

MAMMOTH COMMUNITY WATER DISTRICT WATER QUALITY REPORT - 2002

This brochure is a snapshot of last year's water quality. Throughout the year we conducted more than 750 tests for over 90 drinking water contaminants. Included are details about where your water comes from, what it contains, and how it compares to State 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.

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 MTBE None

NOTE: MTBE has been 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. 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 request a summary of the assessment be sent to you by contacting: Gary Sisson, Assistant General Manager, (760) 934-2596 x 238, (760) 934-2143 (fax), gssisson@mcwd.dst.ca.us.

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	.08

* 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	58	0-130	2002	NO
Manganese (ppb)	50	17	6 – 43	2002	NO
Total Dissolved Solids (ppm)	1000	246	24-490	Jul 2002	NO
Specific Conductance (micromhos)	1600	379	48-710	Jul 2002	NO
Chloride (ppm)	500	5	0 – 39	Jul 2002	NO
Sulfate (ppm)	500	15	3-38	Jul 2002	NO
Sodium (ppm)	None	35	1 – 93	Jul 2002	NO
Hardness (ppm)	None	120	19-180	Jul 2002	NO
Foaming Agents (MBAS) (ppb)	500	7	0 - 60	Jul 2002	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.

Educational 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 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). 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, and septic systems.
- Radioactive contaminants, which can be natural-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 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.

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	1.0	0 – 2.3	1999-01	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	15	0 – 130	2002-03	*YES*	Erosion of natural deposits
Asbestos (MFL)	7	(7)	.23	0 – 1	1993	NO	Erosion of natural deposits
Fluoride (ppm)	2	1	0.4	0 - .6	Jul 2001	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
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Note About Arsenic: Arsenic was detected at levels exceeding the MCL in one of the District's wells. This well has 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.

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.

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	20	7	0	Internal corrosion of household water plumbing systems
Copper (ppb)	1.3	.17	20	1.7	*5*	Internal corrosion of household water plumbing systems

Note About Copper: Corrosion control treatment to reduce internal corrosion of household plumbing systems has been approved by the Department of Health Services. Treatment of District supplies is projected to begin during the fall of 2003.

Special Note About Copper: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level may experience gastrointestinal distress. People who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. It is possible that copper 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 copper levels, 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).

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.
- **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. MRDLG's are set by the U.S. Environmental Protection Agency.
- **Primary Drinking Water Standard or PDWS:** MCL's and MRDL'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)

Mammoth Community Water District

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