

City of Oceanside 2002 Consumer Confidence Report of Detected Compounds

We test the drinking water quality for many constituents as required by State and Federal Regulation. Your tap water met all EPA and State drinking water health standards. This report is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are our best allies. For more information about your water, call Guss Pennell at 435-5804.

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

Health Information

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 Safe Drinking Water Hotline (800-426-4791).

Oceanside's Water Sources

Approximately 93% of the water we use in Oceanside is imported from hundreds of miles away. This is "surface water" from rivers and streams in Northern California and the Colorado River Basin. The Metropolitan Water District (MWD) imports this water to Southern California via a 242-mile-long aqueduct that carries Colorado River water from Lake Havasu, and a 444-mile-long aqueduct bringing water from the Sacramento-San Joaquin Delta. Both aqueducts terminate in Lake Skinner in Riverside County, where these waters are combined.

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 and wastewater. 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.

The San Diego County Water Authority (Authority) purchases this imported water from MWD and distributes it to water agencies throughout the County, including the City of Oceanside. Approximately 53% of Oceanside's water is purchased "raw" from the Authority and is treated at the City's Robert A. Weese Water Filtration Plant. Another 40% of our water is purchased from the Authority already treated.

In addition, the City is fortunate to have a local source of groundwater. This groundwater is extracted by wells and demineralized at the Mission Basin Desalting Facility. About 7% of our water is local groundwater. When the desalting plant is expanded in the next few years, it will supply up to 21% of our water needs.

An assessment of the groundwater sources for the City of Oceanside was completed in February 2002. The sources are most vulnerable to the following activities not associated with any detected contaminants: sewer collections and/or agricultural/irrigation wells. Additionally, the sources are known to exceed some secondary maximum contaminant levels, for which treatment is provided prior to distribution. A copy of the complete assessment is available at the City of

Oceanside office. You may request a summary of the assessment by contacting Guss Pennell at (760) 435-5804.

The **Oceanside Utilities Commission** meets on the fourth Thursday of each month at 7:00 p.m. in the City Council Chambers, 300 North Coast Highway. The public is welcome to participate in these meetings. For more information, please call 435-5800.

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.
- **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.
- **Unregulated contaminants**, included under Additional Parameters. No maximum contaminant level (MCL) currently exists for these parameters. This monitoring helps EPA and the California Department of Health Services to determine where certain contaminants occur and whether the contaminants need to be regulated.

In order to ensure that tap water is safe to drink, USEPA and the California Department of Health Services (Department) prescribe regulations which 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.

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 EPA's Safe Drinking Water Hotline (800) 426-4791.

NOTES:

- 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. It is a good indicator of water quality and effectiveness of our filtration system. Monthly turbidity samples taken from the distribution system are listed in the *Secondary Standards* section.
- Total coliform MCLs: no more than 5.0% of the monthly samples may be total coliform positive. Thirty-one distribution locations are sampled weekly.
- Aluminum has a secondary MCL of 200 ppb or 0.2 ppm.
- Radium 226 analysis is required if gross alpha exceeds 5 pCi/L. MWD data is Total Radium (226 and 228). The MCL for Total Radium is 5 pCi/L.
- Calculation based on pH, temperature and dissolved minerals to determine scale forming or scale dissolving tendencies.
- Data collected for Information Collection Rule 1997-1998.
- Compliance is based on a running annual average of 12 distribution system samples taken quarterly.
- Boron data for R.A. Weese and Mission Basin Desalting Facility collected in 2001 for compliance with Unregulated Chemical monitoring requirements.

WATER QUALITY DATA

The table below lists all the drinking water contaminants that we detected during the 2002 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 - December 31, 2002. The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Terms and abbreviations used below:

- **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 is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
- **Regulatory Action Level (AL)**: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **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. MRDLs are set by the U.S. Environmental Protection Agency.
- **Primary Drinking Water Standard**: MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **Treatment Technique**: A required process intended to reduce the level of a contaminant in drinking water.
- **Detection Limits for purposes of Reporting (DLR)**
- **NA**: not applicable • **ND**: not detectable at testing limit • **NS**: no standard • **NC**: not collected • **µmho/cm**: micromhos per centimeter • **pCi/L**: picocuries per liter (a measure of radiation) • **ppm**: parts per million or milligrams per liter • **ppb**: parts per billion or micrograms per liter • **ppt**: parts per trillion or nanograms per liter • **CFU/mL**: colony forming units per millimeter • **SI**: saturation index

PARAMETER	Units	State			Range Average Highest	SOURCE WATERS			Major Sources in Drinking Water
		MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR		Robert A. Weese Treated Water (surface water)	MWD Lake Skinner Treated Water (surface water)	Mission Basin Desalting Facility (groundwater)	
PRIMARY STANDARDS — Mandatory Health-Related Standards									
Turbidity	NTU	1.0 TT			Highest <0.3	0.32	0.11	NA	Soil runoff.
Total Coliform Bacteria	%	5.0 (b)	(0)	—	Distribution system-wide monthly average range = 0-1.1% Distribution system highest monthly value = 1.1%				Naturally present in the environment.
INORGANIC CONTAMINANTS									
Aluminum (c)	ppm	1	0.6	0.05	Range Average	0.087-0.188 0.138	ND ND	ND ND	Residue from water treatment process; erosion of natural deposits.
Arsenic	ppb	50	NS	2	Range Average	ND-3 2	ND ND	ND ND	Erosion of natural deposits; glass and electronics production wastes.
Fluoride	ppm	2	1	0.1	Range Average	0.26-0.30 0.28	0.19-0.26 0.24	0.10-0.20 0.15	Erosion of natural deposits; water additive that promotes strong teeth.
Selenium	ppb	50	(50)	5	Range Average	ND-8 5	ND ND	ND-13 8	Erosion of natural deposits; runoff from cattle feed.
Nitrate	ppm	45	45	2	Range Average	ND ND	ND ND	1.8-3.6 2.7	Runoff and leaching from fertilizer use; sewage; erosion of natural deposits.
Copper	ppm	1.3 (AL)	0.17	0.05	Range for 55 homes sampled = ND-0.457 90th Percentile for 55 homes sampled = 0.209				Internal corrosion of household plumbing; erosion of natural deposits.
Lead	ppb	15 (AL)	2	5	Range for 55 homes sampled = ND-11 90th Percentile for 55 homes sampled = 4				Internal corrosion of household plumbing; erosion of natural deposits.
RADIOACTIVE CONTAMINANTS <small>[analyzed every four years, for four consecutive quarters (sampled in 2002)]</small>									
Gross alpha	pCi/L	15	NS	1	Range Average	2.17-4.14 3.08	ND-5.53 3.99	ND-5.58 2.74	Erosion of natural deposits.
Gross beta	pCi/L	50	NS	4	Range Average	ND ND	ND-7.48 5.54	1.99 1.99	Decay of natural and manmade deposits.
Radium - 226 (d)	pCi/L	3	NS	0.5	Range Average	NA NA	ND-2.36 1.01	ND ND	Erosion of natural deposits.
Uranium	pCi/L	20	0.5	2	Range Average	ND-2.46 2.01	ND-3.18 2.61	ND-3.83 2	Erosion of natural deposits.
SECONDARY STANDARDS — Aesthetic Standards									
Chloride	ppm	500	NS	NS	Range Average	74-90 81	78-92 83	80-148 113	Runoff and leaching from natural deposits; seawater influence.
Color	Units	15	NS	NS	Range Average	ND ND	1-3 2	ND ND	Naturally occurring organic materials.
Corrosivity (e)	SI	Non Corrosive	NS	NS	Range Average	-0.58 to 0.75 -0.18	0.25 to 0.42 0.33	0.27 to 0.78 0.55	Natural or industrial factors that influence balance.
Hardness (Total hardness)	ppm	NS	NS	NS	Range Average	236-264 249	230-250 241	180-257 214	Leaching from natural deposits.
Hardness (Total hardness)	grains/gal	NS	NS	NS	Range Average	13.9-15.4 14.6	13.4-14.6 14.1	10.5-15.0 12.6	Leaching from natural deposits.
Manganese	ppb	50	NS	NS	Range Average	ND ND	ND ND	ND-20 ND	Leaching from natural deposits.
Sodium	ppm	NS	NS	20	Range Average	73-84 77	72-81 77	48-54 51	Runoff and leaching from natural deposits; seawater influence.
Specific Conductance	µmho/cm	1600	NS	NS	Range Average	781-864 808	830-902 852	622-829 724	Substances that form ions when in water; seawater influence.
Sulfate	ppm	500	NS	0.5	Range Average	166-201 191	162-191 179	96.4-128 120	Runoff and leaching from natural deposits; industrial wastes.
Total Dissolved Solids	ppm	1000	NS	NS	Range Average	502-592 536	495-453 509	349-517 437	Runoff and leaching from natural deposits; seawater influence.
Turbidity	NTU	5	NS	NS	Distribution system range = 0.05-1.6 Distribution system average = 0.16				Soil runoff.
ADDITIONAL PARAMETERS — Disinfection by-products									
Chloral hydrate (f)	ppb	NS	NS	0.5	Range Average	ND-2.9 1.8	3.5-7.0 5.1	ND ND	By-product of drinking water chlorination.
Chlorate (f)	ppb	NS	NS	NS	Range Average	NC NC	NC NC	150-420 267	By-product of drinking water chlorination.
Cyanogen chloride (f)	ppb	NS	NS	0.5	Range Average	ND-1.2 0.7	2.3-5.5 3.4	ND ND	By-product of drinking water chlorination.
Haloacetic acids	ppb	NS	NS	1	Range Average	11 11	1-29 20	4.2 4.2	By-product of drinking water chlorination.
Haloacetic acids	ppb	NS	NS	1	Distribution system-wide range = 9-27 Distribution system highest running annual average = 18				By-product of drinking water chlorination.
Haloacetonitriles (f)	ppb	NS	NS	0.5	Range Average	ND-6.0 2.7	5.6-17 8.7	ND ND	By-product of drinking water chlorination.
Haloketones (f)	ppb	NS	NS	0.5	Range Average	24 2.4	1.3-2.2 1.6	ND ND	By-product of drinking water chlorination.
Total chlorine residual	ppm	[4.0]	[4.0]	NS	Distribution system-wide monthly average range = 2.0-2.5 Distribution system highest running annual average = 2.2				By-product of drinking water chlorination.
Total organic halides (f)	ppb	NS	NS	50	Range Average	175-275 218	115-157 138	ND ND	By-product of drinking water chlorination.
Total Trihalomethanes	ppb	80	NS	0.5	Range Average	31 31	37-58 49	4.2 4.2	By-product of drinking water chlorination.
Total Trihalomethanes (g)	ppb	80	NS	0.5	Distribution system-wide range = 25-66 Distribution system highest running annual average = 48				By-product of drinking water chlorination.
ADDITIONAL PARAMETERS (unregulated)									
Alkalinity as CaCO ₃	ppm	NS	NS	NS	Range Average	102-120 111	114-123 119	71.2-90.0 82.0	Leaching from natural deposits.
Ammonia as nitrogen	ppm	NS	NS	NS	Range Average	0.66-0.90 0.76	NC NC	0.53-1.08 0.72	By-product of drinking water chloramination.
Boron (h)	ppb	NA	1000(AL)	NS	Range Average	100-130 122	110-140 130	110-116 108	Leaching from natural deposits.
Heterotrophic Plate Count	CFU/mL	NS	NS	NS	Range Average	ND-2 ND	ND-8 ND	ND-5 ND	Bacteria naturally present in the environment.
Magnesium	ppm	NS	NS	NS	Range Average	22-26 24	23-25 24	20-25 23	Leaching from natural deposits.
Perchlorate	ppb	NS	4(AL)	4	Range Average	ND ND	ND-5 ND	ND ND	Used in rocket motors, fireworks and explosive devices.
pH	pH units	NS	NS	NS	Range Average	7.27-8.28 7.65	8.02-8.08 8.06	8.22-8.86 8.5	Measure of the acidic or basic character of water.
Potassium	ppm	NS	NS	NS	Range Average	3.8-4.0 3.9	3.9-4.1 3.9	1.1-1.3 1.2	Leaching from natural deposits.
Sodium	ppm	NS	NS	NS	Range Average	74-81 79	76-86 79	61-68 66	Runoff and leaching from natural deposits; seawater influence.