

2007 WATER QUALITY REPORT

This report contains important information about your drinking water.

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.



PADRE DAM
Municipal Water District

An Everyday Essential



PADRE DAM
Municipal Water District

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Did you get our call?

WE NEED TO REACH YOU WHEN THERE IS A WATER QUALITY OR SERVICE PROBLEM.

When a water main broke and a Boil Water Order was issued in Alpine in April, we called impacted customers immediately with information and instructions. But we do not have up-to-date emergency contact information for all of our customers. Those customers did not receive our call.

If you answer the telephone and hear, "This is a public notice from Padre Dam Municipal Water District," it's us calling you with important information about your water supply. The voice broadcasting service we use allows us to notify customers within minutes rather than days, and costs much less than the mail. We will call you with information and instructions regarding:

- Water Main Breaks**
- Planned Shut-Offs**
- Boil Water Orders**
- Construction Information**
- Emergencies**



MAKE SURE YOU GET OUR CALL

Please give us the telephone number where we are most likely to reach you. Write it on your water bill before you mail it to us, call our Customer Service staff at 619-258-4600, or email it to us at customer@padre.org.



How to read the table on the next page.

The table on the following pages is a summary of the testing performed on your water in 2006. To read the table, compare the health standards for organic and inorganic constituents in your water with the levels recorded at the Lake Skinner Treatment Plant and the Helix Levy Treatment Plant. The terms used in the table are explained below.

Health Standards

Primary Standards are set by the USEPA and California Department of Health Services for harmful contaminants that are public health concerns.

Secondary Standards are set by the California Department of Health Services for constituents that affect the aesthetic quality of water, such as taste, odor and color.

Unregulated Chemicals/Additional Parameters are constituents which are under study and must be reported.

Units of Measurement

PPM is the abbreviation for parts per million, or in volume terms, milligrams per liter (mg/L). For example, one part per million is one cent in \$10,000 or one minute in two years.

PPB is the abbreviation for parts per billion, or in volume terms, micrograms per liter (ug/L). For example, one part per billion is one cent in \$10,000,000 or one minute in 2000 years.

NTU is nephelometric turbidity units.

pCi/L is picoCuries per liter, a measure of radioactivity.

μS/cm is micromhos or microSiemen per centimeter, a measure of conductance.

Health Standard Levels

MCL is the abbreviation for 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 is the 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 USEPA.

PHG is the 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.

MRDL is the maximum residual disinfectant level, the level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

MRDLG is the 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. MRDLGs are set by the USEPA.

DLR is the detection limit for reporting purposes set by the California Department of Health Services.

PDWS is the primary drinking water standard, the MCL and MRDL for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Recorded Levels

NA = not applicable.

ND = none detected.

NL = notification level.

TT is treatment technique, a required process intended to reduce the level of a constituent in drinking water.

Additional Abbreviations

DBP is disinfection by-products.

N = Nitrogen

Your tap water meets all USEPA and California drinking water health standards.

Padre Dam purchases 100% of its water supply from the San Diego County Water Authority, which purchases its water from the Metropolitan Water District of Southern California. Metropolitan imports water from the Sacramento-San Joaquin River Delta in Northern California through a 444 mile long aqueduct, and from the Colorado River at Lake Havasu through a 242 mile long aqueduct. Metropolitan treats the water at the Skinner Filtration Plant in Temecula and then distributes it to San Diego County.

Padre Dam's drinking water, like all tap and bottled drinking 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.

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.

In order to ensure that tap water is safe to drink, USEPA and the California Department of Health Services prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish contaminant limits for bottled water.

Some people may be more vulnerable to contaminants in drinking water than the general population, such as infants, the elderly, cancer patients undergoing chemotherapy, organ transplant patients, HIV/AIDS patients, or any other person with a compromised immune system. These people should seek advice from their health care provider about drinking tap water.

For more information about contaminants and potential health effects, or for USEPA/Centers for Disease Control guidelines to reduce the risk of infection by *Cryptosporidium* and other microbial contaminants, call the:

USEPA Safe Drinking Water Hotline 800-426-4791

Potential Source Water Contaminants

1. Microbial contaminants

such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

2. Inorganic contaminants

such as salt and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.

3. Pesticides and herbicides

which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

4. 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.

5. Radioactive contaminants

that can be naturally occurring or be the result of oil and gas production and mining activities.

Your Water

PARAMETER	MEASURE	HEALTH STANDARDS			SKINNER PLANT		LEVY PLANT		SOURCES
		MCL MRDL	PHG MCLG MRDLG	DLR	RANGE	AVERAGE	RANGE	AVERAGE	
PRIMARY STANDARDS Health Related Concerns									
Clarity									
Combined Filter Effluent Turbidity	NTU/ %	0.3/95 (a)	NA	NA	0.11* * Highest	100%<0.3	0.11* * Highest	100%<0.3	Soil runoff
Microbiological									
Total Coliform Bacteria	%	5.0 (b)	(0)	NA	0%	0%	0.5%	0%	Naturally Present in environment
Fecal Coliform and E. Coli	(c)	(c)	(0)	NA	0%	0%	0%	0%	Human/animal fecal waste
Inorganic Chemicals									
Aluminum (f)	ppb	1000	600	50	ND	ND	110-190	143	Treatment process, natural deposits, erosion
Fluoride	ppm	2	1	0.1	0.16-0.23	0.20	0.19-0.23	0.21	Erosion of natural deposits, additive for dental health
Nitrate (as N) (g)	ppm	10	10	0.4	ND-0.45	ND	ND-0.32	ND	Fertilizer, sewage, erosion
Radiologicals (h)									
Gross Alpha Particle Activity	pCi/L	15	(0)	3	ND	ND	1.5-3.2	2.4	Erosion
Gross Beta Particle Activity	pCi/L	50	(0)	4	ND	ND	ND-5.9	ND	Decay of natural and man-made deposits
Uranium	pCi/L	20	0.43	1	1.5	1.5	ND-2.2	ND	Erosion
Disinfectants (i)									
Total Trihalomethanes (TTHM) (j)	ppb	80	NA	0.5	12-73	43	4.1-14.3	7.7	By-product of chlorination
Haloacetic Acids (five) (HAA5) (j,k)	ppb	60	NA	1	5-41	18	1.7-4.6	3.7	By-product of chlorination
Total Chlorine Residual	ppm	[4.0]	[4.0]	NA	1.4-2.8	2.4	0.1-3.1	1.66	Disinfectant added for treatment
Bromate (l)	ppb	10	(0)	5	NA	NA	ND	ND	By-product of ozonation
DBP Precursors Control (TOC) (i)	ppm	TT	NA	0.30	TT	TT	2.1-2.9	2.4	Various natural and man-made sources
SECONDARY STANDARDS Aesthetic Concerns									
Aluminum (f)	ppb	200	600	50	ND	ND	110-190	143	Treatment process, erosion
Chloride	ppm	500	NA	NA	68-95	78	64-88	77	Natural deposits, seawater influence
Color	Units	15	NA	NA	1-2	2	1-2.5	1	Naturally occurring organics
Corrosivity (m) (as Satur. Index)	SI	non-corr.	NA	NA	0.17-0.45	0.28	NA	NA	Elemental balance in water, temp.
Odor Threshold (n)	TON	3	NA	1	2	2	NA	NA	Naturally occurring organics
Specific Conductance	µS/cm	1600	NA	NA	650-880	748	658-710	684	Substances form ions in water, seawater influence
Sulfate	ppm	500	NA	0.5	118-184	154	140-170	153	Runoff/leaching, industrial waste
Total Dissolved Solids (TDS)	ppm	1000	NA	NA	381-518	438	430	430	Runoff/leaching, seawater influence
UNREGULATED CHEMICALS									
Boron	ppb	NA	NL=1000	100	100-160	140	120-140	145	Runoff/leaching, industrial waste
Chromium VI (o)	ppb	NA	NA	1	0.04-0.12	0.08	ND	ND	Industrial waste
ADDITIONAL PARAMETERS									
Federal Regulated no MCLs (a)									
Perchlorate	ppb	NA	NA	4	ND-4.6	ND	ND	ND	Industrial waste
Other parameters									
Alkalinity	ppm	NA	NA	NA	80-100	88	88-122	100	
Calcium	ppm	NA	NA	NA	40-55	47	43-95	58	
Chlorate (r)	ppb	NA	NL=800	20	25-41	52-104	NA	NA	Chlorination, industrial processes
Hardness	ppm	NA	NA	NA	174-234	200	186-200	191	
Hardness	gpg	NA	NA	NA	--	11.4	--	11.4	
Magnesium	ppm	NA	NA	NA	18-23.5	20	19	19	
pH	pH units	NA	NA	NA	8.1-8.2	8.1	7.5-7.9	7.6	
Potassium	ppm	NA	NA	NA	3.5-4.3	3.7	3.6-4.0	3.7	
Sodium	ppm	NA	NA	NA	62-88	72	61-68	65	Natural and man-made sources
Total Organic Carbon (TOC) (f)	ppm	TT	NA	0.30	2.0-3.1	2.4	2.1-2.9	2.4	

Questions

Table Footnotes

- (a) 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 and shall not exceed 1 NTU at any time. Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. The monthly averages and ranges of turbidity shown in the Secondary Standards were based on the treatment plant effluent.
- (b) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive.
- (c) Fecal coliform/E.coli MCLs: The occurrence of 2 consecutive total coliform-positive samples, one of which contains fecal coliform/E. coli, constitutes an acute MCL violation. The MCL was not violated in 2006.
- (f) Aluminum has both primary and secondary standards.
- (g) State MCL is 45 mg/L as nitrate, which equals 10 mg/L as N.
- (h) Metropolitan conducted four (4) quarters of monitoring from August 2005 to April 2006. Reported results were taken from the first two (2) quarters of 2006. Helix radiological monitoring was four quarters in 2005.
- (j) In 2006, Metropolitan and Helix were in compliance with all provisions of the Stage 1 Disinfectants/ Disinfection By-Products (D/DBP) Rule. The State of California has adopted the D/DBP Rule effective June 2006. TOC provides a medium for the formation of DBPs. Metropolitan was also in compliance with the DBP precursor (TOC) control portion of the Stage 1 D/DBP regulation.
- (k) DLR = 1.0 ppb for each HAA5 analyte (dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid) except for monochloroacetic acid which has a DLR = 2.0 ppb.
- (o) MWD Chromium VI reporting level is 0.03 ppb.
- (p) Both PHG (issued by the Office of Environmental Health Hazard Assessment) and NL (issued by CA Department of Health Services) were set at 6 ppb. Perchlorate reporting level is 2 ppb.
- (q) Data collected from January 2002 to January 2003. Minimum reporting levels are as stipulated in the Federal Unregulated Contaminants Monitoring Rule (UCMR). List 1 - Assessment Monitoring consists of 12 chemical contaminants for which standard analytical methods were available.
- (r) MWD ranges for the plant effluent and the distribution system were taken from two (2) quarterly samples. Distribution system samples were taken from three (3) locations.
- (t) MWD average and range for TOC were taken from weekly samples collected. Helix TOC results were from monthly samples.

For questions regarding **Water Quality** please contact:

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