Town of Wise Water Quality Report

2011

TO OUR CUSTOMERS

We're very pleased to present to you this year's Quality on Tap Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is the 260 million gallon Bear Creek Reservoir, a surface water supply located on Coeburn Mountain Rd.

Your water is safe

If you have any questions regarding this report, or any questions concerning your water utility, please contact Sal Odierno at 328-6353. You can also attend regularly scheduled Town Council meetings at the municipal building at 501 West Main St. on the fourth Tuesday of each month at 7:00 p.m. We want our valued customers to be informed about their water utility. If you want to learn more about the Town's treatment facility contact the water treatment plant at 328-6353 to arrange a tour.

GENERAL INFORMATION

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:

(1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. (2) 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. (3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. (4) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems. (5) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. The water quality results in the accompanying table are from testing done in 2011.The state, however, 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 accurate, is more than one year old. US EPA sets MCLs at very stringent levels. In developing the standards, EPA assumes that the average adult drinks 2 liters of water each day throughout a 70 year lifespan. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one in ten thousand to one in a million chance of having the described health effect for other contaminants,

THIS REPORT WILL NO LONGER BE MAILED. IT WILL BE PUBLISHED IN THE COALFIELD PROGRESS ANNUALLY

THIS CCR IS AVAILABLE UPON REQUEST

Water Quality Monitoring

The Town of Wise routinely monitors for constituents in your drinking water in accordance with Federal and State Laws. The table on the following page shows the results of our monitoring for the period of Jan. 1, 2011 to Dec. 31, 2011. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose a health risk.

Additional Lead Information

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and lead plumbing. The Town of Wise is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800)426-4791 or at http://www.epa.gov/safewater/lead.

Source Water Assessment

The Virginia Department of Health conducted a source water assessment of our system during 2002. Bear Creek Reservoir and Bear Creek were determined to be of high susceptibility to contamination using the criteria developed by the state in its approved Source Water Assessment Program. The assessment report consists of maps showing the source water assessment area, an inventory of known land use activities of concern, and documentation of any known contamination within the last 5 years. The report is available by contacting Sal Odierno at the phone number or address given elsewhere in this drinking water quality report.

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

Non-Detects (ND) - Not detected in water

Parts per million (ppm) or Milligrams per liter (mg/l) – Equivalent to the fraction of a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter— Equivalent to the fraction of a single penny in $10,000,000.

Nephelometric Turbidity Unit (NTU) - A measure of the clarity of water. Turbidity in excess of 5 NTU is barely noticeable to the average person.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

***Maximum Contaminant Level (MCL) -** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.

Maximum Residual Disinfectant Level Goal (MRDLG) The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (MRDL)- The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Picocuries per liter (pCi/L) - Measure of radioactivity in water.

*MCL's are set at very strict levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL for a lifetime to have a one-in-a-million chance of having detrimental health effects.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Initial Disinfection System Evaluation (IDSE) - One year study conducted to determine a water system's disinfection by products.

*Includes IDSE sampling results.

Source: Bear Creek Reservoir Capacity: 260 Million Gallons

2011 Test Results

Regulated Contaminants

Contaminant	Likely Source	Sample Date	Level Detected	MCL	MCLG	Unit	Meets EPA Standards?
Turbidity*	Soil Runoff	2011		95%	N/A	NTU	YES
	Lowest monthly percentage of samples meeting TT		100% .04-.19				
Fluoride	Erosion of natural deposits; water Additive which promotes strong	8/3/11	.80	4.0	4.0	PPM	YES
Nitrate/Nitrite	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits	3/17/11	.20	10	10	PPM	YES
Chlorine	Water additive used to control microbes	2011 Average	.86 Range: .30-2.0	MRDL= 4.0 Mg//L	MRDLG= 4.0 Mg//L	PPM	YES
*Total Trihalomethanes	**Byproduct of water chlorin-** ation	**2011 Average**	**46.25** Range: 34.0-64.0	**80**	**N/A**	**PPB**	YES
*Haloacetic Acids (HAA)	**Byproduct of water chlorin-** ation	**2011 Average**	**35.0** Range: 24.0-47.0	**60**	**N/A**	**PPB**	YES
Total Organic Carbon	**Naturally present in the** environment	**2011 Average**	**1.08** Range: 1.00-1.29	**TT met** when >1 or alternate criteria met	**N/A**	**PPB**	YES
Lead—Reduced monitoring; testing required every 3 yrs	Corrosion of household plumbing; erosion of natural deposits	9/1/2010-9/13/2010	3.40 1 site exceeded AL	AL= 15	0	PPB	YES
Copper—Reduced monitoring; testing required	Corrosion of household plumbing; erosion of natural deposits	9/1/2010-9/13/2010	.170-0 sites Exceeded AL	AL= 1.3	0	PPM	YES
Gross Alpha	Erosion of Natural Deposits	7/3/2008	1.9	15	0	pCi/L	YES
Combined Radium	Erosion of Natural Deposits	7/3/2008	2.81	5	0	pCi/L	YES

What Does All This Mean?

We have learned through our monitoring and testing that some constituents, as expected, have been detected. This is normal and the EPA has determined that your water **IS SAFE** at these levels.

The presence of contaminants does not necessarily mean that the water poses a health risk. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. More information can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-(800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as people 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. 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 at 1-(800) 426-4791.