

## City of Oceanside

# 2005 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 except for a temporary exceedance of turbidity standards during a few days in March 2005. Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches. 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. Llamada 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 (800) 426-4791.

## Oceanside's Water Sources

Approximately 90% of the water used 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 a source water assessment of the 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 or summary of the assessment can be obtained by contacting MWD 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 30% 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 Oceanside's 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. A summary of the assessment may be requested by contacting Guss Pennell at 435-5804.

**The Oceanside Utilities Commission** meets on the third Tuesday of each month at 4:00 pm in the City Council Chambers, 300 North Coast Highway. The public is welcome to participate in these meetings. For more information, please call 435-5800.

## 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, agricultural application 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 Notification 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, the U.S. Environmental Protection Agency (USEPA) and the State 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 USEPA's Safe Drinking Water Hotline (800) 426-4791.

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.

## Water Quality Data

The table at right lists all the drinking water contaminants detected during the 2005 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, 2005. The State requires monitoring 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:

- **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.
- **TT – Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.
- **CFU/ml:** colony forming unit per milliliter • **NC:** not collected • **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

- (a) 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 hours 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 30 locations each month within the distribution system and reported under Secondary Standards.
- (b) Aluminum has a secondary MCL of 200 ppb or 0.2 ppm.
- (c) Lead and Copper are tested every 3 years at consumer's taps. Last tested in 2003. 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 from the plumbing.

PARAMETER	Units	MCL (MRDL)				Range Average	SOURCE WATERS			Major Sources in Drinking Water
		PHG (MCLG) (MRDLG)	State DLR	Robert A. Weese Treated Water (surface water)	MWD Lake Skinner Treated Water (surface water)		Mission Basin Desalting Facility (groundwater)			
<b>PRIMARY STANDARDS – Mandatory Health-Related Standards</b>										
Turbidity (a)	NTU	TT = 1 95% < 0.3	NS	NS	Highest % < 0.3	0.62 <b>94.6%</b>	0.18 96%	0.10 100%	Soil runoff.	
<b>INORGANIC CONTAMINANTS</b>										
Aluminum (b)	ppb	1000	600	50	Range Average	107-278 189	ND-151 73	ND ND	Residue from water treatment process; erosion of natural deposits.	
Barium	ppb	1000	2000	100	Range Average	129 129	ND-107 ND	ND ND	Erosion of natural deposits; oil drilling and metal refinery wastes.	
Fluoride	ppm	2.0	1	0.1	Range Average	0.20-0.26 0.22	0.16-0.28 0.23	0.1 0.1	Erosion of natural deposits; water additive that promotes strong teeth.	
Nitrate	ppm	45	45	2	Range Average	ND-3.5 ND	ND-3.3 ND	7.7-8.6 8.2	Runoff and leaching from fertilizer use; sewage; erosion of natural deposits.	
Copper (c)	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 (c)	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.		
<b>RADIOACTIVE CONTAMINANTS (d)</b>										
Gross alpha	pCi/L	15	(0)	3	Range Average	2.17-4.14 3.08	ND-5.5 4.2	ND-5.58 2.74	Erosion of natural deposits.	
Gross beta	pCi/L	50	(0)	4	Range Average	ND ND	ND ND	1.99 1.99	Decay of natural and manmade deposits.	
Uranium	pCi/L	20	0.43	2	Range Average	ND-2.5 2.0	2.9-3.2 3.0	ND-3.8 2.0	Erosion of natural deposits.	
<b>SECONDARY STANDARDS – Aesthetic Standards</b>										
Aluminum (b)	ppb	200	NS	NS	Range Average	107-278 189	ND-151 73	ND ND	Runoff and leaching from natural deposits; seawater influence.	
Chloride	ppm	500	NS	NS	Range Average	77-90 84	83-92 88	112-134 121	Runoff and leaching from natural deposits; seawater influence.	
Color	Units	15	NS	NS	Range Average	<3-4 3	1-3 2	<3-3 <3	Naturally occurring organic materials.	
Corrosivity (e)	Non Corrosive	Non Corrosive	NS	NS	Range Average	-0.07 to 0.40 0.11	0.04 to 0.60 0.38	0.28 to 0.71 0.40	Natural or industrial factors that influence balance.	
Hardness (Total hardness)	ppm	NS	NS	NS	Range Average	193-269 242	169-260 231	224-234 251	Leaching from natural deposits.	
Hardness (Total hardness)	grains/gal	NS	NS	NS	Range Average	11.3-15.7 14.2	9.9-15.2 13.5	13.1-14.7 13.7	Leaching from natural deposits.	
MBAS (Foaming Agents)	ppb	500	NS	NS	Range Average	70 70	ND ND	ND ND	Municipal and industrial discharges.	
Specific Conductance	µmho/cm	1600	NS	NS	Range Average	712-891 790	687-938 854	808-834 823	Substances that form ions when in water; seawater influence.	
Sulfate	ppm	500	NS	0.5	Range Average	108-220 179	103-210 173	135-150 140	Runoff and leaching from natural deposits; industrial wastes.	
Total Dissolved Solids	ppm	1000	NS	NS	Range Average	356-608 520	386-554 501	430-550 505	Runoff and leaching from natural deposits; seawater influence.	
Turbidity	NTU	5	NS	NS	Distribution system range = 0.05-1.3 Distribution system average = 0.14			Soil runoff.		
<b>ADDITIONAL PARAMETERS – Disinfection by-products</b>										
Haloacetic acids (f)	ppb	60 (RAA)	NS	1	Distribution system-wide range = 6.0-44.3 Distribution system highest running annual average = 31.7			By-product of drinking water chlorination.		
Total chlorine residual	ppm	[4.0]	[4.0]	NS	Distribution system-wide range = 0.6-3.5 Distribution system highest running annual average = 2.4			By-product of drinking water chlorination.		
Total Trihalomethanes (f)	ppb	80 (RAA)	NS	0.5	Distribution system-wide range = 14.0-106 Distribution system highest running annual average = 65.5			By-product of drinking water chlorination.		
<b>ADDITIONAL PARAMETERS (unregulated)</b>										
Alkalinity as CaCO <sub>3</sub>	ppm	NS	NS	NS	Range Average	100-125 115	95-114 107	91-104 96	Leaching from natural deposits.	
Ammonia as nitrogen	ppm	NS	NS	NS	Distribution system-wide range = 0.29-1.09 Distribution system-wide average = 0.58			By-product of drinking water chloramination.		
Boron (g)	ppb	NS	1000 (NL)	NS	Range Average	100-130 122	150-160 150	100-116 108	Leaching from natural deposits.	
Calcium	ppm	NS	NS	NS	Range Average	37-65 56	38-62 55	47-54 50	Leaching from natural deposits.	
Heterotrophic Plate Count	CFU/mL	NS	NS	NS	Range Average	ND-2 1	ND-1 ND	ND-1 ND	Bacteria naturally present in the environment.	
Magnesium	ppm	NS	NS	NS	Range Average	19-25 23	18-26 23	25-29 27	Leaching from natural deposits.	
pH	pH units	NS	NS	NS	Range Average	7.6-8.7 8.0	8.1-8.2 8.1	7.4-8.9 8.4	Measure of the acidic or basic character of water.	
Sodium	ppm	NS	NS	NS	Range Average	94 94	69-88 82	88 88	Runoff and leaching from natural deposits; seawater influence.	
Trichloropropane 1,2,3-TCP	ppt	NS	<b>5(NL)</b>	5	Range Average	ND ND	ND ND	<b>ND-22</b> <b>10</b>	Industrial wastes and pesticides.	

(d) Analyzed every four years, for four consecutive quarters (RA Weese and Mission Basin sampled in 2002, MWD in 2005).

(e) Calculation based on pH, temperature and dissolved minerals to determine scale forming or scale dissolving tendencies.

(f) Compliance is based on a running annual average (RAA) of 12 distribution system samples taken quarterly.

(g) Boron data for RA Weese filter plant and Mission Basin Desalting Facility collected in 2001 for compliance with Unregulated Chemical monitoring requirements.