



Bedford County Public Service Authority

2010 Consumer Confidence Report

2010 SML Central CCR



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Special points of interest:

Visit the website:
www.bcpsa.com
Water Quality Link
 for more information pertaining to your service area.
 If you have any questions about the water quality report please call our Office at: 540-586-7679

This Annual Drinking Water Quality Report for calendar year 2010 is designed to inform you about your drinking water quality. Our goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand the efforts we make to protect your water supply. The quality of your drinking water must meet state and federal requirements administered by the Virginia Department of Health.

Sources of your drinking water—

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:

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 storm water 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, urban storm water runoff, and residential use. 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 storm water runoff and septic systems.

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.

A source water assessment of our system conducted in June of 2002 by the Virginia Department of Health the Smith Mountain Lake was determined to be of high susceptibility. The source of your drinking water is the Highpoint Water Treatment Plant. It is one of the few membrane filtration plants in the state designed to treat surface water in accordance with the Safe Drinking Water Act and all other Virginia Department of Health guidelines. The raw water source, Smith Mountain Lake, is a reservoir maintained by American Electric Power for generation of hydroelectric power. The process requires no chemical addition except chlorine for disinfection, so the process waste consists of only concentrated lake sediment.

Frequently Asked Questions-Consumer Confidence Reports

Q. What is a consumer confidence report (CCR)?

A. The Consumer Confidence Report, or CCR, is an annual water quality report that a community water system is required to provide to its customers. The CCR helps people make informed choices about the water they drink. They let people know what contaminants if any, are in their drinking water, and how these contaminants may affect their health. CCRs also give the system a chance to tell customers what it takes to deliver safe drinking water.

Q. How do renters get water quality information about their drinking water?

A. A community water system must make a good faith effort to reach consumers who do not get water bills, such as renters or workers. An adequate good faith effort would include a mix of methods appropriate to the particular system such as: posting the reports on the Internet; mailing to postal patrons in metropolitan areas; advertising the availability of the

report in the news media; delivery of multiple copies for distribution by single-billed customers such as apartment buildings, nursing homes, schools or large private employers and community organizations.

Q. Why does the current CCR contain results from previous calendar years?

A. Federal regulations require that if a system is allowed to monitor for regulated contaminants less often than once a year, the table must include the date and results of the most recent sampling. Thus, the table in the CCR may reflect the date and result of the last samples taken.

Q. How is the average citizen supposed to interpret or use the data in the CCR or water quality report?

A. The presence of a particular ingredient does not mean that the water is unsafe to drink. However, if something is detected above the maximum level, the PWS must discuss the potential health effects, and actions taken to correct the problem.

Definitions

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The following table shows the results of our monitoring for the period of January 1st to December 31st 2010. In the table and elsewhere in this report you will find many terms and abbreviations you might not be familiar with.

The following definitions are provided to help you better understand these terms:

BDL—Below detection level

Parts per million (ppm) or Milligrams per liter (mg/L)—one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

pCi/L—picocuries per liter (a measurement of radiation).

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, or 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, or 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.

Treatment Technique or TT – a required process intended to reduce the level of a contaminant in drinking water.

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements.

Maximum Residual Disinfectant Level Goal or MRDLG– the maximum level of a disinfectant added for water treatment, 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 or MRDL—the maximum level of a disinfectant is necessary for control of microbial contaminants.

Secondary Maximum Contaminant Level or SMCL—the highest level recommended for a contaminant in drinking water, based on aesthetic considerations.

Nephelometric Turbidity Unit (NTU)—nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

IMPORTANT INFORMATION ABOUT LEAD AND COPPER

Lead/Copper—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 home plumbing. Bedford County Public Service Authority 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 15 to 30 seconds or until it becomes cold or reaches a steady temperature 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 or at <http://www.epa.gov/safewater/lead>.

2010 Water Quality Data – Smith Mountain Lake Central PWSID# 5019400

Contaminant (Unit of Measure)	MCLG	MCL	Level Found	Range	Violation	Date of Sample	Typical Source of Contamination
Microbiological Contaminants							
Turbidity (NTU)	0	TT	0.992 (highest level detected 2010)	Lowest monthly percentage 99%	No	Continuously monitored	Soil runoff
Volatile Organic Contaminants							
TTHM (ppb) Trihalomethanes	0	80	57	46-52	No	Quarterly	By-product of drinking water disinfection
HAA5 (ppb) Haloacetic Acid	0	60	48	32-66	No	Quarterly	By-product of drinking water disinfection
Chlorine (ppm)	MRDL= 4	MRDLG=4	Average=1	.07-2.5	No	Monthly 2010	Water additive used to control microbes
Inorganic Contaminants							
Lead (ppb)	0	AL=15	5 (90th percentile) none were above the action level	BDL	No	July 2008	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	1.3	AL 1.3	.50 (90th percentile) None were above the action level	BDL	No	July 2008	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride (ppm)	4	4	.10	n/a	No	July 2010	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	0.56	na	No	July 2010	Runoff from fertilizer use, leaching from septic tanks, sewerage; erosion of natural deposits
Barium (ppm)	2	2	.03	na	No	July 2010	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits
Radioactive Contaminants							
Alpha emitters(pCi/l)	0	15	.1	na	No	July 2009	Erosion of natural deposits
Combined radium (pCi/l)	0	5	.8	na	No	July 2009	Erosion of natural deposits
Unregulated Contaminants							
pH (pH units)	na	6.5-8.5	7.5 average	6.4-8.5	No	Daily	Acidity or basicity of water
Hardness(ppm)	na	na	105	59-203	No	monthly	Measurement of naturally occurring hardness metals

The table lists only those contaminants which had some level of detection. Many other contaminants have been analyzed but were not present or were below the detection limits of the lab equipment.

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Some people may be more vulnerable to contaminants in drinking water than the general population. People undergoing chemotherapy or living with HIV/AIDS, transplant patients, children and infants, the frail elderly, and pregnant women and their fetuses can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. The Environmental Protection Agency (EPA) and the Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by microbial contaminants are available from the national Safe Drinking Water Hotline at (800)-426-4791.

Many customers wish to know if bottled water is safer than regular tap water. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Research repeatedly shows bottled water to be not safer than conventional tap water provided by public water systems in the United States.

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800)-426-4791 or online at www.EPA.gov/OGWDW. For a survey of bottled water companies, contact the National Resources Defense Council at 212-727-2700, or visit their Web site: <http://www.nrdc.org/>.

For more information about this report...

Thank you for allowing us to continue providing your family with clean, quality water this year.

The staff at Bedford County Public Service Authority work diligently to provide the best water quality possible to every tap. Our staff is constantly being trained on new technologies, safety issues, customer service issues and other related items to assist us in achieving our goal of providing the highest quality water and the best customer service possible. We ask that our customers help us to protect our water sources, which are the heart of our community, our way of life and our children's future.

The time and location of regularly scheduled board meeting are as follows—

The third Tuesday of every month at 7:00 PM at Bedford County PSA Board Meeting Room located at our offices at 1723 Falling Creek Road; Bedford, Virginia 24523.

If you have questions about this report or need any additional information about any aspect of your drinking water or want to participate in decisions that may affect the quality of your drinking water, please contact—

The Bedford County Public Service Authority at (540)-586-7679. Any other questions you may have concerning your water quality may be addressed via E-mail at customerservice@bcpsa.com.



Bedford County Public Service Authority
1723 Falling Creek Road
Bedford, Virginia 24523

Visit our Website at www.bcpsa.com for additional information and services that are provided by the BCPSA.
Phone: 540-586-7679

Mission Statement

As an independent Authority the Bedford County Public Service Authority exists to anticipate the needs of the County for clean, high quality, water and wastewater services. We shall strive to provide these services to the people of Bedford County, when and where economically possible, at rates that are reasonable and just.