2009 Consumer Confidence Report

for Central Marina and Ord Community

Marina Coast Water District is proud to present the 2009 Consumer Confidence Report. This annual water quality report includes information about where your water comes from, what it contains and how it compares to drinking water standards. As in the past, the District gives you the assurance that your drinking water meets stringent California and Federal drinking water standards.

If you have any questions regarding the information in this report or about your water, please contact our Water Quality Manager, Evelina Adlawan at 384-6131. You can also visit our website at www.mcwd.org.

Water Supply and Treatment

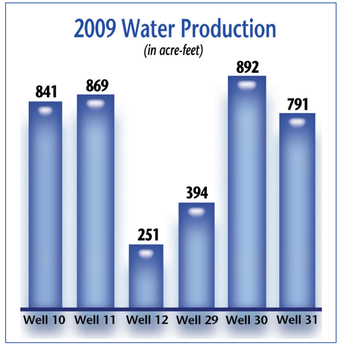
The District provides groundwater produced from six wells delivered through a distribution system network of eight storage tanks and one hundred sixty miles of pipeline.

Three deep supply wells located in Central Marina draw groundwater from the 900-foot aquifer of the Salinas Valley Groundwater Basin. The groundwater is treated at each well site for disinfection and to remove the naturally occurring hydrogen sulfide that can sometimes cause odor problems.

Three supply wells located in the Ord Community draw groundwater from the lower 180-foot and the 400-foot aquifers of the Salinas Valley Groundwater Basin. Groundwater from these supply wells is also disinfected in the Ord Community chlorination treatment plant.

In 2005, the Central Marina and Ord Community water systems were connected that allow water to flow between the systems to meet peak demands and improve overall services. Always looking for opportunities to improve operations, the District completed construction of the new D-Reservoir that was placed in service in June 2009.

Marina's Desalination Plant did not operate in 2009, but is capable of providing up to thirteen percent of Central Marina's annual water demand.



Water Supply Assessment and Protection

The District remains committed and encourages our customers to be vigilant and join our efforts to protect our precious water resources.

In July 2001, the California Department of Public Health (CDPH) completed an assessment of each groundwater supply wells in Central Marina, which concluded they are most vulnerable to historic waste dumps, landfill activities and military installations. The desalination plant seawater intake well is considered most vulnerable to salt water intrusion and to contaminants associated with injection wells.

In February 2002, an assessment was completed of the groundwater supply wells in the Ord Community. The well field is considered to be most vulnerable to known volatile organic contaminant plumes from the closed landfill on the former Fort Ord. The well field is also most vulnerable to saltwater intrusion, sewer collection system, above ground storage tanks, irrigated crops, transportation corridors, farm machinery repairs and septic systems.

Full details of the assessment may be viewed at the following locations: MCWD, 11 Reservation Road, Marina, CA, or at CDPH, 1 Lower Ragsdale Drive, Building 1, Suite 120, Monterey, CA.

Cover Photo: Martin Rosales obtains a water sample. Samples throughout the distribution system are regularly tested.

The MCWD Customer Service staff is available to assist you 8:00 a.m. to 5:30 p.m. Monday through Friday, excluding holidays. We are open during the lunch hour. Pictured above are (left to right) Barbara Montanti, Sherrie Payne, Ernest Pons, and Susan Kiefert.

Celebrating 50 Years of Service to the Community
MARINA COAST
1960
2010
WATER DISTRICT

11 Reservation Road, Marina, CA 93933-2099
Phone: (831) 384-6131 • Fax: (831) 883-5995
www.mcwd.org • mcwd@mcwd.org

Mission Statement: Providing high quality water, wastewater and recycled water services to the District's expanding communities through management, conservation and development of future resources at reasonable costs.

Board meetings are open to the public and held the second Tuesday of every month at the District office, 11 Reservation Road (Marina State Beach) at 6:45 p.m. Agendas are posted in the following places at least 72 hours before each meeting: Marina Coast Water District, Marina and Seaside City Halls, Marina and Seaside Libraries and the Marina Post Office.

Este informe contiene informacion muy importante sobre su agua potable Traduzcalo o hable con alquien que lo entiende bien.

Water Quality Monitoring

The District diligently monitors water quality and, once again, is proud to report that your drinking water meets California and Federal drinking water standards.

Federal Unregulated Contaminants Monitoring Rule-2 (UCMR-2)

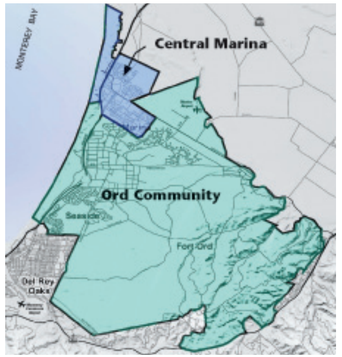
In 2009, the District completed testing for ten UCMR-2 chemicals specified by the US Environmental Protection Agency (USEPA). The UCMR-2 chemicals were not detected in Central Marina and Ord Community. The results were reported directly to the USEPA and are also available at our website at www.mcwd.org/ccr2009-ND.html

Federal Groundwater Rule

The CDPH started implementing the Federal Groundwater Rule (GWR) on December 1, 2009. The purpose of the GWR is to reduce the risk of illness caused by microbial contamination in public groundwater systems. The District is pleased to report that coliforms were not detected in the required 520-distribution system samples collected in Central Marina and Ord Community.

Trichloroethylene (TCE)

TCE was a common solvent used by the US Army on the former Fort Ord. In 2009, TCE (below the MCL or standard) was detected in District's supply Well No. 29, 30 and 31, and also in the Intermediate and Sand Tanks. With the interconnection of the two water systems, the Intermediate and Sand Tanks may supply drinking water to Central Marina and Ord Community distribution systems.



The Army operates a network of shallow groundwater monitoring wells to track progress in its ongoing cleanup of the TCE contamination plume from the now-closed landfill and fire drill area. The Army groundwater monitoring wells do not supply drinking water to District customers. TCE was detected in a majority of the Army's groundwater monitoring wells. In addition to quarterly monitoring of the Army's groundwater monitoring wells, the District's supply Well No. 29, 30 and 31 and the Intermediate and Sand Tanks are also monitored quarterly.

Arsenic

The District's supply wells meet both the California and Federal arsenic standard of 10 parts per billion, but it does contain low-levels of naturally occurring arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

A Notice on Radon

Radon is a naturally occurring radioactive gas that is found throughout the United States. You cannot see, taste or smell radon. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water from showering, washing dishes and other household activities. Compared to radon potentially entering the home through soil, radon entering the home through tap water will in most cases be a small contributor to radon in indoor air. Breathing air containing radon may lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. For additional information, call the USEPA's Radon Hotline at (800) SOS-RADON.

What Are the Sources of Contaminants?

The sources of drinking water, both tap and bottled water, include rivers, lakes, streams, ponds, reservoirs, spring 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 resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

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

Inorganic Contaminants such as salts and metals may be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides 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, 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 USEPA and CDPH prescribe regulations that 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.

A Note to the Immuno-compromised

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, those 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 USEPA Safe Drinking Water Hotline: 1-800-426-4791.

Water Quality Chemist Thomas Barkhurst analyzing a water sample

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: 1-800-426-4791.

Water Information Sources on the Web

California Department of Public Health —
www.dph.ca.gov/ps/ddwem

US Environmental Protection Agency —
www.epa.gov/safewater

Centers for Disease Control — www.cdc.gov

Fort Ord Cleanup Project —
www. fortordcleanup.com

How to Read Water Quality Tables

The following tables list the results of detected contaminants in the District's distribution system and groundwater supply wells. While most monitoring was completed through December 2009, regulations allow the District to monitor certain chemicals less than once per year because the levels do not change frequently. The test results are divided into the following sections: *Primary Drinking Water Standards, Secondary Drinking Water Standards, Other Constituents* and *Unregulated Contaminants.* To help better understand the report, use the Definitions of Terms given below.

To read the table, start with the column titled *Detected Contaminant(s)* and read across the row. *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 2009 or, for some contaminants, the most recent sampling year. *Annual Average* is the average 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.

Jose Rodriquez flushes a fire hydrant to ensure water quality for customers.

Distribution System Water Quality

PRIMARY DRINKING WATER STANDARDS — *Disinfection Byproducts & Disinfectant Residual*

Detected Contaminants	*Units*	*MCL [MRDL]*	*PHG (MCLG) [MRDLG]*	*Year Tested*	*Annual Average*	*Range Low - High*	*Violation*	*Major Sources in Drinking Water*
Total Trihalomethanes (THM's)	ppb	80	n/a	2009	12.5	2.3 - 38	No	Byproduct of drinking water disinfection.
Haloacetic Acids (HAA's)	ppb	60	n/a	2009	0.5	ND - 1.9	No	Byproduct of drinking water disinfection.
Chlorine Residual [as Cl_2]	ppm	[4.0]	[4]	2009	0.62	0.01 - 1.7	No	Drinking water disinfectant added for treatment.

PRIMARY DRINKING WATER STANDARDS — *Lead & Copper Indoor Tap Samples*

Detected Contaminant	*Units*	*Action Level*	*PHG*	*Year Tested*	** 90th Percentile Level*	*No. of Sites Above Action Level*	*Violation*	*Major Sources in Drinking Water*
Copper	ppm	1.3	0.17	2007	0.27	0 of 30	No	Internal corrosion of household plumbing systems.

**** 90th Percentile:*** *For compliance, the sample result at the 90th percentile level must be less than the copper action level at 1.3 ppm. Lead action level is 15 ppb. Lead was not detected in Central Marina and Ord Community indoor tap water samples.*

A Reminder About Lead: *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 District 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 to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead*

Definitions of Terms Used:

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 and technologically feasible.

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 USEPA

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 EPA

Primary Drinking Water Standards (PDWS): MCL's and MRDL's for contaminants that affect health along with their monitoring and reporting requirement, and water treatment requirement.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

Secondary Drinking Water Standards: Secondary MCLs are set to protect odor, taste and appearance of drinking water

UCMR: Unregulated Chemicals Monitoring Rule that help EPA and CDPH to determine where certain contaminants occur and need to be regulated

n/a: Not applicable

ND: Not detectable at testing limit

NTU: Nephelometric Turbidity Units (measure of clarity or turbidity)

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

TON: Threshold Odor Number

Groundwater Supply Wells Water Quality

Detected Contaminants	*Units*	*MCL*	*PHG (MCLG)*	*Year Tested*	*Annual Average*	*Range Low - High*	*Violation*	*Major Sources in Drinking Water*
PRIMARY DRINKING WATER STANDARDS								
Arsenic	ppb	10	0.004	2009	3.8	ND - 8	No	Erosion of natural deposits.
Fluoride (Natural)	ppm	2.0	1	2009	0.16	ND - 0.23	No	Erosion of natural deposits.
Nitrate (NO_3)	ppm	45	1	2009	7.6	ND - 20	No	Erosion of natural deposits.
Radium 228	pCi/L	5=Tot Rad (a)	0.019	2005	ND	ND - 1.4	No	Erosion of natural deposits.
Trichloroethylene (TCE)	ppb	5	1.7	2009	0.65	ND - 1.3	No	Discharge from metal degreasing.
SECONDARY DRINKING WATER STANDARDS								
Chloride	ppm	500	n/a	2009	80	22 - 100	No	Natural deposits; seawater influence.
Color	units	15	n/a	2009	0.5	ND - 3	No	Naturally-occurring organic materials.
MBAS - Foaming Agents	ppb	500	n/a	2009	20	0 - 60	No	Municipal and industrial waste dischargers.
Odor Threshold	TON	3	n/a	2009	1.2	1 - 2	No	Naturally-occurring organic materials.
pH	Units	6.5 - 8.5	n/a	2009	8.2	8.0 - 8.4	No	Naturally-occurring minerals.
Specific Conductance	µS/cm	1600	n/a	2009	617	490 - 690	No	Formed ions when in water; seawater influence.
Sulfate	ppm	500	n/a	2009	45	21 - 59	No	Naturally-occurring minerals.
Total Dissolved Solids	ppm	1000	n/a	2009	402	310 - 500	No	Naturally occurring minerals and metals.
Turbidity	NTU	5	n/a	2009	0.22	0.11 - 0.55	No	Soil run-off.
Zinc	ppm	5.0	n/a	2009	0.07	ND - 0.22	No	Erosion of natural deposits.
OTHER CONSTITUENTS — *No Drinking Water Standards*								
Alkalinity	ppm	n/a	n/a	2009	103	91 - 120	n/a	Naturally-occurring minerals.
Calcium	ppm	n/a	n/a	2009	38	5.4 - 63	n/a	Naturally-occurring minerals.
Magnesium	ppm	n/a	n/a	2009	11	0.31 - 20	n/a	Naturally-occurring minerals.
Potassium	ppm	n/a	n/a	2009	2.7	2.2 - 3.5	n/a	Naturally-occurring minerals.
Sodium	ppm	n/a	n/a	2009	64	37 - 100	n/a	Naturally-occurring minerals.
Hardness (b)	ppm	n/a	n/a	2009	138	15 - 230	n/a	Naturally-occurring minerals.
Radon 222	pCi/L	n/a	n/a	2000	532	208 - 1408	n/a	Naturally-occurring gas.
UNREGULATED CHEMICALS — *No Drinking Water Standards*								
Boron	ppb	1000 (AL)	n/a	2009	37	ND - 110	n/a	Erosion of natural deposits.
Chromium, Cr VI Screen	ppb	n/a	n/a	2004	3.4	1.3 - 5.9	n/a	Erosion of natural deposits.
Vanadium	ppb	50 (AL)	n/a	2009	4.2	ND - 8.1	n/a	Erosion of natural deposits.

Footnotes:
(a) Total Radium is the sum of Radium 226 and Radium 228
(b) Water Hardness Unit Conversion: 138 ppm = 8.7 grains/gallon

Comparisons
Parts per million = 1 second in 12 days
Parts per million = 1 inch in 16 miles
Parts per billion = 1 second in 32 years
Parts per billion = 1 inch in 16,000 miles

*** 90th Percentile**: For compliance, the sample result at the 90th percentile level must be less than the action level for copper at 1.3 ppm. Action level for lead is set at 15 ppb. Lead was not detected in Central Marina and Ord Community indoor tap water samples.

Not Detected Chemicals: The list of chemicals tested, but not detected are reported at:
www.mcwd.org/2009ccr-ND.html