

2007 Consumer Confidence Report

Water System Name: MD-7 Marina View Report Date: 6/23/2008

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2007.

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

Type of water source(s) in use: Two wells drawing from water deposits in fractured rock

Name & location of source(s): Wells 1 and 2 are both located within the Marina View Maintenance District

Drinking Water Source Assessment information: A source water assessment was conducted for both Marina View wells in July 2002. While few contaminating activities were noted due to the remote location of the wells, the assessment identified other wells in the area as having the potential for outside contamination. Your system is already subject to a quarterly "DO NOT DRINK ADVISORY" due to the presence of naturally occurring contaminants. A copy of the complete assessment may be viewed at the Madera County Environmental Health Department, by visiting the State's website, www.dhs.ca.gov/ps/ddwem/technicaldwp/source_info/source_index.htm, or by requesting a summary of the assessment from Environmental Health at (559) 675-7823.

Time and place of regularly scheduled board meetings for public participation: Meetings are held at 9:00 a.m. each Tuesday, except the fifth Tuesday of any month, at the Board of Supervisors Chambers: 200 W. 4th Street, Madera. Visit the County website, www.madera-county.com/supervisors/agenda.html for a copy of the agenda.

For more information, contact: Linda Alexander Phone: (559) 675-7817

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 PHGs (or MCLGs) as is economically and 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 risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): 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.

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 risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

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

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

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

Variations and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

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 stormwater 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 stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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 USEPA and the state Department of Public Health (Department) prescribe regulations that 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.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA					
Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER						
Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	5	<5	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	5	.38	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

*Any violation of an MCL or AL is marked with an asterisk. Additional information regarding the violation is provided later in this report.

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	5/05	28.5	20 – 37	None	None	Generally found in ground & surface water
Hardness (ppm)	5/05	75.5	39 – 112	None	None	Generally found in ground & surface water

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Radioactive Contaminants						
Gross Alpha (pCi/L)	3, 5, 8 & 11/07	86.8*	32.5 – 253	15	(0)	Erosion of natural deposits
Combined Radium 226 & 228 (pCi/L)	9/07	2.79	<1.00 - 2.79	5	(0)	Erosion of natural deposits
Uranium (pCi/L)	3, 5, 8 & 11/07	139.6*	34.4 - 370	20	.43	Erosion of natural deposits
Inorganic Contaminants						
Aluminum (ppm)	7/05	.09	<.05 – 0.13	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2, 5, 8 & 11/06	9.04*	<2 – 18.4	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride (ppm)	5/05	.15	<.1 – .2	2.0	1	Erosion from natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	5/05	11.8	5.9 – 17.7	500	N/A	Runoff/leaching from natural deposits; seawater influence
Color (units)	5/05	<5	<5 – 5	15	N/A	Naturally-occurring organic materials
Iron (ppb)	5/05	185	<100 – 270	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb)	5/05	28.5	<20 – 37	28.5	N/A	Leaching from natural deposits
Specific Conductance (micromhos)	5/05	215	140 – 290	1600	N/A	Substances that form ions when in water; seawater influence
Sulfate (ppm)	5/05	2.55	1.8 – 3.3	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	5/05	192.5	152 – 233	1000	N/A	Runoff/leaching from natural deposits

Turbidity (Units)	5/05	1.5	0.2 – 2.8	5	N/A	Soil runoff
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*Any violation of an MCL or AL is marked with an asterisk. Additional information regarding the violation is provided later in this report.

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Notification Level	Health Effects Language
Boron (ppm)	5/03	.13	<0.1 – 0.16	Some men who drink water containing Boron in excess of the notification level over many years may experience reproductive effects, based on studies in dogs

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report

Additional General Information on Drinking Water

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 the 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).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 (1-800-426-4791).

While your drinking water meets the current standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The California Department of Health Services 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.

Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

We are required by drinking water regulations to *monitor* your drinking water for specific contaminants on a regular basis. The results of regular monitoring are indicators of whether or not your drinking water meets all health standards. In 2007 we failed to perform the triennial monitoring for lead and copper at the customers tap therefore, was in violation of the regulations. Even though this failure was not an emergency, as our customers, you have a right to know what happened, what you should do, and what we did or are doing to correct this situation. There is nothing you need to do, monitoring from previous years have shown levels of these two elements are well within safe limits. This summer we will be asking for your participation in the lead and copper monitoring and will once again be in compliance.

The Marina View system continues to show violations of the MCL in three primary areas: arsenic, gross alpha and uranium. Please take note of the following information. ***Arsenic:** Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer. ***Gross Alpha Particle Activity:** Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer. ***Uranium:** Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer.

We are exploring several options to address the levels of gross alpha and uranium. The options that have been identified include treatment of groundwater, or switching to the use of surface water with the appropriate treatment to allow for its use. In addition, we are in consultation with a firm interested in doing a pilot study in the area to test new technology to remove gross alpha and uranium. Should that study prove successful, the technology could also be applied in Marina View.

Summary Information

As you can see by the tables, our testing revealed violations in two primary areas. The source water for this system has consistently contained levels of gross alpha, uranium and arsenic higher than the EPA's MCL. Long-term exposure to contaminants in concentrations above the MCL has been determined by the EPA to lead to a higher incidence of cancer. Although we are studying several possibilities, no system improvements are planned at this time. **WE DO NOT RECOMMEND THAT YOU DRINK WATER FROM THIS SYSTEM.**

In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements to the system. Any major improvement will require a Proposition 218 election and you will be fully informed at that time. Rate adjustments may also be necessary to adequately fund additional costs and expenses.

We hope you find this report informative and helpful. Please call our office if you have any questions. The County of Madera works continually to provide the best available water to every tap. We ask that you, our customers, help us protect our water resources. Water is the heart of our community, our way of life and our future.