

City of Oceanside 2003 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 información muy importante sobre su agua potable. Tradúzcalo 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 91% 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 60% of Oceanside's water is purchased "raw" from the Authority and is treated at the City's Robert A. Weese Water Filtration Plant. Another 31% 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 9% of our water is local groundwater. When the desalting plant is expanded in the next few years, it will supply up to 19% 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 435-5804.

The Oceanside Utilities Commission meets on the fourth Wednesday of each month at 5:00 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.
- Trichloropropane (1,2,3-TCP), some people who use water containing 1,2,3-trichloropropane in excess of the action level over many years may have an increased risk of getting cancer, based on studies in laboratory animals.

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.

Water Quality Data

The table at right lists all the drinking water contaminants detected during the 2003 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, 2003. The State requires the City 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 & abbreviations used below:

- **AL – Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **DLR:** detection limits for purposes of reporting
- **MCL – Maximum Contaminant Level:** 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.
- **MCLG – Maximum Contaminant Level Goal:** 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.
- **MRDL – Maximum residual disinfectant level:** The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.
- **MRDLG - Maximum residual disinfectant level goal:** 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.
- **PHG – Public Health Goal:** 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.
- **TT – Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.
- **CFU/ml:** colony forming units per millimeter • **NC:** not collected
- **ND:** not detectable at testing limit • **NS:** no standard • **NT:** not tested
- **NTU:** nephelometric turbidity units • **pCi/L:** picocuries per liter (a measure of radiation) • **ppb:** parts per billion or micrograms per liter • **ppm:** parts per million or milligrams per liter • **ppt:** parts per trillion or nanograms per liter • **µmho/cm:** micromhos per centimeter • **<:** less than

NOTES:

- The turbidity level of the filtered water shall be less than or equal to 0.5 NTU in 95% of the measurements taken each month and shall not exceed 5.0 NTU at any time. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of the filtration system. Monthly turbidity samples taken from the distribution system are listed in the *Secondary Standards* section.
- 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 (+ values) or scale dissolving (- values) tendencies.
- 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.

PARAMETER	Units	State MCL (MRDL)	PHG (MCLG) (MRDLG)	State DLR	Range Average Highest	SOURCE WATERS			Major Sources in Drinking Water
						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	0.5 TT 95% (a)	NS	NS	Highest %<0.5	0.33 100%	0.09 100%	0.18 100%	Soil runoff.
INORGANIC CONTAMINANTS									
Aluminum (b)	ppm	1	0.6	0.05	Range Average	0.138-0.284 0.204	ND ND	ND ND	Residue from water treatment process; erosion of natural deposits.
Arsenic	ppb	50	NS	2	Range Average	3 3	ND ND	ND ND	Erosion of natural deposits; glass and electronics production wastes.
Barium	ppm	1	2	0.1	Range Average	ND-0.1 ND	ND ND	ND ND	Erosion of natural deposits; oil drilling and metal refinery wastes.
Fluoride	ppm	2	1	0.1	Range Average	0.26-0.30 0.28	0.15-0.27 0.22	0.10-0.11 0.10	Erosion of natural deposits; water additive that promotes strong teeth.
Nitrate	ppm	45	45	2	Range Average	ND ND	ND ND	2.5-2.9 2.7	Runoff and leaching from fertilizer use; sewage; erosion of natural deposits.
Copper	ppm	1.3 (AL)	0.17	0.05	Range for 54 homes sampled = ND-0.626 90th Percentile for 54 homes sampled = 0.222				Internal corrosion of household plumbing; erosion of natural deposits.
Lead	ppb	15 (AL)	2	5	Range for 54 homes sampled = ND 90th Percentile for 54 homes sampled = ND				Internal corrosion of household plumbing; erosion of natural deposits.
RADIOACTIVE CONTAMINANTS [analyzed every four years, for four consecutive quarters (sampled in 2002)]									
Gross alpha	pCi/L	15	NS	1	Range Average	2.17-4.14 3.08	2.99-3.96 3.41	ND-5.58 2.74	Erosion of natural deposits.
Gross beta	pCi/L	50	NS	4	Range Average	ND ND	ND-4.08 ND	1.99 1.99	Decay of natural and manmade deposits.
Radium - 226 (c)	pCi/L	3	NS	0.5	Range Average	NA NA	ND-0.51 ND	ND ND	Erosion of natural deposits.
Uranium	pCi/L	20	0.5	2	Range Average	ND-2.46 2.01	ND-2.39 ND	ND-3.83 2.0	Erosion of natural deposits.
SECONDARY STANDARDS – Aesthetic Standards									
Chloride	ppm	500	NS	NS	Range Average	68-88 78	76-92 81	122-148 134	Runoff and leaching from natural deposits; seawater influence.
Color	Units	15	NS	NS	Range Average	ND-3 ND	1-3 2	ND-3 2	Naturally occurring organic materials.
Corrosivity (d)	Non Corrosive	Non Corrosive	NS	NS	Range Average	-0.16 to 0.26 0.08	0.23 to 0.49 0.32	0.20 to 0.36 0.30	Natural or industrial factors that influence balance.
Specific Conductance	µmho/cm	1600	NS	NS	Range Average	703-866 781	745-922 816	759-804 786	Substances that form ions when in water; seawater influence.
Sulfate	ppm	500	NS	0.5	Range Average	140-217 184	147-206 171	119-144 129	Runoff and leaching from natural deposits; industrial wastes.
Total Dissolved Solids	ppm	1000	NS	NS	Range Average	440-616 508	436-563 487	442-580 492	Runoff and leaching from natural deposits; seawater influence.
Turbidity	NTU	5	NS	NS	Distribution system range = 0.05-1.8 Distribution system average = 0.15				Soil runoff.
ADDITIONAL PARAMETERS – Disinfection by-products									
Haloacetic acids	ppb	60	NS	1	Distribution system-wide range = 4.2-26.5 Distribution system highest running annual average = 15.4				By-product of drinking water chlorination.
Total chlorine residual	ppm	[4.0]	[4.0]	NS	Range Average	0.5-3.6 2.8	NT NT	1.6-2.8 2.1	By-product of drinking water chlorination.
Total chlorine residual	ppm	[4.0]	[4.0]	NS	Distribution system-wide range = 0.2-2.8 Distribution system highest running annual average = 2.2				By-product of drinking water chlorination.
Total Trihalomethanes	ppb	80	NS	0.5	Range Average	25-38 30	32-61 45	3.0-7.7 4.7	By-product of drinking water chlorination.
Total Trihalomethanes (e)	ppb	80	NS	0.5	Distribution system-wide range = 18-67 Distribution system highest running annual average = 42				By-product of drinking water chlorination.
ADDITIONAL PARAMETERS (unregulated)									
Alkalinity as CaCO ₃	ppm	NS	NS	NS	Range Average	105-125 113	100-124 112	78-90 84.0	Leaching from natural deposits.
Ammonia as nitrogen	ppm	NS	NS	NS	Range Average	0.67-1.01 0.81	NC NC	0.74-1.01 0.86	By-product of drinking water chloramination.
Boron (f)	ppb	NS	1000 (AL)	NS	Range Average	100-130 122	110-140 130	110-116 108	Leaching from natural deposits.
Calcium	ppm	NS	NS	NS	Range Average	50-66 55	49-64 54	44-59 52	Leaching from natural deposits.
Hardness (Total hardness)	ppm	NS	NS	NS	Range Average	211-273 244	209-264 227	206-241 229	Leaching from natural deposits.
Hardness (Total hardness)	grains/gal	NS	NS	NS	Range Average	12.3-15.9 14.3	12.2-15.4 13.3	12.1-14.1 13.4	Leaching from natural deposits.
Heterotrophic Plate Count	CFU/mL	NS	NS	NS	Range Average	<1-29 1	<1-2 <1	<1-3 <1	Bacteria naturally present in the environment.
Magnesium	ppm	NS	NS	NS	Range Average	21-27 24	21-26 22	19-28 24	Leaching from natural deposits.
pH	pH units	NS	NS	NS	Range Average	7.00-8.41 7.96	8.04-8.08 8.06	8.17-8.59 8.38	Measure of the acidic or basic character of water.
Potassium	ppm	NS	NS	NS	Range Average	NT NT	3.6-4.3 3.9	NT NT	Leaching from natural deposits.
Sodium	ppm	NS	NS	NS	Range Average	78-85 81	66-89 76	79-80 79	Runoff and leaching from natural deposits; seawater influence.
Trichloropropane 1,2,3-TCP	ppt	NS	5 (AL)	5	Range Average	ND ND	ND ND	12-40 26	Industrial wastes and pesticides.