

## **VIRGIN VALLEY WATER DISTRICT 2002 ANNUAL WATER QUALITY REPORT**

We are pleased to present to you the 2002 Water Quality Report. This report is designed to inform you about the water we deliver to you every day. Our constant goal is to provide you with safe and a dependable supply of drinking water at the lowest cost possible. We want you to understand that we are continually making every effort to protect your water resources. We are committed to ensuring the quality of your water.

### **- Where does my water come from?**

Our water supply currently comes from the hydrologic basin known as basin 222. The Water District draws the water from six (6) deep wells located throughout the valley. Depths of wells range from 600' to 3,300'. The Water District has installed three (3) new wells and will be placing the wells in service during the year 2003.

### **- Why are there contaminants in my drinking water?**

All drinking water, including the less regulated bottled water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that 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 EPA hotline at 1-800-426-4791.

The Virgin Valley Water District routinely monitors for contaminants in your drinking water according to State and Federal laws. This report shows the quality of the water as monitored during the period of January 1<sup>st</sup> to December 31<sup>st</sup> of 2002. A copy of all test results is available upon request at the District Offices.

### **- Do I need to take special precautions?**

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 infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care provider. EPA/Center 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 (800) 426-4791.

### **- Important Drinking Water Definitions:**

**MCLG:** Maximum Contaminant Level Goal: The Level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MCL:** Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

**AL:** Action Level: The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.

<b>Contaminants Units Inorganic Contaminants</b>	<b>MCLG</b>	<b>MCL</b>	<b>YOUR WATER</b>	<b>RANGE LOW</b>	<b>RANGE HIGH</b>	<b>SAMPLE DATE</b>	<b>VIOLATION</b>	<b>TYPICAL SOURCES</b>
Arsenic (ppb)	N/A	50	37	6	78	6/02	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Nitrate [Measured as Nitrogen] (ppm)	10	10	1.05	.77	1.5	9/02	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Microbiological Contaminants</b>								
Total Coliform (# of monthly positive samples of 72 samples)	0	0	0	N/A		Monthly Once 6-19-02	Yes	Naturally present in the environment

<b>Contaminants Units Inorganic Contaminants</b>	<b>MCLG</b>	<b>AL</b>	<b>YOUR WATER</b>	<b># OF SAMPLES AL</b>	<b>SAMPLE DATE</b>	<b>EXCEEDS AL</b>	<b>TYPICAL SOURCES</b>
Copper (ppm)	1.3	1.3	.062	10	6/01 Samples not required in 2002	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. At this time VVWD is only required to test every 3 years
Lead (ppb)	0	.015	.0014	10	6/01 Samples not required in 2002	No	Corrosion of household plumbing systems; Erosion of natural deposits. At this time VVWD is only required to test every 3 years

### **INFORMATION REGARDING ARSENIC:**

Federal Regulations currently require that arsenic, which occurs naturally in the water supply, not exceed a concentration of 50 ppb in drinking water. This is an enforceable standard called a Maximum Contaminant Level (MCL) and was established by the EPA to protect public health. The 50 ppb was based on studies, which suggest that long-term exposure to arsenic might cause skin lesions known as hyperkeratosis. People who drink water containing arsenic in excess of the allowable standard over many years could experience skin damage or problems with their circulatory system, and could have an increased risk of getting cancer. The National Research Council's report has concluded that arsenic in drinking water may cause bladder, lung and skin cancer, and may also cause other types of cancer. The EPA re-evaluated the arsenic MCL, and determined it to be too high and lowered the MCL to 10 ppb. The Water District has until January 2006 to be in compliance with the new standard. The District will continue to monitor the arsenic levels in the water system.

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.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA 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.

The District has taken steps to reduce the amounts of arsenic in your water through the process of blending. Mesquite's current arsenic levels are 37 ppb's and Bunkerville's arsenic levels are 7 ppb, which are well below the 50 ppb's set by EPA.

**- What other information can you give me about my water?**

PH	7.62	Water Temperature	72°
Total Dissolved Solids	458 mg/l	Fluoride	0.86 mg/l
Chloride	60 mg/l	Sulfate	124 mg/l
Hardness	9-12 grains/gallon		

Each water source is tested either on a quarterly or annual basis for 76 different contaminants as required by State and Federal agencies. Results of those tests can be found by contacting the Water District at 702-346-5731 or on the Water District's website at [vvh2o.com](http://vvh2o.com).

**- How can I learn more about my water?**

If you have any questions regarding the Water Quality or District operations, the District Board of Directors meets every 1st and 3<sup>rd</sup> Tuesday at 4:00 p.m. at 500 Riverside Road. These meetings are open to the public.