

MAMMOTH COMMUNITY WATER DISTRICT ANNUAL WATER QUALITY REPORT - 2003

This brochure is a snapshot of water quality data for the year 2003. Last year your tap water met all EPA and State drinking water health standards. Included in this report are details about where your water comes from, what it contains, and how it compares to State Department of Health standards.

Water System Information

This water quality report contains important information about your drinking water supplied by the Mammoth Community Water District Water System, serving the residents of the Town of Mammoth Lakes. *Este informe contiene informacio'n muy importante sobre su agua beber. Tradu'zcalo o' hable con alguien que lo entienda bien.*

Questions about this water quality report may be addressed by mail to the Mammoth Community Water District, attention Gary Sisson, P.O. Box 597 Mammoth Lakes, California 93546; by telephone at (760) 934-2596 x 238; or by e-mail at gssisson@mcwd.dst.ca.us. This report may also be seen on the District's web site at <http://www.mcwd.dst.ca.us>.

Members of the public have the opportunity to participate in decisions that affect drinking water quality by attending any of the District's regularly scheduled Board of Directors meetings. These meetings are held at 5:30 p.m. on the third Thursday of each month and are located at the Mammoth Community Water District offices on 2315 Meridian Boulevard across from the Industrial Park.

Sources of Water

Water provided to District customers comes from both surface water and groundwater sources. Surface water is collected, filtered and disinfected, and groundwater is pumped from wells located within the community in the Mammoth Basin watershed. Water from all but two of the wells is treated with chlorine and filtered for iron and manganese removal prior to delivery to customers.

Depending on where in the community you live, you may receive all surface water, all well water, or a combination of the two. The source of your water may also change depending on the season. If you are interested in which water source is being supplied to you at any time, please contact the District.

A source water assessment was conducted for the wells and surface water supplies of the Mammoth Community Water District Water System in March 2002 and is summarized in the table below. A copy of the complete assessment may be viewed at Mammoth Community Water District office or at DHS San Bernardino District Office, 464 West 4th Street, Suite 437, San Bernardino, CA 92401. You may also request a summary of the assessment be sent to you by contacting: Gary Sisson at (760) 934-2596 x 238, fax: (760) 934-2143 or e-mail at: gssisson@mcwd.dst.ca.us.

Source Number	Source ID	Most Vulnerable Activities (PCA)	Chemical Detected
005	Well 01	Sewer Collection Systems	None
007	Well 06	Sewer Collection Systems	None
009	Well 10	Sewer Collection Systems	None
015	Well 15	Sewer Collection Systems	None
016	Well 16	Sewer Collection Systems	None
019	Well 17	Sewer Collection Systems	None
017	Well 18	Sewer Collection Systems	None
018	Well 20	Sewer Collection Systems	None
003	Lake Mary Raw Water	Recreational area – surface water source Surface water – stream / lakes / rivers Sewer Collection Systems	MTBE (Aug '99, Aug '00) MTBE (Aug '99, Aug '00) None

Note: MTBE was detected in August 1999 and August 2000 sampling events at levels that exceeded the Secondary Maximum Contaminant level of 5 ug/L (parts per billion); however, MTBE levels were below the primary MCL of 13 ug/L. Subsequent sampling since September 2000 has shown no further detection of MTBE. Naturally occurring arsenic has been detected in all wells above its detection level of 2.00 ug/L. Arsenic has been detected in Well No. 17 (concentration ranging from 74 ug/L to 130 ug/L) above its MCL (50 ug/L) during June, August and October 2002 sampling events. Well No. 17 is currently not being utilized as a source of supply for the community.

Definitions

The following are definitions of key terms that consumers will need to understand the data listed in the table that shows the level of each detected contaminant.

- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCL's are set as close to the PHG's (or MCLG's) as is economically and technologically feasible. Secondary MCL's 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. MCLG's are set by the U.S. Environmental Protection Agency.
- **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.
- **Primary Drinking Water Standard or PDWS:** MCL's for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.
- **Regulatory Action Level:** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **n/a:** not applicable **nd:** not detectable at testing limit **ppb:** parts per billion or micrograms per liter **ppm:** parts per million or milligrams per liter **pCi/l:** picocuries per liter (a measure of radiation)

Detected Contaminants

Sampling Results Showing Detection of a Contaminant with a Primary Drinking Water Standard

Radioactive Contaminants	MCL	PHG (MCLG)	MCWD water	Range of Detection	Sample Date	Violation	Typical Source Of Contaminant
Gross Alpha Particle Activity (pCi/l)	15	n/a	1.1	0 – 4.1	2001	NO	Erosion of natural deposits
Inorganic Contaminants	MCL	PHG (MCLG)	MCWD water	Range of Detection	Sample Date	Violation	Typical Source Of Contaminant
Arsenic (ppb)	50	n/a	16	0 – 40	2003	NO	Erosion of natural deposits
Asbestos (MFL)	7	(7)	.23	0 – 1	1993	NO	Erosion of natural deposits
Fluoride (ppm)	2	1	0.4	0 - .5	2002-03	NO	Erosion of natural deposits
Barium (ppm)	1	(2)	0.01	.1 - .6	Jul 2002	NO	Erosion of natural deposits
Aluminum (ppm)	1	0.6	0.01	0 - .06	Jul 2002	NO	Erosion of natural deposits

Note About Arsenic: Arsenic was detected at levels exceeding the MCL in two of the District's wells. These wells have been taken out of service until additional sampling indicates acceptable levels or treatment for arsenic removal is installed and approved by the California Department of Health Services. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Special Note About Arsenic: 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 costs 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.

Detected Contaminants (con't.)

Sampling Results Showing Detection of Lead and Copper

Contaminant	AL	PHG (MCLG)	# of Samples Collected	90 th Percentile Level Detected	# of Sites Exceeding AL	Typical Source of Contaminant
Lead (ppb)	15	2	40	0	1	Internal corrosion of household water plumbing systems
Copper (ppm)	1.3	.17	40	1.2	2	Internal corrosion of household water plumbing systems

Special Note About Lead: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Sampling Results Showing Treatment Surface Water Sources

Treatment Technique*	Direct filtration treatment
Turbidity Performance Standards**	Turbidity of the filtered water must: 1- Be less than or equal to 0.5 NTU in 95% of measurements in a month. 2- Not exceed 1.0 NTU for more than 8 consecutive hours. 3- Not exceed 5.0 NTU at any time.
Lowest monthly percentage of samples that met turbidity performance standard no. 1	100%
Highest single turbidity measurement during the year	0.10

* A required process intended to reduce the level of a contaminant in drinking water.

** Turbidity (measured in NTU) is a measurement of the cloudiness of water and is an indicator of filtration performance. Turbidity results, which meet performance standards, are considered to be in compliance with filtration requirements.

Sampling Results Showing Detection of a Contaminant with a Secondary Drinking Water Standard

Inorganic Contaminants	Secondary MCL	MCWD Water	Range of Detection	Sample Date	Violation
Iron (ppb)	300	50	4-190	2003	NO
Manganese (ppb)	50	12	1 – 37	2003	NO
Total Dissolved Solids (ppm)	1000	236	36-490	Jan 2003	NO
Specific Conductance (micromhos)	1600	375	52-710	Jan 2003	NO
Chloride (ppm)	500	5	0 – 39	Jan 2003	NO
Sulfate (ppm)	500	16	3 – 38	Jan 2003	NO
Sodium (ppm)	None	34	1 – 93	Jan 2003	NO
Hardness (ppm)	None	122	17-180	Jan 2003	NO
Foaming Agents (MBAS) (ppb)	500	40	0 – 270	Jan 2003	NO

Note: The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Sampling Results Showing Detection of a Contaminant that is Unregulated with No MCL

Inorganic Contaminants	Action Level	MCWD Water	Range of Detection	Sample Date	Violation
Boron (ppb)	1000	140	110-190	2003	NO
Vanadium (ppb)	50	8	3-15	2003	NO

Educational Information

Typical 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. As a result, all 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 health risk. More information about contaminants and potential health effects can be obtained by calling the EPA'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). In order to ensure that tap water is safe to drink, the USEPA and the California 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.

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, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Mammoth Community Water District
P.O. Box 597
Mammoth Lakes, CA 93546
(760) 934-2596



Annual Water Quality Report

