

MELODY WOODS WATER CO. WATER QUALITY REPORT 1995

Mission

The mission of ALL water suppliers is to provide **safe, aesthetically pleasing** water to its customers **at a reasonable cost**. The first priority is the provision of **safe** water, free from bacteria, viruses and other health hazards. The Melody Woods Water Co. (the company) has satisfied this mission in 1995.

State of California Role

The State assumed the role of monitoring and regulating the company when Santa Clara County would no longer provide this service due to funding problems. This means that the company is now responsible to the State for reporting, etc.

In preparation for this, the State required that a survey of our system be made by an independent consulting firm and report on our system's condition to the State. Based on this report the State would or would not issue a permit to allow the company to operate.

The consultant's report satisfied most of the State's requirements for operation with recommendations that would bring the system into complete compliance with the State's requirements.

Based on the report, the State issued a permit to operate to the company with recommendations that the problems identified by the consultant be corrected.

To date, all of the conditions have been met with the exception of a requirement that a Certified Water Plant Operator be on the company's staff. Certification is achieved by passing a state examination that is given about twice a year. The company is taking steps to have a certified operator on staff as soon as possible.

Pathogens

Pathogens are disease-causing organisms that may be present in the water supply. The company is required by the State to have tests for the presence of pathogens in our water performed every month by a state certified laboratory and a report of these results forwarded to the Department of Health. Since the testing for specific pathogens would be costly and time consuming, the test procedure is limited by state regulation to a presence-absence (P-A) test which indicates that pathogens are either present or not.

Should the test results be positive, check tests are required within 24 hours at the initial test site plus 4 additional sites to confirm the results or show that the initial test was faulty. In 1995 the company had two positive test episodes. Check testing proved these results to be in error. Errors can result from any of a number of causes including the testing laboratory itself. We have not

determined the specific cause for the errors associated with our samples. It is highly unlikely that we could ever find the cause.

The important point is that our water is free of pathogens!

Source Testing

Every three years the state requires that our source of water (wells 2 & 3) have a complete analysis for organic, inorganic, mineral, and physical characteristics. These tests must be conducted by a state certified laboratory. Results are reported as being less than the Maximum Contaminant Level (MCL)

The company had this analysis done in 1995 and all tested contaminants except iron were below the maximum level. Since iron is considered to be a secondary or unregulated contaminant, this does not present a problem to the company. However, as a precautionary measure, the company initiated an iron monitoring program to check for iron content in the treated water being delivered to our users. As a result of these tests, we have determined that the iron level in the treated water is approximately 1/3 the concentration in the source water.

Discussions with the California Dept of Health have indicated that the current level of delivered water would probably be within the MCL should iron become a regulated component.

The complete analysis is contained in 8 pages of data. Rather than include these in this report, we will make the results available to any member who requests them. Should you be interested, contact either Dale Pennington at 353-2556 or Tom Gray at 353-3750.

Disinfection

The company uses a hypochlorination process for treating its delivered water. This is a simple process that disinfects the water; reduces and/or removes organic, inorganic and mineral contaminants in the raw (source) water. The process introduces chlorine into the water based on information gained from experience. Enough chlorine is introduced into the water to "kill the bugs", reduce/remove organics and inorganics (called chlorine demand) and still have enough chlorine left (called free residual chlorine) to disinfect the distribution system. State requirements are for at least 0.5 parts per million (ppm) free residual chlorine at the distribution start point and 0.2 ppm at the remote point in the system.

To achieve these results has taken considerable trial and error efforts. For the past several months we have consistently met these levels except for a few instances where major distribution upsets, e.g. broken lines, major leaks, etc. have happened. **For this reason, it is important that any line breaks or leaks be reported as soon as possible to the company.**

Lead and Copper Rule

There are some contaminants considered to be of special concern due to their potential health

hazards. These are controlled by the US Environmental Protection Agency (EPA) until the states enact their own controls. Of major concern to us is the **Lead and Copper Rule**. The EPA has established MCL's for these two contaminants but, unlike monitoring contaminants in the supplied water, these levels are to be monitored at the water tap in the user's home. This means that the home plumbing is an integral part of the monitored system. In fact, the home plumbing becomes the dominating factor in most systems.

The company is required to get a representative sampling of the water system users MCL's for these contaminants with sampling priority given to the most likely problem sites. Systems with lead distribution lines and homes with lead plumbing are the highest risk situations. **Our system does not have this problem.**

Next on the concern list are homes with copper plumbing using lead solder and not having water softeners and filter systems. This would be particularly true for newer installations since pipes tend to get a lining with time that will protect them from corrosion.

The water company's role concerns how corrosive the supplied water might be since this is a possible source of lead and/or copper getting into the water. EPA requires that all water systems obtain representative samples of home tap water with priority to higher risk sites for analysis for lead and copper and report the results.

The company conducted these tests in 10 homes in November 1995 and found that there is no lead problem but the copper level in 2 of the test sites exceed the MCL.

We have reported the results to EPA with a suggested program that we think will correct the problem. Another round of testing will be conducted in January 1996 to see if our plan has any merit. Should we not meet the MCL for copper, we will probably have to take additional steps in treating our water that could have a significant cost impact.

The company feels that we have identified the most likely candidates for lead and copper problems and have had these tested. If any users are uncomfortable with their particular levels, the company can arrange to have their water analyzed during the next test phase. If any user wants to take advantage of this, please contact the company as soon as possible. **Since this is in excess of any requirement on the company, the owner will have to bear the cost of this analysis which can be between \$35.00 and \$50.00 depending on the number of samples submitted.**

Tom Gray 11/28/95

