

Town of Rocky Mount  
*Water Treatment Plant*

2008  
*Annual Drinking Water  
Quality Report*



*Our Water Meets All  
Drinking Water Standards;  
Is Continuously Tested;  
Is Safe To Drink*

Town of Rocky Mount  
345 Donald Avenue  
Rocky Mount, Virginia 24151

ADDRESS CORRESPONDENCE  
TO:  
TOWN OF ROCKY MOUNT  
WATER TREATMENT PLANT  
345 DONALD AVENUE  
ROCKY MOUNT, VA 24151

## **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 the State and Federal requirements administered by the Virginia Department of Health (VDH).

If you have questions about this report, please contact: Bob Deitrich, Water Treatment Plant Superintendent, at (540) 483-5747 from 8:00 a.m. to 4:30 p.m.  
E-mail Address: [bdeitrich@rockymountva.org](mailto:bdeitrich@rockymountva.org)

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: C. James Ervin, Town Manager, at 540-483-7660 from 8:00 a.m. to 5:00 p.m.

The times and location of regularly scheduled Rocky Mount Town Council meetings are: Second Monday of each month; meeting starting at 7:00 p.m. at the Allen O. Woody, Jr. Municipal Building.

## **GENERAL INFORMATION**

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Substances (referred to as contaminants) in source water may come from septic systems, discharges from domestic or industrial wastewater treatment facilities,

agricultural and farming activities, urban stormwater runoff, residential uses, and many other types of activities. Water from surface sources is treated to make it drinkable while groundwater may or may not have any treatment.

All 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 provider. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from Safe Drinking Water Hotline (800-426-4791).

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 materials, 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 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, urban stormwater runoff, and residential uses.
- < 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.
- < 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 and provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide for public health.

## **SOURCES AND TREATMENT OF YOUR DRINKING WATER**

The source of your drinking water is surface water from the Blackwater River. Water from the river is treated with chlorine for disinfection, soda ash to adjust the pH and a coagulant to help remove microscopic organic matter. Treated water is then filtered and again disinfected with chlorine. Fluoride is also added to the finished water to promote dental health and a polymer is added to reduce pipe corrosion throughout the distribution system.

## **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 1<sup>st</sup> to December 31<sup>st</sup>, 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:

*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.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

*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.

*Action Level* - 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.

*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.

*Variances and exemptions* - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The table lists only those contaminants that 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.

Most of the results in the 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 up-to-date, is more than one year old.

MCLs are set at very strict levels by the U.S. Environmental Protection Agency (EPA). In developing the standards, EPA assumes that the average adult drinks two (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

## WATER QUALITY RESULTS

Contaminant	MCLG	MCL	Level Found	Range	Violation	Date of Sample	Typical Source of Contaminant
Fluoride	4 ppm	4 ppm	1.17 ppm	0.94 – 1.39 ppm	No	Daily	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	10 ppm	10 ppm	1.31 ppm	N/A	No	January 2009	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits
Copper	TT=1.3	TT=1.3	<0.15 ppm (90 <sup>th</sup> percentile)	N/A	No	August 2008	Corrosion of household plumbing system; erosion of natural deposits
Turbidity	N/A	TT=5 NTU TT=Percentage of samples that were less than 0.5 NTU	0.12 NTU 100% (all months met the standard)	0.04 - 0.17 NTU N/A	No	Daily	Soil runoff (Turbidity is a measure of cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.)
Combined Radium	0	5 pCi/l	1.1 pci/l	N/A	No	April 2003	Erosion of natural deposits
Gross-Alpha	0	15 pCi/L	0.4 pci/L	N/A	No	April 2003	Erosion of natural deposits

Contaminant	MCLG	MCL	Level Found	Range	Violation	Date of Sample	Typical Source of Contaminant
TTHMs (Total Trihalomethanes)	0.080 mg/l (Qtr. Ave)	0.080 mg/l (Qtr. Ave)	0.066 mg/l	0.032 – 0.098	No	Quarterly	Bi-product of drinking water disinfection
HAA5s (Total Haloacetic Acids)	0.060 mg/l (Qtr. Ave)	0.060 mg/l (Qtr. Ave)	0.059 mg/l	0.041 – 0.079	No	Quarterly	Bi-product of drinking water disinfection

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 Rocky Mount Water Treatment Plant 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 and 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 your exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

**Water Saver Tip:** Replace aerator screens on all of your household faucets to reduce your daily water use. Aerator screens are rated in gallons per minute. You can cut your faucet usage by 25% or more by installing the proper aerator. Low flow showerheads are always recommended to help reduce your monthly water bill.

**Water Safety Tip:** Hose bib vacuum breakers (available at most hardware stores) are a great way to protect you and your neighbors from backflow contamination. Attach one to each garden hose tap and this will prevent contaminants from being siphoned from your garden hose back into your drinking water system.

## VIOLATION INFORMATION

The Town of Rocky Mount did not have any MCL or TT (water quality) violations for 2008. In addition, no monitoring violations occurred.

### **ADDITIONAL HEALTH INFORMATION**

This Drinking Water Quality Report was prepared by:

Bob Deitrich, Water Treatment Plant Superintendent, Town of Rocky Mount, 345 Donald Avenue, Rocky Mount, Virginia 24151 at (540) 483-5747.

A source water assessment of our system was conducted in 2002 by the Virginia Department of Health. As with most surface water sources throughout the state, the river was 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 five (5) years. The report is available by contacting your water system at the phone or address given elsewhere in this drinking water report.