water additive for tooth health
				Average	0.22	0.23	

Radiologicals (f)	MCL	PHG (MCLG)	State DLR	Range Average	Combined Skinner Plants	OWTP	Major Sources
Gross Alpha Particle Activity (pCi/L)	15	NA	1	Range	2.99 - 3.96	1.08 - 1.19	Erosion of natural deposits
				Average	3.41	1.13	
Gross Beta Particle Activity (pCi/L)	50	NA	4	Range	ND - 4.08	NR	Decay of natural and man-made deposits
				Average	ND	NR	
Combined Radium (pCi/L) (g)	5	NA	0.5	Range	ND - 0.51	NR	Erosion of natural deposits
				Average	ND	NR	
Uranium (pCi/L)	20	0.5	2	Range	ND - 2.39	NR	Erosion of natural deposits
				Average	ND	NR	

Disinfection By-Products, Residuals, Precursors	MCL	PHG (MCLG)	State DLR	Range Average	Combined Skinner Plants	OWTP	Major Sources
Total Trihalomethanes (TTHM) (b) (ppb)	80	NA	0.5	Range	32 - 61	15.8 - 56	By-product of drinking water chlorination
				Average	45	28.5	
Total Trihalomethanes (TTHM) (i) (ppb)	80	NA	0.5	Range	33 - 77	8.1 - 64.2	By-product of drinking water chlorination
				Average	57	40.0	
Haloacetic Acids (five) (HAA5) (b,j) (ppb)	60	NA	1 (l)	Range	11 - 20	3.5 - 43.8	By-product of drinking water chlorination
				Average	16	19	
Total Chlorine Residual (ppm)	[4]	[4]	-	Range	2.40	2.35 - 3.01	Drinking water disinfectant added for treatment
				Average	2.40	2.40	

## Unregulated Chemicals Requiring Monitoring - OMWD Water

State of California regulations require us to monitor these contaminants while the EPA considers setting limits on them. These chemicals are formed in small quantities during the disinfection process at the water treatment plant. No Public Health Goals or Maximum Contaminant Levels have been established for these contaminants.

Unregulated Chemicals	MCL	PHG (MCLG)	State DLR	Range Average	Combined Skinner Plants	OWTP	Major Sources
Boron (ppb)	NA	AL =1,000	100	Range	110 - 140	150 - 170	Runoff/leaching from natural deposits; industrial wastes
				Average	130	160	
Perchlorate (ppb)	NA	AL=4	4	Range	ND	ND	Industrial waste discharge
				Average	ND	ND	

Microbial Contaminants	MCL	PHG (MCLG)	State DLR	Range Average	Combined Skinner Plants	OWTP	Major Sources
Heterotrophic Plate Count (c) (CFU/mL)	TT	NA	-	Range	<1 - 2	<1 - 1	Naturally present in the environment
				Average	<1	<1	

Other Parameters	MCL	PHG (MCLG)	State DLR	Range Average	Combined Skinner Plants	OWTP	Major Sources
Alkalinity (ppm)	NA	NA	-	Range	100 - 124	112	Erosion of natural deposits
				Average	112	112	
Calcium (ppm)	NA	NA	-	Range	49 - 64	53	Erosion of natural deposits
				Average	54	53	
Hardness (ppm)	NA	NA	-	Range	209 - 264	227	Erosion of natural deposits
				Average	227	227	
Magnesium (ppm)	NA	NA	-	Range	21 - 26	23	Erosion of natural deposits
				Average	22.5	23	
pH (pH Units)	NA	NA	-	Range	8.04 - 8.08	8.0 - 8.6	Erosion of natural deposits
				Average	8.06	8.3	
Potassium (ppm)	NA	NA	-	Range	3.6 - 4.3	3.8	Erosion of natural deposits
				Average	3.9	3.8	
Sodium (ppm)	NA	NA	-	Range	66 - 89	79	Runoff/leaching form natural deposits; seawater influence
				Average	76	79	
TOC (ppm)	TT	NA	-	Range	2.0 - 2.7	NR	Various natural and man-made sources
				Average	2.4	NR	

## Secondary Drinking Water Standards

Aesthetic Standards	MCL	PHG (MCLG)	State DLR	Range Average	Combined Skinner Plants	OWTP	Major Sources
Chloride (ppm)	500	NA	-	Range	76 - 92	76	Runoff/leaching from natural deposits; seawater influence
				Average	81	76	
Color (units)	15	NA	-	Range	1 - 3	0 - 5	Naturally occurring organic materials
				Average	2	0.32	
Corrosivity (SI)	non-corrosive	NA	-	Range	0.20 - 0.36	NR	Elemental balance in water; affected by temperature, other factors
				Average	0.30	NR	
Methyl- <i>tert</i> -butyl-ether (MTBE) (ppb)	5	13	3	Range	ND - 0.50	ND	Leaking underground gasoline storage tanks and pipelines
				Average	ND	ND	
Specific Conductance $\mu\text{mho/cm}$	NA 1600	NA	-	Range	745 - 922	798	Substances that form ions in water; seawater influence
				Average	816	798	
Sulfate (ppm)	500	NA	0.5	Range	147 - 206	170	Runoff/leaching from natural deposits; industrial wastes
				Average	171	170	
Total Dissolved Solids (TDS) (ppm)	1000	NA	-	Range	436 - 563	510	Runoff/leaching from natural deposits; seawater influence
				Average	487	510	
Turbidity (Monthly) (NTU)	5	NA	-	Range	0.05 - 0.07	0.04 - 0.07	Soil runoff
				Average	0.06	0.06	



## Disinfection By-Products Requiring Monitoring - OMWD Water

*State of California regulations require us to monitor these contaminants while the EPA considers setting limits on them. These chemicals are formed in small quantities during the disinfection process at the water treatment plant. No Public Health Goals or Maximum Contaminant Levels have been established for these contaminants.*

ICR Disinfection By-Products Data 8/97 to 12/98	MCL	PHG (MCLG)	State DLR	Range Average	Combined Skinner Plants	OWTP	Major Sources
Chloral Hydrate (ppb)	NA	NA	0.5	Range	3.5 - 7.0	NR	By-product of drinking water chlorination
				Average	5.1	NR	
Cyanogen Chloride (ppb)	NA	NA	0.5	Range	2.3 - 5.5	NR	By-product of drinking water chlorination
				Average	3.4	NR	
Haloacetonitriles (ppb)	NA	NA	0.5	Range	5.6 - 17	NR	By-product of drinking water chlorination
				Average	8.7	NR	
Haloketones (ppb)	NA	NA	0.5	Range	1.3 - 2.2	NR	By-product of drinking water chlorination
				Average	1.6	NR	
Total Organic Halides (ppb)	NA	NA	50	Range	115 - 157	NR	By-product of drinking water chlorination
				Average	138	NR	

## Abbreviations

AL	California Action Level
CFU/ml	Colony Forming Units per milliliter
DBP	Disinfection By-Products
DLR	Detection Limits for purposes of Reporting
HAA5	Haloacetic Acids (five)
ICR	Information Collection Rule
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
NA	Not Applicable
NR	Not Required

ND	None Detected
NTU	Nephelometric Turbidity Units
pCi/L	picoCuries per liter
PHG	Public Health Goal
ppb	parts per billion or micrograms per liter ( $\mu\text{g/L}$ )
ppm	parts per million or milligrams per liter ( $\text{mg/L}$ )
RRA	Running Annual Average
SI	Saturation Index (Langelier)
TOC	Total Organic Carbon
TTHM	Total Trihalomethanes
TT	Treatment Technique
$\mu\text{mho/cm}$	micromho per centimeter

## Footnotes

- (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. The monthly averages and ranges of turbidity are listed in the Secondary Standards section. A value of 0.56 NTU was recorded by OWTP instruments, but this one-time measurement was due to entrained air, not particles.
- (b) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform positive. Compliance is based on the combined distribution system sampling from all the filtration plants. In 2003, 11,119 samples were analyzed by MWD and 780 by OMWD. The MCL was not violated.
- (c) HPC values were based on the monthly averages of the plant effluent samples. In 2003, all distribution samples collected had detectable total chlorine residuals and no HPC was required.
- (d) Aluminum, copper, MTBE, and thiobencarb have both primary and secondary standards.
- (e) MTBE reporting level is 0.5 ppb.
- (f) MWD results are for the 2002-2003 4-quarter radiological monitoring program except for gross alpha and uranium values at Lake Mathews and San Jacinto Tunnel West Portal where there is a monthly discretionary monitoring program. OMWD results are for 2003 sampling.
- (g) Standard is for Radium-226 and -228 combined.
- (h) MWD average and range for the filtration plant effluents were taken from weekly samples for TTHM. OMWD TTHM values based on quarterly filtration plant effluent monitoring.
- (i) MWD Distribution system-wide average and range taken from 47 samples taken quarterly. OMWD Distribution system-wide average and range taken from 9 samples taken quarterly.
- (j) OMWD HAA5 samples based on quarterly distribution system-wide sampling. MWD HAA5 samples based on monthly distribution system-wide sampling. DLR = 1.0 ppb for each HAA5 analyte (dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid) except for monochloroacetic acid which has a DLR = 2.0 ppb.

