Consumer Confidence Report

This report is a snapshot of the quality of the water the City of San Diego provided to the City of Del Mar, in 2014. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies.

Where does my water come from?

The City of Del Mar purchases untreated water from the San Diego County Water Authority, which purchases water from multiple sources, including the Metropolitan Water District of Southern California. The City of San Diego treats the water for the City of Del Mar at the Miramar Water Treatment Plant. The treated water is pumped to and stored in the City's four reservoirs.

Source Water

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 storm water 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 storm water 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 storm water 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board – Division of Drinking Water (SWRCB - DDW) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

What do the test results say?

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).

In 2014, as in past years, your tap water not only met, but exceeded all U.S. Environmental Protection Agency (USEPA) and State drinking water health standards.

Important Health Information

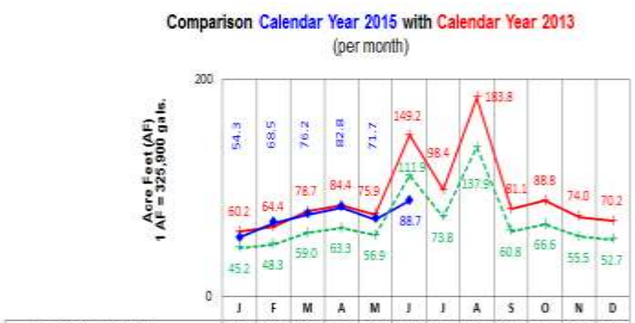
Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants 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). During calendar year 2014, the water supply to each of the City's purveyor water treatment plants was monitored for Cryptosporidium and Giardia, and neither was detected.

Lead

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the US EPA Safe Drinking Water Hotline (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Del Mar is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://water.epa.gov/drink/info/lead/

Del Mar Water Consumption



	J	F	M	A	M	J	J	A	S	O	N	D
CY2013 Monthly (in AF)	60.2	64.4	78.7	84.4	75.9	149.2	98.4	183.8	81.1	88.8	74.0	70.2
CY2015 Monthly (in AF)	54.3	68.5	76.2	82.8	71.7	88.7						
25% Reduction Target Monthly (in AF)	45.2	48.3	59.0	63.3	56.9	111.9	73.8	137.9	60.8	66.6	55.5	52.7

Mandatory water restrictions are in effect in Del Mar, effective June 1, 2015. Del Mar's goal is to reduce water use by 25% compared to CY2013. For more information, please visit: www.delmar.ca.us/waterconservation

Este informe contiene información muy importante sobre la calidad de su agua de beber.
Tradúzcalo ó hable con alguien que lo entienda bien.

This report is also available online at City's website at: **http://www.delmar.ca.us/ccr2014**

2014 Del Mar Water Quality Report

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 U.S. Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline at 800-426-4791. For a list of action levels, visit the web site of the State Water Resources Control Board - Division of Drinking Water (SWRCB-DDW): http://www.waterboards.ca.gov

How to Read the Tables

The tables below list contaminants which 1) SWRCB-DDW requires the City to monitor, 2) SWRCB regulates with associated primary [health] or secondary [aesthetic], or no established standards. During 2014, these contaminants were detected at or above the SWRCB's Detection Limits for Purposes of Reporting during the reporting year.

These tables summarize monitoring from 2014 with exceptions (see table footnotes). SWRCB mandates monitoring radioactive contaminants every three years. The lead and copper testing was conducted in 2015, and is monitored every three years. The levels of these contaminants are not expected to vary significantly from year to year.

Definition of Terms

Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

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 or technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected health risk. MCLs are set by the U.S. EPA.

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 health risk. MRDLGs are set by the U.S. EPA.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected health risk. PHGs are set by the California EPA.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring, reporting, and water treatment requirements.

Abbreviations

A: Absent
CA SMCL: California Secondary Maximum Contaminant Level
SWRCB-DDW: California State Water Resources Control Board - Division of Drinking Water
CSD MDL: City of San Diego Water Quality Laboratory
Method Detection Limit: Lowest quantifiable concentration of a measured analyte detectable by the laboratory.
CU: Color Units
DLR: Detection Limit for Reporting
gr/Gal: Grains per Gallon
ml: Milliliter
MWD: Metropolitan Water District of Southern California
N/A: Not Applicable
ND: Not Detected
NTU: Nephelonmetric Turbidity Units
OU: Odor Units
pCi/L: Picocuries per Liter (a measure of radiation)
ppb: Parts per billion or micrograms per liter (µg/L) – [1 ppb = 0.001 ppm]
ppm: Parts per million or milligrams per liter (mg/L) – [1 ppm = 1,000 ppb]
TT (Treatment Technique): a required process intended to reduce the level of a contaminant in drinking water
µS/CM: Micro-siemens/cm

TABLE 1 – DETECTED REGULATED CCR CONTAMINANTS WITH PRIMARY MCLs

Primary Standards (Mandatory Health Related Standards) - CHEMICAL CONTAMINANTS

CONTAMINANT	UNITS	MCL	PHG (MCLG)	CDPH DLR	MIRAMAR TREATMENT PLANT EFFLUENT CONCENTRATION AVERAGE	RANGE	TYPICAL SOURCE OF CONTAMINANTS
Fluoride (naturally occurring)	ppm	2	1	0.1	0.3	0.2 - 0.3	Erosion of natural deposits
Fluoride (treatment related)	ppm	2	1	0.1	0.8	0.7 - 0.8	Water Additive that promotes strong teeth
Barium	ppb	1000	2000	100	ND	ND - 111	Erosion of natural deposits

Note: Optimal Fluoride Level = 0.7 ppm; Control Range = 0.6 - 1.2 ppm

Primary Standards (Mandatory Health Related Standards) - RADIOACTIVE CONTAMINANTS

CONTAMINANT	UNITS	MCL	PHG (MCLG)	CDPH DLR	MIRAMAR TREATMENT PLANT EFFLUENT CONCENTRATION AVERAGE	RANGE	TYPICAL SOURCE OF CONTAMINANTS
Gross Alpha Particle Activity	pCi/L	15	(0)	3	4.5	N/A	Erosion of natural deposits
Gross Beta Particle Activity	pCi/L	50*	(0)	4	ND	N/A	Decay of natural and manmade deposits
Uranium	pCi/L	20	0.43	1	2.4	N/A	Erosion of natural deposits

* CDPH considers 50 pCi/L to be the level of concern for beta particles.

Primary Standards (Mandatory Health Related Standards) - MICROBIOLOGICAL CONTAMINANTS — CITY OF DEL MAR - DISTRIBUTION SYSTEM AVERAGE

CONTAMINANT	Systems that collect <40 samples/month MCL	No. of Months in Violation	PHG (MCLG)	TYPICAL SOURCE OF CONTAMINANTS
Total Coliform Bacteria	No more than 1 positive monthly sample	0	(0)	Naturally present in the environment
Fecal Coliform and *E. coli*	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. coli positive.	0	(0)	Human and animal fecal waste

Primary Standards (Mandatory Health Related Standards) -- AT THE TAP CONTAMINANTS -- LEAD AND COPPER RULE

CITY OF DEL MAR - SAMPLES TAKEN AT THE TAP OF 23 DIFFERENT SAMPLE SITES

CONTAMINANT	UNITS	ACTION LEVEL	PHG (MCLG)	CA DPH DLR	90th PERCENTILE CONCENTRATION	Exceeding AL	TYPICAL SOURCE OF CONTAMINANTS
Copper	ppm	1.3	0.3	0.05	0.498	0	Internal corrosion of household plumbing systems
Lead	ppb	15	0.2	5	5	0	Internal corrosion of household plumbing systems

Note: Monitoring mandated every three years. Most recent monitoring conducted in 2012

TABLE 2 -- DETECTED REGULATED CCR CONTAMINANTS WITH SECONDARY MCLs

CONTAMINANT	UNITS	CA SMCL	CSD MDL	MIRAMAR TREATMENT PLANT EFFLUENT CONCENTRATION AVERAGE	RANGE	TYPICAL SOURCE OF CONTAMINANTS
Chloride	ppm	500	0.5	91.4	85.3 - 99.2	Runoff/leaching from natural deposits; seawater influence
Color	CU	15	1	ND	ND - 1	Naturally occurring organic materials
Iron	ppm	300	(100)	ND	ND - ND	Leaching from natural deposits
Odor - Threshold	OU	3	1	ND	ND - 1.4	Naturally occurring organic materials
Specific Conductance	µS/cm	1600	N/A	856	658 - 987	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	(0.5)	193	114 - 228	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	ppm	1000	10	538	381 - 586	Runoff/leaching from natural deposits

TABLE 3 -- DETECTED UNREGULATED CCR CONTAMINANTS REQUIRING MONITORING

CONTAMINANT	UNITS	NOTIFICATION LEVEL	CDPH DLR	MIRAMAR TREATMENT PLANT EFFLUENT CONCENTRATION AVERAGE	RANGE	TYPICAL SOURCE OF CONTAMINANTS
Boron	ppm	1	0.1	0.12	0.11 - 0.14	Runoff/leaching from natural deposits; industrial wastes

TABLE 4 – DETECTED DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUAL AND DISINFECTION BY-PRODUCT PRECURSORS

Treatment Plant Effluent

CONTAMINANT	UNITS	MCL [MRDL]	(MCLG) [MRDLG]	CDPH DLR	MIRAMAR TREATMENT PLANT EFFLUENT CONCENTRATION AVERAGE	RANGE	TYPICAL SOURCE OF CONTAMINANTS
Bromate*	ppb	10	0.1	5 / 1**	ND	ND - ND	By-product of drinking water disinfection
Total Organic Carbon [TOC]	ppm	TT	N/A	0.3	2.4	2.1 - 3.0	Various natural and manmade sources

*Required for Miramar ** City of San Diego DLR = 5

Distribution System Results (Secondary MCL) — CITY OF DEL MAR - DISTRIBUTION SYSTEM AVERAGE

CONTAMINANT	UNITS	SMCL [MRDL]	(MCLG) [MRDLG]	CDPH DLR	AVERAGE	RANGE**	TYPICAL SOURCE OF CONTAMINANTS
Color, Visual	Color Units	15	----	3	≤3	ND - 3	Naturally occuring organic materials.
Odor	OU (Ton)	3	----	1	1.22	1 - 2.1	Naturally occuring organic materials.
Turbidity	NTU	1	----	0.1	0.14	0.1 - 0.7	Soil runoff

Distribution System Results — CITY OF DEL MAR - DISTRIBUTION SYSTEM AVERAGE

CONTAMINANT	UNITS	MCL [MRDL]	MCLG [MRDLG]	CDPH DLR	AVERAGE	RANGE**	TYPICAL SOURCE OF CONTAMINANTS
Disinfectant Residual [Chloramines as Cl2]	ppm	4	4	----	1.7	0.2 – 3.2	Drinking water disinfectant added for treatment
HaloAcetic Acids [HAA5]	ppb	60*	N/A	----	15.5	8.2 – 16.5	By-product of drinking water disinfection
Total TriHaloMethanes [TTHMs]	ppb	80*	N/A	----	50.1	32.6 – 65.5	By-product of drinking water chlorination

NOTES: * Total Trihalomethane and HAA5 compliance is based on Locational Running Annual Average (LRAA)
** Ranges are based upon single sample results.

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ADDITIONAL CONSTITUENTS - SODIUM, TOTAL HARDNESS, AND TURBIDITY

CONTAMINANT	UNITS	MCL	PHG (MCLG)	MDL	MIRAMAR TREATMENT PLANT EFFLUENT CONCENTRATION		
					AVERAGE	RANGE	TYPICAL SOURCE OF CONTAMINANTS
Sodium	ppm	N/A	N/A	20	85.7	74.8 - 92.8	Naturally present in the environment
Total Hardness	ppm	N/A	N/A	10	254	173 - 292	Naturally present in the environment
Total Hardness	gr/Gal	N/A	N/A	0.6	14.8	10.1 - 17.0	Naturally present in the environment
Alkalinity - Total as CaCO3	ppm	N/A	N/A	10	122	102 - 139	
pH	pH	N/A	N/A	N/A	8.07	6.50 - 9.05	
Ammonia as Nitrogen	ppm	N/A	N/A	0.03	0.62	0.44 - 1.02	
Turbidity	NTU	TT=NTU	N/A	---	Max. Level found = 0.10		Soil runoff
Turbidity	NTU	TT=95% of samples ≤ 0.3 NTU	N/A	---	100% of samples ≤ 0.3 NTU		Soil runoff

DETECTED UNREGULATED PARAMETERS REQUIRING MONITORING

UCMR3 PARAMETERS	UNITS		UCMR3 MRL		MIRAMAR TREATMENT PLANT EFFLUENT CONCENTRATION		
					AVERAGE	RANGE	MAJOR SOURCES IN DRINKING WATER
Bromochloromethane	ppb	----	0.06	----	ND	ND - ND	Fire extinguishers; pesticide solvent
Chlorodifluoromethane (HCFC-22)	ppb	----	0.08	----	ND	ND - ND	Refrigerant
Chlorate	ppb	----	20	----	ND	ND - 25	By-product of drinking water disinfection
Chromium-6	ppb	----	0.03	----	0.16	0.03 - 0.36	Naturally occurring metal; steel; chrome plating
Molybdenum	ppb	----	1	----	3.9	3.4 - 4.2	Naturally occurring element; in ores and plants
Strontium	ppb	----	0.3	----	843	750 - 920	Naturally occurring element
Vanadium	ppb	----	0.2	----	ND	ND - 0.26	Naturally occurring metal; used as a catalyst

Additional tables and information about the water quality can also viewed via http://www.sandiego.gov/water/quality/reports.shtml

The public is invited to discuss water quality related items during the regularly scheduled City Council Meetings, held the first and third Mondays of the month from 6 p.m. at City Hall - Communications Center, 240 Tenth Street, Del Mar, CA 92014. Council meetings are occasionally held on the second Mondays and/or special meetings called.