

The U.S. Environmental Protection Agency (USEPA) and the California Department of Health Services require that all water suppliers provide their customers the following information about drinking water.

Table 1. Marina Well Water Quality

Detected Contaminants	Units	MCL	PHG (MCLG)	Year Tested	Average Amount Detected	Range Low - High	Violation	Major Sources in Drinking Water
Primary Drinking Water Standards								
Arsenic	ppb	50	0.004	2004	4.4	ND - 7.5	No	Erosion of natural deposits.
Fluoride	ppm	2	1	2004	0.1	ND - 0.15	No	Erosion of natural deposits.
Gross Alpha Activity	pCi/L	15	n/a	2001	2.5	ND - 6.7	No	Erosion of natural deposits.
Secondary Drinking Water Standards								
Chloride	ppm	500	n/a	2004	75	51 - 120	No	Runoff- leaching from natural deposits; seawater influence.
Specific Conductance	µmhos/cm	1600	n/a	2004	622	489 - 754	No	Substances that form ions when in water; seawater influence.
Sulfate	ppm	500	n/a	2004	55	45 - 71	No	Naturally-occurring mineral.
Total Dissolved Solids	ppm	1000	n/a	2004	385	310 - 450	No	Naturally occurring minerals and metals
pH	Units	6.5 - 8.5	n/a	2004	8.0	7.9 - 8.1	No	Naturally-occurring minerals.
Color	Units	15	n/a	2004	1.5	ND - 3.0	No	Naturally-occurring organic materials.
Odor Threshold	TON	3	n/a	2004	2.6	1.0 - 6.6	No	Naturally-occurring materials
Turbidity	NTU	5	n/a	2004	0.11	0.05 - 0.20	No	Soil run-off.
Other Contaminants — No Drinking Water Standards								
Alkalinity	ppm	n/a	n/a	2004	125	105 - 136	n/a	Naturally-occurring minerals.
Calcium	ppm	n/a	n/a	2004	27	19 - 37	n/a	Naturally-occurring mineral.
Magnesium	ppm	n/a	n/a	2004	8	0.66 - 17	n/a	Naturally-occurring mineral.
Potassium	ppm	n/a	n/a	2004	3.2	2.2 - 4.6	n/a	Naturally-occurring mineral.
Sodium	ppm	n/a	n/a	2004	95	71 - 140	n/a	Naturally-occurring mineral.
Hardness ^(a)	ppm	n/a	n/a	2004	99	50 - 162	n/a	Naturally-occurring minerals.
Radon 222	pCi/L	n/a	n/a	2000	701	208 - 1408	n/a	Naturally-occurring gas also found in soil, outdoor air, indoor air.
Unregulated Chemicals — No Drinking Water Standards								
Boron	ppb	1000 (AL)	n/a	2004	110	ND - 200	n/a	Erosion of natural deposits.
Chromium, Cr VI Screen	ppb	n/a	n/a	2004	2.5	1.3 - 5.9	n/a	Erosion of natural deposits.
Hexavalent Chromium, Cr VI	ppb	n/a	n/a	2002	1.1	ND - 4.6	n/a	Erosion of natural deposits.
Vanadium	ppb	50 (AL)	n/a	2004	4.4	ND - 7.9	n/a	Erosion of natural deposits.

Footnote:
(a) Hardness of 99 ppm = 6 grains/gallon

Please refer to the definitions on the opposite side of this report to better understand these tables.

How to Read Water Quality Tables

The District diligently monitors the quality of your drinking water. In 2004, we conducted tests for over 150 contaminants at various sampling points in Marina’s water system. Regulations allow that certain contaminants are monitored less than once per year because the levels do not change frequently. The following Tables list the contaminants that were detected. The test results are divided into sections as **Primary Drinking Water Standards** that protect public health, **Secondary Drinking Water Standards** that could affect the water’s taste, odor and appearance and other unregulated contaminants for which maximum allowed levels have not been established.

Starting with a contaminant, read across. **Units** express the amount measured. **MCL** shows the highest amount of contaminant allowed. **PHG/MCLG** is the goal amount for that contaminant (this may be lower than what is allowed). **Year Tested** is usually in 2004 or the most recent sampling year. **Average Amount Detected** is the amount measured or detected. **Range** tells the lowest and highest amounts measured. A **No Violation** indicates that regulation requirements were met. **Major Sources in Drinking Water** tell where the contaminant usually originates.

Table 2. Marina Distribution System Water Quality

Microbiological Quality — Primary Drinking Water Standard					
Detected Contaminant	MCL	(MCLG)	Number of Samples Tested = 277	Violation	Major Source of Contaminant
Total Coliform	1 per month	(0)	Total Positive Samples = 4 3-Positive Samples in October	Yes	Naturally present in the environment.

Indoor Tap Water Lead & Copper — Primary Drinking Water Standards								
Detected Contaminant	Units	Action Level	PHG	Year Tested	Amount Detected at the 90th Pecentile	No. of Sites Above	Violation	Major Source of Contaminant
					No. of Samples Collected = 31	Action Level		
Copper	ppm	1.3	0.17	2004	0.12	0 of 31	No	Internal corrosion of household plumbing systems.

Disinfection Byproducts & Disinfectant Residual — Primary Drinking Water Standards								
Detected Contaminants	Units	PHG		Year Tested	Highest Running Annual Average	Range		Major Source of Contaminant
		MCL [MRDL]	(MCLG) [MRDLG]			Low - High	Violation	
Total Trihalomethanes (TTHM's)	ppb	80	n/a	2004	2.60	ND - 6.4	No	By-product of drinking water chlorination.
Chlorine Residual (MRDL as Cl ₂)	ppm	[4.0]	[4]	2004	0.63	0.01 - 1.57	No	Drinking water disinfectant added for treatment.

Educational Information and Special Health Information

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 heath risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

A Note to the Immuno-compromised: In addition to the elderly and infants, some people may be more vulnerable to contaminants in drink-

ing water than the general population. Immuno-compromised persons undergoing chemotherapy, having undergone organ transplants or have HIV/AIDS or other immune system disorders 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 provide appropriate means to lessen the risk of infec-tion by Cryptosporidium and other microbial contaminants. Call USEPA Safe Drinking Water Hotline 1-800-426-4791 for information.

Table 3. Contaminants NOT Detected in Marina Drinking Water		
Primary Drinking Water Standards		
Microbiological Quality in Marina Distribution System	Lead & Copper Rule Marina Indoor Tapwater Samples	
Fecal Coliform was Not Detected in 277 Samples Tested in 2004.	Lead was Not Detected in 31 Indoor Tap Water Samples Tested in 2004	
Disinfection Byproducts – Distribution System		
Haloacetic Acids 5 Were Not Detected in Samples Tested in 2004		
Volatile Organic Chemicals (VOC's) Not Detected in Marina Wells Tested in 2004	Synthetic Organic Chemicals (SOC's) Not Detected in Marina Wells Tested in 2004	
Bromodichloromethane	Alachlor	
Bromoform	Atrazine (AAtrex)	
Chloroform	Bentazon (Basagran)	
Dibromochloromethane	Benzo(a)pyrene	
Total Trihalomethanes	Carbofuran (Furadan)	
Benzene	Chlordane	
Carbon Tetrachloride	2,4,-D	
1,2-Dichlorobenzene	Dalapon	
1,4-Dichlorobenzene (p-DCB)	Dibromochloropropane (DBCP)	
1,1-Dichloroethane (1,1-DCA)	Di(2-ethylhexyl)adipate	
1,2-Dichloroethane (1,2-DCA)	Diethylhexylphthalate (DEHP)	
1,1-Dichloroethylene (1,1-DCE)	Dinoseb	
cis-1,2-Dichloroethylene	Diquat	
trans-1,2-Dichloroethylene	Endothall	
Dichloromethane	Endrin	
1,2-Dichloropropane	Ethylene Dibromide (EDB)	
1,3-Dichloropropene	Glyphosate	
Ethyl Benzene	Heptachlor	
Methyl-Tertiary Butyl Ether (MTBE)	Heptachlor Epoxide	
Monochlorobenzene	Hexachlorobenzene	
Styrene	Hexachloropentadiene	
1,1,2,2-Tetrachloroethane	Lindane (gamma-BHC)	
Tetrachloroethylene (PCE)	Methoxychlor	
Toluene	Molinate (Ordram)	
1,2,4-Trichlorobenzene	Oxamyl	
1,1,1,-Trichloroethane (1,1,1-TCA)	Pentachlorophenol	
1,1,2-Trichloroethane (1,1,2-TCA)	Picloram	
Trichloroethylene (TCE)	Polychlorinated Biphenyls	
Trichlorofluoromethane (Freon 11)	Simazine (Princep)	
Trichlorofluoroethane (Freon 113)	Thiobencarb (Bolero)	
Vinyl Chloride (VC)	Toxaphene	
Xylenes (Total)	2,4,5-TP (Silvex)	
Inorganic Chemicals Not Detected in Marina Wells — Tested in 2004		
Aluminum	Cyanide	
Antimony	Lead	
Asbestos	Mercury	
Barium	Nickel	
Beryllium	Nitrate (as NO ₃) and Nitrite (as Nitrogen)	
Cadmium	Selenium	
Chromium (Total)	Thallium	
Secondary Drinking Water Standards Not Detected in Marina Wells — Tested in 2004		
Copper	MBAS, Foaming Agents	
Iron	Silver	
Manganese	Zinc	
Unregulated Chemicals (UCMR) Not Detected in Marina Wells — No Drinking Water Standards — Tested in 2001 & 2002		
Perchlorate (ClO ₄)	Acetochlor	
Dichlorodifluoromethane (Freon 12)	Sum of DCPA mono- and di- acid degradate	
Ethyl Tertiary Butyl Ether (ETBE)	4,4'-DDE	
Tert-Amyl - Methyl Ether (TAME)	EPTC (Ethylidpropylthiocarbamate)	
Tert Butyl Alcohol (TBA)	Molinate	
1,2,3-trichloropropane (1,2,3-TCP)	Methyl Tertiary Butyl Ether (MTBE)	
2, 4-Dinitrotoluene (2,4-DNT)	Nitrobenzene	
2,6-Dinitrotoluene (2,6-DNT)	Terbacil	
In addition, over 50 Unregulated Organic Chemicals were tested in 2004. These chemicals were not detected.		

Information About Sources of Contaminants

In order to ensure that tap water is safe to drink, the USEPA and CDHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDHS regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. The sources of drinking water (both tap 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. It can also pick-up substances from animals or 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 and 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), gas stations, urban stormwater runoff, agricultural application and septic systems.
- Radioactive contaminants that can be naturally occurring or the result of oil and gas production and mining activities.

Conservation Reminder

The recent rains brought only short-term relief to intruding seawater, which continues to be a challenge in and around the Marina area. Each year as more water is pumped from the basin than is naturally replenished, saltwater from the ocean enters the basin’s coastal aquifers. As the District strives to find alternative water sources, we encourage you to join us by conserving water to protect this precious resource.

Information About Sources of Contaminants

In order to ensure that tap water is safe to drink, the USEPA and CDHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDHS regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. The sources of drinking water (both tap 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. It can also pick-up substances from animals or 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 and 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), gas stations, urban stormwater runoff, agricultural application and septic systems.
- Radioactive contaminants that can be naturally occurring or the result of oil and gas production and mining activities.

Conservation Reminder

The recent rains brought only short-term relief to intruding seawater, which continues to be a challenge in and around the Marina area. Each year as more water is pumped from the basin than is naturally replenished, saltwater from the ocean enters the basin's coastal aquifers. As the District strives to find alternative water sources, we encourage you to join us by conserving water to protect this precious resource.

Definitions

Definitions of terms used in this report:

Maximum

Contaminant Level (MCL) = The highest level of a contaminant that is allowed in drinking water.

Primary MCLs are set as close to the PHG's (or MCLG's) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Primary Drinking Water Standards

(PDWS) = MCL's for contaminants that affect health along with their monitoring and reporting requirement; and water treatment requirement.

Public Health Goal

(PHG) = The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's 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.

MCLG's are set by the U.S. Environmental Protection Agency.

Regulatory Action

Level (AL) = The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water supplier must follow.

Maximum Residual

Disinfectant Level

(MRDL) = 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 disinfectant added for water treatment below which there is no know or expected risk health. MRDLG's are set by USEPA.

UCMR = Unregulated Chemicals Monitoring Rule

n/a = Not applicable

ND = Not detectable at testing limit

TON = Threshold Odor Number

NTU =

Nephelometric

Turbidity Units

MFL = million fibers per liter

pCi/L = picocuries per liter (a measure of radioactivity)

ppm = parts per million, or milligrams per liter

ppb = parts per billion, or micrograms per liter