Annual Drinking Water Quality Report

TOWER ROAD WATER SYSTEM

INTRODUCTION

This Annual Drinking Water Quality Report for calendar year 2008 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 (VDH).

If you have questions about this report, please contact:

Ray E. Hill (276)730-3170 or Donald Webb (276) 730-3174

If you want additional information about any aspect of your drinking water or want to know how to participate in decisions that may affect the quality of your drinking water, please contact:

Ray E. Hill (276) 730-3170

The times and location of regularly scheduled board meetings are as follows:

second Monday of each Month at 12:30 PM

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 storm water 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 storm water 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 storm water 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.

Drinking water, including bottled drinking 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. More information can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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

SOURCE OF YOUR DRINKING WATER
The source of your drinking water is (X) surface water as described below:

> The drinking water is purchased from the city of Galax water system. The water is drawn from Chesnut Creek and treated at the Galax Water Plant.

The Virginia Department of Health conducted a source water assessment of our system during 2002. The Creek was determined to be of high susceptibility to contamination using the criteria developed by the state in its approved Source Water Assessment Program

DEFINITIONS
Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The table on the next page shows the results of our monitoring for the period of January 1st to December 31st, 2008. 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:

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.
Non-detects (ND) - lab analysis indicates that the contaminant is not present
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.
Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.
Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
Action Level, or (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water.
Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity, or cloudiness, of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is monitored because it is a good indicator of the effectiveness of our filtration system.
Maximum Residual Disinfectant Level Goal or 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 or MRDL – the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Other definitions

CDC – Center of disease control

WATER QUALITY RESULTS
Regulated Contaminants

Contaminant (Units)	MCLG	MCL	Level detected	Violation (Y/N)	range	Month of Sampling	Typical Source of Contamination
Nitrate (ppm)	10	10	0.47	N	N/A	9/10/07	Runoff from fertilizer use; leaching from septic tanks, sewage. Erosion of natural deposits.
Floride (ppm)	4	4	ND	N	N/A	9/03/08	Water additive which promote strong teeth.

Alpha Emitters (pCi/L)	0	15	1.7	N	N/A	9/03/08	Erosion of Natural Deposits
Combined Radium (pCi/1)	0	5	2.3	N	N/A	9/03/08	Erosion of Natural Deposits
Chlorine (ppm)	Mrdlg=4	Mrdl=4	0.73	N	0.0-1.0	2008	Water additive used to control microbes
Total Organic Carbon	N/A	TT,met When>1	1.00	N	---	2008	Naturally present in the environment
Haloacetic Acids (ppb)	N/A	60	31	N *	ND-65	2008	By-product of drinking water disinfection
TTHMs (Total Trihalomethanes) (ppb)	N/A	80	47	N *	ND-86	2008	By-product of drinking water disinfection

Contaminant (units)	MCLG	MCL	Level Dected	Violation (Y/N)	Range		Date of Sample	
Turbity	N/A	TT, 1 NTU Max	0.12	N	0.05-0.12		2008	Soil runoff
		TT,<0.3 NTU 95% of the time	100%	N	NA			

Lead and Copper Contaminants

Contaminant (units)	MCLG	Action Level	90th Percentile	Date of Sampling	# of Sampling Sites Exceeding Action Level	Typical Source of Contamination
Lead, ppb	0	15	9.8	2007	1	Corrosion of household plumbing systems; erosion of natural deposits.
Copper, ppm	1.3	1.3	0.013	2007	0	Corrosion of household plumbing systems; erosion of natural deposits.

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. The CARROLL 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/safe water/lead.

VIOLATION INFORMATION:

THERE WERE NO MCL OR TT VIOLATIONS DURING THE YEAR (2008)

THERE WERE NO MONITORING, REPORTING, OR OTHER VIOLATIONS DURING THE YEAR (2008)

The water quality results in the above table are from testing done in 2008. However, the state 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.

MCL's are set at very stringent levels by the U.S. Environmental Protection Agency. In developing the standards EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. 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.

We welcome your questions and comments and look forward to your continued cooperation and support through the coming years to provide the safest water possible for all our communities.

THANK YOU!!