

City of Oceanside 1999 Consumer Confidence Report of Detected Compounds

We test the drinking water quality for many constituents as required by State and Federal Regulation. 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 (760) 966-8795.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó 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. EPA/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.

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.

The Oceanside Utilities Commission meets on the fourth Thursday of each month at 7:00 PM in the City Council Chambers, 300 North Coast Highway. The public is welcome to participate in these meetings. For more information, please call (760) 966-4850.

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.

Radon is 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 in your home, 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).

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- *Inorganic contaminants*, such as salts and metals, which 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 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.

In order to ensure that tap water is safe to drink, the California Department of Health Services (Department) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. We treat our water according to the Department's regulations. The department's Food and Drug Branch regulations establish limits for contaminants in bottled water which 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 0.5 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 our filtration system. Monthly turbidity values are listed in the Secondary Standards section.
- Compliance is based on a running annual average of six quarterly distribution systems, which was 37.8 ppb for 1999.
- Aluminum has a secondary MCL of 0.2 ppm.
- Standards are for Radium-226 and -228 combined.
- Pour plate technique, 48-hour incubation at 35°C, monthly averages.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 1999 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, 1999. 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 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 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, when exceeded, triggers treatment or other requirements that a water system must follow.
- **n/a:** 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

PARAMETER	Units	State MCL	PHG (MCLG)	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								
CLARITY								
Turbidity	NTU	5.0 & 0.5 (a)	NS	Highest %<0.5	0.15 100%	0.24 100%	0.29 100%	Soil runoff.
VOLATILE ORGANIC CONTAMINANTS								
Total Trihalomethanes (b)	ppb	100	n/a	Range Typical	24-35 30	37-51 46	ND ND	By-product of drinking water chlorination.
Total Trihalomethanes	ppb	100	n/a	Distribution System-wide Range = 23-54 Distribution System highest running annual average = 39				By-product of drinking water chlorination.
INORGANIC CONTAMINANTS								
Aluminum (c)	ppm	1	n/a	Range Typical	0.103-0.365 0.200	0.058-0.16 0.114	ND ND	Residue from water treatment process; erosion of natural deposits.
Arsenic	ppb	50	n/a	Range Typical	2.1-2.9 2.5	1.4-2.0 ND	ND ND	Erosion of natural deposits; glass and electronics production wastes.
Fluoride	ppm	2	1	Range Typical	0.10-0.31 0.17	0.22-0.34 0.24	0.1-0.2 0.2	Erosion of natural deposits; water additive that promotes strong teeth.
Nitrate (as nitrogen)	ppm	10	10	Range Typical	0.2-0.4 0.21	ND ND	ND ND	Runoff and leaching from fertilizer use; sewage; erosion of natural deposits.
RADIOACTIVE CONTAMINANTS								
[analyzed every four years, for four consecutive quarters (sampled from 8/98 to 4/99)]								
Gross alpha	pCi/L	15	(0)	Range Typical	ND-6.22 4.05	ND-5.53 3.99	0.6-1.6 0.6	Erosion of natural deposits.
Gross beta	pCi/L	50	(0)	Range Typical	4.18-7.42 5.52	ND-7.48 5.24	NC NC	Decay of natural and manmade deposits.
Combined radium (d)	pCi/L	5	(0)	Range Typical	ND-1.56 ND	ND-2.36 1.25	NC NC	Erosion of natural deposits.
Radon	pCi/L	NS	NS	Range Typical	ND ND	ND ND	50-90 70	Decay of natural deposits
Uranium	pCi/L	20	(0)	Range Typical	ND-3.18 2.61	ND-3.67 2.55	1-3 3	Erosion of natural deposits.
SECONDARY STANDARDS — Aesthetic Standards								
Chloride	ppm	500	NS	Range Average	61.2-75.1 68.7	74.5 74.5	52.6-106 78.1	Runoff and leaching from natural deposits; seawater influence.
Color	Units	15	NS	Range Typical	ND-5 ND	1-2 2	NC NC	Naturally occurring organic materials.
Hardness (Total hardness)	ppm	NS	NS	Range Typical	191-294 241	214-287 245	97-223 157	Leaching from natural deposits.
Hardness	grains/gal	—	—	Range Average	11-17 14	12.5-16.8 14.3	5.7-13 9.2	Leaching from natural deposits.
Heterotrophic Plate Count (e)	CFU/mL	NS	NS	Range Typical	ND-8 1	<1-22 <1	2-182 66	Naturally present in the environment.
Iron (mg/L)	ppb	300	NS	Range Typical	ND-107 ND	ND ND	ND-207 67	Leaching from natural deposits; industrial wastes.
Manganese	ppb	50	NS	Range Typical	ND ND	ND ND	ND-49 16	Leaching from natural deposits.
Odor Threshold	Units	3	NS	Distribution system-wide Range = ND-2 Distribution system-wide Typical = ND				Naturally occurring organic materials.
Sodium	ppm	NS	NS	Range Typical	65-82 73	66-82 73	59-65 62	Runoff and leaching from natural deposits; seawater influence.
Specific Conductance	µmho/cm	1600	NS	Range Typical	678-911 804	739-922 815	389-767 574	When in water; seawater influence.
Sulfate	ppm	500	NS	Range Typical	140-240 194	163-230 190	43.9-122 87.3	Runoff and leaching from natural deposits; industrial wastes.
Total Dissolved Solids	ppm	1000	NS	Range Typical	396-612 492	445-574 500	111-443 302	Runoff and leaching from natural deposits; seawater influence.
Turbidity	NTU	5	NS	Distribution system-wide Range = 0.05-0.80 Distribution system-wide Typical = 0.14				Soil runoff.
ADDITIONAL PARAMETERS (unregulated)								
Alkalinity as CaCO ₃	ppm	—	—	Range Typical	86.8-126 108	104-126 113	27.7-90.3 66.9	Leaching from natural deposits.
Ammonia as nitrogen	ppm	—	—	Range Typical	0.56-1.19 0.84	NC NC	NC NC	By-product of drinking water chlorination.
Calcium	ppm	—	—	Range Typical	46.6-75.1 60	52-72 61	21.3-49.2 34.6	Leaching from natural deposits.
Chloral hydrate	ppb	—	—	Range Typical	ND-2.9 1.8	3.5-7 5.1	ND ND	By-product of drinking water chlorination.
Chlorate	ppb	—	—	Range Typical	NC NC	NC NC	150-420 267	By-product of drinking water chlorination.
Chloropicrin	ppb	—	—	Range Typical	ND ND	0.1-0.4 0.2	ND ND	By-product of drinking water chlorination.
Cryptosporidium	Oocysts/100L	—	—	Range Typical	ND-10.9 ND	ND ND	ND ND	Human and animal fecal waste.
Cyanogen chloride	ppb	—	—	Range Typical	ND-1.2 0.7	2.3-5.5 3.4	ND ND	By-product of drinking water chlorination.
Haloacetic acids	ppb	—	—	Range Typical	13-14 14	19-28 24	ND ND	By-product of drinking water chlorination.
Haloacetonitriles	ppb	—	—	Range Typical	ND-6.0 2.7	5.6-17 8.7	ND ND	By-product of drinking water chlorination.
Magnesium	ppm	—	—	Range Typical	17.3-26.5 26.2	20.5-26 22.5	8.7-24.2 17.2	Leaching from natural deposits.
Perchlorate	ppb	—	—	Range Typical	NC NC	ND-6 ND	ND ND	Used in rocket motors, fireworks and explosive devices.
pH	pH units	—	—	Range Typical	7.38-8.40 7.78	8.03-8.08 8.05	8.58-9.03 8.90	
Potassium	ppm	—	—	Range Typical	3.5-4.1 3.8	3.5-4.1 3.7	NC NC	Leaching from natural deposits.
Total chlorine residual	ppm	—	—	Range Typical	2.4-3.1 2.7	1.6-2.6 2.0	1.9-2.4 2.1	By-product of drinking water chlorination.
Total organic halides	ppb	—	—	Range Typical	175-275 218	115-157 138	ND ND	By-product of drinking water chlorination.