

City of Oceanside

2008 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 U.S. Environmental Protection Agency (USEPA) and State drinking water health standards during 2008. 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) 435-5804.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Llamada (760) 435-5800 para más información.

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 (1-800-426-4791).

Oceanside's Water Sources

Approximately 90% 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, MWD 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 summary of the assessment can be obtained by contacting MWD by phone at (1-213-217-6850).

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 30% 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 10% of our water is local groundwater. During 2009, the capacity will be increased to supply up to 19% of our water needs.

An assessment of the current 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 Water Utilities Department office at 300 North Coast Highway in Oceanside or at the California Department of Public Health (CDPH) office at 1350 Front Street, Room 2050 in San Diego. You may request a summary of the assessment by contacting Guss Pennell at (760-435-5804) or CDPH at (1-619-525-4159).

Fluoride

The City of Oceanside does not add fluoride to the water treated at the two treatment plants operated by the City. As of December 3, 2007, the treated water supplied by MWD to the City contains added fluoride. Depending

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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*, that 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, agricultural application and septic systems.
- *Radioactive contaminants*, that 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 USEPA and the CDPH 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, the USEPA and the CDPH prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. CDPH 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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

2008 CCR, continued

on the season, this could be up to 50% of the total water supply for the City. This will result in fluoride levels between 0.2 and 0.8 mg/L from blending of the three treated water sources in our system of reservoirs. Based on 12 months of monitoring at 31 locations throughout the City, the average fluoride level was 0.5 mg/L. The area of the City south of Oceanside Boulevard and west of College Boulevard has fluoride levels between 0.6 and 0.8 mg/l while the rest of the City is between 0.3 and 0.5 mg/L.

Water Quality Data

The table at right lists all the drinking water contaminants that we detected during the 2008 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, 2008. 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:

- AL: Regulatory Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that 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.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

CFU/ml: colony forming unit per milliliter • ND: not detectable at testing limit • NL: Notification Level • NS: no standard • 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 • RAA: Running Annual Average • µmho/cm: micromhos per centimeter • <: less than

NOTES

- Turbidity is a measure of the cloudiness of the water. We monitor it because it indicates the effectiveness of our filtration system. Filtration is considered a Treatment Technique (TT). Treatment plant samples are tested every 3 hrs and 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. Turbidity shall not exceed 1.0 NTU at any time. Turbidity is also tested at 31 locations each month within the distribution system and reported under Secondary Standards.
- Aluminum also has a secondary MCL of 200 ppb or 0.2 ppm.
- MWD started Fluoridation treatment in December of 2007.

PARAMETER	Units	MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	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 (a)	NTU	TT	NS	NS	Highest %<0.3	0.22 100%	0.08 100%	0.29 100%	Soil runoff.
INORGANIC CONTAMINANTS									
Aluminum (b)	ppb	1000	600	50	Range Average	150 - 248 191	ND ND	ND ND	Residue from water treatment process; erosion of natural deposits.
Fluoride					Range	0.2 - 0.3	Fluoride Added	0.1 - 0.2	
Naturally Occurring	ppm	2	1	0.1	Average	0.3		0.1	Erosion of natural deposits.
Fluoride (c)					<i>Optimal Control Range</i>				
Added	ppm	2	1	0.1	Range Average	Not Added	0.7 - 1.3 0.7 - 1.0	Not Added	Water additive for dental health.
Nitrate	ppm	45	45	2	Range Average	ND ND	ND - 2 ND	10 - 14 12	Runoff and leaching from fertilizer use; sewage; erosion of natural deposits.
Copper (d)	ppm	1.3 (AL)	0.3	0.05	Range for 51 homes sampled = ND - 1.6 90th Percentile for 51 homes sampled = 0.16, 1 site exceeded the AL				Internal corrosion of household plumbing; erosion of natural deposits.
Lead (d)	ppb	15 (AL)	2	5	Range for 51 homes sampled = ND - 32 90th Percentile for 51 homes sampled = ND 1 site exceeded the AL				Internal corrosion of household plumbing; erosion of natural deposits.
RADIOACTIVE CONTAMINANTS (e)									
Gross Alpha	pCi/L	15	(0)	3	Range Average	ND ND	3.3 - 4.3 3.6	ND - 4.2 3.3	Erosion of natural deposits.
Gross Beta	pCi/L	50	(0)	4	Range Average	ND ND	ND - 8.8 ND	ND ND	Decay of natural and man-made products.
Radium 228	pCi/L	NS	0.019	3	Range Average	ND - 1.1 ND	ND ND	ND ND	Erosion of natural deposits.
Uranium	pCi/L	20	0.43	1	Range Average	1.8 - 2.9 2.1	2.3 - 2.7 2.5	4.0 - 4.8 4.4	Erosion of natural deposits.
SECONDARY STANDARDS – Aesthetic Standards									
Chloride	ppm	500	NS	NS	Range Average	74 - 93 88	92 - 99 96	108 - 145 126	Runoff and leaching from natural deposits; seawater influence.
Color	Units	15	NS	NS	Range Average	ND ND	2 2	ND ND	Naturally occurring organic materials.
Corrosivity (f)	Non Corrosive	Non Corrosive	NS	NS	Range Average	-0.06 to 0.37 0.13	0.24 to 0.63 0.44	0.08 to 0.53 0.40	Natural or industrial factors that influence balance.
Hardness (Total Hardness)	ppm	NS	NS	NS	Range Average	214 - 285 252	222 - 273 247	212 - 258 235	Leaching from natural deposits.
Hardness (Total Hardness)	grains/gal	NS	NS	NS	Range Average	12 - 17 15	13 - 16 14	12 - 15 14	Leaching from natural deposits.
Sulfate	ppm	500	NS	0.5	Range Average	166 - 210 190	173 - 221 195	109 - 143 127	Runoff and leaching from natural deposits; industrial wastes.
Total Dissolved Solids	ppm	1000	NS	NS	Range Average	456 - 650 556	502 - 590 542	450 - 620 523	Runoff and leaching from natural deposits; seawater influence.
Turbidity	NTU	5	NS	NS	Distribution system range = 0.05 - 0.6 Distribution system average = 0.13				Soil runoff.
DISINFECTION BY-PRODUCTS (DBP)									
Haloacetic Acids (g)	ppb	60 (RAA)	NS	1	Distribution system-wide range = 6 - 32 Distribution system highest running annual average = 15				By-product of drinking water chlorination.
Total Chlorine Residual	ppm	[4.0]	[4.0]	NS	Distribution system-wide range = 0.1 - 3.8 Distribution system highest running annual average = 2.6				By-product of drinking water chlorination.
Total Trihalomethanes (g)	ppb	80 (RAA)	NS	0.5	Distribution system-wide range = 29 - 64 Distribution system highest running annual average = 45				By-product of drinking water chlorination.
ADDITIONAL PARAMETERS									
Alkalinity as CaCO ₃	ppm	NS	NS	NS	Range Average	102 - 118 109	94 - 113 105	83 - 102 94	Leaching from natural deposits.
Ammonia as Nitrogen	ppm	NS	NS	NS	Distribution system-wide range = 0.02 - 1.03 Distribution system-wide average = 0.59				By-product of drinking water chloramination.
Boron	ppb	NS	1000 (NL)	100	Range Average	150 150	120 - 150 140	160 160	Leaching from natural deposits.
Calcium	ppm	NS	NS	NS	Range Average	50 - 72 61	52 - 67 59	46 - 56 51	Leaching from natural deposits.
Heterotrophic Plate Count	CFU/mL	TT	NS	NS	Distribution system-wide range = ND - 780 Distribution system-wide average = 2				Bacteria naturally present in the environment.
Magnesium	ppm	NS	NS	NS	Range Average	20 - 27 24	21 - 27 24	24 - 30 27	Leaching from natural deposits.
pH	pH units	NS	NS	NS	Range Average	7.7 - 8.3 8.0	8.0 - 8.2 8.1	8.1 - 8.6 8.4	Measure of the acidic or basic character of water.
Potassium	ppm	NS	NS	NS	Range Average	4.9 4.9	4.1 - 4.7 4.5	3.0 3.0	Runoff and leaching from natural deposits; seawater influence.
Sodium	ppm	NS	NS	NS	Range Average	87 - 88 88	83 - 94 89	89 - 96 92	Runoff and leaching from natural deposits; seawater influence.

- Some MWD water is used to supplement Oceanside's treated water. Oceanside does not currently Fluoridate during treatment.
- Lead and Copper are tested every 3 years at consumer's taps. Last tested in 2006. If the Action level is exceeded in 10% of the samples (90th percentile) then the water supplier must modify the treatment process to prevent the leaching of these

- metals into the water from the plumbing.
- Analyzed every four years, for four consecutive quarters (R. Weese and Mission Basin sampled in 2006-2007).
- Calculation based on pH, temperature and dissolved minerals to determine scale forming or scale dissolving tendencies.
- Compliance is based on a running annual average (RAA) of 12 distribution system samples taken every quarter.