

2005 Consumer Confidence Report

Water System Name: MD-6, Lake Shore Report Date: 6/30/06

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, 2005.

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: Three wells drawing from water deposits in fractured rock

Name & location of source(s): The wells, known as #1, #2 and #3, are located within the Lake Shore Maintenance District.

Drinking Water Source Assessment information: A source water assessment was conducted for the Lake Shore 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/technical/dwp/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: 209 W. Yosemite Avenue, Madera. Visit the County's website, www.madera-county.com/supervisors/agenda.html, for a copy of the agenda.

For more information, contact: Linda Alexander Phone: (559) 661-6333

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 or 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 which 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*, which 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*, which 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, USEPA and the state Department of Health Services (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	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	5	<5.5	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	5	.15	0	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

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)	8/04, 5 & 12/05	40	13-56	none	none	Generally found in ground & surface water
Hardness (ppm)	8/04, 5 & 12/05	114.7	28-159	none	none	Generally found in ground & surface water

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

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
Arsenic (ppb)	7/12/05 11/2/05 12/6/05	53.54*	2-76	50	.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride (ppm)	5/25/05 & 6/12/05	.6	05-07	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2, 5, 8 & 11/04; 2, 5 & 11/05	111.58*	<1-164	15	(0)	Erosion of natural deposits
Chromium (ppb)	6/12/05, 7/12/05	.41	<1-2	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Radium 228 (pCi/L)	2, 5, 11 & 12/05	.882	.38-1.3	5	(0)	Erosion of natural deposits
Uranium (pCi/L)	2, 5, 8 & 11/04; 2, 5 & 11/05	112.69*	<1-166	20	.43	Erosion of natural deposits

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, 8 & 12/05	33.6	2.7-49.5	500	N/A	Runoff/leaching from natural deposits; seawater influence
Color (Units)	8/04, 5 & 12/05	6.67	<5-10	15	N/A	Naturally occurring organic materials
Iron (ppb)	8/04, 5 & 12/05	273.3	<100- 440	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb)	8/04, 5 & 12/05	175*	120-250	50	N/A	Leaching from natural deposits
Specific Conductance (micromhos)	8/04, 5 & 12/05	332	106-460	1600	N/A	Substances that form ions when in water; seawater influence
Sulfate (ppm)	8/04, 5 & 12/05	6.37	.6-9.4	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	8/04, 5 & 12/05	262	108-368	1000	N/A	Runoff/leaching from natural deposits
Turbidity (Units)	8/04, 5 & 12/05	1.38	.5-2.8	5	N/A	Soil runoff
Zinc (ppm)	8/04, 5 & 12/05	.37	<.05-1.0	5.0	N/A	Runoff/leaching from natural deposits; industrial wastes

*Any violation of an MCL, MRDL, or TT is asterisked. 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)	8/10/04	.41	1	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. Immuno-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).

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

The Lake Shore 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.

In addition to the primary violations noted above, there was a secondary violation for manganese. Manganese was found at a level exceeding the MCL of 50 ppb. Secondary standards are set to protect you against unpleasant aesthetic effects (e.g., color, taste, odor), the staining of plumbing fixtures (e.g., tubs and sinks), and clothing while washing. The high manganese levels are due to leaching of natural deposits. Violation of secondary MCLs do not pose a risk to public health and communities may choose whether or not to treat for them.

A report assessing methods to address these violations was completed. In addition, we are investigating some new technology which may expand our treatment options. 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.

As you can see by the tables, our testing revealed violations in three primary areas, as well as one secondary violation. 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 concentration 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.** We hope you find this report informative and helpful. Please call our office if you have questions.