

# Water Source

Volume 10 Issue 2  
July 2003

A Newsletter to the Customers of Bella Vista Water Company

## Water Quality Report for Customers of Bella Vista Water Company

(Bella Vista City and Bella Vista South – System ID#s 02010, 02007)

**I**t's time for our **Fifth Annual Water Quality Checkup!** As residents of Arizona, we are constantly reminded of the importance of protecting our most precious natural resource - water. You may not even think about what it takes to purify and deliver that water to your home, but **Bella Vista's number one priority is to provide a reliable, safe supply of drinking water to our customers.**

The United States Environmental Protection Agency (USEPA) finalized a rule in 1998 which requires water companies to annually produce a report that addresses the quality of the water they deliver. This report is an important part of the 1996 Amendments to the Safe Drinking Water Act, which gives consumers an opportunity to get involved. All the information provided, is reported in accordance with the water quality standards established by the United States Environmental Protection Agency (USEPA) and the Arizona Department of Environmental Quality (ADEQ).

This Annual Water Quality Report provides detailed analytical testing results from water samples that are collected and tested regularly. The results shown are from January 1, 2002 through December 31, 2002. It also provides information on the source of our water. The State requires us to monitor for certain contaminants less than once per year because the concentrations of those contaminants are not expected to vary significantly from year to year. Some of our data is more than one year old.

### Special Health Concerns

Some individuals may be more vulnerable to contaminants in drinking water than the general public as a whole. 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 and 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 USEPA Safe Drinking Water Hotline (800) 426-4791.

In order to ensure that tap water meets all standards, USEPA sets regulations which limit the amount of certain contaminants in water provided by public water systems. The State and EPA require us to test our water on a regular basis to ensure standards are met. The United States Food and Drug Administration regulations establish limits for contaminants in bottled water. Drinking water, including bottled water, may reasonably be 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 in tap water and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800) 426-4791. Information on bottled water can be obtained from the United States Food and Drug Administration.

**We are happy and proud to report that our water quality meets or exceeds all state and federal standards.**

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

# Notes, Information and Important Terms

**The following information will help you understand some of the important issues and terms related to our water quality testing.**

## **Where does our water come from?**

Bella Vista Water Company owns and operates twenty-nine wells in the Sierra Vista area. The water source is groundwater, which comes from the Sierra Vista Sub-Basin of the Upper San Pedro Basin. It is provided to approximately 20,000 customers. In January 2001, the Arizona Department of Environmental Quality completed a source-water assessment for Bella Vista Water Company. Copies are available by writing ADEQ, 1110 West Washington Street, Phoenix, AZ., 85007, or by calling 1-800-234-5677.

## **Water quality.**

In 2002, Bella Vista Water Company routinely monitored for several contaminants. Certain quantities of substances are essential to good health, and in small quantities have no effect on people, but excessive quantities can be harmful.

## **Contaminants that may be present in water.**

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 human activity. These include:

**Microbial contaminants...**such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

**Inorganic contaminants...**such as salts and metals, which 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 and residential uses.

**Organic chemical contaminants...**including synthetic and volatile organic chemicals, which are by-products 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.

In the table on the opposite page you will find terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

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

**Maximum Contaminant Level Goal (MCLG):** 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.

**Parts per million (Ppm) or Milligrams per liter (mg/l):** one part per million is equivalent to one minute in 2 years or a single penny in \$10,000.

**Parts per billion (Ppb) or Micrograms per liter:** one part per billion is equivalent to one minute in 2,000 years or a single penny in \$10,000,000.

**Picocuries per liter (pCi/l):** Picocuries per liter is a measure of the radioactivity in water.

**Non-Detects (ND):** Laboratory analysis indicates that the contaminant is not present.

**Millirems per year (mrem/yr):** Measure of radiation absorbed by the body.

## **Health effects of listed contaminants.**

**Alpha Emitters:** Certain minerals are radioactive and may emit a form of radiation know as alpha radiation. Some people who drink alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

**Combined radium:** Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

**Barium:** Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

**Microbiological: (Total Coliform)** Total Coliform bacteria in drinking water, generally is the result of a problem with water treatment or the pipes which distribute the water, and indicates the water may be contaminated with organisms that can cause disease. Disease symptoms may include: diarrhea, cramps, nausea and possibly jaundice and associated with headaches and fatigue. However, these symptoms are not just associated with disease-causing organisms in drinking water.

**Di(2-ethylhexyl) phthalate:** Some people who drink water containing di(2-ethylhexyl) phthalate in excess of the MCL over many years may have an increased risk of getting cancer.

# Test Results

## Regulated Contaminants

The following table shows some of the contaminants for which our drinking water is tested, the levels of the contaminant found, and the levels at which the contaminants are unsafe.

Contaminants	Violation Yes/No	Range of Levels Detected	Highest Level Detected	Unit Measure	MCLG	MCL	Major source in drinking water
<b>Radioactive Contaminants</b> (tested once every four years)							
Alpha Emitters (South System #02007 tested 4/99)	No	5.7 to 13.3	13.3	Pci/l	0	15	Erosion of natural deposits
Combined radium (South system #02007 tested 4/99)	No	.2 to .3	.3	Pci/l	0	5	Erosion of natural deposits
<b>Inorganic Contaminants</b> (tested every three years except Nitrates tested annually, Nitrites and Asbestos tested every nine years)							
Barium (South system #02007 tested 8/01)	No	.02 to .14	.14	Ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Barium (City system #02010 tested 4/01)	No	.082 to .36	.36	Ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
<b>Synthetic Organic Contaminants</b> (15 contaminants tested once every year, all others have waivers)							
Di(2-ethylhexyl) phthalate (City system #02010 tested 2/02)	No	.00080 to .0011	.0011	Ppm	.006	.006	Discharge from rubber and chemical factories. Plasticizer used in production of PVC resins.
<b>Microbiologicals</b> (tested twice a month)							
Total Coliform Bacteria (South system #02007 tested 7/02 *** (Hereford Rd. and Lower Stump Canyon)	Yes	0 to 1	1	--	0	*	Naturally present in environment
Fecal Coliform & E. Coli (South system #02007)	No	ND - 0	0	--	0	**	Human and animal fecal waste
*Presence of coliform bacteria in 5% of monthly samples **If routine sample and repeat sample are total coliform positive and one is also fecal coliform positive. *** (Hereford Road was retested according to EPA Standards and came back positive. The cause of the positive sample at Hereford Road was a cracked line coming into the sampling station. Station repaired, retested and sample came back negative. Lower Stump Canyon was retested according to EPA Standards and came back negative, cause unknown, possible bad bottle.							

To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

In our next issue...

Our series continues...

***Protecting our Groundwater Begins at Home!***

Our latest water usage charts.

Did you know...?

## A COUPLE OF FINAL NOTES...

To our large volume water customers, we would appreciate it if you would post this report in a conspicuous location so your tenants, residents, patients, students, and/or employees, who consume the water we deliver, but are not billed as customers, can learn about our water system.

**If you have any questions, or would like further information regarding this report, please contact Judy Gignac at Bella Vista Water, 458-5470 or email her at [judy.gignac@algonquinwater.com](mailto:judy.gignac@algonquinwater.com).**

**You can also visit us on our Web site at [www.bellavistawater.com](http://www.bellavistawater.com).**

This newsletter is offered as a service to our customers. If you have any questions or comments about any of the material in this issue, or ideas or suggestions for future issues, we'd love to hear from you. Please address them to:

Judy Gignac  
Bella Vista Water Company  
4055 Campus Drive  
Sierra Vista AZ 85635  
(520) 458-5470  
**[www.bellavistawater.com](http://www.bellavistawater.com)**

Or email them to: [judy.gignac@algonquinwater.com](mailto:judy.gignac@algonquinwater.com)

PRE SORTED  
STANDARD  
U.S. POSTAGE  
PAID  
SIERRA VISTA AZ  
PERMIT NO. 56

Bella Vista Water Company  
4055 Campus Drive  
Sierra Vista AZ 85635