

**2001 ANNUAL DRINKING WATER REPORT,
MELODY WOODS MUTUAL WATER COMPANY**

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

During 2001 Melody Woods Mutual Water Company (MWMWC) conducted more than 300 tests for drinking water contaminants. We only detected two contaminants - a small amount of nitrate and a continuing problem with high levels of manganese. The State requires us to report monthly on the presence/absence of pathogens and an annual analysis of other selected components. MWMWC voluntarily conducted additional water quality tests. Please see the **Violation** paragraph located later in this report. This report is an overview of our water quality in 2001. Included are details of our source of water, what it contains, and how it compares to State standards. As a mutual water company we all have a vested interest in the company's performance and should all be aware of and involved in its operation. For information about your water quality, call Tom Gray at 353-3750. Operational questions can be directed to Dale Pennington at 353- 2556.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 1-800-436-4791.

MWMWC gets all of its water from one well - we call it well # 3 - located just off of Summit Road between Melody Lane and Mt. Charlie Road. After the water is pumped from the well, it is treated to remove contaminants and to disinfect it to protect you against microbial contaminants.

A Drinking Water Source Assessment was conducted by the State in July, 2001.

The source water assessment was conducted for the **WELL 03** of the **Melody Woods Water Company**. The source is considered most vulnerable to the following activities not associated with any detected contaminants: ~~Transportation corridors -~~ Roads/Streets.

A copy of the complete assessment may be viewed at:

Department of Health Services
2151 Berkeley Way
Room 458
Berkeley, CA 94704

You may request a summary of the assessment be sent to you by contacting:

Sharon M. Wong, P.E.
Associate Sanitary Engineer
(510) 540-2147
(510) 540-2152 (fax)
swong3@dhs.ca.gov

Our Water Board meets on the second Tuesday of each quarter (Jan, Apr., Jul, and Oct) at 7:30 PM in the home of one of the board members. Contact Dale Pennington at 353-2556 to determine which member is hosting the meeting for the quarter of interest to you.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of 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 at 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 before we treat it 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* may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

**Radioactive contaminants* are naturally occurring or be the result of oil and gas production and mining activities.

**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.

In order to ensure that tap water is safe to drink, the USEPA and California Department of Health Services (Department) prescribe regulations that limit the amount of certain contaminants in water provided public water systems. MWMWC treats our water according to Department's regulations. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

<i>Public Health Goal (PHG)</i>	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.
<i>Maximum Contaminant Level Goal (MCLG)</i>	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.
<i>Maximum Contaminant Level (MCL)</i>	The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.
<i>Primary Drinking Water Standard</i>	MCLS for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
<i>Regulatory Action Level (AL)</i>	The concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.
<i>Not Applicable (n/a)</i>	Does not apply.
<i>Not Detectable (nd)</i>	Not detectable at the testing limit.
<i>Parts per million (ppm) or Milligrams per liter (mg/l)</i>	One part per million corresponds to one minute in two years or a single penny in \$10,000.
<i>Parts per billion (ppb) or Micrograms per liter (ug/l)</i>	One part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
<i>Picocuries per liter (pCi/L)</i>	Picocuries is a measure of radioactivity in water.

Table Of Detected Chemicals

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Contaminant	Violation Yes/No	Sample Date	Level Detected	Range of Level Detected	PHG	MCL (AL)	Likely Source of the Contaminant
Nitrate	No	1/28/01	0.3ppm	N/A	45 ppm	45 ppm	Runoff /leaching from natural deposits, fertilizers, waste treatment facilities, etc.
Fluoride	No	10/7/98*	0.2 ppm	N/A	1 ppm	2 ppm	Erosion of natural deposits
Sulfate	No	10/7/98*	70 ppm	N/A	N/A	500 ppm	Runoff/Leaching from natural deposits
Manganese **	Yes	2001	690 ppb	50 ppb to 690 ppb	N/A	50 ppb	Leaching from natural deposits
Iron**	No	2000	145 ppb	100 ppb to 200 ppb	N/A	300 ppb	Leaching from natural deposits
Copper	No	1999*	0.135 ppm	none of the 5 sites tested exceeded th AL	0.17 ppm	1.3 ppm	Internal corrosion of household plumbing
Sodium	N/A	10/7/98*	21 ppm	N/A	N/A	N/A	Salt present in the water and naturall occurring
Hardness	N/A	10/7/98*	272 ppm	N/A	N/A	N/A	Sum of polyvalent cations present in the water, generally magnesium and calcium

* 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.

**Denotes average values after treatment

In addition to the components reported in the above table, we test monthly for the presence of coliform bacteria in our water. In 2001 we had no episodes of the presence of coliform.

We are required to test for lead and copper every three years. These tests are unique in that they include the household plumbing in determining the results. A number of households (5) having the highest

potential for the presence of lead and/or copper because of the materials used in the home plumbing are selected for testing. Results are reported on a 90th percentile basis - i.e., if 90% of the tested sites are below the regulatory action level, we are in compliance. The ALs are 0.015 mg/L for lead and 1.3 mg/L for copper. In 1999 our 90th percentile level for lead was 0.0003 mg/L and 0.135 mg/L for copper. Since we were in compliance with the ALs for the past three consecutive years, we were not required to monitor for lead and copper in 2001.

Violation

The violation we experienced was for manganese. Although the manganese value is higher than the MCL it should be noted that there are no known health impacts from manganese. The problem with manganese in our water is aesthetic since it makes the water look dirty and can cause staining of clothing and plumbing fixtures.

We monitored for manganese on an average of twice a month using a field test kit. No certified laboratory tests were made. The results of our testing show an annual average of 0.55 ppm for 2001 with a high reading of 0.70ppm and a low reading of 0.05 ppm. The high reading occurred in January and the low reading in March. The MCLG for manganese is 50 ppb (0.05 ppm). We exceeded this amount at least once during every month in 2001 and, hence, were in violation every month. Water from Well #3 typically measures from 1.2 ppm to 1.7 ppm and is treated with ozonation, filtration and chlorination at the storage tank. You can see that, although we are not in compliance with the MCLG, we do make a significant reduction in the manganese.

About Nitrate: *Nitrate in drinking water above 45 ppm is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.*

Prepared by: Tom Gray, February 2002

